
*The History
of Broadcasting
in Japan*

History Compilation Room
Radio & TV Culture Research Institute
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1967

PREFACE

Forty-two years have already passed since Japan's radio broadcasting commenced in March 1925. On looking back over these years, we find that broadcasting has gone through many vicissitudes along with changes in political and social life and conditions. In particular, since the inauguration of television . February 1953, the great radio and television media in their respective ways have worked themselves into the daily life of the people and become part and parcel of modern life. Meanwhile, these two media, as cultural organs, have greatly increased their significance and reached an unprecedented stage of development and prosperity.

While focusing its attention on the essential points in the changes and development of broadcasting in the past years, this history attempts to clarify the process of constant growth and progress followed by broadcasting, on the basis of impartial data.

I am sure that the "History of Broadcasting in Japan" will serve as a fountainhead of information on broadcasting, past and present, and also be useful for the present and future of this medium in Japan.

In this age of space relaying of television, the remarkable growth of broadcasting is beginning to serve as a means of materializing closer international ties.

I hope, therefore, that this publication will provide the peoples of the world, who are interested in the present state and future possibilities of broadcasting, with a source of information and a means of obtaining better understanding of such mass-communications media in Japan.

December, 1967



Yoshinori Maeda
President
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Introduction

Radio broadcasting in Japan began on the 22nd March, 1925, under government clearance. It was just four years and four months after KDKA in the United States (Pittsburgh) which led the world in regular radio broadcasting. With regard to television broadcasting, on the other hand, a considerably long time was needed mainly for technical experiments as in the cases of European and American countries, before it commenced formally on the 1st February, 1953, about 28 years after the commencement of radio broadcasting. But in radio and television broadcasts, Japan took the lead among Asian nations in industrialization, thus being loaded with honours as a pioneer.

With a history of over forty years, broadcasting in Japan is a match, either in social position or rôles played, to another mass-communication medium, the newspaper which claims a far longer history. In recent years, television broadcasting has maintained progress while the radio broadcasting has been in the doldrums. Under the circumstances, according to a public opinion research conducted in 1963 by Japan's leading broadcasting entity, NHK, television broadcasting outrivalled all other media including newspapers with regard to public confidence in the function of communicating news and other information. A similar result was seen in the case of a research conducted in 1961 by Elmo Roper & Associates in the United States. Radio broadcasting, which had long been very popular with Japanese families as one of the most familiar communications media, has already transferred its leading position to television. It is a matter of course, therefore, that the television receiver is now one of necessities of life for almost all Japanese families. On 10th September, 1960, NHK started carrying out regular colour television broadcasting, following some broadcasters in the United States, and since the production of colour television receivers has recently been accelerated, the coming of the colour television boom seems to be at hand.

As of late March, 1967, the registered number of families receiving NHK broadcasts exceeded 21,640,000, of which some 19,240,000 families had both radio and television receivers, while 2,400,000 had no television sets but possessed radio receivers because of such physical conditions as hard-to-receive geographical positions and other special conditions. (89.8 per cent of the total Japanese families had radio and/or television receivers.) The distribution rate ranks very high as compared with foreign countries. Especially on the side of television receivers, the installed number of sets has been increasing rapidly year after year since the commencement of broadcasting. As a result, so far as the number of families receiving television broadcasts is concerned, Japan is ranked second today, following the United States.

Generally speaking, the development of broadcasting depends on the increase in the number of receivers, and such increase is under the control of governmental policies concerning radio regulation, managing schemes of broadcasting entities themselves, conditions of national economy, society and culture, etc. In the case of Japan, the aforementioned policies and schemes have been carried out steadily under effective and appropriate plans. Furthermore, surroundings and terms have been quite advantageous to the enforcement of the policies and schemes. Especially since 1955, the national economy has continued to grow at a rapid pace, thus giving

rise to revolutionary changes in the consumer structure and contributing greatly to increase in the number of receivers. According to "The United Nations Yearbook of Statistics, 1965" (Published by the United Nations), Japan was at the top in that year in the production of radio receivers, and ranked second, following the United States, in the production of television receivers. These products, which are marketed in Japan to meet the domestic demand, have also been exported in great quantities to play an eminent rôle in obtaining foreign currency. In the process of the economic growth, the so-called home electrification boom arose, stimulating consumers to vie with one another in buying home electrical appliances including improved television sets and transistorized portable radio receivers, the massproduction of which became full-fledged in this country earlier than in other advanced nations.

As in the cases of Australia and Canada, Japan is adopting a broadcasting system which consists of public service broadcasting networks and a number of commercial networks operated by independent commercial broadcasters operating side by side in each district with the aforementioned public service network. The establishment of such a broadcasting system took place after May 1950, the year "The Radio Law" and "The Broadcast Law" were promulgated as new legislations concerning radio wave and broadcasting.

Under "The Broadcast Law", NHK, a corporation which at the time of its promulgation had already 25 years of history and tradition, was dissolved and then reorganized as a new public entity. At the same time this law changed the unified monopolistic system operated by NHK and provided regulations for the general broadcasters licensed under the Radio Law enacted for the purpose of securing equitable and efficient utilization of radio waves. The Law does not provide any restrictions on the form of business operation of the general broadcasters, but most of those licensed under it adopted the form of joint stock company for operating commercial broadcasting. Moreover, those who operate both radio and television broadcasts are predominant. In any case, the adoption of the plural competitive system among NHK and the commercial broadcasting companies must be considered an epoch-making event in Japanese broadcasting circles.

The newly-started NHK is a non-profit business organization established on the basis of the fundamental principle of the Broadcast Law, which stipulated that it must be operated by the people and for the benefit of the people. In view of the public utility character of NHK, the Broadcast Law provides various regulations with regard to its organization, business, financial affairs, etc. Unlike the old NHK, the new Corporation, however, is not subject to direct control of the Government and is provided with a Board of Governors as the highest policy-making organ. The Board, in a word, is an organ representing the will of the people and operating under the group deliberation system. As a financial source, receivers' fees, which the Law guarantees NHK that it can collect and use without troubling the national treasury, are secured, instead of obtaining subsidies from the Government. These Board and receiver's fee systems serve as the basis on which NHK builds its impartial and neutral position untouched by the control of authorities such as the Government and the political party in power.

NHK operates two radio and two television networks linking its stations located in various parts of the country. The first networks (one radio and one television) present general service programmes intended for average homes. The second networks (one radio and one educational service television), on the other hand, are devoted to educational and cultural programmes intended for specific audiences. Moreover, some of the general service and educational service television programmes are presented in colour. The local stations, while rebroadcasting incoming network programmes, also operate local broadcasting using the specified time allocated to them by the Headquarters in Tokyo. The Broadcast Law also specifies NHK alone as the organization obligated to conduct a short-wave overseas service. This service known under the title of Radio Japan operates the regional services directed to various areas and the general service covering the entire world.

The commercial broadcasters operating side by side with NHK are dependent on advertising income for financial resources. They operate in various parts of Japan as independent organizations closely connected with local communities. As no one commercial broadcasting company is allowed by law to control another either in personnel or in capital, networks formed by these stations are not fixed as in the case of NHK. In other words, these networks may be termed the "sponsored networks" selected within the limits of sales policies and advertising budgets of large enterprises having markets throughout the country and linking the stations located in the strategic areas. Consequently, from the standpoint of the key stations in Tokyo, securing of large enterprises as sponsors and bringing as many local stations into affiliation with them are prerequisite for stability and growth both for themselves and the local stations. In the circumstances, competition among the key stations naturally becomes intense.

The broadcasting facilities in Japan as of the end of March 1967 were as follows:

(1) NHK

Radio 1st network 170 stations (99.7% coverage)
Radio 2nd network 133 stations (98.4% coverage)
Television general service 530 stations of which 165 were UHF stations (95% coverage)
Television educational service 517 stations of which 163 were UHF stations (94% coverage)
Colour television stations

General and educational television stations are linked into a network.
Short-wave overseas service "Radio Japan"

36 hours a day, 18 transmissions, 23 languages (In addition to the above, 106 experimental FM stations are in operation).

(2) Commercial stations

Radio

46 companies, 145 stations (including one company and two stations operating domestic short-wave broadcasting)

Television

46 companies, 460 stations (of the above, 34 companies operate both radio and television, 40 companies and 365 stations operate colour service. No experimental FM broadcasting is operated by commer-

cial stations, but one university station operates in Tokyo.)

The fact that so many broadcasting facilities operate in a small area of 370,000 square kilometres is an indication of the level of broadcasting culture in Japan. Among these facilities low-power automated and unattended rebroadcasting stations are included in considerable numbers. These had to be provided because of the topography of Japan where 70% of the land is mountainous, which has resulted in large numbers of isolated areas where reception is difficult. Another reason was the increasing interference by foreign broadcasts as well as by domestic broadcasts of neighbouring stations. The rebroadcasting stations were positioned to eliminate such interference as far as possible.

NHK's budget, including capital and business accounts for fiscal 1966 (one year from 1st April) totaled \$260 million while that of the commercial broadcasters totaled \$370 million. NHK employed some 15,000 and the commercial broadcasters together employed 19,000 persons directly engaged in the business of broadcasting.

In tracing the history of broadcasting in Japan, division of the whole period into three sections would serve as an effective means of grasping the true picture of its development because of the changes that have taken place in the business and managerial characters.

(1) The period, though very short, during which three independent public utility organizations were formed in Tokyo, Osaka and Nagoya at the outset of the broadcasting service (1925 to 1926).

(2) The period during which NHK, which resulted from the merger of the initial three organizations, extended the network throughout the country (1926 to 1950).

(3) The period during which establishment of commercial services became possible under legislations on broadcasting and the parallel development and stabilization of both NHK and the commercial broadcasters (1950 to the present).

When we view the history of broadcasting from the contents of the service and planning and production of programmes, August 1945, when Japan faced the fact of defeat in the war marks an epoch. At this time the supervision of broadcasting was transferred from the Japanese Government to GHQ of the victorious Allied Forces as part of the Occupation policy.

In this book, the narration is divided into the following three parts, in consideration of the points aforementioned:

(1) Part I: Prewar period—from the birth of radio broadcasting till the end of the Pacific War.

(2) Part II: Postwar period (a)—from the beginning of the control of broadcasting by GHQ till the enactment of the Broadcast Law.

(3) Part III: Postwar period (b)—from the birth of television broadcasting till 1965.

In parts I and II, the principal contents of the narrative concern events that took place while NHK operated radio broadcasting as a monopolistic organization. Part III concerns the period in which radio and television broadcasts were operated under parallel existence of NHK and the commercial broadcasters and aims chiefly towards bringing into relief the policies and outstanding features of management for each period.

Part I is characterized by a strong reflection of the governmental control over the broadcasting service in general. NHK, which came into being as a unified monopolistic organization in August 1926, was a public utility corporation organized on the basis of private management. But in spite of this, why did it often give the impression of being a government agency? This was due largely to the fact that NHK was a business organization operating under a special authorization of the Government. In those days, there was yet no legislation exclusively concerned with broadcasting, and the control and operation of the service were placed exclusively under the administrative measures of the Government. Broadcasting in this period developed and changed almost entirely in the process of the prosecution of incidents and wars (Manchurian Incident, War with China, Pacific War). From the political situation prevailing in Japan in those days, the Government's control not only over broadcasting but also over all other mass-media was gradually strengthened. Broadcasting, in particular, became a powerful means of propaganda and played the rôle of guiding public opinion because of the aforementioned relations with the Government.

The Government, however, while intensifying its control of NHK's broadcasting, followed a policy of protecting and fostering NHK in its effort to expand its facilities, increase listeners and secure stable financial resources. The foundation of the broadcasting service was firmly established during this period, and it cannot be ignored that because of the favourable war situation up till the middle part of the period, it saw remarkable developments. NHK's national network programmes were implemented smoothly, and the number of listeners had increased to 7.5 million by early 1944, which marked the highest in prewar days.

The point deserving special mention in NHK's programming is the inclusion of news, educational and cultural programmes in a proportion equal to that of entertainment programmes, which has not always been the case with the broadcasting services of other countries. This keynote of programming still in practice at NHK was established at the outset of the service. In 1935 school broadcasts, on which NHK places emphasis today, and which form the nucleus of educational programmes, as well as the short-wave service for overseas listeners had already been commenced.

Narratives in Part II are based on the background of democratization in all aspects of Japanese life, including politics, economy, education, culture, etc., brought about under the Occupation resulting from Japan's defeat in the war. Consequently, the essential point in this part constitutes how broadcasting was reformed under the policies of the GHQ for the Allied Powers. Among various directives issued by GHQ with regard to mass-media, "The Radio Code Provided for the Japanese Government" and the "Memorandum Related to Reorganization of NHK" were of special significance to broadcasting. These two directives eliminated all control of the Japanese Government over broadcasting programmes and business operations and clarified the recognition of the independence of the broadcasting service so long as its programmes did not obstruct the execution of Occupation policies. On the other hand, through guidance and advice provided by GHQ for broadcasters, programming systems and production techniques current among the American commercial broadcasters were inducted into Japan. The patterns of programming and production prevalent today were

thus established during this period.

NHK, reorganized by the GHQ directives, made a new start as a democratically operated business organization based on the support of the public. Its character of public utility and a unified monopolistic form, however, were left untouched from the expedience of the prosecution of the Occupation policies. Later, in the atmosphere of changed American policies for the Far East, including the early independence of Japan, voice advocating the need for a complete reorganization of NHK arose within GHQ and basic administrative laws concerned with radio waves and broadcasting were enacted. Under these laws, a plural competitive system between NHK and the commercial broadcasters was brought into being. Part II, therefore, must be regarded as the most important period in which the foundation for the future growth of broadcasting in Japan was firmly established.

The most outstanding feature of Part III is the industrialization of television as a new broadcasting medium. In the process of a remarkable development of Japanese economy, radio and television, the latter in particular, have become the favourites of the times and have established their respective positions among mass-communications media. And, as stated before, television in Japan is about to enter into an age of colour.

The second feature is the resumption of the overseas service, under the station name of Radio Japan through which international exchange of culture and information became active. The resumption of the overseas service was made possible by the conclusion of the San Francisco Peace Treaty, which led to the independence of Japan, which had been under Occupation for seven years.

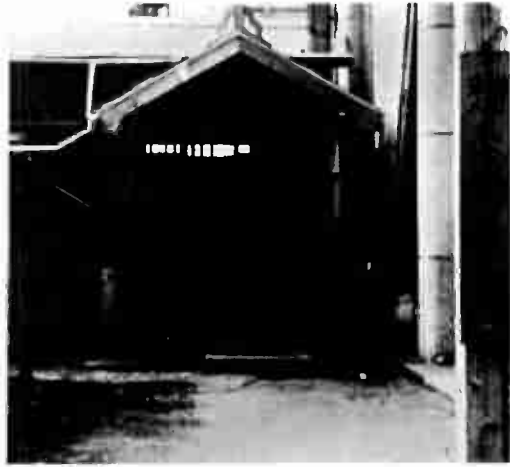
In Part III the establishment of a new order in the field of radio wave and broadcast administration is mentioned. In view of the existing state of the broadcasting services in Japan, equitable allocation of limited available broadcasting frequencies (medium wave for radio and principally VHF for television) is an important question. On the other hand, in consideration of the fast growing broadcasting services, the necessity for drawing up fundamental plans for the utilization of the FM system and UHF presents an acute problem. Also on the question common to all the nations involving internationalization of telecasting through the medium of satellites, Japan already entertains plans for launching its own broadcasting satellites.

All these problems must be solved in the future, and these are the most important questions faced by broadcasting services in Japan.

I

Prewar Period —From the birth of radio broadcasting till the end of the Pacific War—

1. Front view of the provisional studio of the Tokyo Broadcasting Station. Broadcasting was conducted here from March 1925 to July of the same year. 2. President Shimpei Goto broadcasting his greetings to listeners on 22 March when provisional broadcasting commenced. 3. The new station building. Full scale broadcasting commenced from here on 12 July, 1925. 4. Radio listening scenes in the early stages: ㊤ Enjoying radio broadcasting with a receiver. 12 August, 1925 "The Asahigraph" ㊦ around the loudspeaker.

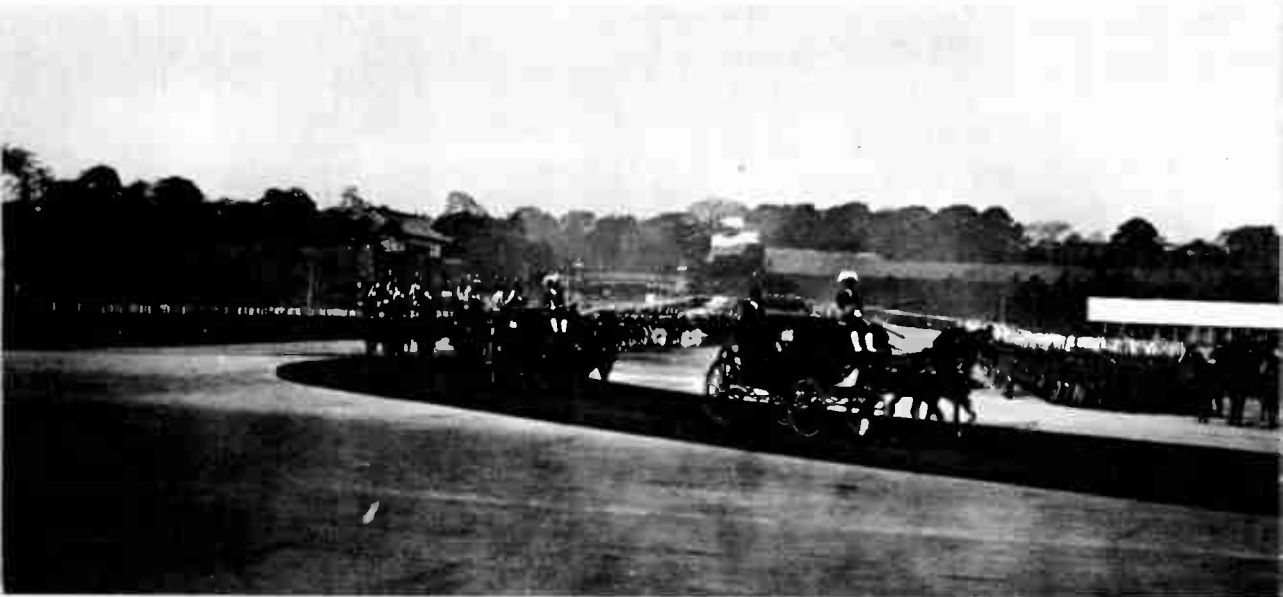


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1. The Emperor leaving the Imperial Palace for Coronation Ceremony (national network broadcast).
 2. "Radio Gymnastics" commenced on 1 November, 1929 in commemoration of the coronation.
 3. Violin solo by Ephrem Zymbalist (27 October, 1930). 4. Piano solo by Rodolphe Kreutzer
 (17 April, 1931). 5. "Classwork" at the primary school attached to the Aoyama Normal School,
 Tokyo, for a school programme (1 July, 1935). 6. The first Diet session report was presented to
 the listeners in recorded speech of Prime Minister. (17 November, 1941). 7. The February 26
 Incident that flung a black spot on the gray state of the nation. Commander in control of the



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martial law spoke "To the Soldiers" over the radio and played a decisive role in the suppression of the uprising. ④ Front gate of the Tokyo Station. 29 February, 1936. ⑤ Martial Law Headquarters set up at the Kudan Military Hall in Tokyo. 8 ⑥ Japanese announcers describing the competition at the Berlin Olympics. ⑦ The finals of the 200-meter breast stroke. Maehata wins! 9. Tokyo Broadcasting Station completed in April 1939. 10. 150kW high-power broadcasting using domestic equipment commenced on 28 December, 1937.



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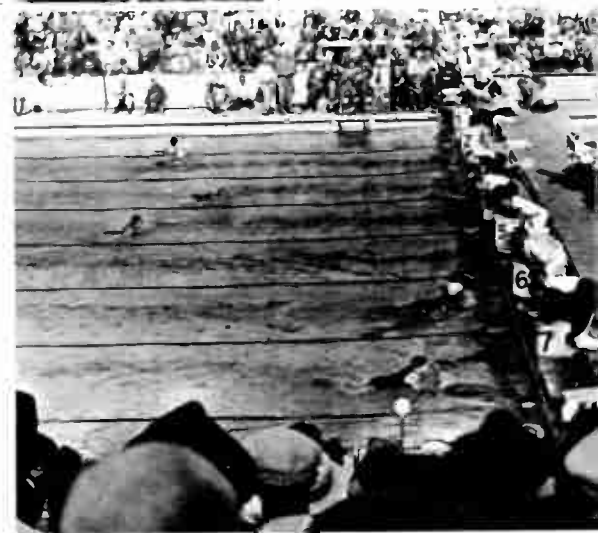
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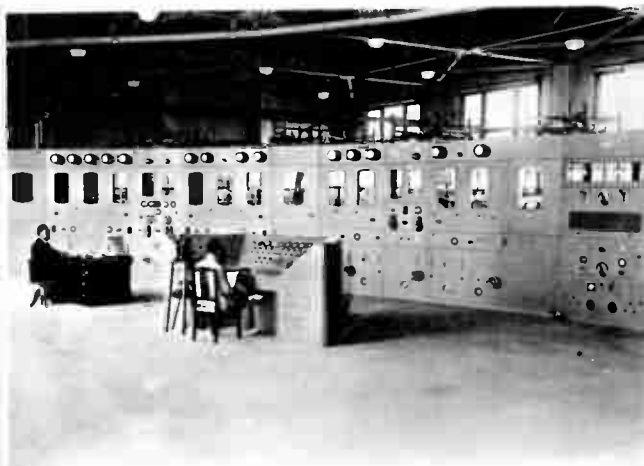
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1. Japan's first television drama "Before Supper" presented experimentally was received successfully at Tokyo Station (13 April, 1940). 2. Though the times were filled with tension, peaceful chirping of birds is being recorded in the foothills of Mt. Fuji (May 1941). 3. The atomic bomb took a death grip on Japan (Nagasaki, 9 August, 1945). 4. Newspaper articles reporting the Imperial broadcast that announced the end of hostilities. People kneeling in front of the Imperial Palace to pray for the protection of the fundamental character of the nation.



1 2



3 4



1. Background of the Industrialization of Broadcasting

1. Development of Radio Engineering

Researches and experiments in radio engineering had been carried out for many years in Japan. Until about 1920 the principal organs of research, however, were limited to government agencies, with the Electro-Technical Laboratory of the Ministry of Communications playing the leading role and with War, Navy and Railway Ministries operating their respective laboratories. This situation arose from the existence of the Telegraph Law, the fundamental legislation related to radio communications, which was passed in 1900 and revised into the Radiotelegraph Law in 1915. This law stipulated that all radiotelegraph and radiotelephone operations shall be under exclusive control of the government. In such circumstances, special authorization of the Minister of Communications was required when any private research organ was to be established.

The Electro-Technical Laboratory of the Ministry of Communications started its researches on radiotelegraphy in 1896 and on radiotelephony in 1907. In all aspects of such research work, contributions made by technology inducted from other nations could not be ignored. In the first place, Japan had been eagerly absorbing the essence of Western civilization since the establishment of the Meiji Government in 1868.⁽¹⁾ Japan therefore was extremely sensitive to trends in other countries. In the field of radio engineering also the eyes of Japanese engineers were constantly turned towards wider horizons, and they usually lost no time in absorbing whatever they found to be of advantage in their work. However, not a little development was also achieved on their own initiative. The TYK system radiotelephone unit (a type of instantly extinguished spark system) invented in 1912 was the most outstanding example of such Japanese ingenuity. This telephone unit was subjected to about three years of tests and then adopted as the first commercial radiotelephone unit in the country, and also played a pioneering role even in the world-wide development of radiotelephony.⁽²⁾

Until this period, results achieved by Japanese research engineers were no less inferior to those of their counterparts overseas. With World War I (1914-1918) as the turning point, however, development of radio communications abroad marked a new epoch, and high-power radiotelegraph stations were built in the more advanced countries. Furthermore, when vacuum tubes began to be industrialized, the wireless world began to shift from the electric arc and high-frequency generator systems to the vacuum tube. At this period, Japan, which was inferior in industrial power, appeared to fall gradually behind world progress both in technology and equipment.

(1) Reformations carried out early in the Meiji Era, together with those after World War II, constitute most memorable records in the history of Japan. Through the former, feudalistic mechanisms were completely destroyed, the direction for absorbing modern ideas was indicated and the foundations for Japan to open its eyes toward the world at large were laid.

(2) TYK derived its name from the first letters of the names of three joint researchers, Torigata, Yokoyama and Kitamura, of the Electro-Technical Laboratory of the Ministry of Communications. This unit was exhibited at the San Francisco World Fair held in 1913 and attracted wide attention.

Towards the end of 1916, the Electro-Technical Laboratory announced its intention of taking up full scale research work on vacuum tubes. Subsequently trial manufacture of such tubes was undertaken at the Laboratory and at the then well-known electric equipment manufacturers. But in those days no plant facility adequate for industrializing trially made vacuum tubes was available. It was around 1923 when general and military communication facilities came under government control that they began to adopt the vacuum tube system. Even then most of the transmitters and vacuum tubes had to be imported from such overseas manufacturers as Marconi.

2. Experiments in Broadcasting

In the United States, a radio boom had already been apparent since 1920, and its influence had spread to Europe, where various countries were beginning to build radio stations. The radio fever in Japan gradually developed from about 1922, undoubtedly due to the influence of the start of radio broadcasting abroad and particularly in the United States.

In Japan, researches and experiments in radio engineering among private circles started with the Tokyo Invention Research Institute, which began work in this field under government authorization, in 1922. From that time institutions principally intended for researches and experiments began to be operated by manufacturers and schools. Meanwhile, public demonstrations of the radiotelephone system intended to spread knowledge of radio among the public began to be undertaken by the influential newspaper companies.⁽¹⁾

Demonstrations by newspaper concerns were opened to the public at department stores, museums and at special facilities. In the early stages of such demonstrations the principal contents were simple announcements and recorded music. Later, however, news, stock market reports, talks, quick reports of lower house elections, etc., were included. Still later, live music as well as dramatic performances of top-class actors and actresses began to be presented. Although these were experimental programmes, some were amply indicative of the regular programmes that were to come.

Meanwhile, publicity through newspapers and magazines, and publications devoted exclusively to radio broadcasting began to appear. These, of course, aroused curiosity and appetite for knowledge regarding the mysterious things known as radio waves. Of special note was the appearance of amateur technicians who began to assemble radio receivers to receive experimental programmes. And by the time regular radio broadcasting commenced in Tokyo in 1925, the number of such amateurs was estimated to be nearly 50,000, the majority in the principal cities. This situation gave impetus to establishment of manufacturers of radio parts and importers of overseas products.

It was through such demonstrations in private circles that the expectations of the general public towards the commencement of radio broadcast-

(1) The influential Asahi and Mainichi newspaper companies, now chief representatives of the Japanese press, were still operating as independent entities in Tokyo and Osaka. In those days, each company claimed circulations of about 1 million, and both almost simultaneously commenced public demonstrations of broadcasting in the aforementioned two cities.

ing rose to extraordinary heights. And, furthermore, many people now expressed intentions of going into broadcasting on a commercial scale.

On 1st September, 1923 a great earthquake⁽²⁾ shook the Tokyo and Yokohama areas. The effect of this disaster was far-reaching since it occurred in the nation's capital, the political, economic and cultural centre of the country. And it was because of this disaster that a business recession, which was beginning to be felt in the aftermath of World War I, was accelerated. The earthquake damage, indeed, severely affected Japan's economic recovery. However, such unfavourable conditions served as a turning point in groping for new enterprises capable of overcoming the situation, and such state of affairs also served as an opportunity for accelerating modernization of urban life.⁽³⁾

The trend towards commercialization of broadcasting gained further momentum amid such social conditions. During the earthquake disaster, misleading rumours plunged the general public into serious confusion, and was one of the reasons why there was an acute awareness of the need for radio broadcasting.

Those who showed the greatest enthusiasm towards commercialization of broadcasting were, of course, the manufacturers and distributors of electrical equipment, who hoped to profit from broadcasting enterprises. In this sense, the situation was similar to that prevalent in other countries. Newspaper companies and press agencies also highly evaluated broadcasting because it offered the possibility of quick news reporting and they showed an active attitude towards its commercialization. In particular, newspapers at that time were engaged in severe competition over increasing subscribers. Their programme for commercialization of broadcasting, therefore, included designs for possible control of two media, i.e., newspapers and broadcasting, so as to secure a dominant position in reporting news.

3. Process of the Establishment of the Broadcasting System

Investigations and researches related to the broadcasting system began in the spring of 1922 at the Communications Bureau of the Ministry of Communications, along with increasing trend toward experimental and commercial broadcasting and the draft of the general principles relative to broadcasting was adopted by a special committee established in this Ministry. The first question to become the subject of discussion as a basic item closely connected with the broadcasting policy of the nation was that concerning the nature of the managing agency. And the second question was the problem of laws and ordinances for the control of such managing agency.

Since broadcasting was interpreted as being a form of radio communication coming under the Radiotelegraph Law, it was in principle an enterprise that should come under government control. However, it was left in the hands of private management for the following reasons:

(2) The Great Earthquake claimed 100,000 dead and 570,000 houses destroyed.

(3) After the earthquake disaster, adoption of western style living habits became conspicuous in clothing, food and housing. As a result terms like "modern" and "culture" became the vogue among urban people. It was about this period that mass communications media, such as newspapers, magazines and motion pictures, began to show signs of rapid development.

- (1) Although broadcasting by its nature was a public service enterprise, it was not indispensable to the social life of the people. On this point it differed from general radio communications.
- (2) The operation of business, such as, for example, material gathering and editing connected with broadcasting programmes, selection of performers, negotiations with the performers and calculations of performance fees, were not suited to administrative organs.
- (3) At a time when the state finance was in stringent circumstances because of a business recession following World War I, it was not considered proper for the government to be involved in a new undertaking, the success of which was by no means assured.

On the other hand, views were expressed to the need for enacting a special law for the purpose of clarifying the basis for authorizing private management of broadcasting. However, since the future of the broadcasting enterprise was still problematical, even if legislation were to be expedited, the view that there was a possibility of disputes developing among the ministries, in the process of the deliberation of the bill, regarding the question of the share of controlling power and that such disputes were pregnant with dangers of benefiting the prospective enterprisers in securing interests became predominant. It was, therefore, decided that the question of broadcasting should be disposed of within the framework of the Radiotelegraph Law. Ultimately, broadcasting was to be considered a system of radiotelephone privately established under special authorization of the competent Minister. Consequently, the licence for broadcasting enterprise was to be issued under the administrative measure of the Minister of Communications. This system continued in effect for many years till the Broadcast Law was enacted in May 1950.

Through the adoption of this fundamental policy, the authorities at the Ministry of Communications as preliminary conditions for issuance of a licence examined the standards and methods relative to the management, transmitting and receiving equipment, broadcast programmes and problems related to the listeners, thus starting to consolidate the foundations for systematization. In the process of investigation, actual conditions prevalent in various nations were used as reference materials, but except for technical facilities, few examples worthy of utilization as criteria were found in the field of management systems and programme organization, since radio broadcasting had just commenced both in the United States and the principal countries in Europe. As a result, the policy was adopted for adjusting all essential items in consideration of conformity to the state of national affairs and national character and on the principle that broadcasting originally was a project that should have come under the control of the national government.

With respect to the management system, in particular, it was decided that the adoption of a free private enterprise system, such as prevalent in the United States would be difficult because of differences in conditions between the United States and Japan. Government intervention in the project, such as in Germany, was also reviewed, but certain difficulties in this system were pointed out from the standpoint of private management. Therefore, the following points were clarified with regard to initial views, although certain revisions were made in the process of examination:

- (1) The operator of broadcasting shall be capable of permanently and definitely operating the facility; he shall also be determined not to devote himself exclusively to the pursuit of profit but to be of service for the social and public benefit. In this sense, some association or corporation formed by newspaper and press agencies, manufacturers and distributors of electrical equipment would be considered suitable.
- (2) One station in one area (within a radius of 100 miles) shall be the rule.
- (3) The financial source shall comprise fixed monetary subscriptions made by the equipment manufacturers and distributors according to their sales volume or capital and receivers' fees collected from the listeners.
- (4) The net profit of the service shall be limited to 10% of the capital, and if any surplus should accrue, the receiver's fee shall be reduced.
- (5) No advertisements shall be permitted.

With regard to listening equipment, private installation was authorized on the condition that such receiving equipment will be "those capable of receiving only the wavelength for which they are made." This was in conformity with the initial opinion on the matter. The decision was made in pursuance of the view that it would eliminate danger of infringing upon the security of public and military communications and that there was a need for preventing reception of foreign radio waves, especially the so-called "red" radio waves expected from the Soviet Union. Actually, however, interference was prevented by radio regulations, and because of the rapid increase in the number of listeners and diversification of types of receivers soon after the commencement of the broadcasting service, the measure aforementioned was soon suspended.

The Ministry of Communications thus continued to examine concrete plans for systematizing the broadcasting service. And in March 1923, the question of broadcasting was finally taken up at the National Diet. At the time of interpellations in the Diet, the competent minister's reply contained one point which attracted special attention. He said, "In view of the existing state of affairs in the United States where rapid increase⁽¹⁾ in the number of radio stations has brought about the problem of interference, this point must be taken into consideration in determining the broadcasting system of this country. Consequently, applicants should be advised to combine as far as possible to limit the number of stations".

The concept of the Ministry of Communications relative to the broadcasting system was legalized during December 1923 and the beginning of the following year in the form of "Regulations for Private Radiotelephones for Broadcasting Use" and "Bylaws for the Conduct of Supervisory Affairs". These regulations emphasized the government's supervisory powers and were rather more like police regulations. Later, they were revised from time to time in line with the development of the broadcasting service and social

(1) Record of the United States Department of Commerce shows that within less than a year between July 1921 and April of the following year 286 new radio stations were established. Furthermore, a survey undertaken in 1924 showed that the number had increased to 524. Broadcasting services in the United States were allowed to commence operations simply by registering with the Department of Commerce. Moreover, since the Department had no power to allocate frequencies to the radio stations, serious interference developed during the radio boom mentioned above. And the situation was practically left alone and became worse. The United States Congress therefore passed the Dill-White Radio Bill in February 1927, and the Federal Radio Commission (FRC) established under the above law began to regulate broadcasting frequencies.

changes; but they continued to regulate Japan's broadcasting service until the end of the Pacific War.

The "Regulations for Private Radiotelephones for Broadcasting Use" contained no article limiting the number of installations. Consequently, it was interpreted that as long as the facility satisfied the conditions stipulated in the regulations, freedom of application for private installation would be recognized. Under the interpretation, the number of applicants for installation of broadcasting equipment increased rapidly throughout the country even shortly before the public announcement of the regulations. As a matter of fact, the applications were in excess of 60 cases to make it seem a radio application boom.

Applicants included wireless equipment manufacturers, newspaper companies and press agencies. There were also a number who used names of well-known financiers as promoters. Others considered the application as a means of acquiring a sort of concession. In particular, a certain applicant in Osaka even submitted plans for establishing broadcasting facilities throughout the country in order to make the service a nationwide organization. The transmitters expected to be used by the applicants were mostly products of the General Electric, Western Electric and Radio Corporation of America, as at that time domestic equipment had not been sufficiently developed. Even these American products were 1 kW or so in output; those with more than 3 kW were unavailable.

4. Service Management Pattern Decided

As may be assumed from the draft essentials of the broadcasting system and the competent minister's reply to interpellations in the Diet, the policy of the Ministry of Communications in licensing the applicants stressed stabilized service operations and prevention of radio interference. In these circumstances, the Ministry adhered to the policy of licensing only one station in one area and in consideration of its economic capacity, cultural level, density of population, etc. the following points were determined in May 1924:

- (1) For the time being, radio stations will be established in the three major cities—Tokyo, Osaka and Nagoya.
- (2) The service will be operated jointly by influential local people, newspaper companies, press agencies and radio equipment dealers in each area.

Incidentally, the initial idea of having radio equipment dealers put up fixed monetary subscriptions was abandoned and the receivers' or licence fees collected from the listeners were made the sole financial resource.

However, at this time of fixing the policy, there were 26 applicants in Tokyo, 12 in Osaka and 3 in Nagoya. And since the motives and objectives of these applicants in establishing the broadcasting service, capital available, and projected scales of service highly diversified, realization of joint management by the applicants was considered difficult. In fact, in some areas disputes developed among the competing applicants.

The greatest single factor that gave rise to disputes was the large number of applicants who planned to commercialize broadcasting for the sole purpose of profit. These people thought that, since only one radio

station was to be established in one area and the receivers' fees were to serve as financial resources, revenues would increase with the growing number of listeners without corresponding increases in expenditures, and therefore, the margin of profit would increase accordingly.

In July 1924, the then Minister of Communications Tsuyoshi Inukai decided that "it should be a non-profit seeking organization". He therefore specified operation by non-profit corporate juridical persons under civil law, and stipulated service to the public good as the sole objective. Thus the proposal based on the fundamental policy of establishing broadcasting organizations on the basis of a profit seeking system, though the margin of profit was limited, under two years of scrutiny since the beginning of the investigation and study of the system, underwent a complete change, even though none was made in the adoption of private operation.

The following merits were cited as advantages of a public service juridical person by the Communications Ministry authorities:

- (1) As broadcasting is a service beneficial to the promotion of public welfare, it would be possible to operate the service with the foremost aim of benefit to listeners and public good.
- (2) Although broadcasting is an enterprise which tends to become monopolistic, there is no danger of injurious effects arising from monopolistic operation.
- (3) It is befitting such special enterprise whose expenditures do not increase correspondingly to increases in revenues arising from growth in numbers of listeners.
- (4) Selection of programme contents and the operation of the service can be made fair and impartial.

However, according to the record of the Ministry of Communications, the basic reason for adopting the public service organization was as follows: Broadcasting was originally a business project that should come under exclusive control of the government. From the viewpoint of the supervisory administration of such a service, the public service organization would be most convenient for providing guidance, control, protection and promotion measures. As a matter of fact, when three juridical persons were established in Tokyo, Osaka and Nagoya, and when, as will be seen later, these three juridical persons merged to form a Corporate Juridical Person, Nippon Hoso Kyokai, (Japan Broadcasting Corporation) commonly known as NHK⁽¹⁾ and designated as such hereinafter, the government's policies in supervisory administration began to be reflected in all aspects of the broadcasting service. On one hand, the government followed the policy of cooperation and promotion in securing financial resources, implementing network expansion programmes and measures for increasing the listeners, all of which were fundamental items for the development of the service. On the other hand, the government wielded strong powers in intervening into top personnel affairs and control as well as guidance measures for programmes.

Nevertheless, it was thus that Japan's broadcasting system was established by the Ministry of Communications. In those days, Japanese

(1) It was after the Pacific War or 1946 that "NHK" began to be used officially as a diminutive of Japan Broadcasting Corporation.

broadcasting, together with the receiver's fee system described in the following, was worthy of special mention taking into consideration the existing state of the broadcasting services of the world.

5. Receivers' Fees as Financial Resources

The question to receive special scrutiny in the process of investigating the broadcasting system was that of securing financial resources. The beneficiaries, manufacturers and distributors of electrical equipment who were to derive monetary profit, and the listeners who were to receive the benefit of utilization should naturally have borne the major portion of expenses. This was the idea of the Communications Ministry authorities at the initial stage. With regard to the former, it was not possible to expect much of their resources because their production and marketing had not been developed sufficiently as in other countries like the United States. In addition, doubts were expressed regarding the wisdom of inducting capital investments of profit-seeking business organizations into a public service project. Therefore, the final decision inclined towards dependency on the latter.

In those days, the British Broadcasting Corporation (BBC) had gone a step ahead in adopting the licence system. However, the system, such as was enforced in Great Britain, which called for collection of fees by the government and delivery of one-half to the management of the broadcasting service as a financial source, could not be enforced in Japan without special legislative measures. As already stated, at a time when the success of enterprise was still indefinite, it was the government's policy to wait for any legislation on broadcasting. Therefore, the question of receivers' fees was to be disposed of within the authority of the Ministry of Communications, and the legal measure was taken in the form of the ministerial ordinance, Regulations for Private Radiotelephones for Broadcasting Use.

Under these regulations, the operator of the broadcasting service could collect receivers' fees through conclusion of a receiving contract, under private statute, with the operator of the receiving equipment. In concluding an agreement, the only thing needed was the approval of the Minister of Communications on the contents of the contract. For this reason, the collected receivers' fees could be used in their entirety by the broadcaster without passing through the national treasury. The Ministry, however, required the receiving equipment operator to attach a copy of his contract with the broadcasting service operator to the application for a permit to install such receiving equipment required under the Radiotelegraph Law. This was meant to protect the broadcaster. In other words, the effectiveness of receiving equipment installation permit was endorsed by the continuance of the receiving contract. Consequently, listeners who had not concluded any contract with the broadcaster were regarded as operating such equipment illegally and were considered subject to legal action. This method calling for legal protection of contracts under private statute was unprecedented in the world.

When the decision was made to operate the broadcasting service in the form of a public service juridical person, there were some who questioned the legality of seeking financial resources from receivers' fees. However,

the legal interpretation that if individual interests of the members constituting the juridical person were not the objective, even a public service juridical person may collect receivers' fees, was adopted. This point, therefore, did not become a subject for discussion.

In any case, though the receiver's fee system underwent some revision in the process from the commencement of broadcasting in this country, the basic policy was followed without alteration, still serving as the supporting pillar in the development of the broadcasting service.

2. Start of the Broadcasting Service

1. Establishment of Three Broadcasting Stations

Following the policy indicated by the Ministry of Communications, broadcasting agencies under public service organization were to be established in Tokyo, Osaka and Nagoya at the rate of one station in each city. Large numbers of organizations making applications for the establishment of broadcasting facilities were, therefore, obliged to merge and form a single organization in each city. The process of the mergers went extremely well except in Osaka. The method of establishing a juridical person in each area was as follows:

In Tokyo, representatives of the 28 applicant organizations acted as promoters for the establishment of the Tokyo Broadcasting Station. The general meeting for its inauguration was held in October 1924, the articles of incorporation were voted on and officers elected. In the articles of incorporation, the constituent members were classified into individual and organization members, and the unit investment of the latter was set at 10 times that of the former. However, investments by the organization members such as newspaper companies and press agencies were reduced on the condition that they provide news materials for the broadcasting station without charge. As a matter of fact, investments in public service juridical persons were similar in nature to contributions, and no dividend or compensation against the investments was approved. Consequently, the investors included only those who were willing to collaborate actively in the public service nature of business and those who expected some indirect profits along with the development of the broadcasting service. Executive officers elected from among the investor members were 23, including 9 from the equipment manufacturing and marketing circles, 7 from newspaper companies and press agencies, 2 from stock exchanges and 5 from sundry organizations. As the chief director who would represent the organization, Kenzo Iwahara, president of the then influential Shibaura Seisakusho and a powerful member of the financial world, was appointed. Furthermore, for the purpose of establishing the social position of the organization, former Minister of Communications and the then Mayor of Tokyo, Shimpei Goto, who had deep understanding of cultural enterprises, was recommended as its governor. The Tokyo Broadcasting Station was officially approved by the Minister of Communications as of 29th November, 1924, thus starting

out as the very first business agency of this nature.⁽¹⁾

In Nagoya, as there were only three applicant organizations, in contrast to multiple applicant organizations in Tokyo and Osaka, merging was carried out smoothly. The inaugural general meeting of Corporate Juridical Person, Nagoya Broadcasting Station was held in January 1925. Officers elected comprised mostly leading members of the Nagoya Chamber of Commerce and Industry, excepting a few elected from newspaper companies and press agencies. As chief director, representative of the chamber, Kinnosuke Kamino, was appointed and the approval for its establishment was issued on the 10th of the same month. Nagoya, being situated between Tokyo and Osaka, was subject to considerable influences from the two cities both economically and culturally; it was also a city of a strongly feudalistic nature. For this reason, the citizens of Nagoya were cautious about acceptance of any new enterprise. In such circumstances, little results could be obtained in soliciting members of the juridical person unless the officers themselves and other interested persons visited the leading citizens in person and invited investments. Even after the start of the broadcasting service, its development frequently met inhibitive situations because of such local characteristics, although smaller populations within the service area also affected the growth in a negative manner.

Meanwhile, establishment of a juridical person in Osaka had to go through very complex procedures and met with extreme difficulties. Although the policy of setting up a non-profit public service organization had already been determined, there were some, among the applicant organizations, which schemed to establish subsidiaries directly connected with the broadcasting agency so as to seek monetary profit. Under the situation, allocation of officer's positions among the applicants met with serious opposition and brought about disputes. The Osaka area, along with Tokyo in those days, was an economic centre of the country. In particular, the flow of Osaka businessmen into Tokyo, where economic activity had been paralysed by the great earthquake of 1923, was remarkable in those days. And since Osaka businessmen considered the new enterprise as an opportunity for seeking greater profit, and because of their high enterprising spirit, dissatisfaction with the government policy of making broadcasting a non-profit business probably caused a certain amount of heartburning.

Regarding establishment of the subsidiaries aforementioned, some of the applicants schemed for its materialization. Their plan was to establish such subsidiaries in parallel with the establishment of a Corporate Juridical Person, the Osaka Broadcasting Station. The principal business lines of the subsidiaries were to import, manufacture, market and repair equipment related to radiotelephones, to design and execute construction work, to advance loans to broadcasting stations and to act as agents for receivers' applications for installation and collection of receivers' fees. Thus, their plans concerned all sorts of allied affairs that would contribute towards smooth development of the primary affairs of the broadcasting service.

The question of parallel establishment of subsidiaries delayed the election

(1) The establishment of the Corporate Juridical Person, the Tokyo Broadcasting Station in November 1924 took place more than two years before the establishment of the British Broadcasting Corporation, which was changed into its present form similar to the public service enterprise of Japan from the initial organization.

of officers. Moreover, serious disputes developed among the promoters, who were highly sensitive to their interests, regarding the positions of the chief director and managing directors. The Ministry of Communications, therefore, tried to settle the problem by attaching the condition that, from the nature of the broadcasting station as a public service corporation, no special relationship with certain profit-seeking companies will be established in the future, as one of the conditions for approval. The plans for the establishment of subsidiaries, for which payments of deposits by some prospective investors had already been completed and a draft of agreement with the broadcasting station had been prepared, were thus dissolved. At the same time, the question of the election of officers, which continued to trouble the parties concerned, was settled only after several months. The Osaka Broadcasting Station was approved as a juridical person on 28th February, 1925 and made its official start. As chief director, Komakichi Kimura, a director of the Osaka Electric Company and an influential financier in the Osaka area, was appointed.

2. Government Supervision

Fundamental items in the broadcasting system were instituted on the basis of the Regulations for Private Radiotelephones for Broadcasting Use and Bylaws for the Conduct of Supervisory Affairs, which were based on the Radiotelegraph Law. These were regulations related to the Communications Ministry's conditions of authorization for facilities of broadcasters and listeners and supervision and operation of the authorized facilities. In issuing permits for the establishment of the three juridical persons in Tokyo, Osaka and Nagoya and in approving applications for setting up broadcasting equipment by these juridical persons, the Ministry of Communications applied these regulations. In addition, having recognized the need for further regulating principal matters related to the operation of such equipment, the Ministry ordered the broadcasters to observe the following essential regulations for juridical persons:

- (1) Business plans and the budget of revenues and expenditures for each business year shall be submitted in advance to the Minister of Communications.
- (2) Approval shall be obtained for securing loans of outside funds, disposal of surpluses and election or dismissal of officers.
- (3) Resolutions of the general meeting of the members, business results of the preceding financial year, settlement of accounts, inventory of assets and any changes in the membership shall be reported.
- (4) The Minister of Communications may order reports of business and financial situations and have such reports examined by government officials, or he may order government officials to be present at the general meetings of the members and have them express their opinions.

As can be assumed from the above items, the regulations principally involved financial and personnel affairs, and were most severe. This could be interpreted as the cautious attitude of the competent government office, in view of a special situation in which what should have been placed under exclusive control of the government was put in the hands of private organizations. However, the fact that business plans and budgetary appropria-

tions had only to be reported and no intervention was evident in the personnel affairs except those of officers was quite different from the extent of supervision enforced on NHK, established later. At this stage, therefore, actual operation of the service was largely left in the hands of the broadcasters.

Essentials of regulations with respect to the broadcasting equipment of the three juridical persons were roughly as follows:

- (1) The effective period of permission to operate the equipment shall be ten years, but renewal of permission would be possible.
- (2) The call letters, call name, wavelengths used, broadcasting items and broadcasting hours of the facilities shall be as follows (see next table).
- (3) Broadcasting of advertisements shall be prohibited regardless of the form of presentation.
- (4) Programmes shall be reported to the competent Bureau of Communications by the day before broadcasting. In case broadcasting should be cancelled because of unavoidable circumstances, the reason shall be reported.
- (5) Items of public benefit shall be broadcast when requested by the Director of the Bureau of Communications.
- (6) For the public benefit, the State may take control of the broadcasting facility, or all or part thereof may be purchased by the State.
- (7) Chief engineer and equipment operators shall be selected from among those licensed by the Director of the Bureau of Communications.

In addition to the above, the monthly receiver's fee per receiving equipment was fixed at within ¥2.00 in Tokyo and Nagoya as applied for by the broadcasters, while it was fixed at within ¥1.50 in Osaka. It was also approved in Osaka that a sum within ¥2.00 may be charged once only as subscription fee at the time of the conclusion of a contract.⁽¹⁾

The starting time of broadcasting and ratio of programme hours were fixed differently for the three stations. This was also fixed in respect of

Item	Tokyo facility	Osaka facility	Nagoya facility
Call letters	JOAK	JOBK	JOCK
Call name	Tokyo Broadcasting Station	Osaka Broadcasting Station	Nagoya Broadcasting Station
Wavelengths	375 metres	385 metres	360 metres
Power (input)	1.5 kW	1.5 kW	1.5 kW
Broadcasting items	Weather forecast, time announcement, stock and financial market report, news, talks, music and other entertainments and items that should be reported	same	same
Programme hours	hr. min. hr. min. 9 : 00 - 11 : 00 11 : 15 - 13 : 00 13 : 30 - 15 : 00 19 : 00 - 21 : 00	hr. min. hr. min. 8 : 00 - 16 : 30 18 : 00 - 22 : 00	hr. min. hr. min. 9 : 00 - 11 : 30 12 : 00 - 13 : 00 13 : 30 - 15 : 30 19 : 00 - 21 : 00

the contents of applications, and shows differences in the opinions relative to broadcasting and management policies of the broadcasters. However, conditions which actually existed in the three stations were not necessarily maintained according to their initial plans after broadcasting commenced.

Among the Communications Ministry's items of supervision following the authorization of broadcasting equipment, a specially rigid policy was adopted for the control of broadcast programmes, and this was considered rather too sensitive. It was clear that the policy was followed as a reflection of the political environment⁽²⁾ which necessitated rigid control of press and thoughts in general, but on the other hand, it may have been the result of a dispute with the Home Ministry, which controlled the powers of police administration involving newspapers, magazines and motion pictures, regarding control of broadcasting programmes.

Originally, there was room for doubt not only on the part of the Home Ministry but also of other ministries regarding delegation of the power of controlling press and thought to the Ministry of Communications through control of broadcasting programmes.

The views of the Ministry of Communications were as follows:

- (1) As broadcasting was a form of communication by means of radiotelephone, supervision of the contents of communications should be in the hands of the ministry supervising communications facilities.
- (2) However, as the contents of broadcasting are similar to those of newspapers and other publications, it would be proper to take into consideration the views of other ministries with regard to the policy of control.

The above⁽²⁾ was meant principally for easing the strained relationship with the Home Ministry. The Home Ministry, however, had not completely accepted the views of the Ministry of Communications. Even after the commencement of broadcasting, subtle undulations in the relationship between the two ministries were evident. For examples, at one time the two ministries jointly requested views of other ministries regarding items that should be prohibited from being broadcast. Also, direct call telephones were installed between the two ministries in order to facilitate adjustment of opinions regarding the supervision of broadcasting.

At any rate, it must be said that the Ministry of Communications, which had no adequate mechanism and personnel for supervising press and thought, was faced with the necessity of defending itself against intervention by the Home Ministry, which had long traditions and specialized administrative techniques in the control of press and thoughts, and other ministries, in order to launch upon supervising this entirely new mass medium. Conse-

(1) The receiver's fee was set at ¥1.00 a month in Tokyo and Osaka immediately upon the start of broadcasting, but fixed in Nagoya six months after broadcasting commenced.

(2) Control of press and thoughts was based on the Publication Law enacted in 1893 and the Newspaper Law, which was enacted in 1909. The objects of supervision were publishers and authors of publications containing opinions that were critical of the concept of Japanese national policy that the Emperor was sacred and inviolable, and those that would destroy traditional manners and customs.

Furthermore, in order to defend the "sacred national polity" against modern ideas, against Marxism in particular, which began to make inroads into Japan after World War I, the Law for Maintenance of the Public Peace was enacted in 1925. This was a severely suppressive law aimed at those who would form societies aimed at changing the national polity or denying private property, as well as at scholars and cultured people who were deemed as being in sympathy with such ideas. It was this law which later served as a flank aid in the formation of Japanese fascism.

quently, the Ministry of Communications could not help being particularly sensitive regarding matters connected with the supervision of the broadcasting programmes (see "The State and Broadcasting Service", pp. 72~81).

3. Organization

The articles of incorporation, which regulated basic principles of business operation at the Tokyo, Osaka and Nagoya broadcasting stations, were very similar at the three stations.

In comparing the articles of incorporation of the three stations, the point that strikes us as strange is the number of managing directors. The Tokyo Station had two, Osaka Station stipulated within six and the Nagoya Station set the number within three. This situation had developed out of the allocation of officers' chairs at the time of the merger of applicants. Actually, however, the Nagoya Station had only one managing director from the start. At the Osaka Station, six managing directors were elected at first because of the dispute that took place up to the time of incorporation. Later, however, only one remained.

Under the articles, the will of the juridical person was to be determined at the general meeting of the members, and important executive items were to be handled at the meeting of the directors. The members as of June 1926 totalled 667 in Tokyo, 879 in Osaka and 504 in Nagoya.

The business organization at the three stations was practically identical. Each was organized into three departments, namely, the broadcast programme, transmitting engineering, and general administrative departments. However, in the early days of operation, the small staff had to take care of diversified work regardless of the department to which each belonged.

Editors and producers of broadcast programmes, which constituted the heart of the broadcasting service, were at first secured from among experienced staff at other mass-communication media, such as newspapers and magazines. These people were at once appointed chiefs of various sections. For the transmitting department, those who had experience in marine and land wireless operations were employed, and as their chief a Communications Ministry official who has been engaged in the study of radio communications was appointed. However, as none had any experience in the editing and production of broadcasting programmes and in the operation of equipment in other fields of engineering, inexperienced personnel had to be assigned to them and painstaking work was required before they were put on regular routine business.

As the broadcasting service developed, division and specialization of duties took place. The number of staff also increased, and by June 1926, the Tokyo Station employed 191, Osaka had 128 and the Nagoya Station, 76.

4. Financial Situation

As in business firms in general, financial affairs of the broadcasting organization were based on investments by the members and loans from other financial resources. These funds were used for building facilities and providing equipment. The accumulated receivers' fees were used for operat-

ing expenses. In case any surplus accrued, it could be used for expanding the service under authorization by the Minister of Communications. This policy was later followed by NHK as a keynote of its finance.

In the early days of the broadcasting service, Tokyo and Osaka estimated the number of contracted listeners for the year at about 10,000, while Nagoya estimated it at 5,000, and operating expenses were budgeted accordingly. This financial programme was established amid unfavorable conditions and the economic environment of the times. For example, large numbers of bankruptcies, readjustments and suspensions of operations that were taking place presaged the coming of the great depression. The production of radio sets had not been developed to an adequate stage, and their prices were very high. Furthermore, the service areas of the three stations were limited to the cities where the stations were located and their peripheral areas.

Unexpectedly, however, the number of receiving contracts obtained by the three stations far exceeded the initial estimates. After one year, as a matter of fact, the Tokyo Station had nearly 170,000 listeners, Osaka had about 70,000 and Nagoya served some 40,000 contractors.

As far as Tokyo and Osaka were concerned, such fortunate error in estimates allowed marked expansion of the respective services. Revenues from the contracted listeners not only put the operation of the services on a regular track but general recognition of the value of broadcasting was greatly enhanced. Furthermore, soliciting of new members and new loans became much easier and bright prospects could be seen with regard to the financial resources for construction of facilities. As stated before, the monthly receiver's fee had been set at up to ¥2.00 in Tokyo and up to ¥1.50 in Osaka by the order attached to the broadcasting equipment installation permit issued by the Ministry of Communications, but the actual rate at both stations was reduced to ¥1.00.

As a result of the settlement of accounts for financial 1926 (April to March of the following year) both of the above stations had some surplus, which they used to further expand in scale, and prospects for the future became brighter. Also, membership in Tokyo greatly expanded, and the initial financial programme estimating the corporation's own capital at one-third and loans from outside at two-thirds was revised to make the ratio of its own capital two-thirds and that from outside at one-third. As a result, during that year the Tokyo Station was able to meet practically all the expenses necessary for acquiring fixed assets with its own capital fund, and moreover, the station could carry over a sum equal to 85 per cent of loans and unpaid accounts into its reserve. Meanwhile, at the Osaka Station payments from the members were more favourable than in Tokyo, and because of the delay in the construction of facilities, money on hand at the station was abundant. The station was in possession of current assets equivalent to 75 per cent of fixed assets, and since profit from the operation of the service corresponded to 65 per cent of investments and 40 per cent of total assets, the financial affairs of the station were in a highly favourable condition.

In contrast to the Tokyo and Osaka stations, the financial affairs of the Nagoya Station fell into difficulties shortly after the commencement of broadcasting. Nagoya, in the first place, was inferior to the two other cities with respect to the size of its population, cultural level and economic

capacity. As a result, the station ran into difficulties in acquiring materials for broadcasting programmes and soliciting receiving contractors. Although the number of contractors, as stated before, increased beyond initial expectations, the margin of increase was much less than in Tokyo and Osaka. Moreover, the result was achieved only after the members of the Nagoya Station undertook campaigns, both by written invitations and personal visits, to secure such receiving contractors. The number of voluntary contractors arising from general recognition of the value of broadcasting was rather small in this city.

Such unfavourable financial situation at the Nagoya Station came to the surface in 1927. While the Tokyo and Osaka stations could dispense with outside capital because of increases in their own capital and business income, the Nagoya Station, which at first had a comparatively large capital of its own, began to feel financial pressure as a result of failure to secure large numbers of receiving contractors. Such a situation also made it difficult to secure subscriptions of new members. Consequently the balance between business income and expenditures was disturbed, and it gradually became difficult to cover increased expenditures unless more outside loans could be secured.

At any rate, since such financial situation prevailed at the Nagoya Station with about 500,000 potential receiving contractors within its service area, whether it would be financially feasible to establish independent broadcasting stations in other local areas in the future became a serious problem from the standpoint of the policy related to broadcasting. And, as will be seen later, soon the question of the establishment of a unified organization through the merger of independent enterprises to manage the broadcasting service for the entire nation came up for consideration.

5. Commencement of Broadcasting

With establishment of independent broadcasters in Tokyo, Osaka and Nagoya, the stations in these areas immediately began procuring capital funds, selecting sites for the construction of stations, installing broadcasting equipment and employing staff, all of which were necessary preparations to start their respective services. Under authorization by the Ministry of Communications, the Tokyo Broadcasting Station officially started broadcasting on the 22nd March, 1925, the Osaka Station, on the 1st June the same year and Nagoya Station, on the 15th July.

An outline of the inaugural programmes at the Tokyo Broadcasting Station was roughly as follows (see next table).

As shown above, the inaugural programmes of the Tokyo Station were built around music and news. The Osaka Broadcasting Station roughly followed the Tokyo Broadcasting Station in programme organization, but befitting a commercial city, stock market and commodity price reports were included from the very beginning. The inaugural programmes of the Nagoya Broadcasting Station comprised principally traditional Japanese music of various types.

The Governor of the Tokyo Broadcasting Station, Shimpei Goto, in his message to the listeners on the occasion of the inauguration of broadcasting pointed out the four rôles to be played by broadcasting. These were "equal

cultural opportunities for all", "renovation of home life", "socialization of education" and "speed up of economic functions". He stressed that the objectives of the broadcasting service should be concentrated on the above four points. Although these words were born of evaluation of the existing political, economic, educational and cultural conditions, the high evaluation imputed to broadcasting as a means of contributing to the social good, in the face of a strong general tendency towards seeing broadcasting in the same category as entertainment organs like stage plays, motion pictures and gramophone records, must be accorded special mention. It was from such a principle that soon the occasion arrived for expediting construction of a nationwide network. In particular, the emphasis on the educational value of broadcasting showed notable foresight into what was to become one of the outstanding characteristics of Japan's broadcasting.

The antenna powers at the time of commencement were 220W for Tokyo, 500W for Osaka and 1kW for Nagoya. These were very low as transmitting power, and moreover, 80 per cent of receiving sets were of the crystal system, poor in sound quality and sensitivity. In such circumstances, the service areas were limited to the three cities and their respective peripheral areas.

For all three stations, all important technical facilities like transmitters were imported, for Japan's wireless equipment industry, as stated before, was considerably behind that of other nations. At that time, production of transmitting tubes and transmitters was just beginning in this country under patent licences granted by foreign manufacturers. The Japanese engineers, therefore, were entirely inexperienced in the manufacture of such equipment. The Tokyo Broadcasting Station rented a General Electric transmitter from the city of Tokyo and remodelled it for broadcasting use. The Osaka Broadcasting Station used the Western Electric transmitter, which was the only imported one for broadcasting available in Japan. Finally, the Nagoya Broadcasting Station used a Marconi transmitter which

Programme Time	Programme Contents
9. 30	Performance by Imperial Navy Orchestra (works of Weber, Tchaikovsky, Bizet).
10. 00	Message on the opening of the station, and congratulatory message by the Minister of Communications.
11. 30	News provided by newspaper companies.
11. 50	Concert performance of new work on Japanese musical instruments—koto, shakuhachi, sho.
13. 30	News provided by newspaper companies.
13. 45	"Utazawa", traditional popular song, to Japanese "shamisen" accompaniment.
14. 00	Soprano solo (works of Brahms, Schubert, Strauss).
19. 00	News provided by newspaper companies.
19. 30	"Tokiwazu", traditional popular song. Excerpts from Western operas (works of Beethoven and Verdi).
20. 55	Weather forecast.

had been ordered previously.

The microphones, which greatly affect the sound quality of broadcasting, were double-button carbon types imported from the Western Electric Company of the United States. These were used in Tokyo and Osaka. The Nagoya Station, on the other hand, used Marconi's moving coil magnet-phones. These two types differed somewhat in shape and performance, but both were noisy and very heavy to handle.

As the Tokyo Station decided to start broadcasting before completion of its studio facilities in order to meet the general demands for an early start, it first rented a room in the Tokyo Industrial High School which it used as its early studio. The Osaka Station rented a penthouse on the roof of Osaka Mitsukoshi Department Store and made this into a provisional studio.

The studios were poorly equipped and small. The improvement of the clarity of voice by reducing echoes and the prevention of noise infiltrating into the studios from outside were the chief concerns in using such studios. Therefore, if adjustment of reverberation was needed according to the type of programme, reflector boards were used, and curtains hanging over the walls were opened or closed. These measures, however, brought little relief. There was only one microphone in the studio, and it is no overstatement to say that the arrangement of performers and instruments around this single microphone was practically the whole of the control technique during the early stages of broadcasting. However, continued tests and impassioned efforts of programme producers and engineers soon enabled them to digest diversified programmes, thus gradually evolving production and control patterns.

6. Organization of Broadcasting Programmes

It goes without saying that the broadcaster's ideas of broadcasting and his management policy as well as the objective conditions of the times should have been reflected on programming policy. Also, from the process of the establishment of the broadcasting system in Japan, it was impossible to ignore, more or less, the views⁽¹⁾ of the Ministry of Communications, the government agency for supervising broadcasting, in the management of programmes.

The prerequisite of programme organization was the development of programme types. For the programming staff who were totally inexperienced in such work, however, considerable effort and painstaking work were required in groping for and discovering programmes suitable for broadcasting and in allocating these to proper time schedules. Moreover, the staff were faced with the following conditions, which inhibited smooth

(1) Views clarified by the Ministry of Communications on the management of broadcasting programmes prior to commercialization thereof stipulated the following: "Broadcasting should be centred on programmes of practical value, such as time announcements, weather forecasts, stock market reports and news, and entertainment programmes like music should be taken up as those of secondary interest." This view brought out some discrepancy with actual conditions experienced shortly after the commencement of broadcasting, but the Japanese broadcasting stations eschewed from following the policy of stressing music programmes as was seen in overseas broadcasting. For example, the BBC, which started out as a public service broadcaster like its Japanese counterpart included 62% music programmes in the schedule it announced at the end of 1927.

operation of programming:

- (1) As evaluation of broadcasting by the general public was quite low, there was a strong tendency towards considering it as a mere entertainment facility. Reflecting such a concept of broadcasting, some scholars refused invitations to deliver talks over the radio, while some entertainment artists thought that performances on radio would be injurious to their art.
- (2) In the early period of the commencement of broadcasting, the number of receiving contractors was still small. Under the situation, the amount of funds that could be spared for programme production out of the operating expenses based on revenues comprising receivers' fees was very small. This lack of funds became an inhibiting factor not only in the selection of good talent but also in the planning of new programmes.

In addition to such limitations, inadequacy of technical facilities, such as shortage of studios and imperfect equipment, restricted the freedom of programming.

The normal procedure of programming consisted of drafting of the original plans and programme schedules by the programming staff and approval of the plans and schedule by the programming conference. In the early days, however, each of the stations in Tokyo, Osaka and Nagoya was provided with less than 10 programming staff. The members of the staff, therefore, selected items they thought would be suitable and fitted them into suitable places in the schedule. Such items were collected by a number of staff members and the programmes organized. Programming conferences were held only once a month as occasion demanded.

Although programme schedules were organized with consideration paid to possible changes of items, there were some among performers who had a very poor sense of punctuality, and who failed to calculate the length of their performance in accordance with time available on the air. In such circumstances, it was not rare to see a considerable time gap between programmes or one programme nonchalantly eating into the time scheduled for the next programme.

It was by no means easy to develop programme items or to fix broadcasting hours under such a situation. As a result of efforts made in digesting already available programme materials and in discovering patterns of programmes unique to broadcasting, the scope of programme items was gradually expanded. The performers also were gradually trained to adapt themselves to time restrictions in broadcasting.

The programme hours of the three stations at the time of commencement were about 5 hours a day respectively. Six months later, however, programme items and the schedule of the Tokyo Station for normal weekdays showed a reasonable arrangement⁽²⁾ as a broadcast programme organization, as exemplified in the table below. (see next page)

The frequency of stock market and commodity market reports was the

(2) The programme schedule of the Tokyo Broadcasting Station left rest time here and there. This arose from the fact that the use of radio waves all day long for purposes of broadcasting was not authorized by the Ministry of Communications in order to prevent interfering with military and general public communications. This, in other respects, helped preservation of the broadcasting equipment, which had not yet proved adequate in performance.

highest, especially in Osaka and Nagoya. As a matter of fact, programmes in these two stations during the daytime were practically monopolized by such reports. However, it cannot be overlooked that programmes as a whole tended to stress entertainment. This arose from the fact that, in order to increase revenues from receivers' fees and to promote stability of business operations, it was not possible to ignore programmes desired by the listeners. As business operations were put on firmer basis, programme time for those imparting information and knowledge was increased, and the ratio against entertainment programmes was raised.

Originally, the Japanese civilization developed under the influence of the Oriental, Chinese in particular, civilization. In modern times, however, opportunities for contacting and absorbing Western civilization opened up more widely. Under the circumstances, it was possible for Japanese broadcasting stations to seek out materials from all ages and all places. Consequently, cooperation of outside specialists was frequently requested when certain subject matters were taken up for broadcasting.

From about a year and a half after the Tokyo Broadcasting Station started operation in March 1925 till the birth of NHK as a new nationwide organization in August of the following year, the principal programme items established totalled 74,⁽³⁾ as shown in the following table. (p. 35)

Among the items, programmes in talk form were mostly those presented

Programme Schedule of Tokyo Broadcasting Station (as of September 1925)

Time of day	Programme duration (min)	Programme items
9.00	5	Weather forecast
9.30	10	Stock market and commodity market report
9.40	20	Talk on cooking and other matters
10.00	30	Talk suitable for homes
10.30	10	Stock market and commodity market report
11.30	10	Same as above
11.40		Time announcement
11.55	5	Stock market report
12.10	30	Music
12.45	15	General news
13.30	10	Stock market and commodity market report
14.30	10	Same as above
15.30	10	Same as above
15.55	5	Stock market report
18.00	40	English course
18.40	30	Children's stories and music
19.10	15	General news
19.25	125	Music, entertainments and others
21.30	10	Time announcement, weather forecast, and so forth

in series, which included courses in the English, French and German languages. In particular, courses in the English language accounted for 25 per cent of the total time allotted to eighteen lecture courses. Although Western music was not yet so popular, programme time corresponding nearly to 50 per cent of the time allotted to traditional Japanese music was assigned to it, which fact deserves special note. This was an outcome of the stress placed by the broadcasters on this field for the purpose of contributing towards improvement of the cultural level of the Japanese people.

What characterized programming most outstandingly was the fact that all general news scripts were provided free of charge by newspaper companies and press agencies. The same applied at the Osaka and Nagoya broadcasting stations. This may be considered to have arisen from the fact that the broadcasting stations, which had just started operations, had not had time to develop gathering of news material so quickly, but the real truth was that there was too wide a gap in ability between the broadcasting stations and the newspaper companies and press agencies, which already had powerful news reporting mechanisms. Although news scripts were provided free of charge, a condition was attached that the name of the organization providing such scripts be announced over the radio. As a result, the broadcasting stations had no editorial rights in so far as newscasts were concerned. This system continued for several years.

Programme Schedule and Time Ratios at the Tokyo Broadcasting Station
(March 1925 - August 1926)

Department	No. of items	Programme time in %	Items specially often presented
News	6	27%	Financial market general news, weathercast
Talks, lectures	21	31	General talks, English course, Hobbies
Japanese music	18	15	Gidayu, nagauta, biwa
Western music	11	8	Orchestra, concert and solo singing, band
Entertainments	8	10	Kodan, rakugo
Dramas, plays	7	3	Stage plays, movie stories
Children's hour	3	6	Children's stories
Total	74	100	

(3) In the column listing items which were presented most frequently, Japanese music is mentioned. Items included were all works familiar to the Japanese people since early days. These were stories told to the accompaniment of musical instruments or described by music. "Gidayu", otherwise known as "Joruri" and "Nagauta" are accompanied by "shamisen" a string instrument unique to Japan. "Biwa" is one of the Oriental string instruments like a flat harp. "Kodan" and "Rakugo" mentioned in the entertainment column are both performed by a single story teller. The former is centred on stories of revenge and great feats of arms, which appeal to the emotions of the listeners. The latter seeks its materials in common life, and such materials are organized into comical anecdotes and stories.

7. Listeners and Receiving Sets

As stated in the "Financial Situation" (see p. 28), the increase in the number of receiving contracts was highly favourable with each broadcasting station. The greatest factor promoting such increase probably was the enthusiastic expectations placed on broadcasting by the general public. "In any case, as something suddenly appeared from nowhere, and dreams became a fact, the people's astonishment knew no bounds. At first people opened their eyes wide at the fantastic phenomenon and shook their heads in wonder. Soon, however, they rushed to buy receiving sets and tried to enjoy this phenomenon that looked like a miracle." This was what a broadcaster wrote in his reminiscences of the experimental days of broadcasting. These words may be somewhat exaggerated, but they are sufficient to provide a glimpse of the general trend in those days.

As a force behind the upsurge of such expectations must be cited enlightenment campaigns conducted by newspaper companies and students of radio, and the influence of publications related to radio. It was expected that the increasing number of young amateurs, who tried to receive broadcasts with receiving sets assembled by themselves (estimated at 50,000 across the country shortly before the commencement of broadcasting) would connect directly to conclusion of receiving contracts.

Also, the Ministry of Communications, which was the government agency supervising broadcasting, soon after the inauguration of the Tokyo Station revised the regulations to remove or ease obstructive items towards securing more receiving contracts, as a means of protecting the enterprise. In other words, the regulation that "any receiving set possessed by any receiver operator shall be subject to tests by the Electro-Technical Laboratory of the Ministry of Communications and shall receive certificate thereof" was nullified. Also the receivable wavelengths, which were fixed at 200 metres to 250 metres and 350 metres to 400 metres, were revised to 400 metres or below. Through this measure, technical requirements for manufacturing receiving sets were eased, and the use of receivers made by medium and small manufacturers and those assembled by amateurs was promoted, and served as a factor in increasing the receiving contractors.

As evaluation of broadcasting by the general public became higher, with the commencement of broadcasting, the stations considered services to the listeners and publicity were means of securing more listeners. For this purpose the broadcasting stations began providing advice on receiving sets and other problems at the stations and even on the streets. They also advertised in newspapers and magazines and sent out letters of invitation to people who had telephone installations at home regarding the advantages of concluding receiving contracts.

Lecture meetings were sponsored by the stations, motion pictures of broadcasting were shown and receiving set assembly courses were held here and there under sponsorship of the broadcasting stations or at the invitation of schools, cultural organizations or young people's associations. At cinemas, an American educational film "The Mysterious Box" and the "Principle of Radio" were shown for the purpose of disseminating knowledge of radio. In the "Mysterious Box", a question as to why programmes were delivered to the homes when there were no wire connections was

posed. Then the motion picture proceeded to explain, in an easy manner, the process of radio broadcasting and reception. This film was utilized for a long time afterwards and enjoyed wide popularity wherever it was shown. The Tokyo Broadcasting Station produced its first publicity film at the beginning of 1926. Its contents included an outline of broadcasting for a day, depicting production of various programmes and recording the reactions of the receivers.

Statistics released in early 1925 showed that nearly 80 per cent of the receiving sets were of the crystal type, which were poor in sound quality and sensitivity. From the performance of the crystal receiving set, the receivable range was considered to be within a radius of 40 kilometres from the broadcasting station. In areas outside this range, battery-operated vacuum tube receivers had to be used, since it was still a period in which no eliminator type receivers had been developed to the practical stage.

The crystal radio set, which used a crystal for a detector and a head-phone to listen into the programmes, was easy to handle and cost only about ¥10.00. For this reason, this type of radio set gained wide popularity. However, as it was of a "groping" type, e. g. the detector was adjusted while listening to broadcasting in an attempt to "grope" for the position of the highest sensitivity. For this reason, there were instances in which the weather forecast ended while the user was "groping" for the best position, or the best position drifted because of some vibration. Later, when fixed crystal detectors were put on the market, such inconvenience and instability were eliminated.

Where crystal radio sets were not good enough to receive the programmes, or when a speaker had to be used for group listening, vacuum tube system sets were used. However, most of these were 1-tube, 2-tube or 3-tube reflex types at best. The price was about ten times that required for the crystal type, which was extremely high for the living standard of the people of those days. Moreover, recharging of the battery used as the power supply was difficult, and the maintenance expenses mounted considerably. A few people, who belonged to the wealthy class, chose to purchase imported radio sets (RCA, Gilfilan and Philco products), but 4-tube or 5-tube types cost 400 to 500 yen, while the 8-tube super-heterodyne sets cost as much as 1,000 yen.

In those days, radio parts dealers and foreign product importers appeared in large numbers under the stimulus provided by the amateur radio fever, but domestic production of receiving sets practically failed to materialize. Although two or three well-known wireless communications equipment manufacturers went into production of radio sets, the cost proved too high and demand from the general public was not very good. Also, thinking that radio set production was not suitable for manufacturers with a huge capital, most of them suspended production. Thereupon, cottage type makers comprising converted musical instrument makers and amateur manufacturers appeared one after another, and products put out by them began to appear on the market.

For liaison purposes a cooperative organ for these small makers, the Tokyo Radiotelephone Manufacturers' Association, was organized in February 1925. Organizations of similar associations followed in Osaka and Nagoya. In June 1926, the Federation of Radio Dealers' Associations of

Japan was organized by the above three associations, and this soon developed into a nationwide organization.

8. The Influence of Broadcasting

At the start of broadcasting, the people's interest in radio was more of hearing sound and voices originating in distant places rather than of concern with the contents of programmes. As they stretched antennae outside and handled crystal receivers indoors, their curiosity concerning the science of radio waves was further aroused, and as they learned more about radio, unfamiliar technical terms began to crop up now and then in their normal conversation.

In those days, it was not possible for the whole family to enjoy the radio together, since most of the receiving sets used were of the crystal type. For the family, if they wanted to listen to the radio, they had to have separate receiving sets. Sometimes, the members of a family took turns in putting the receiver over their ears. Sometimes, someone in the family listened to a programme and afterwards explained the contents to the others, or the person listening explained the contents from time to time during listening. However, in many cases, the receiving set was left in the hands of an old man, who had more time to handle it, or to children who were always ready to jump at anything new and curious.

In those days, the people's attitude towards listening was not to choose promising programmes but to listen to everything that could be heard through the receiver. While listening to various kinds of programmes without paying much attention, people, nevertheless, learned common sense and advanced their power of understanding. Although it was common knowledge that broadcasting had the potentiality for providing information and imparting knowledge, there was no means of avoiding the fact that people generally preferred entertainment programmes and this tendency has not even changed today.

In August 1925, the Tokyo Broadcasting Station undertook a programme preference survey under the mailing method. This survey revealed the ratio of listeners' programme preference to be 37.8 per cent for traditional Japanese music, 23.1 per cent for Western music, 33.3 per cent for entertainments and dramas and 5.8 per cent for children's stories and songs. Classic stage arts, which had been confined to theatres and halls for appreciation by limited audiences were now released to the general public through broadcasting, thus creating opportunities for them to enjoy entertainments of a higher level. In particular, the high rate of preference for Western music, which in those days had not been popularized, pointed a way to subsequent programme organization, and put more zeal into the development of this field through broadcasting.

Financial market reports during the early days of broadcasting were worthy of special attention. As such reports were made more than a dozen times a day, the programme so impressed the listeners that even children began to employ certain stock market terms. However, the contents of these reports had little interest to the majority of listeners, though they might have benefited those engaged in stock market transactions.

Talk programmes of general nature were accorded greater importance

in Japanese radio than in other nations. However, as many of the lecturers, who had been trained in the so-called visual type language under the influence of the Chinese literature boom, talked over the listeners' heads for as long as 30 minutes at a stretch, and as the contents of the talks were controlled rigidly by the supervisory government agency, the effect of such programmes could not be brought home to the listeners so quickly. On the other hand, series lectures on cooking and hobbies and those on foreign languages, which were purported to impart practical knowledge, enjoyed considerable popularity.

In January 1926 a preference survey covering all programme items and using the head of the family and other members as samples was undertaken by the Tokyo Communications Bureau by direct mail. The percentages of preferences by types of programmes as brought out by this survey consisted of 65 per cent for entertainments, 27 per cent for talks and lectures, 8 per cent for news. The difference in preferences between the head of the family and the rest of its members was evident in the higher preference rate for news programmes by the head and higher ratio for entertainment programmes by the rest of its members. Both the head and the others showed equal preferences for talks and lectures. Even then, preference for entertainment programmes was overwhelmingly high, the ratio having far exceeded the expectation of the broadcasters.

At all the broadcasting stations, announcements were made of the programme schedule for the following day at the end of each day's broadcasting to publicize coming programmes. At the commencement of broadcasting, programme schedules were advertised in newspapers and other media, but no fixed space was provided for presenting daily programme schedules. However, in June 1925, shortly after the commencement of broadcasting, a newspaper named "Daily Radio News" was published in Tokyo, and this paper secured a considerable number of subscribers. Stimulated by this new publication, the trend towards reserving fixed space for radio programmes became evident among the leading newspapers, as a means of increasing subscribers. The Yomiuri Newspaper took the lead, in November 1925, to provide a column for radio programmes. The "radio column" of this newspaper contained the day's programme schedule, a brief description of principal programmes, part of the words of songs and introductions of performers. This column brought forth a very favourable reaction from readers; subsequently, other leading newspapers had to fall in step, and introduction of radio programme in the newspapers became settled. The radio column in the newspapers stimulated the listeners' desire to tune in to programmes, and the people gradually formed the habit of selecting preferred programmes from the papers.

3. Prior To Establishment of NHK

1. Background

The increase in the applications for receiving contracts, after commencement of broadcasting by the Tokyo, Osaka and Nagoya broadcasting

stations, far exceeded expectations. However, since the transmitting power of each station was less than 1kW, and as the receiving sets were of crystal type, which were poor in sensitivity, the service area of each station was limited to the city in which it was located and its peripheral areas. For this reason, it was inevitable for the listeners to be concentrated in the limited service area. As a result, the initial concept of linking broadcasting with the consumer life of the general public to provide equal opportunity of exposure to cultural environment was far from being realized.

Among thinking people, there were some who expected, that since the number of receiving contractors was increasing steadily, the broadcasting facilities would be improved and the programmes would become more substantial. They also expected a network of broadcasting linking the three stations, and that with an increase of transmitting power, as well as the construction of more stations, broadcasting would be expanded to cover the entire nation. Also from the standpoint of the popularization of radio, some thought that the listeners should be given opportunities to receive radio programmes at lower cost, and urban cultural attainment should be disseminated among local communities through network broadcasting.

As aforementioned, the Ministry of Communications stipulated one station in one urban area as the basic principle of radio facility establishment, and designated the above three cities as sites for the first stations. This decision was based on the idea of using these stations as experimental facilities through which suggestions might be derived for the operation of broadcasting stations to be established later on in other areas.

Although all three stations saw rapid increases in the number of listeners during the early period of broadcasting, yet as far as Nagoya was concerned, the rate of increase gradually declined, and concern began to be expressed regarding the future of business operations. As the Nagoya Station was less favourably⁽¹⁾ situated than the Tokyo and Osaka Stations, which were in a position to secure rich broadcasting materials and adequate talent, the former had frequently to invite talents from the two larger cities in order to meet the expectations of its listeners. So accumulation of such expenses at the Nagoya Station could not be ignored from the standpoint of business operations.

As conditions of operations at the three existing stations became known among the general public, people of other cities with a smaller population than Nagoya, who intended to apply for establishing broadcasting stations, were forced to reflect on the feasibility of independent operations in their respective cities with smaller populations and less available broadcasting materials. They thought that even though independent operation of broadcasting stations might be possible, the receiver's fee they would have to charge would inevitably be higher. Also, it would have been necessary to promote popularization of vacuum tube system receiving sets, which were costly and required considerable maintenance expenses, if people living in the serviceable areas were to be brought under coverage, in addition to the

(1) Even in those days when entertainment programmes enjoyed the greatest popularity, there were only about two dozen well-known entertainers living in Nagoya and the surrounding areas. Moreover, most of them were artists in the field of traditional Japanese music. The Nagoya station, which was faced with much difficulty in discovering broadcasting materials, when compared with Tokyo and Osaka, implemented outdoor pickup broadcasting in October 1925, thus forging ahead of Tokyo and Osaka in this field.

city and peripheral areas where the crystal sets could be used. However, under the serious business recession of that time, it was almost unthinkable to impose such expenses on the listening public.

The Tokyo Station, which had the largest financial margin in business operations, was stimulated by the aforementioned public opinion. The Station, therefore, submitted two draft plans for the expansion of broadcasting facilities to the Minister of Communications in November 1925 for his approval. One was a plan for the establishment of the Tokyo Central High-Power Transmitting Station; the other for the establishment of local rebroadcasting stations. The first plan aimed at expanding the service area for those using crystal receiving sets. This contained a programme for constructing a transmitting station somewhere in the suburbs of Tokyo and providing it with an antenna power of 10kW. The transmitting station and the studio would then be connected with land lines. The latter plan included construction of rebroadcasting stations at various points in the country in order to expand the areas where crystal receiving sets could be used. Through these local rebroadcasting stations, programmes originated at the central station would be presented to listeners under coverage throughout the country. Moreover, the operation of the rebroadcasting stations would be centrally controlled at the Tokyo key station. In other words, the latter plan envisaged unification of the broadcasting service on a nation-wide scale. The party which drafted this plan thought that it would stabilize operations of broadcasting services in local cities, dissolve difficulties in the securing of broadcasting materials and allow exploitation of the functions of broadcasting to the full.

Meanwhile, as will be presented in the following section, the Ministry of Communications had already commenced studies and investigations into possibility of unified operations of the broadcasting service on a nation-wide scale. Under this situation, the Ministry simply said that the plans submitted by the Tokyo Station were quite appropriate in their aims, but since there was more room for study with respect to contents thereof, they would only be accepted as plans. The fact that the broadcasters and the supervisory government agency happened to be considering the future of broadcasting on the same footing, only a year after commencement of the service, was proof of the recognition of the social influence inherent in broadcasting.

2. Establishment of Policy

The Ministry of Communications was faced with two problems with respect to the administration of the broadcasting service. One was the technical problem involving ways and means of disseminating crystal receiving sets throughout the country. The other was the choice of the management system, namely, whether it should be a divided independent system as in the case of the three existing stations, or a unified system on a national scale. As expenses required for the former would have been so enormous as to preclude possibility, solution of the question, it was thought, would have to be dependent more on the latter.

In consolidating the fundamental concept of the management policy, officials of the Ministry of Communications repeatedly discussed matters

related to the analysis of the business results of the existing three stations and to problems that might arise in the management of new broadcasting stations established in other cities in the future. As stated in the preceding section, opinions finally crystallized in the following items under the endorsement of the broadcasters and those who were desirous of applying for the establishment of broadcasting facilities:

- (1) With the existing transmitting power, the listeners will be concentrated in the cities and the peripheral areas.
- (2) From the example of the Nagoya Station, broadcasting stations established in medium and small cities are likely to experience difficult business operations even though wide service areas may be available to them.
- (3) Consequently such stations will be forced to charge high receiver's fee regardless of how far they may curtail expenditures.
- (4) In spite of this, programmes presented by such stations will inevitably be poor in quality.
- (5) It was doubtful also, whether such stations could secure capable engineers.

As a result it was decided that independent operation of local broadcasting stations would be attended with such defects, and the policy was clarified of adopting a unified national broadcasting system. It was, of course, unquestionable that merger of broadcasting services as seen in Great Britain, and concentration of broadcasting enterprises under centralized management as in Germany, served as pointers to Japan's adoption of this policy.⁽¹⁾ It is believed that the situation in Britain and Germany exerted some influence on the broadcasting systems adopted in other countries of Europe. For such mergers and concentration of the broadcasting enterprise had the advantage, from the viewpoint of administration and control, of facilitating supervision and guidance in the management of the broadcasting service. In particular, since the broadcasting stations in Japan were established as non-profit organizations from the very beginning, and, moreover, in view of the circumstances attending the establishment of such non-profit corporations, it was comparatively easy to promote a merger of these corporations and to reflect the government's policies in their operations.

The Ministry of Communications drafted a document on the unified operation of broadcasting service in January 1926. This was in great detail with respect to the advantages and disadvantages, the time, organization and scale of the unified management of the broadcasting service. In citing the advantages of such unified management, it observed:

- (1) As the financial affairs can be handled centrally, management of local stations will be facilitated, the receiver's fee can be unified for the entire country and, moreover, it can be reduced gradually as the finan-

(1) The broadcasting service in Great Britain was a monopolistic system operated by the British Broadcasting Company, a profit-seeking organization, though it was changed in January 1927 into the British Broadcasting Corporation, a public service non-profit organization. The local broadcasting stations formed a network as facilities affiliated with the key station. In Germany programming was left in the hands of individual broadcasting stations, but the government itself took charge of the construction and operation of the facilities. As a supervisory organ for these broadcasting facilities, the German Broadcasting Federation (German Broadcasting Co., R.R.G.) was set up by joint investments of the government and the broadcasters in May 1925.

cial affairs of the broadcasting service improve.

- (2) Use of high-power transmitters and establishment of local rebroadcasting stations will facilitate increase of listeners using crystal type receiving sets, and moreover, realization thereof can be attained quite economically.
- (3) When network broadcasting becomes possible, the unified organization will be capable of meeting the enormous expenses required for the construction of channels and facilities.
- (4) Improvement in engineering and progress therein can be expected.
- (5) Government supervision and guidance would be facilitated.

On the other hand, the disadvantages cited included:

- (1) The advantage of further developing meritorious points and supplementing defects through competition among the broadcasting stations would be lacking.
- (2) The burden of receiving contractors against benefits received would be unbalanced. In other words, part of the burden of the receiving contractors in the service areas of broadcasting stations capable of self-sufficiency would be transferred to compensate for insufficiency in the service areas of the stations not capable of self-sufficiency.

According to the thinking of those who drafted the policy, however, competition among the broadcasting stations would be negligible under the system recognizing monopolistic broadcasting areas, and even among the existing three stations, evidences of competition were almost non-existent. Moreover, since broadcasting was a cultural service, and the range of radio waves could not be technically controlled, it would be practically impossible to eliminate regional differences in the burdens of the listeners. Under this interpretation, the authorities who drafted the policy were of opinion that the defects mentioned above would pose no problems.

In February of the following year, the final version of the draft policy was drawn up after certain revisions were introduced into the organization and scale of the unified management system envisaged in the earlier draft. It appears that the questions related to the organization became the subject of most frequent discussions, and while no definite conclusion was arrived at regarding the draft policy, a number of management systems was listed, and the decision of the Minister of Communications was requested. These systems included (1) management under a single organization, (2) management under a federated body with the existing stations and new stations to be established as members, and (3) management by two independent organizations, one in Tokyo and one in Osaka, to be called the eastern and western Japan services. In addition to the above, a proposal⁽²⁾ was made, contrary to the initial basic policy for the establishment of a centralized profit-seeking organization to manage the unified broadcasting service. The then Minister of Communications, Kenzo Adachi, however, decided on the first plan, i.e., management under a single unified organization. This plan called for the establishment of a

(2) This plan envisaged establishment of the Japan Radio Company, Limited. This arose from the views held by some to the effect that the government-operated telephone service was generally inefficient and uneconomical, and the broadcasting service under similar system might be attended with similar defects. As the plan stipulated that dividends would be limited to 10%, and surplus handed over to the government, it was not a purely profit-seeking plan.

new Nippon Hoso Kyokai, to be commonly known as NHK, with the existing three stations as the basis. Under this plan, the headquarters was to be established in Tokyo, and regional stations were to be provided at seven strategic points in the country (the seven points or cities corresponded with the locations of the local administrative jurisdiction of the Ministry of Communications) to take care of the management of the broadcasting service. This decision was followed by the drafting of the five-year programme for the construction of a broadcasting network on a national scale, which was the immediate objective of the newly established NHK (refer to Section 1, Chapter 5, the Network.)

3. Merger of Three Broadcasting Stations

After deciding on the policy of unified nation-wide operation of the broadcasting service, the Ministry of Communications began procedures aimed at obtaining the understanding of the existing three broadcasting stations. As already stated, since the Tokyo Broadcasting Station had drafted the plans for unified operation on a nation-wide scale and had submitted them for approval, it had no reason, in principle, to oppose the proposal of the Ministry. The Nagoya Broadcasting Station had also nothing important to advance as reasons for opposing the proposal, since concern for the future of business management at this station was one of the reasons for the Ministry considering unified operation.

In Osaka, however, opinions favouring division of the country into two great radio centres on one hand, and those favouring establishment of commercial radio under some profit-seeking company in place of the public service system came to the surface. Such opinions showed strong opposition to the proposal advanced by the Ministry of Communications. The former views were based on distribution of population, cultural level of the people, real economic capacity and geographical position of the Osaka as against the Tokyo area. As a matter of fact, the Osaka applicants had the idea of rejecting centralization of the broadcasting service in Tokyo. The latter opinions were a rekindling of the plans supported by the applicants even before the Osaka Broadcasting Station was officially approved. However, as these two plans had already been rejected as a result of examination before the Ministry of Communications adopted the new policy, the Ministry stood firm against them. Therefore, the Osaka Broadcasting Station, while not completely satisfied with the new proposal, was obliged to withdraw its own. The Station, however, demanded that some means be provided to prevent over-concentration of power in the headquarters and that the favoured position of the Osaka Broadcasting Station be expressed in some form.

The Ministry of Communications was of the opinion that, as long as the unified management system is adopted, the powers of the headquarters should be increased, and important matters like overall planning for the operation of business, budgetary, financial and personnel affairs, should be placed in the hands of the Board of Directors at the headquarters, and control of various branch stations be undertaken by the Board of Directors. In the case of the broadcasting service, however, as procedure was reversed, since the new organization was to be established on the basis of

three already existing stations and the headquarters for controlling these newly created branch stations was to be set up as a new entity, not only the Osaka Station but also the other two showed evidences of guarding towards the power held by the headquarters. In particular, in the case of the Tokyo Station, though in substance it had been placed in a position of the principal leadership in the unified operation of broadcasting, it was seriously concerned with the internal organization of the headquarters and appointment of its officers. This arose from the fact that the Tokyo Station itself was to be relegated to the status of a branch station and be absorbed into the new organization as such.

So the Ministry of Communications, which became aware of such tendency existing among the various broadcasting stations, was obliged to adopt the policy of limiting the powers of the headquarters and respecting the autonomy of the branch stations in order to promote smooth establishment of the unified management system. The Ministry thereupon announced the following as its general opinion concerning the relationship between the headquarters and the branch stations:

- (1) While the powers of the headquarters will rest principally on the overall control of the broadcasting service as a whole, as concrete means, both business plans and budgetary measures will be discussed and determined on the basis of proposals made by the branch stations.
- (2) The branch stations will be delegated with powers for undertaking daily business of operations within the areas under their respective jurisdictions, and business plans and budgetary appropriations will be decided at the headquarters. Personnel affairs, such as employment of staff, will be limited to the scope of the respective branch stations.

In other words, the primary concern of the headquarters in its control work was placed on the adjustment of relations among the branch stations which were allowed considerable freedom in the operation of the broadcasting service within their respective areas inside the framework of budgetary appropriations allotted to them on the basis of their own proposals. In short, the opinion rather favoured the branch stations.

In this manner, the plans for the unified management of the broadcasting service as projected by the Ministry of Communications was implemented, while sounding out and taking into consideration the desires and attitudes of the branch stations. Nevertheless, the three stations, Osaka in particular, were not completely satisfied with the attitude of the Ministry and procedures adopted regarding their merger. It was the opinion of the three stations, and Osaka in particular, that they were originally independent business organizations, consequently the merger was a matter of their own concern, and the Ministry should have merely acted as a mediator. In spite of this, the three stations said, the Ministry had acted as if it were reorganizing a business under its direct control, and tried to establish a control organ called the "headquarters" on which it invested comprehensive powers, by ignoring differences in the conditions prevalent at the stations. This, they said, was going beyond the authority of the Ministry.

Between May 1926 and July of the same year, the Preparatory Committee composed of committees set up at the Ministry of Communications and the three broadcasting stations frequently met and discussed matters

related to the articles of incorporation and attendant bylaws for the Corporate Juridical Person, Nippon Hoso Kyokai (NHK), which was to be established as an entirely new organization. The Articles of Incorporation as drafted were prepared by the Ministry without the initiative of the parties directly concerned with the establishment of the new organization.

As the final versions of documents were completed towards the latter part of July 1926, a joint meeting of the leaders of the three stations was called, and an agreement was reached for holding the general meeting for the establishment of the new organization on the 6th August, and the general meeting for the dissolution of the three stations, on the 20th of the same month.

4. General Meeting for the Establishment of NHK

The General Meeting for the Establishment of NHK, which was called to order on the 6th August, 1926 in Tokyo, was an event deserving conspicuous record in the history of broadcasting in Japan. It meant the birth of a business organization, which was substantially to monopolize the broadcasting service for 24 years. At the beginning of the meeting, Minister of Communications, Kenzo Adachi, explained the reasons for the need of a unified management of the broadcasting service, aims of the three stations and the five-year programme for the construction of broadcasting facilities. In addition, he stressed the importance of broadcasting within the framework of national policies, saying that it was the most powerful means of transmitting information in national emergencies, that in some sense it should be considered a State business and that the broadcasting service should correspond to a national affair⁽¹⁾. At the business session of the meeting, the draft articles of incorporation and bylaws were discussed and approved with little trouble, since these had already been approved by the boards of directors of the three stations and at the joint session of the preparatory committees of the Ministry of Communications and the three stations. (For essential portions of the articles, refer to Chapter 4, on Organization).

When the Articles of Incorporation and the Bylaws were approved at the general meeting, the licence for the establishment was issued by the Minister of Communications to the party representing the founders. Also, as it had been stipulated that the officers of the new organization will be appointed by the Minister of Communications, regardless of the provisions of the Articles, the Minister appointed the officers and announced their names on the same day. Thus the new corporation, NHK, came into being.

In the document authorizing the establishment of the new corporation,

(1) The direct motive for such statement by the Minister of Communications was probably his recollection of the remarkable activity undertaken by the British Broadcasting Company, in place of newspapers and other communication media, during the General Strike of unprecedented scale, originating from the coal miners' strike in England in May of that year. Immediately after the establishment of NHK, the Parliamentary Vice-Minister of Communications stated at a meeting of the members of the political party to which he belonged that, in case of national emergency, the broadcasting service should be utilized for the benefit of the State as in the case of Great Britain.

it was stipulated that the following items of order shall be observed strictly:

- (1) NHK shall construct broadcasting facilities, not later than five years from the date of authorization of its establishment, so that broadcasting will be receivable in almost any area in the country with crystal type receiving sets. At the same time, NHK shall establish rebroadcasting facilities suitable for providing good programmes for local listeners between the broadcasting stations. Plans for the implementation of the above shall be submitted to the Minister of Communications for approval within two months of the date of authorization of establishment.
- (2) Business plans and budget of expenditures and revenues for every business term shall be subject to the approval of the Minister of Communications who may order alterations in the said business plans and budget.
- (3) In case loans covering the business term following the business term concerned are to be obtained, plans including the reasons, amount, parties advancing the loans, manner of receiving them and repayment thereof, shall be submitted to the Minister of Communications for approval.
- (4) No surplus arising from settlement of accounts shall be disposed of without authorization of the Minister of Communications.
- (5) Amounts of salaries for the officers and high-ranking staff members shall be subject to the approval of the Minister of Communications.
- (6) Division of duties among the managing directors of the headquarters and branch stations and the selection of auditors of full-time status shall be subject to the approval of the Minister of Communications.

In addition to the above, eight other items were included in this order. It was much more strict than that issued at the time of the establishment of the old corporations. Incidentally, appointments and dismissals of officers were provided for in the Articles of Incorporation so that the corporation could voluntarily request approval of the Minister of Communications. In short, the Ministry of Communications restricted the freedom of the broadcaster from the aspect of the control of personnel affairs related to its officers and financial affairs.

During the general meeting for the establishment of the new organization, 73 officers were appointed by the Minister of Communications in Tokyo, Osaka and Nagoya. Former chief director of the Tokyo Broadcasting Station, Kenzo Iwahara, was appointed president, and as chief directors of the branch stations, Chokuro Kadono, Masao Matsukata and Kinnosuke Kamino were appointed respectively for Tokyo, Osaka and Nagoya. All officers were influential financiers either in Tokyo or local areas. On the other hand, the managing directors, who were to occupy important positions of actually directing the operations of the broadcasting service, were appointed from among those connected with the Ministry of Communications, which gave rise to the fears of the broadcasting service being placed under bureaucratic control and created an unexpected atmosphere of opposition among those present at the meeting.

In face of such opposition, the Minister of Communications explained that appointments of Communications Ministry officials as managing directors were made for the purpose of facilitating business liaison between

NHK and the Ministry and should therefore be of advantage to the broadcasting corporation. However, as the directors of the three stations were not prepared to accept this explanation, the matter plunged into confusion. The Board of Directors of the Tokyo Station voted to issue a statement opposing the measure taken by the Ministry of Communications and to take the matter up in broadcasts as special news provided by the newspaper companies. The contents of the statement were roughly as follows: "Appointment of managing directors entirely from among Communications Ministry officials has given rise to suspicions that the Minister has taken this opportunity as a means of changing personnel at the Ministry. This is an act which shows a lack of understanding of the mission of Nippon Hoso Kyokai, which should exist for service to the public." This was the only example of the broadcaster making public through the radio criticism of the policies and measures taken by the supervisory government agency in the 40 years' history of Japanese broadcasting.

Newspapers also began to criticize actively the situation developing out of the appointment of the officers, and for a time, it seemed doubtful whether dissolution of the three stations could be carried out as planned. However, since it was generally believed that in Japan broadcasting was originally a type of service that should come under direct control of the government although it was specially handed over to private operation, resistance against the Ministry of Communications was naturally limited. So, under these circumstances, the three stations were dissolved as planned on the 20th August, and their facilities, assets and staffs were transferred to the new corporation, NHK.

4. Organization and Finance

1. Features of Organization

NHK was organized as a non-profit juridical person. The members constituting the corporation had the right to participate in its business operations but did not have, in principle, the right to demand distribution of profits or any assets of the corporation. The members had to be limited to persons with deep understanding of the public nature of the service and who were willing to cooperate in the operation thereof without compensation, or to those who expected intangible indirect benefits from the business along with its development. Consequently, anyone was not free to join the corporation; those desirous of becoming members had to obtain the approval of the President of the Corporation after passing examinations by the Board of Directors of the branch stations. Of course, members of NHK at the time of its establishment were about 2,000 members of the old organizations who were transferred to the new organization under By-laws of the Articles of Incorporation.

Pursuant to the policy of the Ministry of Communications, soon after its establishment NHK began establishing branch stations in Kumamoto, Hiroshima, Sendai and Sapporo for the purpose of completing the nationwide unification of the broadcasting service. However, because of the un-

favourable economic condition of the time and low level of public interest in radio, the result of calls for members were not markedly favourable in all parts of Japan. Even then some 3,400 new members were secured, and the four branch stations were established within the year, to bring the total of branches to seven.

One of the principal rights of participation on the part of the members was that of voting, which allowed them to take part in the voting on decisions made at the general meeting, the organ for determining the policy of NHK. One vote for one unit of membership fee (¥200) was the rule, but the members in such essential executive positions as the presidency and chief directorship of the branch stations were allowed special voting rights calculated on the basis of the Bylaws of the Articles of Incorporation. Another important right of participation was that of being able to take direct part in the operation of the service as members of the Board of Directors, the executive branch of the corporation, and as members of the Board of Audit to directly supervise the business operation of the corporation. Under the civil law, all public corporations had to have directors, but this was not the case with auditors. Also, it was not necessary for such directors and auditors to be members of the corporation. NHK, however, considered that auditors must be appointed and made it a rule to appoint both directors and auditors from among the members.

The internal organization of NHK comprised the headquarters and branches but, as has been stated in Chapter III, the principal powers of the headquarters were limited to drafting of overall business plans on the basis of proposals made by the branches and to negotiations and liaison with the competent government agency. On the other hand, the branches were in charge of implementation of business plans, i. e., daily operation of broadcasting in the respective service areas, and drafting business plans, budgets and financial plans.

Because of such form of organization, general meetings of the members of the branches were held, in addition to the headquarters general meeting, and the establishment of branch boards of directors was recognised in addition to the headquarters board of directors. The directors and auditors were elected at the general meeting of the headquarters as well as of branches from among the members. Furthermore, the president and managing directors of the headquarters were elected from among the directors by mutual election, while the chief director and managing directors of the branches were elected from among the directors of the respective branches. No provision was made initially in the Articles of Incorporation for the election of the managing auditor, but in the 1934 revision of the Articles, provision was made for electing one managing auditor from among the auditors by mutual election.

Organic relationship between the headquarters and the branches was maintained through provisions stipulating that resolutions of the board of directors of a branch station shall be subject to the approval of the headquarters board of directors. It was also stipulated that chief directors of the branch stations and one or two managing directors shall be members of the headquarters board of directors and attend its meetings. The board of directors at the headquarters comprised those elected at the general assembly by the members and these included the president and the head-

quarters managing directors, and seventeen branch station directors, including chief directors of the branches, who were elected at the respective general assemblies of the branch stations in the seven districts.

The branches had their own voting and executive organs as if they were independent corporations, and were to manage business affairs within their respective jurisdictions.

What should be noted here is that the general meeting of any branch was not the so-called general meeting of a public utility corporation. Bases for this view were as follows:

- (1) NHK was a single juridical person and not an association of plural juridical persons. Consequently, branches were an internal expedience and had no juridical personality in themselves.
- (2) The general assembly was the highest organ of a corporation and had the powers to undertake important business of the corporation, such as amendment to the Articles of Incorporation and dissolution of the corporation. The general meetings of the branches, however, had no such powers.
- (3) Resolutions of the general meeting were always binding on the directors, but they, on the other hand, had no powers binding the resolutions of the general meeting. In spite of this, the stipulation that resolutions of the branch general meetings shall be subject to the approval of the board of directors at the headquarters ignored the rights of the branch general meetings.

The establishment of such branch general meetings was based on the circumstances arising from the fact that NHK was an organization born out of the merger of the three old juridical persons. However, such an ambiguous state of affairs was done away with by the 1934 reorganization (see Section 3 of this chapter).

2. Primary Factors Leading to Reorganization

About eight years after the establishment of NHK in August 1926, progress made in the construction of a nation-wide network, which was the principal objective of the Corporation, had enabled it to construct broadcasting stations in 25 leading cities, including seven with antenna power of 10 kW. This was accomplished by March 1934. Also made available during this period were rebroadcasting stations which made it possible to exchange programmes among the stations on a nation-wide scale. Types of programme had also increased, and the influence of broadcasting on the general public was beginning to be felt throughout the country. In particular, broadcasting after the outbreak of the Manchurian Incident in 1931 began to assume greater responsibility in the service of the country. Transmission of programmes was also extended to Korea, Formosa and Manchuria. Exchange of programmes with the United States and several other countries was also frequently planned. So the scale of NHK grew year by year, and the number of receiving contractors, which totalled 340,000 at the time of establishment, had multiplied five times to 1,700,000.

As the scale of operation expanded and the foundation of business became more firmly established, an acute problem the Corporation inevitably faced was whether the existing organization, including personnel and busi-

ness management, was appropriate for exploiting its capabilities to the full as a unified nation-wide organization. In the process of examining this problem, the first thing to be taken up for discussion was the anomalous character of the general assemblies of the branch stations touched upon in the preceding section. In short, since the branch stations were in possession of real powers in the management of the broadcasting service in their respective areas, they were, for instance, partial to their own interests in the discussion of plans for the construction of facilities and overall business plans at the headquarters, frequently exposing lack of judgment based on broader views and showing signs of being an obstruction to smooth and organic relationship among various divisions of a single unified entity. Under the circumstances, the headquarters, which should have been the controlling centre of the broadcasting service, was isolated from the practical affairs of the service and appeared to be no more than an organ for merely handling nominal affairs of a public service corporation and for acting as a mediator among various branch stations. As a result, some criticisms to the effect that the headquarters was established not for the purpose of promoting more efficient business management but merely as an outer framework of the organization began to be heard.

Even in the matter of special voting rights accorded the directors of the headquarters, the Bylaws of the Articles of Incorporation allowed only one extra vote for each director. On the other hand, extra votes allowed the chief director of a branch station were calculated on the basis of the number of receiving contractors in his area and the total amount of investments made by the members. At the time of the establishment of NHK, there were three regular headquarters directors and six branch directors who concurrently assumed the post of headquarters directorships and who were considered as representing the interests of the branches. However, since the chief directors of the branches were allowed a total of 19 votes, the ratio between the headquarters directors and those of the branches was nominally 1 : 2 but actually 1 : 8. A similar situation existed in the special votes allowed the members acting as the president of NHK and chief directors of the branches for voting at the general meeting of the members. These were merely numerical expressions of the weight of the branch stations against the headquarters, but nonetheless, these figures were symbolic of the weak position of the headquarters. Later the Ministry of Communications, which proposed the establishment of the headquarters, stated the circumstances as follows:

“As the substantial foundation of the unified management rested on the three already existing stations, specially on the Tokyo Station with strong financial ability and rich broadcasting materials, it was inevitable that the branch stations should have been considered important and that the votes in the headquarters board of directors and in the general meeting of the members should have been decided in their favour.” It was such considerations that served as an inhibiting factor on the claims of the headquarters in deciding fundamental policies of business operation.

Reorganization of NHK had already been proposed by some directors as early as 1930, with such circumstances as the background. The supervisory government agency had also made suggestions from time to time regarding the need for further rationalization of business management.

What should be noted here was the tendency towards placing not only the broadcasting service but also other mass media like newspapers, other publications and motion pictures under stronger government control through changes that had been brought about in the domestic political policies as well as in economic, diplomatic and cultural policies as a result of the outbreak of the Manchurian Incident. In particular, Japan's diplomatic policy, which was in a cooperative mood towards the United States and Great Britain until the country withdrew from the League of Nations in March 1933, now made an about-turn and began to approach Germany where in that year the Nazi Party gained ascendancy. As a result, Japan began to be influenced notably by the Nazis outlook on the world situation. It was known that the Nazis enforced thorough control of the broadcasting service and used it as a public relations organ for national policies. It cannot be denied that such trends in another country were reflected in the views of the Japanese government with respect to broadcasting.

The time for strengthening the control of broadcasting was already ripe both for the broadcaster and the supervisory government agency. It so happened that reorganization of NHK, as will be described in the following section, was undertaken shortly before February 1935, when the licence authorizing NHK as a public service corporation was to expire.

3. Reorganization of NHK

For several months before the end of 1933, repeated discussions took place between the leaders at NHK headquarters and the Ministry of Communications regarding the reorganization of NHK. The final draft plans were presented at the 8th general assembly of the members, held in May 1934. But before the plans were presented at the business session of the general assembly, the director of the Telegraph and Telephone Bureau of the Ministry of Communications delivered a message in which he stated:

- (1) "In the programme organization, not only those broadcasts with contents preferred by listeners but also those that will lead the public towards consolidation of the national spirit should be included.
- (2) In view of the world-wide trend in the construction of high-power broadcasting stations, high-power broadcasting should be promoted.
- (3) In order to lighten the burden of the listeners, not only reduction in receiver's fee but also study of the improvement of receiving sets and maintenance at a reasonable price level will be necessary."

He then added that, "since broadcasting, which should be operated by the government, was specially licensed to NHK, it should be considered that NHK as an extension of the Ministry of Communications was executing its business in place of the government. Consequently, it should be clearly understood that supervision of the broadcasting service would inevitably be different from supervision of other public utility corporations." This was a highly significant statement coming from a government official, and it was considered evidence of the government's intention to exercise more rigid control over broadcasting.

The reorganization plans presented at the general assembly involved the Articles of Incorporation and Bylaws; the principal points of reorganization included the following:

- (1) In addition to expanding the objective of NHK and to promoting better business management and progress of broadcast engineering, NHK will be allowed to operate businesses incidental to the attainment of its objective or invest in such businesses.
- (2) The distinction between headquarters and branches will be eliminated, and the dual system of having respectively the directors, auditors, the board of directors and the general meetings of the members will be dissolved.
- (3) The central organ will be located in Tokyo, and the directors and auditors will all belong to the central organization. The number of directors will be not more than twenty-five and that of auditors will be up to five. The directors and auditors will be elected from among the members at the general meeting. The directors will elect one president, who will represent NHK, one general managing director who will assist the president and be in charge of overall control of business and up to two managing directors who will be in charge of work assigned to them. The auditors will elect one managing auditor from among themselves.
- (4) The term of office of the directors and auditors will be extended to three years from the former two years.
- (5) The members will be allowed one vote per unit investment at the general meeting. Members acting as directors will be allowed the following additional votes: The president will be allowed one-third of the total number of votes possessed by the members. The directors will be allowed a total of votes equal to those allowed the president.
- (6) On the day the revised Articles of Incorporation go into effect, the term of office of the incumbent officers will expire, and regardless of the provisions of the Articles of Incorporation, the new officers will be appointed by the Minister of Communications.

The focus of interest at the general meeting was naturally entrusting of the appointment of new officers to the Minister of Communications as in the case of the establishment of NHK and allotment of votes corresponding to four-tenths of the total number of those possessed by the members to the directors. Considering that these two points were clearly symbolic of an undemocratic trend, they aroused questions and criticisms at the meeting.

It was significant that managing director of the headquarters, Shichiro Komori, made the following reply to questions:

“While this corporation was established on the basis of investments by the members, the total investments now amount to no more than one-tenth of the assets in possession of NHK, the remaining nine-tenths being accumulation of receivers’ fees collected from the listeners. Thus, the broadcasting service is not operated only with investments of the members. Not only for the broadcasting service but also for any public service corporation it is not proper to allow absolute powers only to the members; but it is reasonable to allow the listeners to share in the benefits. It is assumed that such allotment of special voting rights was made under above considerations. It may appear strange for the NHK officers to have such special votes, but protection of the interests of the listeners is protection of the public good in a broader sense. And since it is the obligation of the state to protect the public good, it should be appropriate for the government to possess such special rights. However, it is none other than the govern-

ment's intention not to possess them itself but to give them to the officers appointed and trusted by the Minister of Communications so that they may exercise these rights."

The reorganization plans were approved, on the same day Communication Minister's licence was issued, and NHK made a new start under new organization.

The incumbent officers all retired under the provisions of the revised Articles of Incorporation, and 30 new officers (one-third of the former number) were appointed. Kenzo Iwahara was reappointed as president. What should be noted about the appointment of the new officers was that the officials of the Ministry of Communications occupied the important posts of general managing director, managing directors and heads of the regional key stations established in place of former branch stations. Although the reorganization was aimed chiefly at achieving a more reasonable system of management, it resulted in greater centralization of power under which the board of directors assumed control over all important phases of management, such as drafting of business plans and budgets, control of personnel policies and promulgation of various rules and regulations. Under the new system, the regional key stations or central broadcasting stations were to take charge of the broadcasting service and incidental affairs in their respective jurisdictions under the policies determined by the board of directors. Such a centralized system, together with the appointment of the bureaucrats of the Communications Ministry to the key positions, undeniably facilitated the government's control and guidance of the broadcasting service.

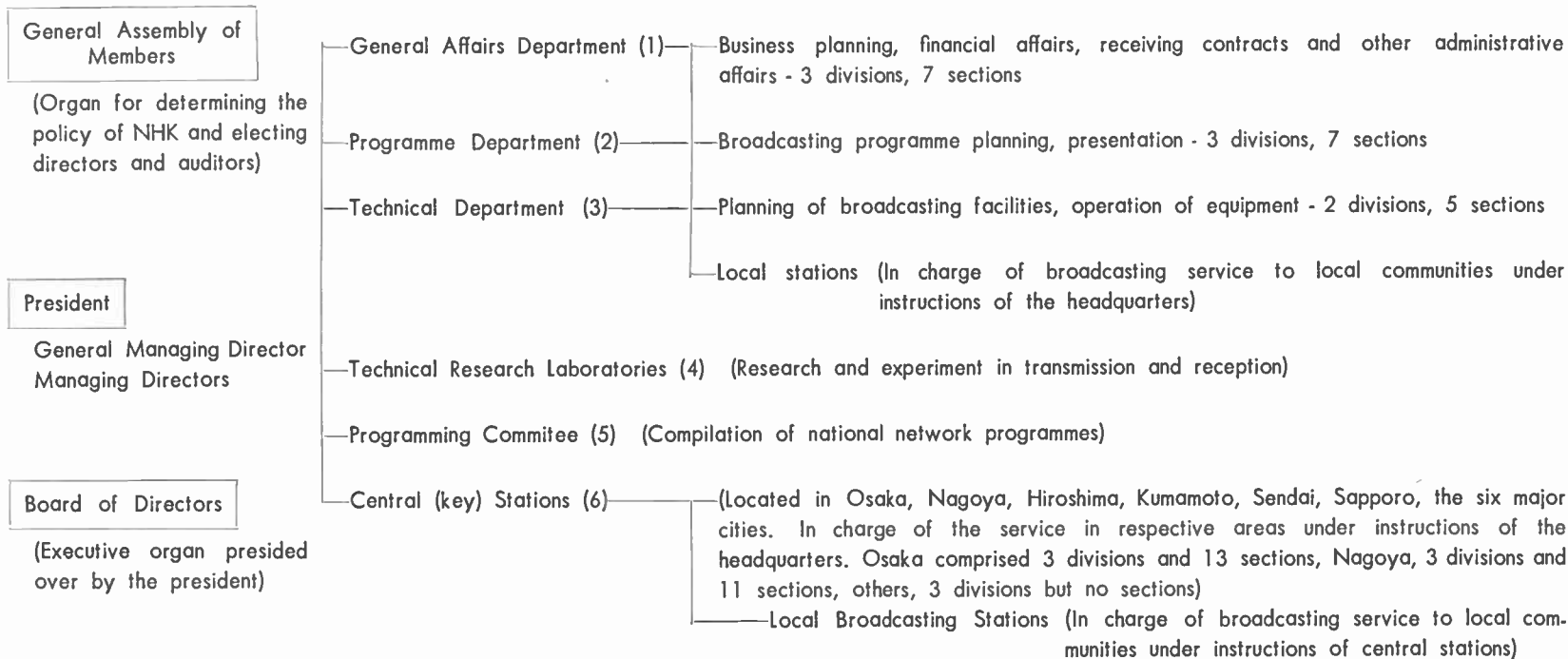
The new organization was as shown in the chart. (see p. 55)

4. Wartime Organization

During about eleven years, from the 1934 reorganization to the end of the Pacific War in 1945, NHK underwent remarkable development and changes in all phases of its business operations. During these years, the War with China, which began in 1937, became a prolonged affair, and the Pacific War that broke out in 1941 became a part of World War II which had been devastating Europe since 1939. And so NHK's development and changes took place under the political, economic and social developments Japan went through in the process of the world-wide developments aforementioned. This point will be referred to from time to time in later chapters.

Meanwhile, division of responsibilities within NHK went through further diversification under the policy of consolidating the war-time structure, even though no broad amendments to the Articles of Incorporation were made. It goes without saying that priority was given to planning and execution of broadcasting programmes which constituted the most essential part of business operations. In 1937, measures designed to increase the weight of overseas broadcasting were implemented, and subsequently an organization for consolidating the overseas department was established. In the field of domestic broadcasting, an overall revision of programming was undertaken in 1941. Under this revision, a new department for overall control of the organic relations among the news, talks, lecture and enter-

Outline of New Organization (as of May 1934)



Note: 1. From (1) to (5) are headquarters organs. In addition to the above, the headquarters was provided with the auditing division for auditing business operation, and a special construction division for network construction.

2. In 1945, the Matsuyama Broadcasting Station was promoted to the status of a central (key) station.

tainment programme departments as well as for integrated programming was established. Also, need for technical researches and experiments in wired broadcasting systems began to be felt along with increasing shortage of resources arising from the expanding scale of war. It was further considered that measures designed to turn the attention of the listeners to war news and the government's war policies were acutely needed. Therefore, divisions related to such measures were either strengthened or newly established.

The three years and eight months of Pacific War, which broke out in December 1941, left a record of the establishment of a total war structure centring around the army and navy and the process of its rapid collapse.

It must be said that, since NHK was a public service enterprise and monopolizing the broadcasting service under the unified organization of nation-wide scale, it was in a position easily subject to absorption into the total war structure. As a matter of fact, immediately upon the outbreak of the war, the government's will was forcefully injected into broadcasting programmes and management of the facilities. And since this brought about virtual control of broadcasting by the government, the organizations within NHK had also to follow the keynote.

The government had long been examining ways and means of controlling broadcasting under the national emergency. On the 5th December, 1941, just three days before declaring war on the Allies, the government came out with the "Essentials of Emergency Structure for Domestic Broadcasting". In response to the governmental measure, NHK established the "Broadcasting Command" at its headquarters (the president was appointed the commander and one of the managing directors, as deputy commander) in order to implement emergency measures quickly and accurately. Although the Broadcasting Command was established separately from the staff organization, every measure related to the emergency was discussed and decided at the Command and the various departments were to implement such measures immediately. Also, the heads of the regional key stations and local stations were given powers to make independent decisions on matters related to the emergency.

A revision of staff organization was undertaken almost every year along with the rapid progress of the war. For example, when need for constructing broadcasting stations in the South Sea areas arose, and NHK staff, as will be described later, began to be dispatched there in large numbers for operating the equipment, the "South Sea Area Affairs Division" was set up under direct control of the president in September 1942. The division was to take care of contacts with NHK staff in the occupied areas and to maintain close liaison with the Army, Navy and competent government offices. Also, since the importance of overseas short-wave broadcasting increased from the standpoint of measures against the enemy and towards third nations and occupied areas, the service, which had been operated by the domestic broadcasting staff, was separated and an overseas department was established to take care of all business related to overseas broadcasting.

At the general assembly of the members, which was held in May 1943, President Shichiro Komori resigned as his term of office had expired. He had been appointed a managing director at the time of the establishment of NHK. Then having occupied the position of general managing director,

was appointed president in September 1936. Thus, for eighteen years he had worked to establish NHK's foundation under a sound financial policy and contributed notably to the remarkable development of the organization. However, under the government policy laying emphasis on programming rather than business management in order to meet the demands of the relentless war, the former vice-president of the Asahi Newspaper Company, Hiroshi Shimomura, who had a deep understanding of broadcasting and had once been an official of the Ministry of Communications, succeeded to the presidency. At this time, the custom of appointing Communications Ministry officials to the position of managing directors was broken. And under the policy of seeking capable personnel from a wider field, former Chief of the Metropolitan Police, Saburo Hayakawa, who had served at the Home Ministry which was then in command of the public peace police administration, and former ambassador to Spain, Makoto Yano, of the Foreign Ministry were invited to NHK to assume the post of general managing directors.

In 1944 the war situation had worsened and the entire country was exposed to bombing by the United States Air Force. As an emergency staff organization, a headquarters for handling internal broadcast, or these related to circles outside NHK, engineering for broadcasting and administration, were set up in addition to the general headquarters in order to secure broadcasting functions even under emergencies, such as air raids. Also to meet the ever growing severity of such raids, the listening equipment and the transmitting equipment maintenance divisions were set up provisionally. The headquarters was set up at the headquarters of NHK while local offices were located in the central or regional key stations so that emergency measures could be taken to defend and protect the broadcasting equipment.

While President Hiroshi Shimomura was in command of the operation of broadcasting under the most difficult war time situation as the highest responsible person of NHK, in April 1945 he was appointed Minister of State and concurrently the Director of the Information Bureau. He, therefore, resigned his position after less than two years as president of NHK. As his successor, Hachiro Ohashi, former Deputy Minister of Communications was appointed, and he was soon to find himself engaged in the evaluation of damage resulting from defeat in the war and in the rehabilitation of the broadcasting service.

5. Financial Affairs

From its establishment the financial affairs of NHK enjoyed favourable development through smooth growth of the service. As a result, the foundation of business operations was established more firmly as the years went by. The number of receiving contractors, who constituted a source of income for NHK, had increased from 340,000 at the time of establishment (1926) to some 7.5 million in 1944, the year before the end of the Pacific War. In terms of the percentage of dissemination, the expansion was from 3 per cent to 50.4 per cent, which represented a twenty-two-fold increase. However, the increase in actual income was no more than about 13 times. This arose from reduction of the receiver's fee on two occasions, inclusion of some 500,000 non-paying listeners exempt under NHK and

the Communications Ministry regulations, as will be described later, among the total number of contractors and payment of a sum corresponding to a month's receivers' fees to local autonomous bodies as public payments since 1932. These measures were taken as an endorsement of the fact that NHK was a public service entity.

With regard to the receiver's fee, it had been stipulated, at the time of the establishment of the broadcasting system, that in case prospects for stability and growth of the broadcasting service are assured, such fee will be reduced to lighten the burden of the receiving contractors. However, in the early period of NHK, the construction of a nation-wide network, which was the principal objective of the organization and required tremendous sums of money, had to be expedited with huge loans. In 1927, the year after NHK's establishment, there was a financial panic accompanied by a moratorium. Two years later, in 1929, the effect of the world-wide depression triggered by the New York stock market crash involved Japan and plunged its economy into confusion. Under such an acute unfavourable financial situation, NHK was not only obliged to revise part of its construction plans but the rate of increase in the number of receiving contractors slowed down. Under these circumstances, NHK even felt the shortage of funds needed for running expenses. Fortunately, the first-stage construction work had been completed, and the seven key stations had been built. Also because business conditions in urban areas had begun to turn for the better after the outbreak of the Manchurian Incident, production of the eliminator system receiving sets had begun to make a fairly good start, and because interest in the news programmes reporting the war situation intensified, the increase of receiving contractors took a very favourable turn.

As a result, because of bright prospects for the future of business operations, in 1932, when the receiving contractors reached the one-million level, the initial receiver's fee of ¥1.00 a month was reduced by 25 per cent to ¥0.75. The fee was reduced to 50 sen in 1935, when the number of contractors reached 2 million. This rate remained unchanged for 10 years till 1945, even under rapid increase in the number of receiving contractors, for approximately the following reasons:

- (1) During this period, the Manchurian Incident was followed by the War with China, which ultimately developed into the Pacific War, and because of the tendency towards inflation arising from wartime business conditions, commodity prices went up.
- (2) Because of the expanded scale of business, expenses for programming, for measures designed to increase and maintain subscribers and for administration greatly increased.
- (3) Network construction and so forth, which should in principle have been financed by capital income was met from income accruing from receivers' fees.
- (4) NHK had to bear all expenses required for overseas broadcasting, which should have been borne by government subsidies.
- (5) Expenditures involving incidental businesses allowed by the Articles of Incorporation and investments in other related businesses had increased.

But in spite of these reasons, considerable business profit accrued to NHK till the early stages of the Pacific War. In particular after 1931, NHK

has been completely free from dependency on loans to achieve stability of business operation. However, towards the end of the war, implementation of emergency facilities regardless of business profit and the increased number of inaccessible receiving contractors because of air raid damage in the cities and evacuation to rural areas, the balance between revenues and expenditures gradually broke down. Early in the final year of the war, NHK was forced to raise the receiver's fee to ¥1.00 a month, which was a reversion to the year of its establishment, but because of changes that took place in the value of currency, NHK's balance sheet still showed shortage of revenues. Under the circumstances, NHK's financial affairs were plunged into a critical state of meeting necessary expenses with long-term loans. (see next table).

As had already been stated, NHK had paid a sum equal to a month's total receiver's fees, to local governments, but this was not a mere contribution; it was a measure taken for increasing and maintaining receiving contractors. In the 1920's, the local autonomous bodies were suffering from financial difficulties under serious economic recession. In those days, the general view of broadcasting inclined strongly towards considering it a luxury. In some communities, evidences of a move towards levying a tax on receiving equipment were visible, and there was danger of such move spreading throughout the nation. If enforced, it would have become an obstruction to increasing receiving contractors and, judging that such a situation would be damaging to the broadcasters, payment of the certain sum above mentioned was decided upon. However, since the payment was made every year and the number of receiving contractors increased markedly since the system was enforced, ultimately it reached a considerable figure. Incidentally, the local governments used NHK's payments as part of the expenses needed to combat tuberculosis.

The system of exempting the receivers' fees was provided even during the period of the three independent corporations. Such exemptions were made either under provisions of NHK's receiving contract or under regulations established by the Ministry of Communications.

The range of contractors qualified for exemptions under the receiving contract included social relief organizations, educational institutions, public hospitals, lighthouses, meteorological observatories and museums. Moreover, victims of calamities affecting a wide area who lived in certain districts were exempt for a limited period. Exemptions under regulations of the Ministry of Communications simultaneously exempted payment of the licence fees due the government. In this category were included juvenile homes, hospitals for war wounded, homes for the aged, orphans, tubercular patients and lepers, poor blind people and penitentiaries. After the outbreak of the Manchurian Incident, however, families of war dead, including soldiers and civilians, village, town and city offices purported to facilitate listening to war news, police stations, receiving facilities of communication offices were also exempt from the payment of receivers' and licence fees.

While investments in or financing of related businesses was an indication of margin in the financial situation, legalization of such steps was taken in May 1934, when reorganization of NHK took place. In other words, an item to the effect that "NHK may invest in other business necessary for its own business operations" was added to the new Articles of Incorporation.

In fact, since investments had already been made in the broadcasting organizations in Korea and Manchuria in the preceding year (1923), the item was included as a means of legalizing the fait accompli. In the case of Korea, the investment was made for the purpose of expanding the facility, while in the case of Manchuria, it was made in the form of subscription to shares of stocks of a newly-established broadcasting company.

War with China broke out in 1937. And as broadcasting began to be undertaken in the occupied areas in Mainland China, NHK, commissioned by the Army, took the responsibility of constructing and operating the stations. Necessary expenditures were guaranteed by the Army, but NHK's own expenses also mounted to considerable sums. Soon broadcasting stations were set up in North and Central China, and NHK became further involved in extending a helping hand to these organizations. As a result, NHK dispatched staff, loaned equipment and materials, advanced government subsidies, and loaned funds for the purchases of receiving sets.

In addition to Korea, Manchuria and occupied areas in Mainland China, aid to broadcasting facilities built in the South Seas area occupied by the Japanese Army during the Pacific War was also continued till the end of the war. The scale of NHK's aid is evident in the fact that its 1945 statement of account included overseas assets accounting for 12 per cent of

Business Revenues and Expenditures Unit: ¥ 10,000

Financial year	Income	Expenditure	Balance
1926	265	182	83
27	482	476	6
28	522	925	-403
29	660	608	51
30	770	624	146
31	975	746	229
32	1,053	1,071	-18
33	1,348	1,122	226
34	1,587	1,223	364
35	1,345	1,208	137
36	1,605	1,397	208
37	1,993	1,633	360
38	2,229	1,736	493
39	2,605	2,011	594
40	3,000	2,543	457
41	3,554	3,122	432
42	3,841	3,729	112
43	4,078	4,046	32
44	4,629	4,681	-52
45	5,864	6,798	-914

- Note: 1. The financial year covers from March to April of the following year. Figures for financial 1926, however, are from August, when NHK was established.
 2. The deficit for financial 1928 arose from payments for part of the nationwide network construction work.
 3. Reduction in the surplus during 1932 and 1935 resulted from a reduction in the receivers' fees. Increase in income during financial 1945 was due to an increase in the receivers' fees.

the total corporation's assets.

NHK's largest single investment was made in the Domei News Agency, which was established in November 1935 under recommendation of the government. As a matter of fact, NHK supplied six officers and ¥3.1 million when the agency was established. And during the progress of War with China and the Pacific War, NHK almost exclusively used news materials of the agency for broadcasting.

Under the Articles of Incorporation, NHK was allowed to operate incidental businesses conforming to its business objectives. Towards the end of the war, it, therefore, took a hand at operating a company engaged in the rationing of receiving sets and vacuum tubes, which were placed under controlled production, and a regenerated vacuum tube manufacturing factory for the purpose of maintaining the receiving equipment. These steps were taken out of necessity because dealers in such equipment and workers were drastically reduced by being called to the battle front or changing their work. However, there was no denying that such business operations imposed considerable financial burdens on NHK.

With regard to NHK's assets, the fixed assets and investments, and its liabilities, loans and short-term debts were as shown in separate table 2. Incidentally, investments by the members included in the liabilities be-

Assets and liabilities (Excerpt) Unit : ¥ 10,000

Year	Fixed assets	Investments	Loans	Short-term debts
1926	145	—	57	6
27	302	—	52	2
28	504	—	326	1
29	551	—	270	4
30	565	—	147	5
31	590	—	—	4
32	705	—	—	5
33	668	113	—	4
34	601	113	—	7
35	743	223	—	17
36	1,067	585	—	16
37	1,423	585	—	22
38	1,699	577	—	41
39	1,969	586	—	50
40	2,370	692	—	163
41	2,702	913	—	263
42	3,005	950	—	827
43	3,117	1,032	—	1,251
44	3,051	967	300	384
45	3,434	453	1,829	1,051

- Note : 1. Fixed assets (land, buildings, machinery and equipment) with depreciation calculated on the cost of acquirement.
 2. Inflation for 1936 resulted from the big investment in the Domei News Agency.
 3. For 1945 there were additional overseas assets (accounted as fixed assets and investments till the preceding year) amounting to ¥ 7.25 million.

came fixed at about ¥1.4 million after 1945 reorganization of NHK. The amount accounted for 10 per cent of the assets at the early stage, but by 1945 it accounted for no more than 3 per cent.

5. Network

1. First-stage Construction Programme

The principal objective of the establishment of NHK was to bring practically the entire area of Japan under coverage within five years, even when crystal receiving sets were in use, and to provide rebroadcasting stations capable of conducting local broadcasting for various communities. According to the order attached to the licence issued by the Ministry of Communications, NHK was to draft plans for the facilities mentioned above and submit them to the Minister for approval within two months of the issuance of the order. It appeared as if the plans were to be drafted independently by NHK, but the fact was that a draft of such plans had already been prepared at the Ministry. NHK, therefore, could do no more than study the construction of broadcasting stations and rebroadcasting facilities on the basis of the plans as drafted by the Ministry. However, since no government subsidies were provided for the implementation of the construction programmes, NHK had to draft these while taking into consideration possibilities of procuring financial resources and other matters related to such projects.

The programme called for increase of the antenna power of the existing Tokyo, Osaka and Nagoya stations to 10 kW, construction of 10 kW stations in five other cities, 3 kW stations in three cities and studio facilities in three others. By these means listeners using crystal receiving sets were to be brought under coverage immediately no matter in which part of the country they lived. The broadcasting stations and studio facilities were also to be linked by land lines to make interchange of programmes possible. As total expense to implement this programme, approximately ¥10 million in the currency of that time was appropriated. It was a bold programme considering the financial condition of NHK, which had just been established, and the level of engineering necessitating considerable dependency on imported equipment. A bank had agreed to advance the funds needed for the construction work, and so NHK attempted to begin implementation of the programme. However, it became rather difficult to increase the number of receiving contractors, who constituted NHK's principal financial source, on account of the financial panic that began to sweep the country, the year following the establishment, and some of the directors began to express uneasiness over the future of the project, and NHK was obliged to revise the original programme to a certain extent.

The plan finally adopted in January 1928 called for increase of the antenna power of the Tokyo, Osaka and Nagoya stations to 10 kW, construction of 10 kW stations at Hiroshima, Kumamoto, Sendai and Sapporo, which were designated as sites for new branches in the preceding year. It also included construction of a 3 kW station in Kanazawa and studio

facilities in Kyoto and Fukuoka. The programme also envisaged laying of land lines between Tokyo and Sendai, and between Osaka and Kumamoto, with links on the way to Hiroshima and Fukuoka. Other lines linking Tokyo-Nagoya-Osaka, Osaka-Kyoto and a marine cable linking Shimonoseki and Moji were to be rented from the Ministry of Communications. Finally, the programme called for radio linking of Sapporo and Kanazawa (see attached figure).

The curtailed programme left much to be desired from the standpoint of constructing a nation-wide network that would bring operators of crystal receiving sets under coverage, but it was sufficient to lay the foundation for the future nation-wide network through construction of key stations. In the subsequent section, this programme will be designated as the "first-stage programme."

In 1928 six 10 kW stations were built all at once, including Tokyo, and the land lines extending for 1,860 kilometres between Sendai and Kumamoto were opened for operation in November. The construction of so many 10 kW stations, which at that time were considered high-power stations, in a single country was unprecedented anywhere.⁽¹⁾ The first-stage programme was completed with the construction of the Kanazawa Station in 1930.

As land lines would involve enormous expenditure, opinions favouring adoption of radio links were initially expressed, but ultimately land lines were decided on, including renting of part of the lines under the control of the Ministry of Communications. Construction of new land lines by NHK itself was commissioned to the Ministry of Communications under the following conditions:

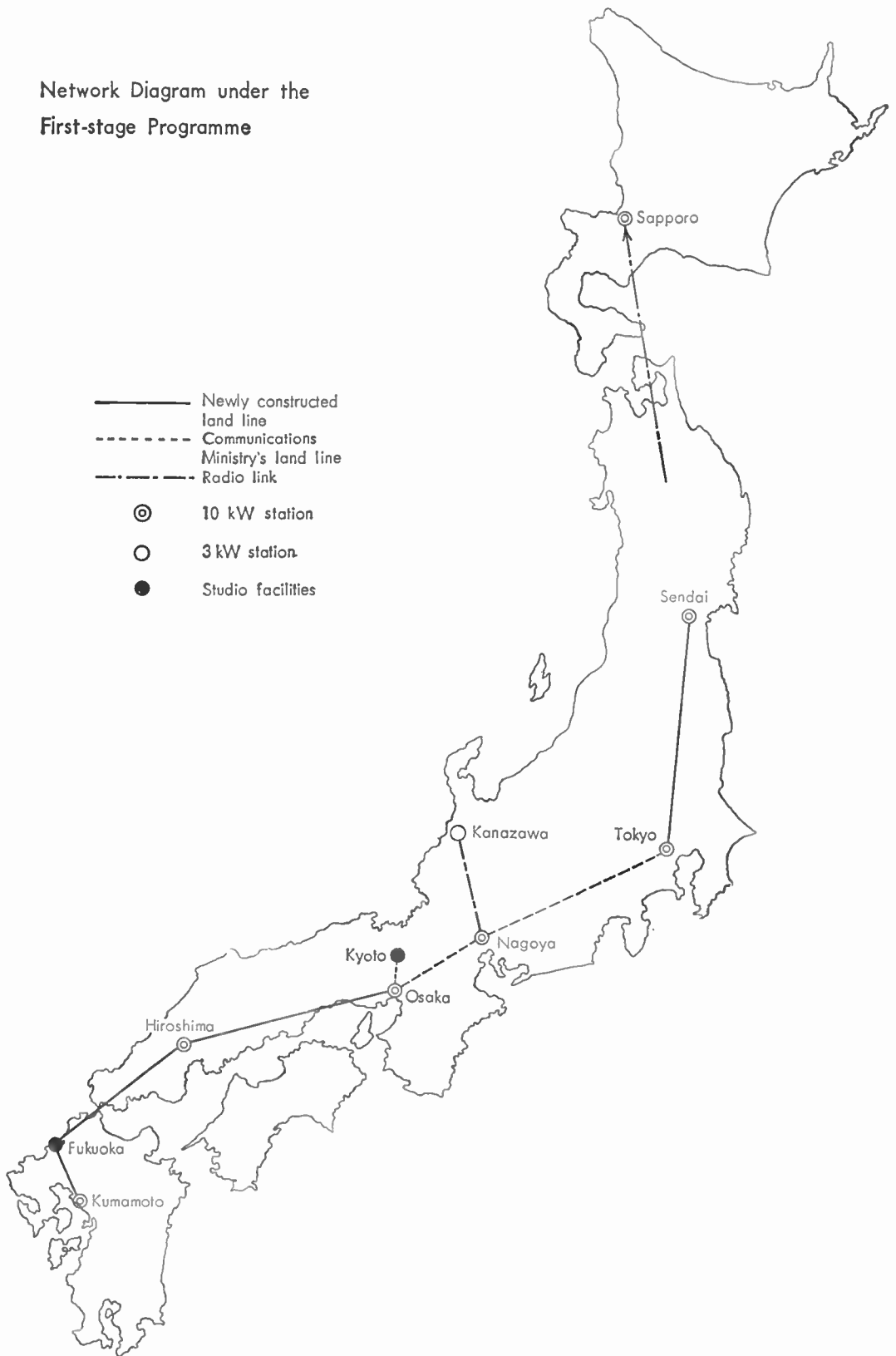
- (1) NHK will bear the expenses but upon completion the lines will be donated to the Ministry.
- (2) As compensation, NHK will utilize the lines at charges considerably lower than those regularly charged by the Ministry.

The construction of new cable was expedited at a high speed with the object of broadcasting account of the Emperor's accession over a nation-wide network in November 1928. And, as stated before, the lines were completed as scheduled between Sendai and Kumamoto.

In parallel with the progress of the first-stage construction work, NHK conducted reception tests and measurements of field intensities throughout the country to obtain data. The result, however, indicated that the field intensity of a 10 kW station was much weaker than had been expected. It was found that the effective range of radio signals receivable with crystal receiving sets averaged no more than 60 to 70 kilometres, and that the range was further shortened in areas where there were hills and mountains near a station. Also, night-time fading was found at a distance of about 100 kilometres from the broadcasting station (fading occurred at 50 to 60 kilometres from the station in mountainous areas). From such data, it

(1) According to a survey published by the "World Radio", foreign programme journal published weekly by BBC, world broadcasting stations with antenna power of 10kW or higher totalled 31 as of the end of 1929. The United States with its enormous expanse of land had 8 such stations (one 50kW, six 25kW and one 15kW stations). In Europe, Great Britain had three (two 30kW and one 25kW stations), France had two (both 12kW) and Germany had two (one 20kW and one 13kW) stations.

Network Diagram under the
First-stage Programme



was found that the service area of a 10 kW station was limited to a radius of about 100 kilometres.

Calculation of radio wave propagation was made on the basis of the Austin-Cohen formula, and the result had shown that the range of a 10 kW station would be about 160 kilometres. As work progressed, however, it was found that the attenuation of radio waves on land had been underestimated in the use of the Austin-Cohen formula, resulting in over-estimation of the range. It was, however, inevitable that such a miscalculation should have taken place, when data related to the propagation of radio waves was not so easily available.

2. The Second-stage Construction Programme

A technical error became clear about the time the first-stage programme was half way completed. As a result, repeated discussions took place regarding ways and means of correcting this error. Conclusions reached comprised the following:

- (1) From a topographical point of view, there were no more areas requiring establishment of new 10 kW or so transmitters.⁽¹⁾
- (2) Field intensity of considerable strength would have to be provided for densely populated urban and flat areas, excepting mountainous districts.

The above two points were made the basis upon which the second-stage programme was drafted. The programme included construction of about forty 300 W to 500 W transmitters in the small and medium cities within five years. Adoption of the land line system for linking these stations was shelved temporarily because of expense; it was decided to use the radio link system.

The programme was closely reviewed with respect to selection of the sites, designation of the power and order of construction. Then, beginning in the spring of 1929, construction of stations was expedited year by year. The radio link system adopted on account of expense had also to be used for some of the stations built under the first-stage programme. Under this system, however, the efficiency of transmission was unstable because of fading and influences of space electricity and so forth. When the carrier telephone system, which had been under study at the Ministry of Communications, was tried out for programme lines in 1931, it proved more stable than the radio links and, moreover, the cost required for this system was just about equal to that required for the radio link system. As a result, it was decided that the carrier lines would be adopted for all programme lines linking low-power broadcasting stations to be built in the future. It was also agreed that the existing radio link system should be changed to the carrier line system.

In the second-stage programme, 34 stations, including one 1 kW, twenty-three 500 W, three 300 W and three 100 W transmitters, were completed in the 12 years up till 1941, the year of the outbreak of the Pacific War. Incidentally, the establishment of a 10 kW short-wave transmitter on

(1) The Japanese archipelagos lie in the circum-pacific volcanic zone along the eastern edge of the Asiatic Continent, stretching north and south. Nearly 80 per cent of its area is occupied by mountains, with a great range running lengthwise through the central part. Flat areas are found here and there along the shores in which the population is concentrated.

Palau Island in September 1941 deserves special mention. Like the short-wave service directed to overseas areas, the technical facility of this station was built and operated by the International Telecommunications Company but overall operation of broadcasting was left in the hands of NHK.

At the beginning of the Pacific War, Japan's radio network covered 43 stations including the Palau Station with a total antenna power of 407.9 kW. Also, the total length of programme lines extended for approximately 11,500 kilometres.

Originally, the second-stage programme was drafted with the object of succeeding to the aims of the first-stage programme, which was to bring crystal receiving sets operated across the country under coverage. However, shortly after the start of the construction work, manufacturers succeeded in producing alternating current system receiving sets, and from about 1932 mass-production of new sets made it possible to reduce the price considerably. Under the circumstance, the demand for crystal and battery-operated receiving sets began to decline rapidly. As a consequence, the following points began to be stressed from the standpoint of network construction:

- (1) In the future establishment of broadcasting stations, the receivable range, using low-cost and high-sensitivity alternating current system four-tube receiving sets, will be taken into consideration.
- (2) With increasing noise interfering with reception,⁽²⁾ higher field intensity will need to be provided for areas subject to interference in order to improve reception.
- (3) With recognition of the social influence of broadcasting, the order of station construction will have to be considered in order to meet increasing requests for the establishment of broadcasting facilities from various parts of the country.
- (4) The same frequencies will have to be used by some stations because of the shortage of available frequencies.

The second-stage programme was expedited while taking the above points into consideration. Nevertheless, the number of stations had to be reduced considerably when compared with the initial plans, and moreover, as long as 12 years were required to construct low-power stations. The greatest factor for this outcome was the tightening of governmental control on procurement of resources from 1937, the year war broke out with China. Construction was frequently delayed on account of the difficulty of procuring materials, and in addition, a policy of curtailing expenditures was followed as far as possible. As a result, the equipment room was frequently used also as an office, studio space was reduced as far as possible and, later even wooden buildings had to be tolerated. These stations, furthermore, were built more for relaying programmes originating at the key stations, and though they were originally intended for servicing local communities, programmes for local communities came to be considered as being of secondary importance.

Mention must also be made of two facilities constructed in parallel with the second-stage programme. These were the second network facili-

(2) Causes of reception interference included regenerative electric waves from the eliminator system receiving sets using antennae, tramcars, electrical equipment used for business purposes and power generators. Noise generated by such devices increased year by year.

ties in Tokyo, Osaka and Nagoya and the high-power transmitter (150 kW) for the Tokyo Station.

3. Plans for Dual and High-power Broadcasting

NHK's second network facility plans had been conceived even before the implementation of the second-stage programme described in the foregoing. As a matter of fact, an expert committee had already been established in the Kanto branch in January 1928 for the purpose of considering means of implementation. Today, it goes without saying that the plural broadcasting system allows enrichment of programme contents and provides choice of programmes for listeners. It was, however, significant that NHK, shortly after its establishment and without a firm foundation for business operation, should have conceived such an idea. In particular, it was significant that the expert committee aforementioned adopted the policy of aiming at educational effect programmes presented over the second network, the contents of which would be suitable for general education at the secondary school level as well as for business training. When the developmental process of educational broadcasting in the forty years of NHK's service is considered, such concept of broadcasting on the part of the Corporation must be considered as having been prophetic.

Technical tests of the second network broadcasting were commenced in June 1929. These were conducted by using the old 1 kW transmitter and the new 10 kW transmitter of the Tokyo Station, and the possibility as well as feasibility of dual broadcasting was evaluated. However, since the majority of receiving sets used in those days were of the crystal type, it was found that separation of programmes presented in different frequencies was difficult. A technical study was therefore made and in accordance with conclusions drawn from this, it was agreed that 10 kW transmitters would be used for the second network at the Tokyo, Osaka and Nagoya stations.

Policies for expanding and consolidating the second network included the following points:

- (1) In addition to the above three stations, dual broadcasting will be conducted at least at the four key stations in Sendai, Sapporo, Hiroshima and Kumamoto.
- (2) The time of commencement will be fixed on the basis of the results achieved at the three existing stations and the financial condition of the Corporation.

However, it was not until immediately after the end of the Pacific War that the above policy could be realized. Prior to the war, plural broadcasting equipment was provided for only the three original stations.

The operation of the second network commenced at the Tokyo Station in April 1931 and at the Osaka and Nagoya stations in June 1933, thus forming a network among the three. The problem of separation, which was the object of tests in dual broadcasting, was automatically solved when the crystal receiving sets were replaced with the alternating current system sets.

Plans for high-power broadcasting were drafted apparently for the purpose of overcoming noise in larger cities as well as noise generated by the

receiving sets by providing stronger field intensity, and minimizing the construction of low-power stations. However, the ultimate object was the prevention of interference as well as reception of propaganda originating at the 75 kW station built in Nanking, the capital of China, in 1932, the year following the outbreak of the Manchurian Incident. The area in which programmes transmitted from the Nanking Station could be received was limited to northern Kyushu. Nevertheless, it was aggravating for the government, which had prohibited the use of short-wave receivers, to learn of foreign broadcasts, specially from an enemy country like China, being received with medium-wave sets. Moreover, with international tension mounting higher after Japan withdrew from the League of Nations, it seemed an urgent question for the government and the army to provide means of defence against such foreign broadcasts.

As the rapid increase in the number of broadcasting stations brought shortage of frequencies and the question of interference became serious throughout the world, the trend towards increase of transmitting antenna power became conspicuous. Also the idea of building high-power stations as a means of defence against propaganda broadcasts of adjoining countries by strengthening the field intensity within was becoming a necessity for various nations. Specially in Europe, where large numbers of countries existed side by side in a comparatively small area, 60 to 100 kW broadcasting stations were established one after another. The Soviet Union even built a 500 kW station in 1933. Also, overseas broadcasting services using short-wave transmitters were established by many nations, making the propaganda war using radio waves more active than ever.

The invisible war using broadcasting spread also to Asia. In fact, propaganda broadcasts by the Nanking Station became outstandingly active. A 100 kW station was under construction in Manchuria, while the Soviet Union reportedly entertained plans for building a number of high-power stations in the Far East.

Plans for the establishment of high-power stations in Japan thus began from the need for defending the country against hostile propaganda. And the government, the army and NHK held repeated meetings to discuss concrete means of establishing such stations. Plans drafted as a result of such meetings included:

- (1) Establishment of high-power stations in Tokyo, Osaka and Fukuoka which were densely populated and were strategic points from the standpoint of national defence.
- (2) Provision of as high antenna power as possible within technical and economic feasibility, but in consideration of the capacity of the radio industry of the country, establishment of a 150 kW station in Tokyo and a 100 kW station in each of the other cities (all dual broadcasting facilities).
- (3) Construction and operation of these facilities including all expenses, by NHK on its own responsibility but under recommendations of the government and the army.

It was thus that work on the high-power station in Tokyo was started. This was completed towards the end of 1936 and was followed by procurement of the sites and broadcasting equipment and generators for the other cities. However, with further tightening of control of resources along

with prolongation of the War with China, it became difficult to implement this plan at an early period. In addition, with the outbreak of the Pacific War, control of radio waves, as will be described in the following section, was enforced. With such changes in the situation, high-power broadcasting became no longer necessary, and the construction of the projected stations was abandoned.

4. Broadcasting Facilities under Radio Wave Control

Control of radio waves during the Pacific War was a measure enforced for the double purposes of securing broadcasting and national defence. Whatever may be said for the former, it was questionable how effective the latter was for preventing infiltration of enemy planes into the skies above Japan. When the Pacific islands fell one after another into the hands of the American Air Force towards the end of the war, these islands were used as LORAN bases for bombing major Japanese cities. This, of course, eliminated the meaning of controlling radio waves for the purpose of preventing attacks from the air.

At any rate, the control of radio waves was an emergency measure enforced under a war time situation. With respect to the means of enforcing such control, the War, Navy and Communications Ministries, the Information Bureau and NHK met in October 1941 and decided on the following points:

- (1) Part of the antenna power at the existing broadcasting stations will be reduced.
- (2) All the stations, or those grouped into a number of blocs, will use the same frequency for broadcasting purposes.
- (3) Broadcasting stations will be established at points important for air defence.
- (4) For preventing deterioration of reception arising from antenna power reduction and the use of the same frequency, additional stations will be built and wired broadcasting commenced.

The control of radio waves under the above system was enforced in December of the same year the Pacific War broke out and continued until it ended. The issuance of the order was made by the Radio Waves Control Headquarters, which was composed of the representatives of the government agencies aforementioned.

Under the control, dual broadcasting operated at the Tokyo, Osaka and Nagoya stations was suspended. The power and the frequency used for the first network were at once reduced and unified, resulting in a complete change in the nation-wide network. In other words, 860 kc was assigned to all the broadcasting stations in the country both for daytime and nighttime broadcasting, though the frequency was later changed to 1000 kc. The 150 kW power of the Tokyo Station was reduced to 10 kW for daytime and to 500 W for nighttime broadcasting. Also, all the stations, which were located in the "eye" areas in the distribution of radio waves, were reduced in power, and especially the nighttime power was reduced to 50 W or below for all the stations in the country. Meanwhile, 21 low-power stations were constructed within a month after the outbreak of the war for the purpose of reinforcing air defence.

In the early period of radio wave control, however, nation-wide confusion in reception developed because the stability of crystal oscillators was not high enough, the synchronization adjusting technique was inadequate and the field intensity was greatly weakened. Specially at night, interference by remote stations became serious. In consideration of the need for improving such a poor receiving condition and for regionally transmitting public information issued by the army, the country was soon divided into five blocs according to military districts, and transmission of programmes on identical frequency at each bloc was commenced; but this was limited to nighttime only.

Synchronization of frequencies in transmission on identical frequencies was highly effective for improving the reception. At the same time it improved the effects of air defence. For this reason, monitoring of the frequency used at each station was made more rigid, and studies aimed at establishing the synchronizing technique were conducted in parallel with field experiments. Although frequency synchronization was thus markedly improved, beat interference arising from drift in synchronization was experienced more or less at various areas. However, because of very high interest in obtaining war news on the part of listeners, few complaints were heard regarding poor reception.

Bloc-by-bloc use of the identical frequency and improvement of frequency synchronization also improved the reception to a considerable extent. Nevertheless, many areas where the field intensity was originally weak benefited very little even from such measures. Therefore, NHK agreed to establish low-power stations in areas of weak field intensity as a further measure towards improving reception, and such stations were built one after another after February 1942. Among these stations were some established with added intention of reinforcing air defence. The number of such stations, as a matter of fact, increased to 47, including the 21 already mentioned, by the end of the war. Most of these were provided with 50 W antenna power and the equipment was mostly of provisional nature. For buildings, part of public facilities or private houses were rented, the antennae were stretched on wooden posts, and the transmitters were reserve equipment on hand or those built domestically.

The radio wave control system was frequently re-examined on the basis of the results of surveys on the air defence effect, and the distribution of the stations, antenna power and the bloc organizations and frequency were changed from time to time and in accordance with changes made in the military districts. Consequently, it could not be denied that programme organization and technical operations were also affected in various ways (see Chapter 7 "Broadcasting Programmes").

At the Toyohara (present Yuzhno Sakhalinsk, Sakhalin) Station and the Okinawa Station, which were built far away from Japan proper towards the end of 1941, wired broadcasting over electric power lines was tried out, since no air defence effect could be expected of the common frequency. The wired broadcasting system was later adopted for air defence purposes at strategic cities, using either electric power or telephone lines. However, the reception could hardly be considered good, and because of shortage of materials under the war time situation, the system did not develop any further than the trial stage. Towards the end of the war, most of the

operating facilities were damaged by air raids, and much of the transmitting and receiving equipment and subscriber lines were left unrepaired till the end of hostilities.

The use of identical frequency and wired communications had already been under study at the Ministry of Communications and NHK since the 1930's as a means of supplementing the shortage of broadcasting frequencies. Even though the results achieved through such studies were still inadequate, they served as the basis for enforcing the control of radio waves immediately upon the outbreak of the war. Also, since the sites and materials for low-power stations established provisionally as a measure for national emergency had already been provided in advance, they also facilitated enforcement of the radio wave control system.

Emergency measures for broadcasting facilities began to be considered in Japan as early as 1941, when tension in the diplomatic relations with the United States became evident. The main points in these considerations comprised the defence construction and protection of the stations, reserve equipment in case of damage to the facilities, provision of mobile broadcasting units, spare programme and liaison lines against possible destruction of the operating lines and assignment of staff under the emergency setup. Preparations for all these items as well as implementation thereof had been expedited.

Expecting that transmissions of programmes would be the responsibility of the Tokyo and Osaka stations in case of emergency, provision of spare studios and transmitters for each station was undertaken. And shortly before and after the outbreak of the war, other stations were provided with spare studios and equipment one after another. In particular, mobile broadcasting facilities were provided for the important stations. Short-wave transmitting and receiving devices were also preferred against possible destruction of programme lines between the stations and UHF devices for linking studios and transmitters. As the war situation turned against Japan around 1943, second and third spares were provided for such important stations as Tokyo and Osaka. Construction of hidden underground facilities was also expedited.

Towards the end of the war, most cities where broadcasting stations were located suffered damage either from air raids or bombardment from the sea, but only 10 broadcasting stations were damaged, excepting the Hiroshima Station, which was completely destroyed by the atomic bomb. Even the stations that were damaged soon returned to service through the use of spare or emergency equipment, thus discharging the obligations of continuing with the broadcasting service.

Jamming against propaganda broadcasts transmitted by hostile countries had also been counted as part of emergency measures even before the outbreak of the war. No jamming, however, was used in the early period of the war as there was little danger of the Japanese people being confused by hostile propaganda through broadcasting, since possession of short-wave receiving sets capable of receiving foreign broadcasts had been prohibited by law. Around 1943 evidences of the commencement of propaganda broadcasting using powerful medium-wave transmitters towards Japan from enemy military bases close to these shores became visible. NHK, therefore, undertook study of the means of jamming such broadcasts

under the guidance of related government offices. As a result, jamming transmitters were provided at the broadcasting stations located in areas under coverage of the enemy broadcasts and preparations expedited for jamming foreign signals by radiating noise signals identical in frequency with those of the enemy stations. Towards the end of 1944, a high-power medium-wave transmitter was set up at the American military base on Saipan, and radio signals of considerable intensity began to reach Japan. Therefore, NHK in accordance with already prepared programme, commenced jamming. The antenna power of noise transmitters ranged from 10 kW to 50 kW, and such broadcasting continued until the end of the war. The jamming effect was approximately good, but in some localities, it could not have been considered sufficiently effective.

Much of the broadcasting equipment was intended for emergency operation during the war, but with progress of the war, it became increasingly difficult to secure materials and manpower for constructing such equipment. Even when materials could be obtained after considerable trouble by the aid of the government and the army, most of the manufacturers had no room left for accepting orders for private equipment. Consequently, NHK was obliged to organize a manufacturing facility to produce some of the equipment needed, although such facility was far from satisfactory. As procurement of materials became practically impossible towards the end of the war, equipment not needed was scrapped for the materials. Also, as parts that did not affect the performance of the equipment were greatly simplified, various equipment became very simple in construction.

Enforcement of the control of radio waves and installation of emergency equipment were marked impediments from the standpoint of the development of broadcasting. However, these measures were inevitable when the national existence was at stake. It was nevertheless fortunate that improvements in the stability of crystal oscillators, development of the frequency synchronizing technique and the engineering work and equipment required for the establishment of groups of low-power stations at least served in good stead for the future consolidation of the network after the war.

6. The State and Broadcasting

1. Political and Ideological Background

As explained frequently in the foregoing, as the need arose, the government's administrative policy towards broadcasting included not only control of the organization, personnel and financial affairs related to the operation of the broadcasting service but also supervision and direction or protection of broadcasting programmes, facilities and receiving equipment. It was impossible to ignore the fact that the basic attitude of the government was always supported by the idea that though broadcasting was licensed to a public service corporation under the administrative measure of the Minister of Communications, it should originally be operated directly by the

government in accordance with the law. Consequently, the government attached various orders to the licence and made it plain that the licence might be revoked should the broadcaster fail to observe them.

At any rate, a question arises as to why the government tightened its control of the broadcasting service, especially the programmes, which constituted the essential portion of the service, throughout the 19 years of development since NHK was established in 1926 until the end of the Pacific War. The answer may be found in the changes that took place in the political situation of Japan and in the way in which the government enforced censorship of press and thought.

Originally, leadership in Japanese politics was in the hands of certain bureaucrats, particularly the senior ones, who had rendered meritorious service towards the establishment of a new national structure since the Meiji Reformation. The framework of the so-called Meiji Constitution, which was promulgated in 1889, was drafted by the initiative of these bureaucrats. This fundamental document of the State recognized the wide ruling powers of the Emperor; it limited the powers of the National Diet by emphasizing that the Emperor was sacred and inviolable and an Absolute Being. This was highly convenient, for those who served close to the Emperor, to maintain their political power. As a matter of fact, they exercised the real powers of the State, even while exerting efforts towards raising the position of the Emperor. It was thus that the governing structure arising from rationalization of the bureaucratic autocracy, while concentrating absolute powers in the Emperor, was impressed deeply on the people through political, military, educational and religious activities.

As a result of World War I, Japan's leading position in international politics was recognized, and with new ideas and cultures flowing into this country from Europe and America, democratic and liberal ideas began to take root rapidly among educated people. Also popular movements aimed at more democratic elections by rejecting bureaucratic autocracy through establishment of party government and by doing away with property limits for franchise in the election of the members of the House of Representatives began to gather momentum. Party politics was established in 1924; the following year the bill for the amendment of the election laws passed the Diet. But at the same Diet session, the Law for Maintenance of Public Peace was passed as a measure for keeping law and order. This aimed at curbing possible enlargement of the power of socialist political parties by amending the election laws as well as by erecting a barrier against the inflow of Communist ideologies from the Soviet Union with which diplomatic relations had been resumed that year. The law prohibited establishment of any political organization that advocated changes in the Emperor system, political organization of the State, or denied the system of private ownership of properties, and provided severe punishment of those who had any connection with such organizations. There was practically none in the Diet who opposed the passage of this law, which later became a powerful weapon against fundamental human rights.

Labour movements in those days showed a tendency of growing more violent against the background of chronic business recession followed by the 1927 financial panic and the 1929 world-wide depression. The labour unions joined forces with the socialist political parties organized one after

another, and their movements began to assume the characteristics of political movements. The progress of business recession caused concentration of capital in larger banks and strengthened control by monopolistic capitalists, while the conservative parties established close relationships with larger capitalists for the purpose of reinforcing the influence of their own parties. As a result, mistrust of party politics began to be voiced among the people. It was the intelligentsia who were most sensitive to the intensifying class struggles. Marxism rapidly spread among them, and it was often said that articles and literary works published in the leading magazines dealing with political problems and ideological questions were virtually controlled by leftist thinkers. The Law for Maintenance of Public Peace with wider interpretation and application of its contents, therefore, played an evil rôle⁽¹⁾ in the suppression of leftist political parties and in the control of speech and thought of scholars, critics and writers.

From such circumstances the radical elements in the army, and fascist tendencies among rightists became evident. While denouncing leftist ideology, they schemed to sever the connections between political parties and the Zaibatsu for selfish interests and to introduce innovations into the structure of the State. With the assassination of the then Prime Minister Tsuyoshi Inukai in 1932, party politics lost real power and intervention of the military in political affairs gained further weight, thus accelerating the growth of fascism in Japan. By this time, the Manchurian Incident had expanded into the Shanghai Incident, and as the situation developed in favour of Japan, more and more people began to support the policy enforced by the military and the government. Publicity exalting militarism was active through newspapers, magazines, broadcasting and motion pictures. Criticism of the military faction almost disappeared and some of the Communists began to change their ideas completely. In the international scene, Japan withdrew from the League of Nations; in diplomacy she turned away from the United States and Great Britain and approached Germany and Italy. In the cultural field, progressive intelligentsia began to lose their influence, and vulgar songs depicting decadent aspects of the thoughts and feelings of the common people as well as various entertainments using patriotism and unrefined justice and humanity as their themes literally flooded Japanese life.

Fascism in Japan was characterized by the lack of its own popular organization as was the case in Germany and Italy. The military organized under the absolute authority of the Emperor was the driving force, and those who subscribed to fascism tried to spread it through controlling mechanism of the organization. This tendency was reinforced in the process that gave rise to the February 26th Incident in 1932 (revolt of some army officers and men who schemed to establish a military government in Japan), that turned the War with China, which started the following year, into a protracted struggle and finally, gave rise to the Pacific War. As a result, a despotic political structure was established by the military faction and bureaucrats directly concerned.

The "Total Mobilization Law" promulgated as a war time legislation in

(1) In the 12 years between the outbreak of the Manchurian Incident (1931) and middle part of the Pacific War (1943) about 17,000 persons were arrested under the Law for Maintenance of Public Peace, out of which some 4,700 were indicted.

1938 vested powers in the government for controlling, in the name of the Emperor, every phase of Japanese life, including economic, industrial and cultural activities, without consent of the Diet. Under this law, the government tightened control on labour, resources, capital, commodity prices and facilities. It also tried to uproot all democratic organizations and ideologies so as to suppress people's criticisms of the war. Meanwhile, in order to promote spiritual exaltation needed for winning the war, the government fanned a campaign for "Total Mobilization of National Spirit", admonishing the people to economize on consumption, to save money, to be ready with labour service and to improve their living habits. In 1940 the political parties were dissolved, and the "Imperial Rule Assistance Association", a national organization for total war, as in Germany and Italy, was established within the framework of the Emperor system.

It was inevitable that control not only of broadcasting but of all mass-media should have been tightened in such a process. In the case of broadcasting, control was comparatively easy, since NHK was a unified organization of national scale monopolizing the service. In the newspaper field, and those of other publications and motion pictures, mergers of enterprises were first enforced. The military faction and the government seriously restricted the editorial rights of these mass-media in order to promote the fighting spirit of the people through thoroughgoing control of public opinion.

In August 1945, Japan recognized defeat and agreed to unconditional surrender. Damage to manpower and materials was enormous, and rehabilitation of the nation appeared almost impossible.⁽²⁾ The fact that no revolution broke out in spite of the collapse of the military faction was, as in the cases of Germany and Italy, because every organization, including the leftist political parties, capable of resistance had been uprooted by fascism, but the greater reason probably was that the reality of defeat was announced to the people by the Emperor, who had always been considered a godhead. In other words, the military faction and the government took such a measure because they thought that internal confusion arising from defeat could be averted by taking full advantage of the absolute trust people placed in the Emperor.

The foregoing is nothing more than analyses of the principal aspects only of prewar politics and ideologies, and have been included here as a pointer towards grasping the meaning of the government policies on broadcasting, which will be presented in subsequent sections.

2. Supervisory Rights on Broadcasting

Supervision of broadcasting has been in the hands of the Ministry of Communications, the competent government office, since the commencement of the service. This was based on the concept that, since broadcasting was a form of radiotelephony, the right to prohibit abuse of a service

(2) Some 1,900,000 Japanese servicemen were killed including those missing. On the other hand, about 700,000 non-combatants were killed, including those missing, in air raids. This means that a total of 2,600,000 Japanese, representing one in every five households, lost their lives. Also, about 3,100,000 houses were either destroyed by fire or demolished for purposes of evacuation, signifying that some 15,000,000 people lost their homes.

provided for public communications and use thereof for anti-social communications, which would disturb public order and desirable customs, was naturally vested with the Ministry. As has already been stated (see Chapter 2 p. 25), such interpretation of the Ministry of Communications met with opposition from the Home Ministry which had power of the police and claimed that the supervision of broadcasting, like other mass-media, should be placed under its supervision. In those days, the social influence of broadcasting had not been recognized sufficiently, and there were doubts as to its future development. For this reason, the Home Ministry gave way to the Ministry of Communications with respect to supervision of broadcasting.

Later, unification of the broadcasting service took place, network construction made progress, and the number of receiving contractors showed evidences of rapid increases. So with increasing social influence of broadcasting, the question of its supervision was rekindled. The Home and Education Ministries actively advocated transfer of supervision from the Ministry of Communications, while the Foreign, War and Navy Ministries claimed that they should have right to intervene in the Communications Ministry's work in this field.

The Home Ministry in prewar days had overall powers of controlling speech and thought. In particular, since the promulgation of the Law for Maintenance of Public Peace (see p. 73), the Ministry exercised its powers over a wide range of fields and tried to uproot anti-fascist forces. And through its support of the establishment of the despotic political setup by the military faction since the outbreak of the War with China, it had become one of the most powerful agencies in the government. As a consequence, the Home Ministry was always dissatisfied with leaving the supervision of broadcasting in the hands of the Ministry of Communications, and the sense of opposition to the latter could not be eliminated from its officials. What motivated the Ministry of Education to enter into a dispute with the Ministry of Communications regarding the supervision of broadcasting were the contents of the second network broadcasting plans approved by the latter in 1930. These plans indicated educational programmes as the principal contents of the second network broadcasts and gave not a little shock to the Education Ministry officials. The Education Ministry, therefore, took the attitude that, if NHK should commence educational broadcasting, it should be brought under the control of that Ministry in the same manner as all other educational institutions, and censorship should be exercised over such programmes. The Education Ministry thus claimed that it had the right to co-supervise broadcasting with the Ministry of Communications.

Opposing views were thus held by the Home and Education Ministries on one hand and the Ministry of Communications on the other regarding the supervision of broadcasting. The question, however, was settled in favour of the Ministry of Communications through political negotiations among the top officials of the ministries. It was agreed, nevertheless, that the Ministry of Communications would maintain close contacts with the other ministries concerned in the matter of programme contents so as to assure maintenance of propriety. The Broadcast Council, which was established in October 1933 as an advisory organ for NHK's president, was a body established by the proposal of the Ministry of Communications.

The Council contained in its membership deputy ministers of Communications, Home and Education, who participated in the discussions on the basic programming policies. This was an outcome of the aforementioned agreement the Ministry of Communications made with the others. In September 1934, deputy ministers of War, Navy and Foreign Affairs joined the Council as new members. This was evidence of the importance the government placed on broadcasting, under domestic and international developments subsequent to the Manchurian Incident, as a powerful means of publicizing national policies.

With the beginning of the Manchurian Incident as the dividing point, a move towards the establishment of a political structure under the concept of total war became visible, and publicizing of the national policies through mass-media became notably active. On the other hand, in order to meet the pressure of international public opinion regarding the Manchurian Incident, Domei News Agency (see p. 61) was organized towards the end of 1935 as a news agency representing the nation. This was proposed by the Ministry of Foreign Affairs as a means of reinforcing international propaganda. The Domei News Agency, whatever the circumstances of its establishment may have been, also met the needs for domestic propagandization. Its slogan was "The voice of Japan is heard over the world through Domei and the world's voice is heard across Japan through Domei". The government also established the Information Committee under direct control of the Cabinet in July 1936 for consolidating its information and propaganda policies as well as for coordinating information issued by various ministries.

NHK agreed to use exclusively the news items provided by the Domei News Agency, which was under the supervision of the Information Committee, to collaborate with the government in its information and publicity activity. With further consolidation of the war time structure after the beginning of hostilities with China, the Information Committee became the Cabinet Information Division. Its activities were expanded to the collection of information not coming under the jurisdiction of various ministries and to issue news and information designed to elucidate the people. Under the circumstances, broadcasting was also more or less placed under its direction. However, as the supervision of broadcasting was in the hands of the Ministry of Communications, directives of the Information Division were, in principle, to be given NHK through the Ministry.

Nevertheless, with expansion of the scale and prolongation of the War with China and tension developing in the international political situation as a result of the outbreak of World War II in 1939, reinforcement of the nation's information and propaganda policy was decided on, and at the end of 1940, the Cabinet Information Division was promoted to the status of a "bureau". This Bureau controlled mass-media and played the rôle of inducing public opinion in the desired direction for actively propagandizing national policies. It was staffed by servicemen and officials assigned to it by the War, Navy, Home, Foreign and Communications Ministries, making it a general information organ utilizing specialized administrative techniques of these ministries.

The broadcasting enterprise, which has been placed under unified super-

vision and direction of the Ministry of Communications both in business management and service operation since it was established, was now placed under supervision of the Information Bureau regarding broadcasting policies, programming and service operation, under the Ministry of Communications with respect to engineering and under both regarding important matters related to the supervision of the corporation. However, censorship of programmes was left in the hands of the Ministry of Communications on the condition that such censorship would be based on the instructions of the Information Bureau. Indeed, since the broadcast supervising division of the Information Bureau was staffed mostly with officials assigned to it by the Ministry of Communications, the system adopted as aforementioned created a closer relationship between the two, greatly facilitating unified supervision and direction.

With the outbreak of the Pacific War, information and propaganda activities of the Information Bureau were naturally reinforced. In the supervision of broadcasting, concrete measures were indicated in accordance with progress of the war situations. Such policies were often controlled by the powerful influences of army and navy officers assigned by their respective ministries. Materials related to the war situation, which constituted the most important portion of war time broadcasting, were handed over to the broadcaster directly from the information divisions of the War and Navy Ministries; any materials obtained from other sources had to be approved by the aforementioned information divisions before they could be presented over the radio. Insofar as this point was concerned, the Information Bureau did not serve as the "handout" window. Moreover, as the war situation turned against Japan, the information divisions began to intervene even in the direction of actual broadcasting, which was part of the powers of the Information Bureau. And in their desire to reflect their will in broadcasting, they frequently tried to issue direct orders to those in charge of programming. It was thus that the control of the supervising parties collapsed, which also brought confusion at the operating side.

3. Programme Censorship and Direction

Since the commencement of broadcasting, regulation of programmes was based principally on the "Bylaws for the Control of Private Radiotelephony for Broadcasting Use", which was enforced in February 1924 (see p. 19). This was revised frequently in the light of subsequent changes in the political and social situations. It was, as a whole, strongly similar to police control, stipulating prebroadcast censorship of programmes and monitoring of broadcasting.

In those days, *ex post facto* censorship of newspaper and magazine articles and motion picture scripts was the usage. With respect to broadcasting programmes, however, contents or summaries of various items had to be submitted for censorship at the local administrative office under direct jurisdiction of the Ministry of Communications by the day before presentation (one hour before broadcasting for news items). This measure was enforced so as to prevent broadcasting of anything that might call forth public criticism by a public service broadcaster specially licensed

by the government. It was also meant to serve as a defence against intervention by the Home and related ministries which had charge of controlling other mass-media. The Ministry of Communications also installed monitor equipment for seeing that the censored scripts were presented without any alterations. If the contents of programmes actually presented diverged markedly from instructions or if any prohibited items were presented, the Ministry was prepared to cut off the power supply immediately.

The standards of censorship were roughly as given below, and any item coming under any of these was prohibited or ordered to be deleted or revised.

- (1) Items that impaired the dignity of the Imperial House.
- (2) Items that disturbed public order and desirable customs.
- (3) Items referring to diplomatic or military secrets.
- (4) Items referring to confidential proceedings at the Diet.
- (5) Items related to the contents of preliminary investigations prior to public trials and others prohibited from public announcements.
- (6) Items deemed to impair the honour of Government and public offices or of the Army and Navy, or items deemed to impair the credit of individuals or groups of individuals.
- (7) Items deemed to be political speeches or discussions.
- (8) Items deemed to be advertisements of businesses or individuals.
- (9) Items deemed to cause marked disturbance of public sentiments.

These criteria generally followed those already applied to other mass-media. However, Item 7 prohibiting broadcasting of matters deemed to be of political nature or political discussions gave a strange impression as it was not applicable to other media. Inclusion of this item was intended to suppress beforehand freedom of criticizing politics through the broadcasting medium, and it served its purpose well in regulating politically inclined programmes in prewar Japan.

Among broadcasting programmes, contents of talks and news scripts reporting political situations were most carefully censored by Communications Ministry officials. From the standpoint of prebroadcast censorship, talks scripts had to be submitted in their entirety, and authorization was forthcoming only after the speakers' social positions, personal histories and ideological tendencies were confirmed and the scripts deemed proper for broadcasting purposes. It was possible to prohibit talks related to political matters in advance, but what of piecemeal criticism of politics possibly included in other programmes? In order to assure comprehensive censorship, these other programmes were also made the subject of scrutiny.

Control of broadcasting after the Manchurian Incident in 1931 became even more strict. Regardless of the type of programme, i.e., whether a talk, news or any other kind, everything that went on the air was placed under censorship in accordance with the following policy:

- (1) All items indicative of extremist principles, theories and movements connected with political, economic and moral problems or those attended with possibilities that may be assumed as such will be prohibited.
- (2) Ideological tendencies of the performers will be more carefully scrutinized, and regardless of whether such performers are connected with ideological organizations, those who are suspected of supporting such

extremist principles or of assisting holders of such extremist principles will be banned from performing in broadcasting.

- (3) The performers shall be careful to use easy terms and manner of speaking; they shall refrain from including subjective views and use of terms partial to certain matters or a violent manner of speaking.

In those days, news materials were to be provided in turns by the newspaper companies and press agencies, but as censorship of broadcasting news scripts was much more strict than of newspaper articles, it was frequently impossible to use such materials without modifications.

As centralization of the broadcasting service and participation of Communications officials in the management were promoted through reorganization of NHK in 1934 (see Chapter 4, "Organization and Finance", Section 3) governmental control of broadcasting was further facilitated and, in fact, became more active. This could be inferred from subsequent supervisory administration, which, instead of stopping at mere police control-like intervention, showed evidences of a move towards control of broadcasting under a certain fixed policy.

After the reorganization of NHK, the February 26th Incident took place in 1936 and the War with China started in 1937, and tension began to mount in Japanese political, diplomatic and military circles. In the government, a need for establishing a thoroughgoing system of publicizing its policies was acutely felt, and a design for utilizing broadcasting as an effective means began to take shape among the authorities. In 1936, with the establishment of the Cabinet Information Committee, an organ for coordinating information services of various ministries, as the turning point, opportunities for broadcasting policies by the Prime Minister, the State Minister and heads of other ministries were promoted. Also, since only the news items offered by the Domei News Agency, which could be considered as an organ for promoting national policy under the guidance of the Committee were to be used for broadcasting, care required for censoring news scripts was reduced. On the other hand, the policy of leading public opinion through news broadcasts was intensified.

Immediately after the start of the War with China, the Cabinet Information Committee was reorganized as the Cabinet Information Division and assumed the work of conducting elucidating publicity for the sake of carrying out the national policy. The directive powers of the Information Division with respect to broadcasting increased, and various plans for setting up of regular programme hours for policy broadcasts and increase of hours for such began to be forced upon NHK. As a result such programmes as the "Government's Hour", in which responsible officials of various ministries presented talks, and "Radio Current Affairs Text" were established. In the field of entertainment programmes, too, those reflecting government policies were increased. On the other hand, jazz music and the like were rejected as being contrary to the exaltation of the national spirit, and solos sung in foreign languages were not approved in principle. Japanese music containing vulgar words were either revised or rejected under the censorship.

Planning of programmes proposed by the Information Division was carried out in consultation with the Ministry of Communications, the competent supervisory government agency, but it must be said that actual power

of directing programming had been transferred to the Information Division. The "War Time Broadcast Planning Council" which was set up at NHK in July 1939, owed its existence to the suggestion of the Information Division. Its members included chiefs of related divisions and sections at the Ministry of Communications, the Information Division and NHK. In the matter of programme planning and organization at the meetings of this Council, the Information Division always maintained the leadership. Programmes aimed at propagandizing government policies were established one after another at the suggestion of the Information Division, and even the tendency of selecting performers in consultation with the Division became evident.

"It is now matter of time for broadcasting, as a commanding and public announcement organ of the nation, to possess the same effect as the official Gazette" were the words uttered by an information officer towards the end of 1940, when the Information Division was promoted to the status of a bureau. These apparently were words arising from admiration of the broadcasting policy of Nazi Germany. As has already been stated in section 2 of this chapter, directing and supervising work on broadcasting were transferred from the Ministry of Communications to the Information Bureau. And since the object of its establishment was more active propagandization of the government policies, the directive powers of the Bureau towards broadcasting was further consolidated. Soon the nation faced the outbreak of the Pacific War, and fundamental matters relating to programme planning and organization were controlled entirely by the Information Bureau, resulting in a broad decline of the autonomy of NHK.

7. Broadcasting Programmes

1. Programming System

Completion of seven key stations and programme lines linking them in 1928 after the inception of NHK opened up a new phase in the organization and execution of broadcasting programmes. By this, the keynote of programming, which stood upon service to local communities, shifted towards being directed to the entire nation. In other words, it became possible to take a step forward in providing equal cultural opportunities to the entire population of the country through cultural interchange between urban and local listeners. The programme taken up for the first nationwide network presentation was the Emperor's accession to the Throne in November 1928, and allied scenes.

The object of nation-wide network was to supply good programmes from the metropolis to local stations lacking in broadcasting materials, in accordance with the Communications Ministry's order attached to the licence. Also, utilization of network programmes enabled the local stations to economize on their budgets. However, for eight years since the establishment of NHK (see Chapter 4 "Organization and Financial Affairs", Section 1), the powers of the headquarters over control of unified business operations had

been limited; in fact local branches were even in a position to lead the headquarters. For this reason, the headquarters had no final say regarding network programmes, and a system of drafting concrete plans at the meetings of the headquarters and other responsible staffs of the branch stations was followed. Even then, such plans were not binding on programming at the branches and they were left free to select their own programmes.

As a result, until about 1934, when trunk network lines were completed and plans for expansion could be promoted, organization for nation-wide network broadcasting had not been perfected. The ratio of producing local or independent programmes as service to local communities was quite high. This situation not only led to shortages in budgets but also brought about cases in which the same types of programmes were competing among several stations at about the same time. Thus, little unified control of programming was possible.

In 1933 the headquarters came out with a draft of "Item-by-Item Basic Frequency of Programme Presentation" on the basis of opinions expressed by various branches. The document was drawn up with the intention of revising it annually according to the results of the preceding year and new plans. It provided for estimated numbers of programme items of various types to be produced during each year. At the same time, it stipulated basic performance fees for performers on the basis of which the programming budget of each local station might be estimated. It was a measure for facilitating budgeting but also expected to promote more frequent utilization of network programmes. After all, this served as a foothold towards unified control of programming throughout the stations. However, it was not until 1934, when the powers of the headquarters were properly established through reorganization of NHK, bringing about centralization of control, that it really began to take effect.

Through the reorganization, unified control of programming was definitely indicated, and as a means of realizing the policy, the Programming Committee was established at the headquarters. This was composed of responsible members of programming, engineering and administrative staffs of NHK, competent officials of the Communications, Home and Education Ministries, and several men of learning and experience from outside NHK, and placed under the direct control of NHK's president. The duties of the Committee consisted principally of discussing matters connected with network programme organization, and deciding on the details, such as programme items, broadcasting dates and length of each programme. In addition, the Committee also specified the broadcasting time and the lengths of independent local programmes as well as local network programmes involving two or more stations. As a result, each station was enabled to draw up schedules by items and presentation time according to categories of programmes, such as nation-wide network, local network and independent local programmes.

The final say on business matters was vested in the NHK's president, who acted as chairman at all meetings of the Committee, or in the general managing director, who acted as his proxy. For this reason, the independence of programming was not infringed upon by the claims of any outsider.

After the war broke out with China in 1937, with the unfolding of the

campaign for the "Total Mobilization of National Spirit"⁽¹⁾ under government promotion, direct and indirect intervention and direction of the government in the programming policies and contents of programmes became more frequent and strict. As has already been stated (Chapter 6, "The State and Broadcasting", Section 3), the Current Affairs Broadcasting Programme Planning Council was established in July 1939, and the leadership exercised by the Programming Committee was virtually transferred to the Cabinet Information Division, which was promoted to the status of a bureau in December 1940. This Council discussed important matters related to programming under war conditions and decided on the monthly programming policy. However, powers exercised by the Information Division did not stop at indicating the policies but extended to decisions on the propriety of individual programmes, clearly infringing upon the *raison d'être* of the Programming Committee.

The business of the Programming Committee was initially disposed of by its chief secretary who had been handling arrangements of broadcasting items and contacts with local stations, but with the establishment of the aforementioned Council, these business matters were taken away from the Programming Committee and assigned to the Programming Division under the Business Department of NHK. With reorganization of the Programming Division into the Planning Division in January 1941, the Programming Committee was dissolved and the Planning Division established for the purpose of tightening control of programmes. It took charge of overall planning and organization of programmes, while at the same time taking care of the business affairs of the Current Affairs Broadcasting Programme Planning Council. It was a mechanism facilitating more thorough direction of broadcasting by the Information Bureau.

When the Pacific War broke out, meetings of the abovementioned Council and other organs in connection with programming were all suspended. And overall discussions, including planning and organization of the entire broadcasting programmes, the contents thereof and concrete measures for their presentation, were conducted daily, later three times a week, with the Information Bureau as the directing authority. Conclusions on these matters were made on the spot. In such circumstances, NHK completely lost its autonomy with regard to programming. With further progress of the war, policies of the army and the government related to broadcasting were successively transmitted to NHK through the Information Bureau, thus substantially placing broadcasting under direct control of the government.

2. Advisory Organs

The keynote for planning and production of broadcasting programmes was formulated in consideration of programming policies of the broadcaster and directions of the supervisory government agency, but at the same time

(1) The "Essentials of the Movement for the Total Mobilization of National Spirit" announced by the government in September 1939 provided that the movement was purported to promote the cooperative spirit of the people, spirit of service to the Imperial State and patience for the prosecution of the war. With the prolongation of the War with China, however, campaigns for the delivery of war resources, purchases of government bonds and encouragement of savings also were promoted. This bureaucrat-conceived ideological movement, however, failed to arouse the voluntary cooperation of the people.

prevention of self-righteous operation of broadcasting and improvement of the contents of broadcasting programmes had to be considered important along with the expansion of social responsibilities of the service. In particular, as the items of programmes were increased and enriched and those requiring professional knowledge of the programme organization increased, it became doubtful whether knowledge and experience of NHK's own programming staff would be sufficient to meet such requirements.

Shortly after the establishment of NHK, advisory groups connected with programming were established one after another at the Tokyo, Osaka and Nagoya branches. The measure was adopted for the purpose of obtaining advice of outside people of learning and experience so as to assure proper programming. This system of setting up advisory groups was maintained till the outbreak of the Pacific War, when their titles changed and they branched out into various expert committees.

The advisory organ established at the Tokyo Station in February 1929 was divided into the education and entertainment programme advisory groups. The former was composed of government officials connected with education and educators in active service, while the latter was composed of several noted writers and critics. The principal subject matter taken up at the education group was the programming for the second network, the construction of which NHK decided to undertake for the Tokyo, Osaka and Nagoya stations with a view to stressing education in broadcasting. Conclusions reached at this group served as influential pointers to the school programmes, which were established later. At the advisory group for entertainment music programmes were taken up as the main subject of discussion. Revisions of vulgar words in Japanese songs unsuitable for broadcasting and selection of Western music, which was gaining popularity in those days, were discussed to find concrete means of dealing with them.

The Broadcast Council, which was established in October 1933 as an advisory organ for NHK's president, as has already been described in Chapter 6, "The State and Broadcasting", Section 2, came into being as a result of the proposal of the Ministry of Communications, which intended to reflect ideas of the various ministries of the government in broadcasting. The sessions of the Council, however, were conducted mostly under free discussions on matters of general nature, and consequently, few concrete reports were drafted. In later years, the meaning of the Council's existence was lost with the increasing influence of the Cabinet Information Division on broadcasting.

Advisory groups of various types, which were established and managed at individual local stations, were all dissolved in 1934, when the reorganization of NHK took place. Only, advisory groups for school programmes were established anew as planning and preparations for school broadcasting were already in progress. In view of the subsequent development of the service, a need arose for incorporating more knowledge of outside experts into planning and organization of broadcasting programmes. In the circumstances, advisory groups for other divisions of the service, such as youth education, talks, entertainment, children's and home programmes, Western music and overseas service fields, were established in September 1937 to undertake examinations of programme contents. These advisory groups, too, lost their meaning around 1941, when the government's control

of broadcasting was tightened and there was direct intervention and direction.

It was the Broadcasting Language Committee and the Pronunciation Improvement Investigation Committee that achieved marked results by depending on the knowledge of outside experts. The Japanese language, under the influence of the Chinese literature, was more for the "eye" than for the "ear" and included terms the meanings of which were difficult to grasp by hearing. Moreover, local dialect differed considerably from the standard Japanese and from one district to another. Consequently, an important question posed on the broadcaster in achieving good results through radio broadcasting was over linguistic expressions. NHK established the aforementioned expert committee in January 1934 and staffed it with several philologists to engage in the study of the standard language suitable for broadcasting and proper pronunciation thereof. The principal objective of this measure was to establish the usage of spoken Japanese through broadcasting so as to achieve the required effect. In this study, vocabulary, expressions, pronunciations and accentuations were based on those generally employed by educated people living in Tokyo.

The subjects taken up by the Committee for study and investigation covered a wide range of field as shown in the following:

- (1) Standardization of diction and pronunciation of the language used for broadcasting news and introductory announcements.
- (2) Correct pronunciation of geographical names, personal names and imported foreign terms.
- (3) Scientific terms and the use of the language peculiar to people of various occupations.
- (4) Selective arrangements of different uses of the language among different social strata and dialects.
- (5) Disposal of homonyms and terms difficult to grasp through the ear.

Several other items were included in the scope of the Committee's activities besides the above, and it required six years and three months before fundamental investigations on the subjects could be completed. Meanwhile, 28 types of publications related to the results of investigations and surveys were issued. The achievements obtained by the Committee, however, were effectively used in the announcers' use of language and pronunciation. Consequently, broadcasting played the rôle of disseminating the standard Japanese language throughout the country. The Committee was dissolved in March 1940, but in August of the same year, the News Language Investigation Committee was established to limit the subject of study to broadcasting news, thus exerting efforts towards the establishment of style and expressions in news broadcasting. However, the work of this Committee was also suspended in May 1945, with the unfavourable turn in the war situation.

3. Broadcasting Items

From 1928, when the trunk network lines were completed, until 1934, when the centralization of powers was achieved, nation-wide network programmes, as already stated in Section 1 of this Chapter, had not been put on routine. However, the lack of centralized control in the matter of

programming rather helped enrich broadcasting items, and the principal ones now available may be said to have been developed in those days. This was because the situation induced abnormal efforts of the Osaka Station, which had a strong sense of rivalry towards the Tokyo Station, in planning new programmes, and proposals of local stations for new items in their desire to have their programmes taken up for nation-wide network presentations.

In the meantime, as allocation of broadcasting time and lengths of programmes proposed by local stations was undertaken in consultation among the responsible programming staffs, the ratio between the nation-wide network programmes and independent local ones became gradually fixed. Items like time announcements and weather forecasts for the entire country, which were more convenient for network broadcasting, were included in the network programmes without any opposition. Subsequently, nation-wide news, radio gymnastics, announcements of government and other public offices, news commentaries, English news, children's hour and lectures on sacred literatures were specified one after another as network programmes.

The nation-wide news programme, which was started in November 1930, used materials purchased from two news agencies and edited as news programmes. In the matter of news sources, therefore, the broadcasting stations were dependent upon outsiders as in the case of the former local news. Nevertheless, special news items frequently presented over the radio after the Manchurian Incident in 1931 rather shocked the newspapers which were traditionally strong in this field (see Section 5 of this Chapter).

The spot reporting of the accession of the Emperor broadcast nation-wide in 1928 was the first network programme of such scale. And since this initial attempt called forth a marked reaction of the general public, the weight of the field relayed programmes thereafter increased in the overall programming. Development of this field had already been started by the Nagoya Station in October 1925, when the military review was relayed from the spot. The Tokyo and the Osaka stations also tried such relay programmes, but these were limited to local areas.⁽¹⁾ With expansion of the network, field relay programmes became popular among various stations, and the range of material gathering extended to sporting events, national functions and depiction of national and social scenes. The relay broadcasting system linking a number of stations was also frequently adopted.

The second network was constructed for the Tokyo, Osaka and Nagoya stations between 1931 and 1933. The programmes presented over this network consisted principally of cultural ones, especially supplementary education. These included foreign language courses (English, French, German and Chinese), and in addition a number of new programmes aimed at practical education were established. Because of their nature, these programmes were intended for specific audiences and no high programme ratings could be expected of them. Even then, some textbooks, such as those for the

(1) Baseball and "sumo" or Japanese wrestling (traditional Japanese sport in which two contestants wrestle in a circular ring) were the most popular items. Field relays of baseball games commenced in August 1927 while those of "sumo" commenced in January of the following year.

English course, published for the purpose of supplementing learning through the ear, were purchased by tens of thousands of listeners, who, it may be said, formed the habit of keeping up with listening to such programmes. The second network became the principal vehicle for presenting school programmes which commenced in April 1935. Programmes for this network were organized systematically in series, and these became one of the outstanding features of NHK's broadcasting.

In the 1st network, social education programmes intended for adults and practical ones of various types for housewives were included in the general talks and lectures. These were presented in a talk style using one performer per programme, but later the discussion style using two or more performers was adopted. After the Manchurian Incident, programmes with contents related to propagandization of government policies by the authorities and their collaborators as well as by military officers were added, thus increasing the number of programmes in this field. The news commentary, which was newly established in October 1933 as a network programme, was a typical one intended to lead public opinion towards accepting government policies.

Religious programmes continued since the establishment of NHK, but the "Lectures on Sacred Literatures" commenced in April 1934 became very popular because of the attraction of the experiences and the manner of presentation of the performers. In Japan, Christianity, Buddhism and the indigenous Shintoism,⁽²⁾ coexisted, but Buddhism was the most widely spread. In the aforementioned programme, expositions of Buddhist sacred literatures formed the principal subject matter in the early stages. Soon, however, relations with China became tense, and for purposes of domestic policy promotion of the national spirit began to be emphasized. As a result, the number of programmes related to Shintoism increased.

The Radio Gymnastics, a programme established for promoting the people's health, was an item that gained popularity so rapidly that it became one of those which helped to increase the number of receiving contractors. An organization for systematic group exercises in tune with the commands and musical accompaniment was established in Tokyo in 1931 and spread across the country under the support of the Home Ministry, Education Ministry and the reserve servicemen's associations. Under the wartime situation, even this programme was used for promoting a militaristic mood through a group utilization system.

With rapid development of techniques in production, control and relaying, new ideas were incorporated into the entertainment programmes, which have constituted the main current of broadcasting since its commencement. New items were also established one after another. Broadcasting of Western music served well in disseminating and elucidating such music among the listeners. As a result, high-level musical works began to be included in the programmes, and numbers of foreign musicians and performers were invited to direct or play for Japanese radio audiences.

(2) A religion worshipping the Sun Goddess said to be the ancestress of the Emperor and those gods believed to be the founders of the Japanese race. This religion was closely connected with the Emperor system and specially protected as one outside the category of religions in general. After the end of the Pacific War, however, it was considered as being in the same category as other religions.

Periodical or serial presentations of masterpieces of Western music were also planned from time to time, and these served to broaden the circles of the lovers of Western music. Through successive establishment of local stations, various types of Japanese music nurtured in generations of traditions came to be included in larger numbers in the network programmes. In addition, a new style of music fusing melodies and instruments of foreign and Japanese music also developed.

After the 1934 reorganization of NHK, programming policy for nationwide network presentations was established and centralization of power was realized. These, together with changes that took place in the political and military situations in this country up to the end of the Pacific War, served to enhance the importance of the network programmes year by year. As has already been stated (Chapter 6, "The State and Broadcasting", Section 3), the government and military faction began to demand of NHK the establishment of programme items that would serve to direct public opinion through network presentation.

As a result, larger numbers of programmes promoting support of government policies came to be included, especially in news and talks.

In the field of news reporting, both the frequency and time duration for reporting on the war situation increased, and overall commentaries on news were provided. News correspondents were dispatched to the battlefields on the Chinese Continent, and these frequently transmitted battle-front situations through spot relays and recordings. After the outbreak of the Pacific War, a military march began to be played as an introduction to news programmes reporting the results of battles. Such programmes were titled the "Government's Hour" in which government officials and military authorities took part (7:30—8:00 p.m. daily), the "Military Announcements" (8:00 p.m. daily during 1940), the "Army Hour" and the "Navy Hour" presented once a week. The "War Time National Reader" was also established, read by the announcer for bringing home to the people the policies of the military faction and the government. Besides, programmes titled "The People's Pledge" and "Our Determination", which reflected the people's will to cooperate with the war also appeared. In order to transmit the government's determinations and policies, the Prime Minister frequently went on the air at his official residence, and popular conventions and nation-wide functions intended for promoting the fighting spirit of the people were frequently presented over the nation-wide network.

General talks programmes during the war were tied closely to the government's information and propaganda policies. The directive principles for these programmes were rejection of thought and culture tinted with American and British colours and emphasis of the significance of the war in world history. In other words, broadcasting appeared as if it had become involved in an ideological warfare. In the pattern of broadcasting, too, talks by individual speakers by which authoritative thinking was imposed on the listeners in a one-sided manner was the general rule. For broadcasting to specific audiences, such as women, the young, and rural folk, items thoroughly imbued with the keynote for unifying the domestic structure into a fighting machine were established. Also, group listening to policy broadcasts at meetings or at individual homes was encouraged by the government, and items intended for such purposes were especially

included.

The manner in which entertainment programmes were affected by the war-time policies and the extent to which they were controlled differed from the news and talks programmes. These programmes were organized primarily for providing entertainment for workers in the munitions plants and farmers engaged in increasing agricultural production; they were also intended to entertain families of men in military service and wounded or sick servicemen. And in order to create breathing spaces in the heavily tension-loaded war time atmosphere, they were mostly of popular content. As the war situation became more serious, entertainment programmes were further emphasized, but the programming policy still followed the overall idea of increasing war resources. Under this policy, the themes of dramas were limited, American and British musical works were taboo and so-called decadent melodies were driven out of radio broadcasting.

Fourteen years or three-fourths of the entire period between the establishment of NHK and the end of the Pacific War (1945) were spent by Japan in incidents and wars during which the fascist political structure was developed and established. And, as aforementioned, programming at NHK notably reflected such a political situation. On the other hand, the interest of people in broadcasting was abnormally intensified through such incidents and wars. For this reason, programme items and broadcasting hours for digesting them increased year by year.

4. Broadcasting Hours

The following table shows how network broadcasting hours involving the Tokyo and six other key stations increased along with expansion of the network. According to the table, time used for presenting programmes originating at each station remained almost constant, but that used for incoming network programmes increased nearly four times and the total number of broadcasting hours almost doubled by 1941 as compared with 1929.

The aforementioned table represents tabulations for the seven key stations, but nation-wide network programmes handled (outgoing and incoming programmes) by each station and local programmes handled at

Year	Broadcasting hours		$\frac{A}{B} \times 100$	Remarks
	(A) Incoming network programmes	(B) Programmes originated		
1929	6,959	11,114	62.6	Year after completion of trunk network lines
1932	13,490	10,994	122.7	Year after Manchurian Incident
1935	20,918	10,255	203.9	Year after reorganization
1938	24,478	10,378	235.8	Year after start of War with China
1941	27,268	11,408	238.1	Year of outbreak of Pacific War

each station (originated and incoming programmes) for 1940 tabulated in terms of programme hours give the following upper table.

While 66 per cent of programmes produced at the Tokyo Station was broadcast simultaneously from all stations, those of the Osaka Station, which had a strong consciousness of rivalry against the Tokyo Station since the establishment of NHK, were used for nation-wide network presentation at the rate of mere 8 per cent. Other stations were practically out of question. Even for the second network provided for the Tokyo, Osaka and Nagoya stations, programmes used for nation-wide network presentation accounted for 16 per cent at the Osaka Station against 82 per cent for Tokyo. This situation was brought about through centralization of power after the 1934 reorganization. When radio wave control was enforced after the outbreak of the Pacific War, the same policy was further strengthened and practically all the programmes began to be transmitted from Tokyo to all the stations in the country (second network programmes were suspended).

The ratios of the number of hours devoted to news, educational, cultural and entertainment programmes handled at the Tokyo Station were as shown in the following lower table.

As can be seen in the table, balanced ratios for various programme items characterized the distribution in the Japanese broadcasting service. In particular, despite high programme rating of entertainment, time allocated for this item was rather low in percentage against the total. In comparison with entertainment programmes, the ratios of news, educational and cultural programmes were high. In the case of the educational and cultural

Station	Nation-wide network programmes		Local programmes		(B) Total	$\frac{A}{B} \times 100$
	(A) Outgoing	Incoming	Original productions	Incoming		
Tokyo	2,858	636	810	8	4,312	66.3
Osaka	377	2,943	1,205	22	4,549	8.3
Nagoya	36	3,374	865	15	4,291	0.8
Hiroshima	22	3,590	845	45	4,504	0.5
Kumamoto	12	3,595	303	468	4,379	0.3
Sendai	15	3,578	341	466	4,403	0.3
Sapporo	9	3,524	505	452	4,491	0.2

Year	1st network			2nd network		
	News	Educational cultural	Entertainment	News	Educational cultural	Entertainment
1928	35%	33%	32%	—%	—%	—%
1932	38	38	24	37	58	5
1936	37	42	21	43	47	10
1941	30	37	33	33	26	41
1942	31	32	—	37	—	—

programmes, emphasis placed on them was one of the factors for their high ratio.

Average per day broadcasting time changed at the Tokyo Station as shown in the following table. In the case of the 1st network programmes, the total time for 1941 had increased by nearly 70 per cent over that of 1926.

Allocation of broadcasting time for various items and scheduling of hours for them went on smoothly till 1944. With frequent air raids in the following year, however, destruction of major cities across the country became serious and the keynote of programming was completely disrupted, and it seemed as if broadcasting was turned into instrument for issuing air raid warnings and transmitting war information. According to the programme schedule drawn up in April 1945, broadcasting commenced at 5:00 a.m. and ended at 10:00 p.m. Actually, however, time for suspension of broadcasting was set here and there conspicuously, which made the total nine hours and forty minutes per day. Programme items also were reduced and the schedule as a whole was simplified. Even then, broadcasting was interspersed with air raid warnings and war information reports.

5. Newspapers and Broadcasting

In prewar news broadcasting, considerable complications had developed between newspapers and NHK. In short, the situation shifted from collaborative to competitive relations. Later, however, the relationship was eased when a single news agency began to supply materials both to newspapers and the broadcaster. In the following, the changes in the relations between the two will be outlined.

For some time after the commencement of broadcasting, the Tokyo, Osaka and Nagoya stations were supplied with news materials by the local newspaper companies and news agencies free of charge; no editing or material gathering was done at the broadcasting stations. In supplying such materials, the newspapers and news agencies attached certain conditions, such as selection and editing of news materials will be undertaken exclusively by the newspapers and news agencies, and the suppliers of such materials will be announced at the time of broadcasting. In the circumstances, the broadcasting stations had no right to make selections or edit the materials provided by the others; the materials supplied had to be read by the news announcers verbatim. What could be assumed from such collaboration was that the newspapers and news agencies had the intention of publicizing themselves through broadcasting. So at the time when competition among newspapers for securing subscribers was extremely

Year	1st network	2nd network
1926	6 hrs. 55 min.	—
1928	7 hrs. 6 min.	—
1932	8 hrs. 11 min.	3 hrs. 27 min.
1935	9 hrs. 59 min.	4 hrs. 3 min.
1938	11 hrs. 26 min.	4 hrs. 35 min.
1941	11 hrs. 56 min.	4 hrs. 58 min.

severe, it could not be denied that the newspapers and news agencies expected to derive some benefit from collaboration with broadcasting.

As a result of depending entirely on the newspapers and news agencies for broadcasting news materials, the style of news scripts and the terms were similar to newspaper articles which were intended for visual appeal. Some, in fact, were unfit for broadcasting which could appeal to the audience only through the ear. Moreover, because the newspapers and news agencies followed the policy of giving priority to their own publications where important news was concerned, materials selected for broadcasting tended inevitably to be of less importance and interest.

Sense of competition between newspapers and broadcasting began to raise its head after broadcasting went into the on-the-spot reporting of events. In particular, the on-the-spot reporting of the accession of the Emperor in 1928 over the nation-wide network opened up a field that could only be handled by broadcasting. And with this spot reporting as the turning point, the NHK authorities made up their minds to undertake nation-wide newscasting on their own. This was realized in November 1930 and accomplished by purchasing news materials from the two existing news agencies and freely selecting and adopting those considered suitable for broadcasting. These then were rewritten in radio style and presented to the listeners in the order arranged in advance. Local news items, which were used for broadcasting without rewriting, however, continued to be supplied by the newspapers and news agencies.

Since the commencement of NHK's nation-wide news broadcasting, important materials involving political, economic and international situations began to be presented over radio. And naturally, time required for inserting such news had to be increased, and as a result, newspapers now could only follow in the wake of broadcasting in news reporting. After the Manchurian Incident, in particular, special newscasts over the radio were always ahead of special editions of newspapers, resulting in greater interest of the people in radio news.

Such changes in the situation resulted in open competition between newspapers and broadcasting. The newspapers in their effort to defend the position and authority of news reporting frequently requested NHK, through their representative organ, to suspend or shorten special newscasts and to cut down the time allocated for general newscasting. At the same time, the newspapers negotiated with the two news agencies to stop supplying NHK with special news materials outside the regulation time. They also requested the competent government agency to take longer in censoring NHK's news scripts.

Although both broadcasting and newspapers were news reporting agencies in the service of the general public, NHK was a public service corporation, while most of the newspaper companies were profit-seeking enterprises organized as commercial organizations.

If radio news reporting should eclipse the news reporting function of newspapers, it would be a question directly affecting the business operation of the newspaper companies. NHK's views on this matter were that because of the difference in the nature of broadcasting and newspapers, broadcasting was not opposed to newspapers but the two should supplement each other. Such a competitive relationship between the two must have been

the fate inevitably faced by broadcasting, which had a later start than the newspapers.⁽¹⁾

As has already been stated (Chapter 6, "The State and Broadcasting", Section 3), NHK and most newspapers were obliged to obtain news materials uniformly from the Domei News Agency established in January 1936. On the basis of the government policy for propagandizing the national policy throughout the world as well as at home, the Domei News Agency was organized by merging the two news agencies aforementioned. With the establishment of this news agency, the relationship between broadcasting and newspapers was gradually eased and finally settled satisfactorily.

6. Regulation of Political Broadcasting

Broadcasting of talks and discussions related to political affairs had been prohibited since the beginning of broadcasting under the policy of the supervisory government agency. And contents of radio programmes infringing upon this policy were controlled rigidly by censorship. Such policy and measures continued until the end of the Pacific War. The regulation, however, was applicable to political talks from a factional viewpoint and to criticisms of national policies; no restrictions were placed on talks by government authorities for the purpose of publicizing government policies.

Prime Minister Hamaguchi was the first government leader to announce government policies over the radio in August 1929. With changes in political situations since the Manchurian Incident, successive Prime Ministers, cabinet members and leading militarists frequently went on the air to explain policies. And as stated before (Section 3 of this Chapter) programme items intended principally to direct public opinion by publicizing national policies were established one after another. As a result, commentaries on political, military, diplomatic and economic affairs were frequently broadcast by experts in the various fields.

Meanwhile, political discussions by politicians, scholars and others, such as writers and critics, who were suspected of holding views critical of the government and military policies, were not only regulated rigidly but a "black list" was made of them and measures designed to prevent them from going on the air were enforced. Examples were as follows: In February 1930, a talks script of a college professor titled "On the General Election" was ordered by the supervisory government agency to have its contents revised, because it contained criticisms of the policies of the government and opposition parties. In November of the following year, a talks programme titled "Return to Asia" broadcast by a certain politician caused trouble after presentation because, the government office said it diverged from the script and criticized the government's diplomatic policy. In December of the same year, a protest was launched by the supervisory gov-

(1) The question of newspapers vs. broadcasting also came up for discussion in the United States. In 1931 the United Press limited broadcasting of its news materials. In 1933 the Associated Press sued a broadcasting station for broadcasting AP news in a newspaper without permission. And at the annual assembly of AP agencies, a resolution was voted for limiting the use of AP news for radio. At the annual meeting of the American Newspaper Publishers' Association held in the same year a resolution was also passed for limiting news broadcasting and opposing insertion of radio programmes in newspapers gratis.

ernment agency, the government and the government party against a round-table talk programme titled "Next Year's Business Conditions" because they thought it criticized government policy.

It was a period in which the political power was about to shift to the coalition of the military faction and the bureaucrats from the political parties, with the Manchurian Incident as the background. Important events, therefore, took place one after another, but broadcasting had been prohibited to deal with them in a critical manner. In the field of international problems, the programmes were organized not for the purpose of searching into the fundamental problems of international politics but rather for helping the listeners to cultivate common sense regarding international issues. It may be said that these events and issues were handled solely from the government's viewpoints.

In July 1936, a programme titled "Growing Japan" using the leaders of the five political parties as performers was planned. The condition posed to these performers was that they would refrain completely from political critique but simply state their individual beliefs regarding the theme. In this way, even the Diet representatives elected by the people were not allowed to criticize government policies or publicize their party's basic policies. Moreover, the contents of the scripts had to be put through pre-broadcast censorship by the supervisory government agency, the Ministry of Communications. As a matter of fact, at one time, the leader of the Socialist People's Party refused to perform in a broadcast because partial deletion of his script was ordered.

Not only the talks programmes but also news programmes related to political matters were placed under rigid control. As stated in the preceding section, news materials were dependent upon newspapers and news agencies, but even the newspaper scripts had to be censored before being put on the air. Censorship of important news related to politics was especially severe, and not only the contents but also details of expressions were placed under scrutiny. News reports involving procedures in the Diet had to stress clarification of the government's policies, but reporting of the interpellations made by members of the Diet was prohibited.

At the Tokyo Station, a plan was conceived, shortly after the commencement of broadcasting, for reporting scenes of Diet proceedings from the spot and an application for permission was submitted to the supervisory government agency. However, there was no chance of the plan being approved because of the policy of controlling political broadcasts. Reasons for rejection were as follows: (1) When talks and discussion, on politics are prohibited, it is not proper to make an exception of the Diet debates. (2) Minutes of the proceedings can be read in newspapers and the official gazette, and it is doubtful whether it is proper to make them public directly through broadcasting.

Demands for such programmes became widespread after the start of the War with China, but even then approval was suspended because, it was claimed, that a programme of such nature cannot be regularized since the lengths of the Diet debates are not fixed, broadcast scripts cannot be censored in advance and therefore, the contents cannot be predicted. In any case, if the government were willing to authorize such a programme, it was entirely possible to edit the recorded debates to the satisfaction of

the supervisory agency, since recording had already reached a state of practical application. It must be said, however, that the political and ideological environment of those days (Chapter 6, "The State and Broadcasting", Section 1) was against it.

Just before the outbreak of the Pacific War, a speech made by the then Prime Minister Hideki Tojo at the special Diet session was put on the air for the first time as a broadcast from the Diet but it was not an on-the-spot broadcast but a recorded programme.

7. Commencement of School Broadcasting

The tendency of emphasizing the educational effect of broadcasting was clearly evident from the beginning in the organization of various types of talks and lecture course programmes. This may be considered as one of the most outstanding features of broadcasting in Japan. Therefore, the nation-wide presentation of school broadcasts, which began in April 1935, was a natural outcome of the importance attached to such education.

The idea of this plan had been conceived as early as 1929, and since then small-scale educational programmes were presented by some local stations. The official start of such programmes, however, was delayed because, as stated in Chapter 6, "The State and Broadcasting," Section 2, dispute between the Ministry of Communications, which had the right to supervise broadcasting, and the Ministry of Education, which had the educational administration powers, regarding the right to regulate educational broadcasting. At any rate, at the two ministries, there was a strong atmosphere of questioning the possible effect of such programmes. Reasons for this attitude may be summarized as follows: (1) A certain amount of compulsion is necessary in education, but that would not be possible with broadcasting. No education can be enforced where listeners are free to choose a programme. (2) School teachers who take part as speakers for radio programmes will be exposed to the danger of being belittled by the pupils, and this would not be good for education in general. (3) Broadcast education lacking personal contact between the educator and the educated would be low in value. The fact that such programmes could be inaugurated despite doubts entertained about their effect owed much to NHK's demonstrations before the commencement of regular programmes. Such demonstrations helped to increase the number of sympathizers in the aforementioned ministries. In any case, the general atmosphere at the two ministries was not too strongly in favour of school broadcasts, and the Ministry of Education refused to recognize them as an official matter. In those days, therefore, the schools were left entirely free to choose whether or not they would utilize such programmes.

In the early stages of school broadcasts, the programmes were organized principally for pre-school children, elementary school pupils and elementary school teachers, and NHK made it a rule to present them at times outside the regular classroom hours. The object of school broadcasts was not to replace classroom work but be supplementary to school education. However, the development of school broadcasts needed collaboration of the Ministry of Education, which exercised absolute power over education, and the trust and enthusiasm of teachers who would accept the new teaching material

as part of their work. This arose from the then existing situation, in which educational administration was centralized, elementary school textbooks were compiled by the Ministry of Education and were common to all the schools in the country, and there was a strong conservative atmosphere in educational circles as a whole, which attached importance to traditions.

NHK established an advisory group, the School Broadcast Committee, composed of representatives of school teachers and the Education Ministry officials and requested advice on the contents of programmes, broadcasting hours and personnel. In line with the advice of this committee, NHK issued pamphlets containing programme schedules for two weeks ahead which were distributed free of charge to about 25,000 elementary schools across the country. Utilization of school broadcasts by the schools was promoted by these pamphlets. These later became monthly publications and served as a teachers' guide to conducting classroom work, using school programmes.

After September 1938, programmes containing important items the Education Ministry required of school teachers began to be presented in the "Teacher's Hour". At this time a statement to the effect that "since school broadcasts have shown considerable effect as supplementary to school education, the schools are advised to utilize them as they see fit" was sent by the Ministry of Education to the prefectural governors. This was an indication of the change of attitude on the part of the Ministry regarding utilization of such broadcasts. In this statement, however, no clarification was made as to whether school programmes might be incorporated into school curricula. NHK had believed in the idea that in order to assign a new educational position to school broadcasts and allow them to function adequately as such, they should be assigned with the important function of providing new teaching materials rather than serving as supplement to school textbooks. It was adjudged that realization of the idea could best be accomplished by winning legal basis for school broadcasts, and frequent applications for that purpose were filed with the Ministry of Education. As a result, a stipulation that "broadcast programmes designated by the Minister of Education may be used for classroom work" was included in the Regulations for the Enforcement of the National School Ordinance issued in April 1941, and designation of the items was made in September of the same year. Through this measure, school programmes were officially recognized as teaching materials and usable as an integral part of school education.

Schools utilizing such programmes also increased notably. According to the 1937 survey, 54 per cent of all the elementary schools in the country was provided with receiving equipment only two years after the commencement of school broadcasting. In particular, 94 per cent of city schools and 50 per cent of suburban schools, totalling 13,691, were provided with such equipment. The number increased from year to year and by 1941, 75 per cent or 19,000 schools were utilizing school programmes. However 85 per cent of the equipment was donated, only the remaining 15 per cent having been procured with school or municipal funds. The receiving system included: (1) moving of home sets from classroom to classroom as need arose; (2) fixing of receiving room and gathering the children in that room for listening; and (3) use of a master receiver from which speakers were

extended to various classrooms. In spite of the rapid increase of receiving equipment, the rate of utilization was not necessarily high. This arose partly from the fact that the Ministry of Education at first did not encourage utilization of school broadcasting, but the most important reason was the lack of guiding methods in classrooms. In order to promote the study of such methods, broadcast education study groups were organized in various areas with school teachers as principal members, and these groups actively engaged in the discussions of the methods for using school programmes and the quality of receiving equipment. NHK cooperated with these groups in their studies in order to improve the listening effect of school broadcasts.

After the school programmes were officially designated as being feasible to incorporation in the classroom work, contents of programmes originally produced by NHK were placed under the review of the School Programme Study Committee established in the Ministry of Education before they were finalized. The school programme schedule as of September 1941 was as shown in the following table.

Just as school broadcasts were about to achieve smooth development, the Pacific War broke out, and broadcasting, whether school or otherwise, was placed under the direction and control of the Information Bureau. The influence of this Bureau was also reflected in the discussions at the School Programme Study Committee of the Ministry of Education. Such influence resulted in incorporating programmes to contribute towards exaltation of the fighting spirit and increase of agricultural production in the teaching materials. With further development of the war situation, the war-time setup related to education was tightened, and the contents of school programmes were further controlled as part of war-time measures.

As enemy air raids grew more frequent and intense towards the end of the war, damage to receiving equipment mounted, and, moreover, children were evacuated in large groups. In these circumstances, NHK was obliged

Day of the week	a.m. 7:50-8:00	10:00-10:15	11:00-11:20	p.m. 2:00-2:30	4:00-4:30
Monday	Radio exercise for schools	Infant's Hour	First Grade Hour	Fifth Grade Hour	Teachers' Hour
Tuesday	"	"	Second Grade Hour	Sixth Grade Hour	"
Wednesday	"	"	Third Grade Hour	7th & 8th Grade Hour	"
Thursday	"	"	Fourth Grade Hour	7th & 8th Grade Hour	"
Friday	"	"	School Newspaper	Higher Grade Hour	"
Saturday	"	"	Lower Grade Hour		"

- Note: 1. For Monday only the "Morning Assembly" at which the Minister of Education and other noted personalities delivered speeches, was established from 8:00-8:10.
2. The "Lower Grade Hour" was intended for 1st to 4th graders of elementary schools (children went to school at the age of six). The "Higher Grade Hour" was for fifth and sixth graders. The "7th & 8th Grade Hour" was intended for those who extended their schooling for two more years after completing sixth grade courses.

to suspend its school broadcasts altogether.

8. Introduction of Foreign Literary Works

The first dramatic work by a foreign author to be taken up in Japanese broadcasting was "Danger" by a British playwright, Richard A. W. Hughes. This work presented by the Tokyo Station in August 1925 played a pioneering role in that it brought to the attention of those accustomed to seeing stage plays the significance and potentialities of radio dramas. Meanwhile, study of radio dramas was encouraged among playwrights, producers and actors by the success achieved in Japan's first radio drama. And on the side of the broadcasting organization, the way was now paved for training the so-called "voice actors and actresses". Soon scripts were commissioned to known writers and efforts were made to discover new writers for radio dramas. On the other hand, study of production and radio acting began to bear fruit, and the proportion of dramas in the overall broadcasting programmes increased.

Nevertheless, opportunities of taking up foreign dramas in Japanese radio were few in prewar days, and only the novels of Victor Hugo, Conan Doyle, Pearl Buck and a few others were rewritten in radio drama form and presented. Even when foreign works were used for radio programmes in such forms, selection of works suitable for conditions prevailing in Japan was not easy. In any case, Japanese literary circles in those days were partial to Western literature, and translations of well-known works were published one after another. As a matter of fact, there was in Tokyo a theatre devoted exclusively to presentation of translated foreign dramas. In view of such a general trend, large numbers of programmes giving outlines of foreign literary works were produced for radio broadcasting.

However, foreign musical works, including classics as well as modern works, whether vocal or instrumental, have been presented in large numbers since the commencement of broadcasting in Japan, thus injecting variety to the programmes. Yet in the early period of broadcasting, understanding of Western music was by no means adequate, and such programmes were not necessarily heartily welcomed by the listeners. However, from the standpoint of elevating the cultural level of Japan as well as enriching the life of the general public, the broadcasters continued to maintain a positive desire for spreading knowledge of music, which may be considered abstract words, and their efforts bore greater fruit year by year. It must, therefore, be considered one of the contributions of broadcasting to have educated the general public to accept Western music, different in vocalization and instruments, more readily along with traditional Japanese music.

Western music used for radio broadcasting consisted principally of orchestral performances. In the early period of broadcasting, army and navy bands were used, and the contributions they made in spreading Western music through performances of popular pieces cannot be underestimated. In Tokyo, Osaka and Nagoya small-scale orchestras were organized by interested private musicians, but it was not until September 1926 that the present NHK Symphony Orchestra, which used to be called the Japan Broadcast Symphony Orchestra or the New Symphony Orchestra, was organized. Josef Koenig, the leading violinist of the old Russian National

Opera Theatre, was selected as conductor for the new Japanese orchestra. He was the first foreign musician the Tokyo Station invited to Japan for the purpose of training a native orchestra.

There were 130 orchestral performances in 1932. These accounted for nearly one-third of the total number of foreign musical works presented over the Japanese radio. Through cooperation of other noted foreign musicians, such as Nicolai Schiferblatt and Josef Rosenstock, who came to Japan after Koenig, the Japan Broadcast Symphony Orchestra greatly improved its technical level and became an important organization in the broadcasting of orchestral music. The principal works performed by the orchestra were Western classics, German music in particular. Special orchestral performances including those commemorating the 100th anniversary of the birth of Johann Strauss (1925), the 100th year since the death of Ludwig von Beethoven (1927) and the 100th year after the death of Franz Schubert (1928) soon became annual functions. In August 1933 there arose the question of copyright⁽¹⁾ involving foreign musical works, and while this made broadcasting of modern foreign musical works impossible for a year thereafter, it rather stimulated presentation of classic Western music. At the same time, however, it stimulated the efforts of Japanese musicians to compose musical works, thus serving as one of the stepping stones towards elevating the level of Japanese music.

1940 corresponded to 2600 since the foundation of the Japanese nation, and NHK made various plans for broadcasting in commemoration of this auspicious year. On this occasion works contributed by the then noted living composers, such as Jacques Ibert of France, Veres Sandor of Hungary, Ildebrando Pizetti of Italy and Richard Strauss of Germany were broadcast. The work by Strauss, in particular, was performed by six orchestras combined around the Japan Broadcast Symphony Orchestra, thus marking an epoch in the prewar radio broadcasting of orchestral music.

In the 1930's many noted foreign musicians visited Japan. Among these were the violinists Efrem Zimbalist, Josef Szigetd, Renee Chemet and Mischa Elman, pianists Alexander Brailowsky, Benno Moiseivitch and Artur Rubinstein, cellist Emanuel Feuermann, and singers Toti Dal Monte and Enzode Muro Lamanto. Every one of these musicians stood before the microphone at least once, deeply impressing Japanese listeners and greatly stimulating the Japanese musical circles. Some like the violinist Alexander Moguilewsky and pianists Leonid Kreutzer and Leo Sirota remained in Japan for a long time and contributed notably towards elevation of broadcasting music.

In the field of light music, the American song "My Blue Heaven" and the French "Mon Paris" were put on records as early as 1927 and made a big hit in Japan. Since then jazz music and chansons were frequently

(1) In the spring of 1933 Wilhelm Prague, an agent for the European Federation of Copyright Administration Unions organized by song writers, composers and publishers of Great Britain, France, Germany, Italy and Austria demanded NHK to pay a lump compensation of a sum equal to five times the standard copyright fees for domestic musical works. NHK held the opinion that the copyright fee should be identical both for Japanese and foreign works and carried on repeated negotiations with Prague. As no agreement could be reached, however, NHK declared that broadcasting of modern music of foreign origin would be suspended completely after August 1933. Negotiations were resumed after a year, and an agreement was finally reached for reducing the copyright fee on condition that broadcasting items would be increased.

broadcast to promote the development of light music. Then new Japanese popular songs imitating the vocalization and melodies of Western popular songs flooded the market to create a brilliant period for broadcasting popular songs. However, reflecting the severity of the times after the start of the War with China, so-called decadent contents found in some of these popular songs were controlled and in their place those of militaristic content began to gain ascendancy.

In the total broadcasting hours of NHK, the ratio of foreign music was 37 per cent in 1941 against about 20 per cent in 1931. This rise in the ratio of foreign music was an endorsement of the initial policy of NHK aimed at developing this particular field of broadcasting. What should particularly be noted in the spread of foreign music through broadcasting was the role played by records. In the early years of broadcasting, little recorded music was used, since live broadcasting was the general rule. After the commencement of the second network broadcasting at the Tokyo Station in 1931, however, recorded music frequently appeared in programmes like the "Masterpieces of the World". And as free use of recorded music was stipulated by the 1934 revision of the Copyright Law, its use was further promoted, and NHK's record library was expanded year by year. As a matter of fact, recorded music was included for regular programmes in April 1937. And because such music began to be used as proper entertainment for certain times of the day from April 1941 simultaneously with the establishment of sensory linkage of the programmes, the ratio of recorded music programmes against the total steadily increased thereafter.

8. Overseas Broadcasting Service

1. Functions and Services

Around 1930, when technical facility of shortwave overseas broadcasting was assured, American and European countries began to show signs of commencing such services. It was a period of active international collaboration under the League of Nations, which was established after World War I. In the circumstances, the nations attached importance to overseas broadcasting services for promoting world peace and international amity. Overseas services were, therefore, expanded by various nations year by year.

In Japan, the first attempt at short-wave transmission directed overseas was made in August 1929, when the scene of the arrival of the German airship Zeppelin in this country was relayed. The attempt ended in failure. This transmission took the form of a relay via the receiving station of the other party. The first instance of successful transmission abroad came in the form of triangular relay of the programmes in commemoration of deposition ceremony of the ratification certificate of the London Disarmament Treaty among Great Britain, the United States and Japan, which was undertaken in October 1930. The programme transmitted from Japan

was produced by NHK, but technical operations were left to the short-wave facility under the control of the Ministry of Communications. At NHK the aforementioned relay system, i.e., broadcasting mutually undertaken through the receiving facility of the other country to reach its domestic receiving sets or listeners, was called "international exchange broadcasting." So, as this type of broadcasting could not be operated without the collaboration of the other country, it was possible only between countries having amicable diplomatic relations.

The "East Asia Relay Broadcasting" which had been conducted until the end of the Pacific War in parallel with the international exchange broadcasting, was directed towards Taiwan, Korea and Kuantung Territory,⁽¹⁾ which were then external territories or colonies, and to Manchuria, North China and Central China occupied as a result of the Manchurian Incident and the War with China. In technical operation, the same system as the international exchange broadcasting was adopted. The aims of this broadcasting were to strengthen the sense of unity among these territories, which had a sort of satellite existence, with Tokyo as the pivotal position.

Short-wave techniques achieved remarkable development in various nations in a short period, and this in turn promoted that of short-wave receiving sets. As a result it became possible to reach overseas listeners directly, instead of through the receiving facilities of their respective countries. The overseas service NHK inaugurated in June 1935 depended on this latter system. From the nature of international exchange broadcasting, the contents were apt to become formal and diplomatic, and sometimes broadcasting was not possible on account of trouble with the receiving facilities. On the other hand, the overseas service under the new system made it possible to plan and produce programmes and establish regular schedules for the purpose of policy propaganda and introducing cultural attainments of the broadcasting country.

The overseas service of Japan was initially aimed at providing information on Japan and entertainment for foreign nationals of Japanese ancestry and Japanese people living abroad. Then more importance began to be attached to spreading knowledge of Japan throughout the world through introduction of cultural and other attainments of the Japanese. As the international situation developed from the War with China to the Pacific War, broadcasting was taken under the wings of the government's information and propaganda agencies, and further, it began to be used as a means of psychological warfare against the enemy. This was a natural outcome of the nature of broadcasting. In the South Pacific areas occupied by Japan during the early stages of the Pacific War, broadcasting stations were built one after another under military administration for presenting programmes for Japanese servicemen and the native people. These areas were also brought under the coverage of NHK's overseas service.

For the transmission of NHK's overseas programmes there were the international telephone channels operated by International Telephone (Ko-

(1) Taiwan was annexed in 1895 and Korea became a Japanese territory in 1910. The Kuantung Territory (the southern tip of the Liaotung Peninsula in Manchuria) was leased by Japan in 1905. These external territories belonged to Japan until the end of the Pacific War.

kusai Denwa) Co., Ltd. (changed to International Telecommunications-Kokusai Denki-Tsushin Co., Ltd. in 1938) which was established in 1933, and the International Exchange Broadcasting and East Asia Relay Broadcasting also rented the aforementioned company's facilities after June 1934. These three systems of overseas broadcasting were used for national purposes to no little extent but NHK, from the standpoint of a public service corporation, bore all the expenses, including costs of programme production, payments to International Telephone Company and operating expenses, without receiving any government subsidies.

2. East Asia Relay Broadcasting

NHK's broadcasting programmes were relayed to Japan's external territories, including Taiwan, Korea and Kuantung, for the first time in November 1928 with descriptions of the Emperor's accession to the Throne. However, as it was a relay of medium-wave broadcasting using a 10 kW transmitter, reception was not generally very good, and the effect inadequate. It is, however, worthy of placing on record as the first step in the East Asia relay broadcasting. Through this attempt, interest in the NHK's overseas broadcasting service was aroused among Japanese living in these territories, where the broadcasting stations soon began to relay part of NHK's programmes as periodical presentations. NHK provided cooperation in the technical aspect in order to improve reception and as a result broadcasting in these territories, where materials were scanty, became more substantial as more programmes originating at the Tokyo Station were incorporated into their schedules.

After the Manchurian Incident in 1931, NHK started liaison broadcasting between Japan and Manchuria in accordance with the request of the Army. In this broadcasting, the unstable relay system was abandoned, and after January 1932 the short-wave radiotelephone channels between Japan and Manchuria were used. Under this system, increasing exchange broadcasts were conducted periodically between the two countries. And after a 10 kW short-wave transmitter of International Telephone Company began to be used in June 1934, the framework of the East Asia relay broadcasting was definitely established. This broadcast not only linked the Manchurian and other territorial broadcasting stations but established connections with other broadcasting facilities established in the areas occupied as a result of the War with China. While most of NHK's broadcasts were relayed to these areas, incoming programmes from the latter stations also increased. Meanwhile, the contents of programmes became steeped in a war time aspect, and relationship among Japan proper, external territories and occupied areas became closer under the policy of "establishment of the new order in East Asia" which was further consolidated through broadcasts.

Periodical broadcasting from the occupied territories in North China started with the "battle front broadcasting" transmitted from Tientsin in the month following the start of the War with China. Meanwhile, a periodical broadcasting service also commenced from Central China (Shanghai) in May 1938. The contents of programmes were mostly field reports by army officers and men as well as war correspondents, but reports from the battle fronts, such as scenes of the occupation of Suchow and

the capture of Hankow, made by announcers dispatched from NHK caused marked repercussions. In return for these "battle front broadcasts," programmes aimed at entertaining the officers and men at the front were transmitted frequently from Japan. Multilateral broadcasts linking Japan and the external areas, including battle fronts, were also presented from time to time.

The largest number of programmes coming in from the external territories and occupied areas registered in a single year was 153 items in 1938. After that, such programmes steadily decreased and by the time the Pacific War broke out in 1941, the number had decreased to 82. On the other hand, programme transmissions from NHK gradually increased, and by July 1941, practically all the programmes produced for the first network of the Tokyo Station (14 hours per day on weekdays and 14 hours and 30 minutes on Sundays and holidays) were being transmitted to these territories.

In order to establish closer cooperation in the planning and operation of the East Asia Relay Broadcasting, the East Asia Broadcasting Council was set up by the related broadcasting organizations in April 1939. Initially, the Council included representatives of the broadcasting corporations of Japan, Korea and Taiwan and the Telegraph and Telephone Company of Manchuria, but later the broadcasting organizations of North China, Central China and Mongkiang area (autonomous area under Te Wang which occupied most of Inner Mongolia) joined the Council. The office of this Council was located in the NHK Building in Tokyo and delegates sent from the member organizations took care of normal business affairs, while a regular meeting was held once a year. The Council, however, dissolved in 1943 as the war situation turned against Japan. Until then not only the programming policies but also facility planning, adjustments of frequency allocations, counterjamming measures and procurement of materials for receiving sets occupied important positions in the discussions at the Council.

With the outbreak of the Pacific War, the military faction and the Information Bureau tightened control of broadcasting. As a result, the use of NHK's programmes directly for the East Asia broadcasting became unthinkable. In short, the East Asia relay broadcasting was redefined as being aimed at clarifying the meaning of the establishment of the "new order in East Asia" in the minds of the peoples of the regions so as to lead them towards collaboration in the prosecution of the war. It was the 5th East Asia Broadcasting Council meeting held in April 1942 that led to such a strong policy. This meeting was attended, in addition to the representatives of the related broadcasting organizations, by officials of the Imperial Headquarters, Information Bureau, the Ministry of Communications and other government agencies, and questions related to the duties of war time broadcasting were discussed.

As a result, the East Asia broadcasting structure was greatly consolidated under unified planning centred on NHK. The programme "Calling to Greater East Asia", which was established as a domestic programme in November 1941, was designated as one to be rebroadcast without fail by all the stations in East Asia. Policy broadcasts that had been conducted by various stations in East Asia for native inhabitants were

absorbed into the Tokyo programme as part of the East Asia Relay Broadcasting Service, and "calls" to the peoples of East Asia began to be made direct from Tokyo.

This broadcast, which served as a pillar of propaganda broadcasting towards the Asian region, was at first transmitted using a 10 kW transmitter, but the transmitters were increased as time passed. By the end of 1942, two 20 kW and three 10 kW transmitters were in use, and the programmes were being transmitted to various areas by means of directional antennae.

However, from 1943 as the war situation grew worse day by day, the question of procuring equipment and materials needed in the external territories and mainland China as well as those for manufacturing receiving sets for effective operation of this broadcasting became an extremely heavy burden. Moreover, as news and other programmes which enemy information organs might utilize them as data for estimating the internal condition of Japan, were ordered to be cut off, not a little impediment was placed in the way of operations. The war became more serious by 1945 when attacks from the air became frequent and intense, and the foundations of home programme organization at NHK were disrupted. The antenna power of the East Asia Relay Broadcasting Service was also reduced from time to time and the programme hours were shortened. And with disposal of some of the transmitters in use, there was naturally no *raison d'être* for this service.

3. International Exchange Broadcasting

Broadcasting commemorating ratification of the Naval Disarmament Agreement concluded in London, which was undertaken in October 1930, was highly significant as the first international exchange broadcasting of Japan. This broadcast lasted for nearly one hour, linking the United States, Great Britain and Japan. In Japan NHK and the Ministry of Communications, in Great Britain, BBC, and in the United States, NBC took charge of the project. Prime Minister Osachi Hamaguchi spoke from Japan, Prime Minister Ramsey McDonald in Great Britain and President Herbert Hoover in the United States. Thus the spirit of disarmament was forcefully brought home to the listeners in the three countries through broadcasting which transcended time and space.

The success achieved in this project encouraged further development of broadcasting in this field. It seemed as if the country NHK selected first as the objective of this plan was limited to the United States. This arose from good results obtained both in transmission and reception between these two countries and the close and amicable relations that existed between them at the time. Exchange broadcasts between the United States and Japan took place mostly on occasions of commemorations to exchange greetings. For example, they were conducted on American Independence Day, Decoration Day, Christmas, the Japanese Emperor's birthday, etc., mostly consisting of formal greetings and exchange of music befitting such occasions.

As exchange broadcasts with the United States became active and good engineering results were obtained, NBC, which had been taking charge

of the affairs at the American end, drafted plans to make them periodical functions and indicated a draft agreement to NHK. However, as the limiting of the party to NBC meant severing of connections with CBS and other broadcasting systems, NHK considered it a disadvantage and the agreement was not signed.

Even after the Manchurian Incident, exchange broadcasts took place frequently between the two countries. This trend continued until shortly before the outbreak of the Pacific War, but in contents, formal greetings gradually decreased and talks and reports related to incidents and wars increased. Moreover, most of these broadcasts were conducted as independent transmissions by requests of special correspondents of UP and AP press agencies who were active in Japan and China.

Among exchange broadcasts with countries other than the United States, special mention should be made of broadcasting of reports of the Japanese delegation at the General Assembly of the League of Nations in Geneva over eight different transmissions between 1934 and the following year. This was the first direct reception of radio waves from the European area. The reports contained important diplomatic matters that ultimately led to Japan's withdrawal from the League of Nations, and the interest in such broadcasting was intense.

Exchange broadcasts with Germany began in November 1933. Then was the year when Japan withdrew from the League of Nations and the Nazi government was established in Germany. Through the Japan-German exchange broadcasts, relaying of German classical music over Japanese networks became active, and the exchange relations between the two countries grew closer.

After June 1934 the international exchange broadcast developed on a world-wide scale through the use of equipment operated by the International Telephone (Kokusai Denwa) Company. At the test of the equipment, a Pan-Pacific International Exchange Broadcast was conducted with participation of the broadcasting organizations of the Philippines, Java, Manchuria, Siam (Thailand), the United States and Japan. Also, on Armistice Day of that year, exchange broadcasting was conducted among the United States, Great Britain, Czechoslovakia, Canada, Brazil and Japan under the auspices of the Carnegie Peace Foundation. From around 1935, international exchange broadcasts from foreign countries began to show evidences of becoming partial to propaganda. The foreign parties expanded the scales of such broadcasting and implemented it on every possible occasion of an international function. Through such a trend, the way was open for Japan to plan exchange broadcasts with various nations or exchange of transmission and reception singly with another country.

Among international functions Japan received and relayed across the country, sports events aroused the greatest reaction. Beginning with the events of the 10th Olympiad held in Los Angeles in August 1932, the Far East Olympics held in Manila in May 1934, the 4th Women's Olympics held in Great Britain in August of the same year, and the 6th International Games held in August 1935 in Hungary were relayed, including voices of some of the participating Japanese athletes. Relaying of the events of the 11th Olympiad held in Berlin deserves special mention as having been the most effective broadcasting of this nature. This resulted

from excellent broadcasting equipment, especially the excellent short-wave "world broadcasting" facilities, made available in large numbers by Germany for foreign correspondents. The interest of the Japanese people in this broadcasting was intense because of the good records made by Japanese athletes and the fact that Japan had been selected as the site for the following Olympiad.

The character of international exchange broadcasts, which had been conducted as a means of promoting friendly relations with other countries, changed with the start of the War with China, and the contents began to incline towards dissemination of national policies. Also, as diplomatic relations with the United States, with which Japan had maintained amicable relations for many years, became strained and as those with Germany and Italy, the so-called Axis nations, became closer, plans for this type of broadcasting were restricted. Among the twenty-nine exchange broadcasts conducted in 1938, sixteen were with Germany and Italy while there were only nine with the United States. However, five broadcasts out of the nine were reports on the war situation by American special correspondents, and not especially intended to promote friendly relations.

The Italo-Japanese Broadcasting Agreement was concluded in January 1941, which stipulated exchange of cultures peculiar to each country once a month through broadcasting. Meanwhile, since the diplomatic relations with the United States had become seriously strained by this time, broadcasts to that country for providing information on Japan through NBC and CBS networks in an effort to turn the tide of American public opinion, increased rapidly. In other words, broadcasts to the United States totalled as many as 44 in 1941 up to the outbreak of the Pacific War, against 13 times in 1940. However, it must be said that international exchange broadcasts had already lost their original meaning. Immediately after the outbreak of the war in December of the same year, a Broadcasting Agreement similar to that with Italy was signed with Germany. This measure was taken for consolidating the broadcasting structure among the three nations with the military alliance signed in September 1940 as the background. International exchange broadcasts gradually declined with the progress of war in Europe and Asia; it finally disappeared from NHK's schedule with relaying of orchestral music received from Germany as the last attempt. It was three months after this exchange broadcast that Germany unconditionally surrendered to the Allies.

4. Overseas Service

NHK's Overseas Service, which came to be known as Radio Tokyo after the start of the War with China, was inaugurated on the 1st June, 1935. In those days, national interests were generally stressed in radio broadcasting and there were clear evidences of tightening control. In line with such a trend, overseas services purported to propagandize national policies were inaugurated and expanded⁽¹⁾ by various countries. In view of the increasing tendency towards being forced into isolation after withdrawal from the League of Nations in 1933, commencement of an overseas service for providing means of transmitting information and propagandas was demanded by thinking people as well as among government officials. Also,

because the East Asia relay broadcasts, which were inaugurated in June 1934 using the short-wave transmitters of Kokusai Denwa Company, could be received not only in the directed areas like Korea, Taiwan and Manchuria but also in other foreign countries, requests for commencing an overseas service from Japanese nationals living in such countries steadily increased. So it was under these circumstances that NHK's overseas service was inaugurated.

The overseas service at the time of commencement was of very small scale, transmitting news, entertainment and musical programmes in Japanese and English towards the West Coast of the United States and Hawaii for one hour a day. Reception was comparatively good and it aroused unexpected interest among the listeners. Subsequently experimental transmissions were conducted towards other directions, including South America, East Coast of the United States and the Straits Settlements, Java and Europe, which were added in January 1937, thus increasing the directions to four and the time to four hours a day. At first, the transmitter was a 20 kW type used concurrently for the international telephone service. In May of the same year, however, a new 50 kW transmitter was completed and used exclusively for broadcasting purposes. But just as arrangements were completed and the overseas service was about to start smoothly, the War with China started. With the war as the turning point, expansion of the overseas service became an urgent question, and an all-out effort, including increase of transmissions and antenna power, extension of broadcasting time, increase of languages and addition of simultaneously radiated frequencies, was concentrated on the overseas service. Badly strained international relations, of course, were one of the reasons for such effort, but there was no denying that Japan was stimulated by the increasing propaganda through radio broadcasting carried out by other countries and the marked progress made in the expansion of facilities intended exclusively for broadcasting use at the International Telephone Company. In this manner, the character of the overseas service rapidly changed to serving the dissemination of national policies.

In the field of programming, news programmes providing information and talks explaining national policies formed the most important items. During one year after the beginning of the War with China in July 1937, 548 talks were broadcast, and 339 of these were related to the war. Reports of receiving Radio Tokyo programmes from Japanese living abroad and foreign listeners increased rapidly. As a matter of fact, more than 20,000 letters were sent to NHK during 1938. Shortly before the start of the War with China, the "World Radio" magazine published in Great Britain wrote, "Radio Tokyo has now become a brilliant star of the Orient and a broadcasting service so important and popular that it cannot

(1) Experimental short-wave broadcasting directed to overseas countries was pioneered by the Netherlands, which inaugurated it in March 1927. In November of the same year Great Britain also established an experimental short-wave station. The "Empire Service" of Great Britain commenced regular service in December 1932, aimed principally at the Colonies and Dominions. Germany started its Weltrundfunk, an experimental broadcasting, two years after Great Britain, in August 1929. The French "Radio Colonial" directed to its colonies began in May 1931. Italy inaugurated its overseas service in December 1934, some three and a half years after France. In the United States and Soviet Russia, short-wave broadcasts were inaugurated for the purpose of bringing their respective vast territories under coverage. These were applied to overseas broadcasts from 1937.

be missed even for a day." This service, in fact, aroused reaction amply proving these words. In those days, a programme that called forth the greatest interest was "Communications" established in August 1938. This was a programme in which essential points of policy propagandization were skillfully woven in, and the whole was organized with recordings. It began with Chinese language and gradually spread to other languages. In 1941 this programme registered 40 presentations a week in various languages, but with the outbreak of the Pacific War, it transformed itself into a vocal bomb.

Prior to this date, in the process of the prolongation of the War with China, World War II broke out, and as international relations grew very strained, NHK's overseas service became a target for severe American refutations. However, American propaganda broadcasts had no effect on the Japanese, because they had been prohibited from operating short-wave receiving sets by law since the beginning of broadcasting, and the enforcement of the law had become more strict since the outbreak of the War with China.

Prior to the outbreak of the Pacific War, the government and the military faction had been exerting desparate efforts to intercept American broadcasts and wireless communications in order to collect information. The listening post set up within the NHK building was one of the best equipped under the control of the government. Information obtained at this post served as the only data available for planning Radio Tokyo programmes. Meanwhile, the Information Bureau established the Overseas Broadcast Liaison Council composed of competent officials of the War, Navy, Foreign and Communications Ministries, Domei News Agency and NHK. This was aimed at unified control of propaganda through broadcasting.

The overseas service during the Pacific War not only conducted propaganda against the enemy in conformity with military strategems but also towards Germany, Italy and the Asian regions. For such purposes, the service was expanded successively. Broadcasts against the enemy were planned by the aforementioned Liaison Council, but actual direction were in charge of the Information Bureau directly connected with the military policies. The "Zero Hour" which was established in April 1942 was directed by the staff headquarters of the army. The programmes were directed to the South Pacific War fronts with the aim of discouraging American officers and men through propaganda. It appears that reactions to these programmes were quite widespread among American servicemen, who nicknamed a female announcer "Tokyo Rose".

Japan's overseas service provided comparatively accurate information, with a series of victories as the background, until the Midway naval encounter in June 1942 and the landing of the American forces on Guadalcanal. For this reason, those in charge of the service could confidently point out contradictions among enemy broadcasts. However, while the American radio announced the results of the aforementioned Midway naval battle immediately afterwards, NHK's overseas service could only announce the results after several days of silence. Thus, clearly reflecting the reversal of the war situation, Radio Tokyo began to fall behind in the propaganda warfare. After this period, stress was placed on refuting the

enemy broadcasts regarding the situations in the South Pacific. Meanwhile, reconstruction of the occupied areas in the Southern regions also served as good material for propaganda. The "Hinomaru Hour" established in April 1943, was a purely propaganda broadcast aimed at the enemy, planned and executed directly by the staff headquarters.

By 1944 the overseas service of NHK had reached the peak of expansion after both facilities and transmissions had been increased year by year. And, as shown in the attached table, it included 15 transmissions presented for a total of 32 hours and 35 minutes a day. The transmitters were operated for a total of 90 hours and 35 minutes a day and the languages used totaled 24. The transmitters included four 50 kW (one unit for the war front base at Singapore besides), two 20 kW and three 10 kW types.

However, as the war situation became more and more unfavourable to Japan, news materials for reporting outcomes of battles became scarce, and because vacuum tube manufacturing plants suffered severe damage

Overseas Service by Transmissions (as of Nov. 1944)

Transmission	Scheduled time (JST)	Languages used
1. For West Coast of U.S.A.	0 : 00 - 3 : 40	English, Japanese
2. For India	0 : 00 - 1 : 45	Hindi, Urdu, Bengali, Tamil, Gujarati, English
3. For Southwest Asia	2 : 00 - 3 : 40	French, Arabic, Iranian, English, Japanese
4. For Europe	4 : 00 - 7 : 00	English, French, German, Italian, Russian, Japanese
5. For East Coast of U.S.A.	7 : 15 - 9 : 15	English, Japanese
6. For South America	9 : 30 - 10 : 30	Spanish, Japanese
7. For India and Southwest Asia	10 : 45 - 11 : 45	Hindi, Urdu, Bengali, Tamil, English, Iranian, Arabic, French
8. For West Coast of U.S.A.	12 : 00 - 17 : 00	Spanish, English, Japanese
9. For Europe	17 : 15 - 20 : 00	English, French, German, Italian, Spanish, Japanese
10. For Australia, Central and Southwest Pacific Areas	17 : 15 - 19 : 15	English, Japanese
11. For China	19 : 30 - 21 : 15	Standard Chinese, English, Russian, Japanese
12. For South America	20 : 15 - 21 : 45	Spanish, Portuguese, Japanese (and Free India Hour)
13. For Thailand, French Indochina, Burma	21 : 30 - 23 : 40	Cantonese, Fukienese, French, Siamese, Burmese, Japanese
14. For Philippines, Dutch East Indies	21 : 30 - 23 : 40	Malayan, Tagalog, Spanish, English
15. For East Coast of U.S.A.	22 : 00 - 23 : 40	English, Japanese

Note : 12th transmission "Free India Hour" was provided for the Indian National Army in Japan.

from air raids, production of large transmitting tubes became extremely difficult. As a result, NHK was obliged to shorten the broadcasting time and reduce the output power and the service itself became ineffective as a means of propaganda. On 14th August, 1945 the government's official acceptance of the Potsdam Declaration was announced and the Imperial Rescript related to the surrender was issued. Translations of these documents were then transmitted in all directions over Radio Tokyo's transmissions.

Appendix

Broadcasting Services in Occupied Areas

Taiwan : Broadcasting in Taiwan started on the 17th June, 1925, when the Taiwan Government-General in commemoration of its 30th anniversary held an exhibition for ten days and operated experimental broadcasting using a 50 W transmitter.

As the broadcasting service in Japan developed, the Government-General of Taiwan inaugurated experimental broadcasting using a 1 kW transmitter in November 1928. With such a transmitter power, however, the service area was limited to northern Taiwan, and further development of the service could not be expected. For this reason, the Government-General, in commemoration of the Emperor's accession in autumn of the same year, drafted a plan for installing a 10 kW transmitter in Taipei, and implemented this in January 1931. The initial plan was for the Government-General to place broadcasting under its direct control, but because of the opinion that the work of programming and presentation was unsuitable for a government office, a Corporate Juridical Person, the Taiwan Broadcasting Corporation, established in February, was commissioned to take charge of all affairs except engineering. The Corporation used a government-owned facility and charged 1 yen a month as receiver's fee to meet running expenses.

A broadcasting station was built in Tainan in 1932; another was established in Taichung in 1935, thus ameliorating conditions of reception. The programmes were intended principally for Japanese people in Taiwan, with those intended for the natives interwoven appropriately. However, because of the lack of broadcasting materials, the Taiwan stations were obliged to depend heavily upon relaying of NHK programmes transmitted from Japan. However, relaying over medium-waves was subject to severe interference by space electricity, and reception was very poor in summer. In the circumstances, the Taiwan stations made plans to invite performers from Japan, and as financial resources for such projects, the Corporation started radio advertising in June 1932. This was the first advertising broadcasting in Japan, but had to be suspended after six months' operation because of opposition from the Japan Newspaper Publishers' Association.

When the International Telephone (Kokusai Denwa) Company's short-wave facilities began to be used in June 1934, reception in Taiwan of NHK's programmes greatly improved, and a programme from there began

to be transmitted towards Japan once a week.

After the outbreak of the War with China in July 1937, short-wave transmissions directed to the Fukien area across the Strait of Taiwan commenced. The following year, short-wave transmissions were increased to cover South China and the South Seas areas. In 1941, the year the Pacific War broke out, transmissions were also directed towards the Philippines, Malaya and the Dutch East Indies, while the languages used were increased to 11.

In the aspect of broadcasting facilities, a 100 kW transmitter was set up at Minhsiung in September 1940 and dual broadcasting was implemented from October 1942. The second network programmes were mainly produced for Taiwanese people as means of educating them, while the first network programmes were meant for the Japanese. These consisted mostly of NHK's programmes relayed to the East Asia Broadcasting Service.

The number of receiving contractors increased from 23,000 in 1935 to 62,000 in 1940; it broke through the 100,000 line in 1944. As air raids by American planes increased from about that time, the total number of listeners at the end of hostilities was estimated at about 80,000. In October 1945, the broadcasting facilities in Taiwan were confiscated by the Republic of China.

Korea : The Government-General of Korea began experimental broadcasting in November 1924, while at the same time considering means of disseminating knowledge of radio. For this reason, commercialization of broadcasting was rapidly promoted, and the number of applicants reached more than a dozen. The Government-General, under the policy of establishing a non-profit broadcasting operation, brought about a merger of the applicant organizations and in November 1926 licensed a Corporate Juridical Person, the Seoul Broadcasting Corporation. The Corporation inaugurated a regular service in February 1927 using a 1 kW transmitter. The receiver's fee at the initial stage of broadcasting was set at ¥2.00 a month, but was reduced to ¥1.00 from the autumn of 1929 and further, to ¥0.75 in 1938. Programmes at first were presented in Japanese and Korean in about an equal ratio. From September 1929, however, more and more NHK's programmes were included and Korean programmes naturally decreased.

With the outbreak of the Manchurian Incident in 1931, strengthening of broadcasting in line with the national policy became urgent, and in April 1932 the Corporation was reorganized as the Korean Broadcasting Corporation. Facilities of this new corporation included two 10 kW transmitters procured with funds advanced by NHK. It began dual broadcasting using Japanese and Korean from April 1933. The first network programmes were intended for the Japanese in Korea, NHK programmes and those produced in Korea having been presented in a ratio of about 7:3. The second network programmes, on the other hand, were principally intended for Koreans. These included news, cultural and entertainment items. However, the interest of Koreans was concentrated on the entertainment programmes, little interest being shown in news and cultural items, which would have had more educational value. As the transmitters in Seoul alone

were insufficient to cover the entire country, stations were set up after 1935 in the leading cities, such as Pusan, Pyongyang, Chongjin, Hanhung, Iri and Taegu.

Meanwhile, for the purpose of countering broadcasts from the neighbouring Soviet Union, China, Nanking in particular, antenna power of the second network station in Seoul was increased to 50 kW in April 1937 with the aid of NHK. This service played an important role in propaganda broadcasting.

Radio wave control was tightened from 1942, the year after the outbreak of the Pacific War, and the antenna power was reduced. During the war, ten regular stations including that at Seoul and four provisional stations including one at Mokpo were in operation.

The subscribers to the Seoul service totalled round 2,000 in 1927, but by the time hostilities with China began in 1937, the number had exceeded 100,000; by March 1942, shortly after the outbreak of the Pacific War, there were more than 270,000 subscribers, of whom 126,000 were Japanese (the ratio of Japanese subscribers was 58.8 per cent). On the other hand, the ratio of Korean subscribers was only 2.3 per cent or 145,000.

Kwantung and Manchuria: Broadcasting in Kwantung began in August 1925, when the Kwantung government commenced experimental operation. In the early stages, the principal programmes were those produced at the local station, but NHK's programmes were also used in winter when the nighttime reception was good.

In Manchuria, the Tungsan government, which gained independence from China, established stations in Mukden and Harbin in 1928. After the Manchurian Incident of 1931, the Mukden Station was placed under the control of the Japanese Army and its operation was handed over to the staff dispatched from NHK. The army also established a new station in Changchun in April 1933. The Harbin Station, the operation of which had been suspended temporarily after the Incident, was placed under the Harbin Radio Regulatory Agency in July 1932.

In September 1933 the Manchurian Telegraph and Telephone Company was established jointly by the Japanese and Manchurian governments, and the Talien, Mukden, Changchun and Harbin stations were placed under this company.

Radio listening was free at the time the company was established, but in November 1934 a monthly fee of ¥0.50 was charged, and this was raised to ¥1.00 from 1939.

Reflecting the policies of the Japanese Army, broadcasting in Manchuria came to have characteristics different from other broadcasting services in the external territories because of the so-called independence of that country in 1932.

In 1934 the Changchun Broadcasting Station increased its output to 100 kW, because Manchuria with its vast territory needed a powerful broadcasting facility to cover the area and to use for national defence. Through the use of this 100 kW transmitter capable of covering the entire country and six smaller stations located at strategic points, dual broadcasting became possible in Manchuria.

After the outbreak of hostilities with China in July 1937, Manchurian

broadcasting was consolidated into a war time structure under the direction of the Japanese Army and the Manchurian Government and served as an organ for promoting national policies.

For Japanese in Manchuria, large numbers of NHK's programmes were relayed. On the other hand, since many Manchurians preferred to listen to Peking broadcasts, entertainment programmes of the Peking Station were rebroadcast from 1937. As the war situation grew worse, the cultural aspect of broadcasting declined and its propaganda capacity was exploited more and more. As a result, news and talks programmes increased. In particular, after the tide of the Pacific War turned against Japan, some news reports were filtered in consideration of the effect on the Manchurian people.

Overseas service was inaugurated at the Dairen Broadcasting Station in July 1937, and in July 1939 a new 20 kW short-wave transmitter was set up at the Changchun Station. Using these transmitters, Manchurian-German exchange broadcasts and propaganda broadcasts against the United States were conducted. Broadcasts aimed at Chungking were also undertaken in cooperation with NHK.

The war time structure was further consolidated with the outbreak of the Pacific War in 1941. Meanwhile, radio wave control enforced in Japan made it impossible to undertake linking between the two countries. For this reason, NHK's programmes began to be transmitted over unshielded cables. And as the war situation grew severe, broadcasting was used increasingly for propaganda. The broadcasting agreements were concluded with the Axis countries like Germany and Italy. As a result, the overseas service was expanded to carry out propaganda broadcasts towards the United States and China using as many as seven languages.

In Manchuria itself, broadcasting stations were built one after another and by 1939, 15 stations were in operation. The number had increased to 26 at the war's end. Rebroadcasting stations linked by land lines were also built. As a result, the number of subscribers which totalled no more than 8,700 at the time of the establishment of the company had broken through the 100,000 line by 1938 and at war's end, it was estimated at 700,000. The number of Manchurian listeners was very small at first, but by 1940 more Manchurians than Japanese had become subscribers.

Advertisements began to be included in Manchurian broadcasting in a direct form, from November 1936. The motive for this was to secure financial resources through advertising, as in the case of Taiwan. In the early stages, few advertisements could be sold because of the lack of industrial operators, but with the development of Manchuria a bright future became visible for advertising on the radio. However, since the advertisements were restricted under the influence of the war, business began to decline, with 1939 as the peak. By the war's end, advertisements in the Manchurian radio had disappeared completely as a matter of course.

Towards the end of the Pacific War, rumours were induced among the people by propaganda broadcasts of the Soviet Union from the north and the United States from the south. Therefore, jamming was commenced, but little effect seemed to have been achieved through such measure.

As aerial attacks became serious in 1945, the Army planned to abandon North Manchuria and to build the last fortifications in Tunghwa. In line

with this plan, the Telegraph and Telephone Company decided to dismantle its broadcasting stations north of Mutankiang and build one in Tunghwa. However, the war ended before this plan was put in force. At the end of hostilities, the Soviet Army occupied Manchuria and took over the control of communications facilities. Later, when the Soviet Army withdrew, they were placed under the Communications Department of China.

The Occupied Chinese Territories: As the Chinese Government had recognized private broadcasting enterprises, in addition to the government facilities, 13 broadcasting stations were in operation in North China before the start of hostilities in 1937, but most of these were privately managed facilities. With the start of hostilities in July and advance of Japanese forces into various areas in North China, government broadcasting stations were confiscated by the Japanese Army and used as instruments for pacifying the inhabitants. Private broadcasting stations, in most cases, were forced to close down because of loss of revenues from advertisements. However, the British and Italian controlled stations in Peking continued operations up till about October 1939.

In November 1937 the Japanese Army issued the Provisional Regulations for Broadcasting in North China by which operation of broadcasting in that area was placed in the hands of NHK. NHK, therefore, dispatched its staff and built a high-power station in Peking. This station started operation in January 1938 using a 50 kW transmitter. In May 1940 the power was increased to 100 kW.

Towards the end of June 1940 the North China Broadcasting Corporation was established under the Regulations for North China Broadcasting which was announced by the provisional North China Government. All affairs related to broadcasting in North China were left in the hands of this Corporation.

At this time, ten broadcasting stations were in operation. The contents of programmes consisted mostly of items intended for pacification of the inhabitants, as in all cases of broadcasting in the occupied areas. The characteristics of the contents were further intensified with progress of the war situations. As Peking was the centre of entertainment arts for all China, programmes produced at the Peking Station were relayed not only throughout North China but also to Manchuria and Japan.

With the outbreak of the Pacific War in December 1941, propaganda through broadcasting was divided into five types, such as for occupied areas, non-occupied areas, Japanese living in the area, etc. For the occupied areas, pacification was stressed most strongly. For non-occupied areas, broadcasts called on the people to cooperate with the Japanese Army in hostile propaganda. For the Japanese people, NHK's East Asia Service programmes were mostly presented.

After the war's end in 1945, the broadcasting facilities of North China were taken over by the Communications Department of the Chinese Government. The take-over was carried out smoothly and in a friendly manner, except in some areas that fell under control of the Communist Army.

In Central China, there were more than forty broadcasting stations at the beginning of the War with China, but the majority of these were private concerns mostly clustered in the foreign settlement of Shanghai.

After the outbreak of hostilities with China, NHK opened a 10 kW station in Shanghai at the request of the Army and began propaganda and pacification broadcasts. With the expanding scale of hostilities, broadcasting stations were built in Nanking, Hankow, Hankchow and Soochow. In addition, war front broadcasting facilities were specially established to cooperate with the Army in its tactical and pacification measures.

When the military operations were completed for the time being in December 1940, it was agreed to establish the Chinese Broadcasting Corporation under special direction of the new Chinese Wang Chao-ming government. The Corporation started operating in March 1941 and continued to control broadcasting in Central China up till the war's end in 1945.

With the outbreak of the Pacific War in 1941, private broadcasting stations controlled by third nationals, which were located in the Shanghai Settlement were taken over by the Chinese Broadcasting Corporation and used for propaganda broadcasts towards the enemy. In short, broadcasting in Central China was more of an instrument of propaganda for the Japanese Army and the new Chinese Government than a regular enterprise.

In South China, the Canton Broadcasting Station was built in January 1939, and the Amoy Station was established in August 1938 after occupation by the Japanese Army. These were established for the principal object of conducting pacification propaganda directed towards the Chinese living in the occupied areas. The Canton Station was placed under the control of the Information Division of South China Expeditionary Forces of the Japanese Army, which provided the funds. In the case of the Amoy Station, the control was placed in the Asian Development Agency and the Navy, which bore all the expenses. The operation of these two stations was placed in the hands of staff dispatched from the Taiwan Broadcasting Corporation; NHK had nothing to do with them.

Occupied Areas in Southern Regions: After the outbreak of the Pacific War in 1941, the Japanese Army and Navy successively occupied the Southern regions up till spring of 1942, where the policies of the Army and the Japanese Government were enforced smoothly. Broadcasting was valued as a means of pacification within the occupied areas as well as an instrument of propaganda against the enemy. The Army had drafted seventeen NHK staff members as civilian army personnel before the outbreak of the hostilities, but immediately after the outbreak of the War, nineteen more were sent to Malaya, the Philippines and Java in January 1942 as civilians attached to the Japanese forces. The Navy also commandeded twenty-four NHK staff members in July 1942 for operating the broadcasting facilities in Celebes, South Borneo and Minor Sunda Islands where naval bases were located.

Broadcasting personnel assigned to the Japanese Army went along with the fighting forces and built and operated broadcasting stations almost immediately upon occupation. As many of the broadcasting facilities had been destroyed by the enemy forces as they retreated, painstaking work was usually waiting for them as they had to repair and rehabilitate such facilities as quickly as possible. It was also no easy matter to procure equipment and other materials, and where radio wave propagation was not good enough, new stations had to be built. In the matter of programm-

ing, too, care was taken to conform to the habits and customs of the natives. In the circumstances, programmes were centred around music, with songs and news and news commentaries interspersed appropriately. As large numbers of all-wave receivers were in use in these areas, either the short-wave band had to be cut off or the receivers confiscated. Also, for the purpose of arousing interest in broadcasts presented by the Japanese station, street corner listening facilities were provided at various locations.

Control of broadcasting in the occupied areas was in the hands of the Army, but the operation of the stations was in charge of the Broadcast Control Agency established in each military government district. Such control agencies were maintained by the Army in Malaya, Sumatra, Java, Burma and the Philippines; the Navy had one in the Celebes district to control the broadcasting stations in that area. Direction and actual work at the control agencies and the broadcasting stations were mostly undertaken by the members of NHK staff attached to the Army and Navy as civilians. Native personnel who had been engaged in broadcasting before the occupation were also employed in the services. Expenses needed for operations were reimbursed from the military accounts. At NHK, the "Southern Regions Room" was established under direct supervision of the president in September 1942 for maintaining contacts with the military, government offices and staff members in the Southern regions in connection with such broadcasting services.

As the occupied areas expanded, personnel available became insufficient for operating the increasing number of broadcasting stations. At the request of the military, therefore, NHK dispatched 170 employees in November 1942. With the arrival of these men, the broadcasting establishment was rapidly put in order and building of new stations expedited. Dispatch of NHK personnel continued, and by 1944 some 300 persons were engaged in broadcasting in various occupied areas. In addition, NHK had employed some 1,300 persons on the spot including Japanese and natives. These people operated nearly forty broadcasting stations. Other than one 50 kW and several 10 kW transmitters brought from Japan, the equipment in these stations was mostly of very small scale, that had been confiscated and repaired in the field.

Meanwhile, the war situation became more and more serious, and as the tide turned against Japan, the effect of broadcasting in the occupied areas declined. In Burma and the Philippines where the entire areas were exposed to counter attacks by the British and Indian forces on one hand and the Americans on the other, the existing broadcasting facilities had to be destroyed as the Japanese forces retreated. The broadcasting facilities in other areas were also frequently destroyed by aerial attacks, and those that escaped destruction had to continue broadcasting under most difficult conditions. However, pacification effects could no longer be expected from such broadcasting, and soon these broadcasts, together with the overseas service of Japan, were forced to become completely silent.

9. Broadcast Engineering

1. Broadcasting Facilities

Radio engineering in Japan was still almost completely undeveloped at the commencement of broadcasting. Until about 1930, most of the equipment had to be imported. The transmitters for the seven 10 kW and one 3 kW stations built under the first-stage broadcasting facility expansion programme (see Chapter, 5, "Network", Section 1), which was implemented immediately after the establishment of NHK, had been imported from Great Britain (Marconi), the United States (STC) and Germany (Telefunken). However, much data were obtained from such foreign equipment, which helped promote the rapid development of domestic broadcasting equipment. As a result, 300 W and 1 kW transmitters required for the second-stage facility expansion programme implemented after 1930 were largely constructed with domestic products. And by 1930 a 10 kW transmitter designed and assembled at NHK was completed. In the early stages of groping for production of broadcasting equipment, the automatic oscillating system with low frequency stability was tried out. Later, however, the stability was markedly improved through the adoption of the crystal oscillation system. And with progress made in the characteristic measuring techniques, improvements were introduced in the aspects of modulation and distortion of the equipment.

Radio engineering in Japan, as stated before, developed on the basis of experience in manufacturing large numbers of transmitters for low-power stations. With regard to more important transmitters, NHK designed these and had the manufacturers assemble them. Nevertheless, NHK also undertook laboratory manufacture and repair of small-scale equipment. The transmitter for the 150 kW dual broadcasting facility established in Tokyo in 1937 was manufactured by the Tokyo Denki Musen Company to the order of NHK. All equipment incidental to this transmitter were also manufactured in Japan. This was made possible by the development of the manufacturing techniques for high-capacity vacuum tubes, high-voltage and high-capacity mercury rectifiers, etc. It was also due to general improvement in the industrial level. The high-power transmitter aforementioned, as a matter of fact, was on an equal footing with the highest level achieved elsewhere. Its manufacturers also made the 100 kW transmitter for the Peking Broadcasting Station in 1937. Another maker, Nippon Electric Company, manufactured a 100 kW transmitter for the Changchun Broadcasting Station in Manchuria in 1934 and another for the Tamio (Minhsiung) Broadcasting Station of Taiwan in 1940. It was indeed surprising that the Japanese broadcasting equipment industry, which had to depend almost entirely on foreign technology in the early years of the service, should have advanced at such a rapid pace within a very short period.

Efforts were also exerted towards domestic production of studio facilities and improvement of their efficiency. As a matter of fact, the number of studios was very few. The Tokyo Station had three, the key stations and the Kyoto Station had two each and the local stations only one. All of these studios were small, the largest Tokyo studio being no more than 76 square metres in floor space. Moreover, their acoustic characteristics were

by no means satisfactory. In fact, the studios were functionally inadequate to achieve the best effects in the presentation of music and dramas.

In other countries, too, broadcasting studios consisted mostly of remodelled rooms in the early years. With the growth of business, however, NBC in the United States built a sixteen-floor broadcasting hall in 1927, and BBC constructed Broadcasting House with nine floors above and three floors below ground in 1932. In Berlin, too, the Broadcasting Hall having five floors above and one floor below the ground was built in 1931.

In Japan the need for substantial buildings especially in Tokyo, where nation-wide network programmes originated in large numbers, Osaka and Nagoya was felt since the early days. As a result, the Osaka Broadcasting Hall was completed in October 1936, and the new Tokyo NHK Building finished in December 1938. Construction of the new Nagoya Station, however, was carried over till after the war because of the difficulty in procuring materials due to tightened controls brought about during hostilities.

The Tokyo and Osaka stations were provided respectively with 13 studios of all sizes together with subcontrol rooms. In addition, the Tokyo Station had a record player room, sound effect research room and a spare studio. The largest studio in Tokyo had a floor space of 365.5 square metres and capacity of 3,536 cubic metres. The largest in Osaka had a floor space of 325 square metres and capacity of 4,302 cubic metres. The studios were of the "floating floor" system concrete structure in which a separate wooden studio was fitted in order to prevent penetration of outside noise along the main beams of the building. The studio itself, therefore, was a sort of box supported by a special metal base and felt padding. For sound insulating walls, various absorbents, such as rock wool, mineral felt and cork boards were used. For internal finish, plywood, platon pulpoid, cloth and other materials were mixed appropriately, thus providing characteristic reverberation time and acoustic characteristics for each studio. With the completion of these two broadcasting stations, studio shortage was dissolved, and it became possible to use those with more suitable reverberation characteristics for the varying nature of programmes. Also because of improved control techniques, the contents of programmes, sound quality and the production techniques showed marked improvement.

In the early years of broadcasting, imported double-button carbon microphones (WE) and moving coil electro-magnetic microphones (Marconi), which came along with the transmitters, were in use. At the 10 kW station, which was built under the first-stage programme, Reiss microphones (Marconi or Telefunken) began to be used. These were better in sound quality and sensitivity than the existing types and much easier to handle. However, these imported microphones were costly and difficult to obtain and also to repair when they developed faults. In the circumstances, domestic production of microphones was in acute demand. At NHK successful experimental manufacture of the Reiss (MH type) microphone was undertaken in 1930, and from then domestically manufactured microphones were used at various NHK stations. As this microphone made less noise when compared with the Marconi product, it was used widely both in studios and outdoors till about 1938.

Although this microphone had a high performance for those days, it lacked directionality and presented difficulty in collecting sound in places

where large amounts of reverberation were produced. The velocity microphone (Marconi) imported in 1933 compensated for this defect, and moreover, made mixing of several microphones used in smaller studios possible. It was therefore natural that demands for this new microphone increased. Domestic production of this microphone was expedited from around 1937 and those produced in Japan began to be distributed among the broadcasting stations from about 1938. The Reiss microphones were now replaced by the velocity types and with the widespread use of these, the performance of sound equipment, which had been behind that of the broadcasting equipment and amplifiers, greatly improved, and the sound quality of broadcasting was correspondingly raised. Thus, together with improvements introduced into the programme lines and receiving sets, the way was opened up towards reproduction of original sounds.

The peak of development in broadcasting techniques came between 1936 and 1939, during which the high-power transmitting station was built in Tokyo, the Tokyo and Osaka radio halls were constructed and an experimental television facility, which will be described later, was completed. These facilities were of such quality as to compare favourably with similar facilities abroad. However after this period, normal development of broadcasting techniques was obstructed by the rigid controls imposed on materials for consumer products under the economic policy of the government and the need for research and preparations related to the wartime broadcasting structure. In expectation of aerial attacks by enemy planes, spare studios and transmitters were provided for the principal stations and the leading communications equipment manufacturers had to devote their effort exclusively to the production of military communications equipment. In the circumstances, production and repair of broadcasting equipment had to be undertaken at NHK, and in this field, the greatest pains were taken on how to economize on materials and how a decline in performance due to such economies could be compensated for by new ideas introduced into designs. Antenna posts erected during the war were jointed wooden types, used provisionally for the Tokyo and Osaka facilities in the very early stages of broadcasting, because of the need for economizing on materials.

2. Rebroadcasting and Recording Techniques

When the Nagoya Station attempted Japan's first outdoor pickup broadcasting in October 1925 on the Emperor's Birthday, a 1,500-metre telephone line was laid between the venue (celebration of the Emperor's Birthday) and the broadcasting station. The same station followed up this attempt with relay broadcasts from theatres using spare telephone lines specially rented from the Ministry of Communications, thus demonstrating its desire to develop this field. Stimulated by such attempts, the Tokyo and Osaka stations also began to undertake spot reports of national events and sports contests. In the early stages, the radio link system was generally employed, but land lines began to be used, except in very special cases, from round 1928, as it became simpler to rent the Communications Ministry's telephone lines.

After 1932, when the frequency of presentations of music and sports programmes became more or less general in programming, permanent link

lines were gradually laid between places where musical performances and sports contests were presented and the broadcasting stations.

At first microphone amplifiers for field pickup use were as big as suitcases because vacuum tubes identical with those used for studio equipment were employed. Also, as storage batteries (some 30A hour) and large dry cells were used as power source, the physical work required of field pickup engineers was enormous—a big difference compared with the handy and light field pickup equipment used today.

Wireless relay using VHF was attempted for the first time in August 1932 for broadcasting the scene of a boat race. In July of the following year, sunrise viewed from the top of Mt. Fuji (elevation 3,776 metres) and speeches were relayed under this system. In the field pickup of sunrise at the summit of Mt. Fuji, a gasoline engine for the power generator was carried up so that a transmitter with wavelength of 8 metres and an output of 50 W could be operated. During the air defense manoeuvres which took place this year ultra-short-wave transmitters were mounted on vehicles and aircraft for the reports. From about this time, the radio relaying system became fixed, and pickup equipment for mounting on aircraft, for boat races and for wireless relay cars began to be provided for the key stations including Tokyo. Possibilities of field pickup broadcasting broadened along with progress made in engineering, and in 1934, broadcasts from depths of about 60 metres under water and from a speeding train were successfully achieved.

Special techniques and resourcefulness were required for collecting sound in outdoor pickup work. The parabolic sound collector, which was used effectively for relaying baseball games in 1933, was later used for recording sounds made by wild birds in deep woods with excellent results. The phase (tubular) type sound collector manufactured in 1938 was not as suitable as the parabolic type for sensing sound from a distance, but it was excellent in directionality and quality. For this reason, it was used not only for outdoor field pickup broadcasting but also for relaying stage plays. Horn type sound collectors of very high efficiency were also developed.

Improvement of sound quality depends on the performance of microphones, and the development of the moving coil type, which was affected little by the wind, for outdoor use and the unidirectional ribbon type considerably improved the sound quality of broadcasting. The development of new microphones also triggered domestic production of portable sound amplifiers for field pickup use. Furthermore, indirectly heated vacuum tubes replaced the directly heated types, which were subject to noise generation when exposed to shocks.

Outdoor pickup broadcasting, which expanded in scope along with progress made in engineering, extended into remote areas in search of unusual materials. Around 1941 field pickup broadcasting using a carrier telephone channel began to be undertaken from remote areas where no radio link was possible because of the topography or where no appropriate telephone lines were available.

Together with outdoor pickup broadcasting, presentation of recorded programmes became more important in programming. However, utilization of recording equipment could not be considered quite satisfactory because the disc recorders were cumbersome to handle and little progress could be

made in the development of better equipment with the tightened control on materials. The earliest broadcasting of recorded programmes apparently goes back to about 1930 when recorded discs were used in Great Britain and Germany. From that time recording techniques rapidly developed in various countries, and suitable equipment and discs for broadcasting began to be manufactured. As a matter of fact, the steel belt system and film recording equipment also began to be used in addition to disc recording devices.

Development of recording equipment for broadcasting purposes in Japan was somewhat behind the other countries. Around 1930 the American "dictaphones", which electrically recorded on a wax-coated cylinder, were provided for the leading stations, but as the sound quality was very poor and noise frightful, they were used principally for recording the contents of programmes for purposes of post-broadcasting censorship, and not for broadcasting purposes. In 1936 NHK imported a set of two disc-type recording devices from Telefunken (Germany) and a steel belt system magnetic recorder from Marconi of Great Britain. These recorders were provided for the Tokyo Station where they were used for broadcasting from the middle of the following year. As these devices were used for news and overseas programmes, recordings for broadcasting developed rapidly thereafter. Meanwhile, researches and experimental manufacture of recording equipment and parts were intensified both by NHK and the manufacturers with a view to manufacturing in Japan. As a result, production of disc recording equipment and recording discs became possible in 1939.

A recording room was provided in the Tokyo NHK Building in 1939, and with the increase in recording equipment and assignment of staff specializing in the work of operating techniques, actual recording, editing and reproduction improved accordingly. The number of discs used each month at the Tokyo Station in 1937, when recorded discs began to be used for broadcasting, were no more than 80 or so, but increased to more than 1,000 by 1941. Local station had simple home-made recorders till about 1939, but NHK provided the regional key stations with some Telefunken type stationary recording equipment, the domestic production of which was achieved, together with a number of portable recorders.

The steel belt system recording equipment imported from Marconi was large in scale and difficult to handle. For this reason, it was used not for general purposes but for recording daytime programmes for repeat presentations in the overseas service at night. As this recording equipment was used very frequently it depreciated fast, and since spare parts could not be obtained, it was scrapped in 1941. Also, the homemade film system recorder adopted in 1939 featured good sound quality and long preservation of recordings, but because of the trouble of developing and the difficulty of obtaining films under the wartime situation, it was not utilized very much.

3. Technical Researches

Broadcasting engineering in Japan was still in its infancy when NHK was established in 1926. The Corporation had recognized the need for promoting investigations and experiments in the basic theories and applications, but it was not till June 1930 that the NHK Technical Research La-

laboratories was established as a research organ attached to the headquarters. Prior to the establishment of the laboratories, opinions were expressed to the effect that such researches should not properly be undertaken by a single business organization like NHK but entrusted to some appropriate institution. There were also opinions that, since such researches had no meaning without close connection with field work, actual work should be undertaken at various stations and the headquarters act merely as an overall supervisor.

However, under the situation in which broadcasting equipment and high-performance receiving sets were mostly dependent on imported products the acute need for the promotion of domestic production of equipment to conform to the existing economic policy of restricting imports, had been recognized by many people. For NHK itself, too, the establishment of a unified research organ for promoting the construction of a nation-wide network by applying the results obtained had deep significance.

The newly-established Technical Research Laboratories were in the beginning staffed by only 16 persons. Research work undertaken at the laboratories covered both the transmission and reception fields, and while taking up immediate problems involving them, the laboratory staff worked hard to contribute to elevation of the radio engineering level. Principal subjects of research assigned to the laboratories were:

Frequency Standards and control: With implementation of NHK's second-stage facility expansion programme, low-power stations gradually increased and the reduction of the frequency deviations of various stations and stabilization of frequencies became an important question. It was natural, therefore, that researches in precision measurements of frequencies and frequency standards were included. The laboratories took up the work of the experimental manufacture of a frequency standard device in 1932, and after 1934 began measuring frequencies of various stations using the results obtained from these researches. Frequency measurements thereafter were enforced periodically, and as the results of such measurements, improvements were made in the standards and frequency monitoring systems. Measurements and control of the frequencies of various stations continued to form one of the duties of the laboratories for a long time thereafter.

Common-Frequency Broadcasting: As it had been expected that adjustment of the utilization of frequencies allocated under the international agreement would become necessary with the increase of broadcasting stations, common-frequency broadcasting had already been undertaken since about 1926 as a means of meeting such a situation. Problems involved in common-frequency broadcasting comprised mutual interference and reception. Therefore, it was necessary to ascertain to what precision the frequencies of two stations using a common frequency should be matched, to what extent reception would be obstructed by interference, the differences in reception between daytime and nighttime, and between the same programme and others. Several tests were made on these points at the Technical Research Laboratories in 1931 to obtain data. As it was found that perfect matching of frequencies was necessary to reduce interference and expand the range of good reception, means of matching the frequencies perfectly, i.e., the synchronization system, was emphasized, and various experiments

were conducted since 1936.

Common-frequency broadcasting as a means of solving the question of frequency shortage was adopted for several stations before the war and the results were fairly satisfactory. With the outbreak of the Pacific War in 1941, this system was taken up as part of the radio wave control. And for preventing possibilities of radio waves guiding enemy planes over Japan, it developed into a large-scale system applied to all the stations in the country (see Chapter, 5, "Network", Section 4).

Radio Wave Propagation: In the early period of the establishment of the Technical Research Laboratories, NHK's second-stage facility expansion programme was in progress. The study of and investigations into the characteristics of radio wave propagation, therefore, was an important subject related to the selection of locations for new stations. Laboratories thereupon commenced investigations into the high-frequency radiation strength, which had posed a problem, and reception tests of broadcasting signals in daytime, at night and throughout the year. In 1933, an automatic recording and measuring device for field intensity was tested at the Laboratories for expediting quantitative study of propagation curves for day and nighttime and seasonal variations in fading, which were involved in the long-distance propagation of radio waves. These tests provided considerable data on the subjects. Also, in 1936, the Laboratories test made an entirely new portable field intensity measuring instrument, thus taking a step forward towards production of practical and applicable instruments of this nature.

Acoustics: Study of acoustics has contributed notably to the improvement of sound quality along with development of broadcasting equipment. At the time the Laboratories were established (1930), reverberations in the studios of various stations were slight as was the case with studios designed for the broadcasting stations of the United States and Great Britain. For microphones, the Reiss and carbon types had been adopted, and loudspeakers for the receiving sets were mostly of the cone type magnetic system. Sound reproduced by such devices contained causes for increasing reverberation. Consequently, studio design in those days inclined rather towards securing of clear sound by reducing reverberation. However, broadcasting in other countries had already grown out of the period of poor sound quality and was advancing into a world of richness and clarity. At the Laboratories, research work was concentrated principally on the examinations of the results of the study of acoustics abroad to find means of applying them to Japanese broadcasting, as well as on analysis and solving of various problems incidental to such application.

When preparations for the study of acoustics were completed in 1931, the first project undertaken was the measurement of the reverberation time. Reverberations were measured with an oscillograph and studies made on the relationship between reverberation time, sound insulating materials and the capacity of the room, and between the programme items and optimum reverberation time. Measurements of reverberations at the local stations were also taken for reference in acoustic design, the first step was taken towards full-scale study of architectural acoustics. Then the reverberation times of theatres and public halls across the country were measured to obtain data and establish a scientific system in the study. The results

accumulated from these studies crystallized in the studio designs for the Tokyo headquarters building completed in 1938. Incidentally, efforts made towards study and improvement of the performance of microphones cannot be ignored in the overall study of acoustics (see Section 1 of this Chapter).

Receiving Sets: At the time of establishment of the Technical Research Laboratories, alternating current system receiving sets were just beginning to appear on the market. For the purpose of testing the performance of these sets, the Laboratories first manufactured test equipment, while at the same time commencing studies so as to improve its characteristics. For this purpose, the Laboratories designed and made several types of standard receivers. These served as the basis for developing standards for the "broadcasting station type" receivers, which played an important part in receiver manufacturing circles in prewar days. The Laboratories also commenced study of electro-acoustics, which was far behind in development. Then from around 1932 investigations into the methods of testing loudspeakers were undertaken with a view to expediting the study of electro-acoustics related to receiving sets.

The "Radio Equipment Qualifying System" established by NHK in 1928 was designed for recommending good receiving sets to listeners. In the early period, tests of receiving sets and components were entrusted to the Electro-Technical Laboratory of the Communications Ministry. After 1932, when test equipment at the NHK Technical Research Laboratories was consolidated, a part of such tests was undertaken at the Laboratories.

Researches at the Laboratories were not limited to fields immediately related to technical operations, but in consideration of the future development of broadcasting engineering problems related to VHF broadcasting, wired broadcasting and television broadcasting were also taken up from the outset. In particular, as a broadcasting system to cope with the situation under which medium-wave broadcasting might be suspended due to wartime requirements, the need for VHF and wired broadcasting was recognized once again about 1939 when tension in the international situation began to mount. As a result, active researches and experiments in these fields were undertaken. Also, as will be stated in the next section, work on television was undertaken in earnest with the object of reporting the events of the Olympic Games scheduled for 1940 in Tokyo. In this work, achievements were notable and telecasting was brought to the practical stage. Meanwhile, the number of research staff at the Laboratories had increased, and by 1940 the total exceeded 260. When the Pacific War broke out, however, many researchers and equipment were mobilized for studying radio detectors and the dark-vision television system. In July 1944 the Research Laboratories were placed under army control as the "Wartime Radio Research Laboratories" and obliged to engage in work related to conduct of the war. In order to continue work on broadcasting engineering, however, a research section was established under the Engineering Department, but this was confined chiefly to the fields necessary for wartime broadcasting. In the circumstances, researches capable of contributing towards improvement of broadcasting engineering in general had to be suspended.

4. Television Engineering

Officially, telecasting in Japan commenced in February 1953 at the NHK Tokyo Television Station. The history of technical researches and experiments in this field, however, goes back a number of years, as the Hamamatsu College of Engineering, Waseda University, the Tokyo Electric and Nippon Electric Companies had already started on studying television as early as 1927. In those days, following in the wake of research work conducted in the United States and Great Britain, the television system used the Nipkow disc at the transmitting end, and for the receiving end, the picture tube was used at the Hamamatsu College of Engineering, while the Weiller mirror wheel, Nipkow disc or prism disc were tried at Waseda University, which were totally mechanical or semi-mechanical systems. The scanning comprised 30 to 60 lines, which were inadequate in precision. But, although the two abovementioned colleges publicized the results of their researches and conducted public demonstrations, the Tokyo Electric and Nippon Electric Companies entertained doubts as to the future of television, and soon suspended their research efforts. Later researches in television began also at the Electro-Technical Laboratory of the Communications Ministry, which together with the two colleges aforementioned pioneered the work in this field.

NHK's work on television began soon after 1930, when its Technical Research Laboratories were established. Its research efforts began with investigations into the scanning systems of various countries. The Laboratories purchased a set of the British "televisor", a product of the Baird Company, and assembled a set of simple transmitter and receiver under the 30-line scanning system to conduct performance tests. This was followed by the study of the light source for reception and trial manufacture of spiral mirror wheel receiving sets. By 1934 a transmitter and receiver with scanning lines of 60 and 12.5 frames per second had been completed. These were capable of reproducing pictures of considerable clarity on the receiver screen.

Meanwhile, Philo Farnsworth of the United States invented a resolving tube, to bring about the dawn of the electronic scanning pickup system. This was followed in 1933 by completion of the iconoscope by Vladimir Zworykin, also of the United States. This has made possible the development of a full electronic television system, thus endorsing the possibility of future development of television engineering.⁽¹⁾ In Japan, also, the study of electronic system television was taken up at the Hamamatsu College of Engineering and Tokyo Electric Company, and by 1935 trial manufacture of the iconoscope and a pickup device using the iconoscope (scanning lines of about 240) were successfully completed. After 1937, however, NHK Technical Research Laboratories became the centre of television researches. The

(1) In 1936 experimental television stations using iconoscopes and emitrons (pickup tubes of the same principle as the iconoscope) were established in the United States and Great Britain. In Germany the Berlin Olympics held that year were telecast using iconoscope cameras. In November of the same year, the world's first regular television service was inaugurated in Great Britain using the Alexandra Palace Station. This was followed by regular or experimental services in various European countries. However, with the outbreak of World War II, telecasts in Europe were suspended one after another. And when the United States, which had commenced regular commercial television services under the standard system adopted in 1941, joined in the hostilities, telecasting came to a temporary stop throughout the world.

principal reason for this shift was the decision at NHK to televise the Olympic Games since Tokyo was selected as the site in 1936. The television relaying of the Berlin Olympics had been highly popular, and NHK planned to repeat the feat in Japan.

NHK Technical Research Laboratories, therefore, voluntarily promoted the study of television in all phases in order to materialize telecasting. In other words, the Laboratories expanded and consolidated their research facilities and experimental manufacturing equipment, and having invited a number of researchers from the Hamamatsu College of Engineering, proceeded with the study of television using the latter's methods, which had the greatest possibility of practical application. Research efforts were made in the fields of pickup, reception and transmission. In particular, since it was not possible to purchase electronic tubes feasible to practical application, which formed the most important part of the basic study, production of such tubes at the Laboratories contributed greatly towards progress of research work.

By the spring of 1939, an experimental television station complete with a studio and domestically produced cameras and antenna was established at the Laboratories, and on the 13th May of the same year, the first television signals were transmitted. It was Japan's first fullscale experimental telecasting. At about the same time, trial manufacture of television receivers on the part of Japanese makers became active, and test receivers were exhibited at various shows and exhibitions. Demonstrations of television reception were also made, thus arousing the interest of the public.

Meanwhile, it became necessary to determine the unified standard system for Japan in order to bring television to a practical stage. For this purpose, the Television Investigation Committee established in 1937 jointly by the Society of Telecommunications Engineers and the Japan Radio Association decided on a provisional standards system,⁽²⁾ while at the same time engaging in the study of the telecasting facility and standard system for the transmission and reception, which would be used for telecasting the proposed Tokyo Olympic Games. However, as the Tokyo Olympics was cancelled in July 1938 on account of the prolongation of hostilities with China, the immediate objective of telecasting vanished and the commencement of a fullscale service was postponed. Furthermore, with the outbreak of the Pacific War, most of the television researchers were mobilized for studies related to military electronics and direct work on television facilities was completely suspended until after the war.

(2) The standard system adopted by the Television Investigation Committee in February 1938 was, in substance, as follows:

Scanning lines: 441

Per second frame: 25

Video frequency band: 2.7Mc

Modulation system: AM (both for video and sound)

10. Listeners

1. Increase in Listeners and Factors Leading to Such Increase

The number of receiving contractors as of August 1926, when NHK was established, totalled 340,000. These listeners were inherited from the old Tokyo, Osaka and Nagoya stations which constituted the prototype organizations of NHK. The broadcasting enterprise in Japan developed even while its future was considered problematical under the business recession that had prevailed since 1920. However, the fact that the radio service, contrary to expectations, was able to attract so many listeners, must have been due largely to its characteristics and functions as a new mass medium, which aroused astonishment and interest in the minds of the people.

The implementation of the network construction programmes after 1928, which resulted in the establishment of seven 10 kW key and a large number of local stations across the country, making it possible to send out excellent programmes over the programme lines linking these stations, served as the most important factor in attracting new receiving contractors. Meanwhile, receiving set manufacturing techniques made progress, and as a result of studies made on the alternating current system receiving set, mass-production of this type was made possible, thus bringing prices down gradually. NHK also promoted the unification of standards for receiving sets and, having set the standards for better types, recommended them to the people. All these efforts could not be ignored as important factors in securing more listeners.

It goes without saying that expansion and improvements made in the transmitting and receiving equipment formed the foundation for attracting more receiving contractors, but the trends towards increases were accelerated astonishingly after the one million line was crossed shortly after the Manchurian Incident, which took place in September 1931. Following the Manchurian Incident, hostilities with China began in 1937 and the Pacific War broke out in 1941. The 12 years since the number of receiving contractors exceeded one million till it passed the 7 million line were a period of dark war days. However, Japan itself was free from direct war damage during this period, and the Japanese armies had advanced into Mainland China and areas along the South Pacific. The fact that the number of receiving contractors followed a steady increase after

Increase of receiving contractors in units of 1 million

Number of contractors	Date exceeded	Period required
1,000,000	February 1932	85 months
2,000,000	April 1935	38 "
3,000,000	May 1937	25 "
4,000,000	January 1939	20 "
5,000,000	May 1940	16 "
6,000,000	August 1941	15 "
7,000,000	March 1943	19 "

the outbreak of hostilities with China can be accounted for by the stimulus given to the people's desire to listen to radio because of their deep interest in the news and information on the progress of hostilities.

With regard to the administration of broadcasting, the guiding principle of Nazi Germany that "broadcasting transmits the will of the nation; listening to broadcasts is a national act, and every household should be provided with a receiving set" affected the policy of Japan, and close ties between the State and broadcasting were emphasized. This served as the keynote for popularizing the radio dissemination campaign advocated by the government. For instance, posters with such words as "National Defence and Radio" endorsed by all the competent government ministries were posted at public places where people gathered, such as railway stations, post offices and city, town and village offices.

In conformity with such a trend, NHK called on the associations of radio dealers and power companies across the country to undertake special sales of receiving sets. Meanwhile, NHK also held exhibitions and film viewing meetings, published pamphlets, planned radio dissemination organizations in the rural areas, thus actively endeavouring to increase the popularity of radio among the people. Also, in order to maintain the already contracted number of listeners, NHK offered courses in receiver servicing, appointed repair shops with good technicians as qualified and designated by NHK so that they might serve as supporting pillars in the maintenance of receiving equipment. What should also be especially noted was the setting of standards for the "broadcasting station type" receivers so as to economize on materials through uniform production and to bring the price down through mass-production, thus further contributing towards the increase in radio receivers.

The fact that these dissemination measures served as one of the factors for rapid increases in the number of receiving contractors could not be over-looked. The total of 6,300,000 receiving contractors (43.5 per 100 households) just before the outbreak of the Pacific War, as a matter of fact, ranked fourth in the world following the United States, Germany and Great Britain. However, in the rate of dissemination, Japan ranked no higher than 17th among the 33 countries where accurate statistics were available.

Assuming from the enthusiasm the Japanese people showed towards broadcasting about the time the Pacific War broke out, it appeared likely that the ideal situation of "one receiving set per one household" would be realized within a few years, since the number of receiving contractors had been increasing at the rate of more than one million a year so long as receiving sets and maintenance parts, such as vacuum tubes, could be supplied smoothly. However, under the wartime setup control on materials for manufacturing consumer products was tightened, resulting in the slowing down of receiver production as well as the speed in increase of receiving contractors. Furthermore, because of successive drafting of repairmen into the army and their transfer to munitions factories, it became difficult even to maintain the sets in operation. The table (attached) comparing the number of months required for securing 1 million receiving contractors shows that it took 19 months for the receiving contractors to reach the 7 million level from 6 million. This fact was an endorsement of the afore-

mentioned situation. From 1944 to the following year, which was the closing period of the war, the number of missing receiving sets mounted to large figures because of damage from aerial attacks and evacuation, and by the end of 1945, the traceable number of contractors had decreased to 5.7 million. This figure was about equal to that pertaining to five years before.

2. Production of Receiving Sets

At the commencement of the broadcasting service, nearly 80 per cent of receiving sets in operation were of crystal type. Others comprised vacuum tube sets using batteries as power supply (see Chapter 2, "Commencement of the Broadcasting Service", Section 7). The production of the alternating current type sets using commercial power as source began in about 1926 to replace the battery-operated receivers. Since then domestic production of various types of alternating current vacuum tube system receiving sets was promoted, and by 1928 these receivers were improved in performance to meet the general demand. With the consolidation of the production setup of Japanese manufacturers and construction of a nation-wide network as the background, the alternating current sets, which were cheap, easy to operate, and high in performance, spread rapidly throughout the country.

In the early stage of development, the alternating current system sets were of three-tube or four-tube types using cone type magnetic loud-speakers. The loud-speaker was connected with the set proper with a cord, but from about 1930, the loud-speaker was assembled into the cabinet along with other components. Then for the purpose of improving the sound quality and raising the output, dynamic loudspeakers made their appearance. Also, large cabinets in which a radio set and electric phonograph were assembled together became popular. On the other hand, the performance and form of vacuum tubes became more efficient, and the trend was seen towards smaller receiving sets. However, in the United States and Europe superheterodyne sets using high-performance vacuum tubes were already in general use. Dynamic loud-speakers using permanent magnets were also popularized, and even the small transformerless radio receivers using indirectly heated rectifiers had been developed. In short, the development of receiving equipment in other countries was in those days considerably well ahead of Japan.

Most of the receiving sets popularly used in this country were three to four-tube straight types still with magnetic loud-speakers. Although superheterodyne receivers and others with better sound quality began to appear on the market from about 1933, these did not become widely popular, because the policy of supplying low-priced receivers for the purpose of facilitating the spread of radio receivers among general public was maintained throughout the period of hostilities after the Manchurian Incident. Also, the manufacturers themselves had no margin in their personnel and materials for developing radio receivers of higher performance. Under the circumstances, development of superheterodyne receivers had to wait till after the war. Thus, the gap between Japan and other countries in this particular field widened further during hostilities.

As the output of receiving sets increased, prices, quality and models became diversified. Moreover, since there were some very low-quality re-

ceivers among them, the people were often confused over the selection of sets. The "Approved Receiver System" NHK established in 1928 indicated the standard of selection to the people on one hand and served to promote improvement of the makers' production techniques. This was the first step NHK had taken towards intervention in fields other than purely broadcasting. This was intended to evaluate the quality of the receiving sets and to recommend better ones to the people as NHK approved types. After the establishment of the system, large number of requests for evaluation were made by manufacturers, but very few cases passed NHK's tests. In such situation, manufacturers of better sets were unable to meet the demand that increased rapidly after the Manchurian Incident, and as a result, the market was flooded with sets of very poor quality.

NHK therefore conceived the idea of going a step ahead of approving the receivers and designate "standard receivers" to break through the situation by unifying the specifications both from the manufacturing and maintenance aspects. Plans for designating such receivers, as a matter of fact, had been under consideration since 1936, but it so happened the hostilities with China began the following year. And with the adoption of the policy for controlling consumer resources, the standardization of receiving sets more easily materialized. In other words, the "broadcasting station type" receivers designated in January 1938 corresponded to the materialization of this standardization system. This (1) resulted in the construction (circuit system, specifications and arrangement of components and cabinet) and performance of the receiving sets under certain standards; (2) set the prices; (3) selected the makers having facilities deemed adequate by NHK for production and testing of trial made product; (4) provided for inspection of the sets by NHK before shipment. Receiving sets thus designated included the three-tube and four-tube types using magnetic loud-speakers.

The system met with strong opposition from the manufacturers as being an intervention in their operations. However, as the government chose to support this system and favourable conditions, such as priority on allocation of materials and exemption from commodity tax, were accorded those conforming to the system, the manufacturers were obliged to follow the production procedure whether they liked it or not. In those days, there were more than 60 receiving set makers in the country, but only 15 experienced and trustworthy manufacturers were designated as being qualified to produce the sets under the NHK system. Among the most popular products were the "National" (Matsushita Electric Industrial Company), "Televian" (Yamanaka Electric Company), the "Nanaola" (Nanao Electric Company), the "Hermes" (Osaka Radio Company) and the "Sharp" (Hayakawa Electric Company).

With the outbreak of the Pacific War as the turning point, all industries were placed under more rigid control in accordance with the policy of uniformly directing them towards expansion of munitions production. And even the radio manufacturers, who collaborated with the spread of radio receivers under the protection of the government and with the object of providing "one receiver for every household", could not escape from the effect of such a policy. Mergers and reorganizations of enterprises were questions inevitably considered along with further tightening of the controls. The year 1942 saw the turning point for the radio receiver manufactures,

for in September, the "Radio Receiver Control Association" was formed with 22 leading makers (7 more were added later) as members, and only these were qualified to obtain allocation of materials for receiver production from the competent government agency. Consequently, types of receiving sets manufactured by them were limited almost completely to the "broadcasting station types", since they were manufactured with controlled materials allocated to the makers. Also, as an agency for distributing the receivers produced by the aforementioned makers, the "Radio Receiver Distributing and Controlling Company" was organized in December of the same year.

However, as the war situation turned more and more against Japan, the output of radio receivers declined and the prices of components went up along with those of the receivers. The government, therefore, had to meet the situation through price controls. For the purpose of securing materials not only for receiving sets but also for maintenance and repairs of those already in possession of the receiving contractors NHK repeatedly negotiated with the competent government agency for allocations, but was unable to obtain satisfaction. In the manufacture and maintenance of receiving sets, stress was laid on how the limited materials available could be utilized effectively, but the output not only fell short of the expected level but because of the low quality of materials available and the necessity to use substitutes, the makers were driven to circumstances under which maintenance of the minimum requirements of the specifications was all that they could do.

3. Sales of Receiving Sets

In the early period after commencement of the broadcasting service, large numbers of radio dealers, bent on breaking through the business recession by riding on the crest of the radio boom, cropped up. Most had experience in the sales of electrical appliances, but not a few of them had changed their business without any knowledge of radio engineering simply because they saw good prospects in this field. As a result, it took some years before the radio dealers began to show sound and trustworthy business management.

In February 1925 the Tokyo Radiotelephone Dealers' Association was established by business operators located within the coverage of the Tokyo Station for the purpose of acting as a liaison agency among such dealers. Since then similar associations were formed both in Osaka and Nagoya. In June of the following year, these associations combined to form the Federation of Radio Dealers' Associations of Japan and absorbed most of the radio dealers' associations in the country. Official contacts between NHK and radio dealers began when NHK entrusted the associations to act as intermediaries in concluding receiving contracts with individual listeners. Subsequently, the relationship between the two grew closer through collaboration in the promotion of the spread of radio receivers. However, as there were certain discrepancies between the dealers, who operated their business for the sole purpose of gaining profit, and NHK which claimed to be a public service organization, it could not be said that the relationship was always amicable. In cases of deciding on the establishment of the aforementioned

system of approved receiving sets and the standard receiver system, or in arrangements for receiving set repair procedures, NHK faced strong opposition from the dealers. On the other hand, NHK, which stood far above the others both in financial capacity and public trust, had to consider aiding the dealers' business operations.

Plans the dealers drafted and implemented in cooperation with NHK for the purpose of improving sales included special sales of receiving sets sponsored by the radio dealers' associations with the support of local NHK stations. Since the function was planned and executed in 1930 by the Osaka Radio Dealers' Association, other similar bodies through the country followed suit, and special year-end and new-year sales, in commemoration of the commencement of broadcasting or in commemoration of the securing of so many receiving contractors began to take place almost every year. As these functions helped to increase the receiving contractors, who were the sole financial sources of NHK, the corporation frequently subsidized the associations or contributed printed publicity leaflets, to assist from the side lines.

The number of radio dealers increased from year to year along with increase in the number of listeners; the total number of such dealers, in fact, had reached the 9,000 mark about the time hostilities with China broke out, and when the Pacific War started, there were more than 15,000 radio dealers in Japan. However, as estimated from the number of receivers handled by the dealers, the average number per dealer must have been no more than 30 sets a year. The business of these dealers depended more upon income from repair work and replacement parts than on the sales of new sets. However, as the power companies, which had enormous financial resources, became more active in selling radio receivers, smaller operators could not compete. Even at about the time of the outbreak of hostilities with China, operators specializing in sales and repairs of radio receivers were very few, most of them concurrently selling other electrical appliances.

The power companies joined the field of radio receiver marketing after 1930, when dissemination of alternating current radio receivers started. Their sales efforts bore far better fruit than those of the radio dealers, and the number handled by these companies increased year by year. In the number of cases of receiving contracts handled by the power companies, too, a little more than 30,000 for 1934 had increased by about 12.7 times to 380,000 by 1941. On the other hand, the number handled by the radio dealers increased only by 2.6 times. The power companies thus accounted for 26 per cent of the total number of cases of receiving contractors against 37 per cent for the radio dealers.

For the power companies, sale of one alternating current receiving set was equivalent to more than an increase of one electric light. In this sense, their position was different from that of radio dealers whose profit was limited only to the one time they sold a receiver. In the circumstances, the power companies were not obliged to place importance on the profit accruing from sales of receiving sets. As a matter of fact, their sales prices were often considerably lower than those of the radio dealers. This arose from the fact that the power companies, with huge capital, were able to purchase large quantities of receivers direct from the makers. Moreover, as the power companies offered help in the work of extending the power

supply lines for the radio sets they sold, they were in a position to outdistance the radio dealers in selling receiving sets to people living in remote areas where daytime power supply was still absent. However, since the power companies, from the very nature of their main business, had no salesmen specializing in the sales of receiving sets, their usual practice was to undertake special sales during certain fixed periods. The power companies were also without adequate repair and maintenance personnel and facilities where defective sets could be fixed and components could be replaced. On these points, they were not in a position to compete effectively with the dealers.

In any case, marketing of receiving sets by the power companies created a strained relationship between them and specialized radio dealers. Meanwhile, as a result of NHK's efforts at easing the friction between them, some power companies agreed to provide aid for the dealers' sales plans, and even to cooperate in the extension of power lines so as to provide daytime power as well as at nighttime. Some also joined the radio dealers in drafting sales plans. Moreover, under wartime control of resources, power and even labour, the activities of the power companies in the field of radio receivers were gradually restricted, and this was another reason for closer relationship between them and the dealers.

4. Repair Work and Interference Prevention

It was undeniable that, from the state of radio engineering at the commencement of the service, there was certain public mistrust of the engineering skill. Initially, NHK's views on this matter were divided. Some claimed that NHK itself should undertake repair work on receiving sets to provide servicing that would be satisfactory to the subscribers. Others considered that this would interfere with the business of radio dealers and, moreover, with the facilities available to the Corporation, adequate repair service would be impossible. Ultimately, NHK decided to set up a "radio consultant office" at each local station to provide free service in examining the receivers, including the state of components, while leaving the actual repair work and replacement of components to the radio dealers.

In the early stages, people took advantage of these "radio consultant offices" very frequently. In 1928, as a matter of fact, they handled as many as 20,000 cases, but four years later (1931) these had increased by seven times to 140,000 at 27 locations. Later, these offices took steps to station technicians for a certain period at specified locations, or organized mobile teams to go round and provide diagnostic consultations on the receivers, thus expanding the work in this field. The scope of work undertaken at the consultant offices, however, was limited, excepting repair work not requiring charges, to indicating defective parts and components that should be replaced, and the remainder was left in the hands of the servicing operators.

Since its establishment, NHK has been providing periodical refresher courses for repairmen in order to help improve their skill. And as need for measures for maintaining receiving sets in good condition became acute along with the increase in receiving equipment, NHK designated most of the repairmen, who had gained high-level skill at these training courses, as

qualified to serve as specialists at the radio consultant shops designated by NHK in June 1936. These consultant shops had to be provided with facilities specified by NHK, and specialists in repair work who had passed the radio technician's examination given by NHK were to be considered highly skilled and trustworthy. These were the conditions NHK specified in designating repair shops as being qualified under NHK standards. These shops, in addition to diagnosing and servicing receiving sets, were frequently commissioned by NHK to organize mobile servicing teams to cooperate in the consultation work as well as in implementing measures designed to prevent interference with reception.

After this system was established until March 1941, NHK designated 2,363 servicing operators or 16 per cent of the total number of radio dealers as qualified shops. The ratio was not necessarily high, but their activities, maintaining very close collaboration with NHK's radio consultant offices, covered a wide field, handling large numbers of cases. In particular, as the decrease in the output of receiving sets during the Pacific War necessitated maintenance of the existing receiving sets for utmost utilization, the role played by the designated consultant shops in such maintenance and repair could not be underestimated.

Noise and interference were present even from the beginning of the broadcasting service, but since the listeners in those days were satisfied if they could just listen to the programmes with their crystal and battery-operated sets on which they depended until about 1928, such problems did not unduly bother them. However, when more alternating current receiving sets and electrical appliances in general began to be used, electrical interference with reception rapidly increased.

Such interference with reception was common in all the countries. In Japan there was a marked interference by regenerated radio waves. With the development and widespread use of electrical appliances, of radio therapy devices for home use, in particular, interference caused by such devices became disturbing. In fact, as many as 10,000 cases of such interference were reported throughout the country in 1933. Therefore, the Radio Reception Interference Prevention Committee including representatives of competent government agencies, academic societies, power companies, electrical appliance manufacturers and NHK as members was established in October of the same year. The Committee undertook studies of the means of preventing interference and the legal measures necessary to accomplish the purpose.

The most common source of interference with radio reception was found in the regenerative radio frequency system radio receivers. This was followed by radio therapy devices. In the case of the latter, however, noise suppressor-provided devices began to increase, and since the boom for such devices for home use died down, noise and interference from this direction tended to decrease. With respect to noise generated by the regenerative radio frequency, a nation-wide campaign for its prevention was unfolded in 1936, with the aforementioned Committee acting as the motive force. In this campaign, efforts were made to provide information on the proper handling of such radio receivers, while at the same time promoting servicing of the receivers which had developed defects in one way or another. At the NHK Technical Research Laboratories, efforts were made in dis-

covering non-interference receiving circuits which suppressed regeneration of radio frequency, and this point was particularly emphasized in designing the "broadcasting station type" receiving sets.

Meanwhile, legal control measures related to the disturbingly loud sounds coming from radio receivers as well as of interfering noise were promulgated in most of the prefectures in the country between 1936 and 1940. There had been no legal means of controlling interference of radio reception by electrical appliances in general, but the aforementioned campaign and efforts of the Communications Ministry and NHK finally bore fruit. Under these measures, it was made obligatory for the owners of electric equipment interfering with reception of radio programmes to provide some means of suppressing such noises.

5. Broadcast Programme Preferences by Listeners

Surveys regarding attitudes of the listeners towards broadcasts, their preferences, desires and criticisms of programmes was an important work from the standpoint of the management of the broadcasting service. At the commencement of the service, no criteria for programming were available, and daily programmes had been produced on the basis of casual notions held by individual producers. In the days when the listeners were satisfied simply to listen to any programmes, such method was adequate. But with the rapid increase in the number of listeners and cultivation of a critical attitude on their part, some objective basis for reflecting the preferences of listeners became necessary.

Broadcasting stations under NHK have more or less undertaken surveys of the preferences of listeners towards programmes from the very beginning of the service. What can be stated in general terms on the basis of the results of such surveys was that the function of broadcasting for providing entertainment was evaluated most highly until about 1931, when the Manchurian Incident took place. In the survey conducted by the Tokyo Station between November and December 1926, it was found that 65 per cent of listeners preferred entertainment programmes. In the survey undertaken at the Osaka Station between April and September 1931 the ratio was also as high as 58 per cent. By that time the novelty of broadcasting had faded, and the function of enlightenment inherent in broadcasting had been generally recognized, yet what the listeners demanded of radio was still entertainment.

In spite of such a trend, just about equal time was allocated respectively to news, cultural and entertainment programmes, and it must be particularly noted that more importance was attached to the production of news and cultural programmes (see Chapter 7 "Broadcast Programmes", Section 4). In short, it was the original policy of NHK as a public service organization to take up what should be considered more important even though ratings of such programmes might be low. Moreover, educational programmes were further enriched through the establishment of the second network at the Tokyo Station in 1931. Also, after the Manchurian Incident which took place the same year, news programmes and those related to commentaries on news increased. As a result, the weight of entertainment programmes somewhat declined.

The basic survey related to radio undertaken between May and August 1932 using all the 1,230,000 receiving contractors as subjects was aimed at finding out the types of receiving sets they operated, their preferences in regard to broadcast items and opinions on the business management policies of NHK; but the principal aim was securing of data on broadcast programmes. From the results of this survey the best five programmes in the respective divisions were selected as shown in the following table.

The table gives the overall result derived from subjects tabulated separately by age, sex, occupation and localities, such as urban and rural areas, and it was found that there were some differences in preferences according to the above classifications. For example, foreign language courses presented since the beginning of the service occupied a position of considerable importance in programming, but the listeners comprised almost entirely male students living in urban areas. For this reason, their rating ranked no higher than the seventh in the order of preference tabulated above.

As is clear in the table below, the interest of listeners in the news reporting function of broadcasting was very high, and this could be applied to all classes of people. The survey mentioned above was conducted in 1932 when hostilities that broke out in Manchuria had spread to Shanghai, an important city in the Chinese Continent. Since then Japan's position in international politics and diplomacy has come to assume greater tension. It was inevitable that radio news reporting such events and commentaries related thereto should stimulate people to take greater interest in listening.

The outbreak of hostilities with China in 1937 was a great shock to the general public and listeners rushed to radio shops and demanded speedy repair work on defective sets. So great was the desire to listen to news. Even as newspapers in Japan achieved outstanding growth during the Sino-Japanese and Russo-Japanese wars and World War I, broadcasting achieved unprecedented growth during the hostilities with China. The auditory sense of the entire nation concentrated on the radio, and it was the general tendency to confirm what was heard on the radio with newspaper articles.

In July 1939 NHK undertook a survey on programme preferences on newly signed subscribers and their motives for subscription. This survey showed their preferences in the order of news (42.4%), naniwabushi a Japanese form of ballad, (36.0%), talks (14.8%), stage entertainment

Table (No. of persons per 100)

Division	1st	2nd	3rd	4th	5th
News	News (91.2)	Time announcement (77.5)	Weather forecast (75.8)	Radio exercise (48.0)	Government announcements (42.3)
Cultural programmes	News commentar- ies (29.4)	Culture (28.1)	Hobbies (22.3)	Hygiene (22.0)	Women (20.7)
Enter- tainment	Rakugo, mandan (57.6)	Naniwabushi (57.5)	Radio dramas (51.2)	Film, stories (49.3)	Kodan (48.0)

(12.1%) and popular songs (8.6%). The motives in the order of higher percentage were (1) to obtain news as soon as possible (18.1%), (2) to deepen recognition of the war situation (12.7%), (3) to seek entertainment (7.0%) and others. This tendency just about coincided with the motives of the existing listeners. Moreover, ratings of news reports rose rapidly along with expansion of the scope and intensity of hostilities, and this trend did not change until the end of the Pacific War.

Entertainment programmes enjoyed popularity next to news as a means of escape from the oppressive wartime atmosphere. Of course, under the government policy popular songs with so-called decadent melodies and words, light music like jazz and imported sports, baseball in particular, which enjoyed high ratings, were placed under control. On the other hand, with prolongation of hostilities, more active presentation of entertainment programmes was promoted in order to enliven the depressed feelings of the public in general and to improve the efficiency of the working people. Traditional Japanese entertainments like naniwabushi, kodan and rakugo and popular songs adopting Western melodies and vocalization thus became popular among the listeners. However, themes handled in these items had to be contributory to the strengthening of the war effort. Among enlightening programmes, those directly aimed at promoting national policies were generally lower in rating than news and entertainment programmes. In particular, it became more difficult to attract the attention of the people to such programmes as the war situation became further intensified. In the circumstances, the government thought that the wisest and the most effective means to suggest national policies was through entertainment programmes.

Aerial attacks on Japan proper by enemy planes began towards the end of 1944. The listeners, placed under the air defence situation, generally left their receiving sets tuned to information broadcasts as soon as air raid warnings were sounded. They even took their receiving sets into dugouts in their desire to follow the movements of enemy planes. In the face of critical danger to life and property, receiving sets served as the people's antennae and guides to action. Immediately before Japan's defeat, radio receivers could be considered a necessity of life in the full meaning of that term.

6. Critique of Broadcasting

Requirements of listeners towards broadcasting and their opinions could roughly be sensed through programme preference surveys undertaken by NHK from time to time and through letters from the listeners. Most opinions, however, were concerned with the contents of programmes and engineering which were apparent to them. Preferences and opinions expressed on the basis of the fact that prewar broadcasting reflected the government's policies and was conducted under government supervision (see Chapter 6, "The State and Broadcasting", Section 3) were generally aired in newspapers and magazines. These articles were written by intellectuals and journalists, and not a few pointed out the weaknesses of broadcasting from the aforementioned point of view. What occupied the greatest weight in their criticisms of broadcasting after the outbreak of the Man-

churian Incident, were none other than their uneasiness and doubt as to whether broadcasting was reporting the true facts in the political, economic, diplomatic and other policies of Japan. This arose from the fact that not only the general public but even politicians belonging to opposition parties were not permitted to criticize policies or discuss politics on the radio (see Chapter 7, "Broadcasting Programmes". Section 6).

A certain well-known writer in speaking of the information transmitting function of broadcasting once said, "Because I keenly feel the power of general publicity possessed by broadcasting, and to go a step forward, its great instigating power, I hope that no composite pictures concocted by wrong ideologies will be presented in the daily reports of social events. When I see the servility of the radio to the government after the outbreak of the Manchurian Incident, my hope in that direction grows much stronger." "Current Report on Surveys" edited by NHK, (January 1932). The writer thus expressed doubt as to whether news broadcasts after the Manchurian Incident were not reporting exaggerated facts or really reporting the truth. Also, a certain high-ranking journalist of the Tokyo Mainichi Newspaper in the same magazine said, "As long as news broadcasts must be accurate and reliable as news, it should never be permissible to press upon the listeners news items selected and judged subjectively by NHK even though it may be a monopolistic broadcaster." Thus, it was noteworthy to see such a strong demand for the objectivity of news broadcasts.

In those days when the general public trusted the government implicitly, listeners' impressions from radio news were in a way different from these received from newspapers, and there were some who undoubtedly believed that since NHK was a government agency, there could be no errors in news broadcasts. As a matter of fact, "the radio news said so" even became a password for endorsing reliability.

A certain high-ranking officer of NHK, on the other hand, commented criticisms of broadcasting by the intellectuals: "There are views that NHK is serving as an organ for disseminating reactionary ideas. This simply means that, because of NHK's relations with the government and the government control of broadcast programmes, NHK's organization and systems included factors easily subject to becoming reactionary; there was no legal provision that it had to become so. In short, the matter was dependent upon the conscience and the determination of the responsible programming personnel". Such an opinion maintained by the people at NHK, however, could not help being suppressed as the powers of fascism revolving around the military faction gained ascendancy.

Contrary to the intensified interest of the general public in news and news commentaries from the outbreak of the Manchurian Incident, the reaction of the intellectuals towards broadcasting was not so outstanding. Among those who were able to obtain detailed information from newspaper articles, not a few considered radio news as of secondary significance. Consequently, their attitude towards broadcasts was rather that of indifference arising from their loss of desire to express dissatisfaction or opposition to news and news commentaries.

When hostilities with China began, demand for news and related programmes naturally increased among listeners. On the other hand, it was entirely possible that there would be some who would be dissatisfied with

reductions in entertainment programmes to make room for floods of such items. But how did the intellectuals react to the government's attempt to propagandize national policies through entertainment programmes? The monthly magazine "Bungei Shunju" published a questionnaire in its January 1941 issue on the subject "Are radio programmes interesting these days?" To this question, 68 people answered that they were interesting, 607 people said they were not, and 10 said they did not know. Many people, therefore, were dissatisfied with the flooding of the air with current events and preaching entertainment programmes.

Among the answers there were some criticisms of broadcasting by intellectuals. Such opinions claimed that the radio should be, so as to say, a pleasant companion. Plenty of memoranda convenient for daily life, fresh topics and music of higher quality should be presented, and excellent radio dramas or exciting recordings or field pickup programmes are also desirable once in a while. It is only when the radio produces these that listeners will become its real friends. Broadcasting will be a help to establishing an adequate wartime setup only on the premise of such daily utility. In short, such criticisms demanded a broad reduction in programmes dealing with current issues and enhancement of the radio daily utility.

Meanwhile, severe criticisms of radio news and other current topics rapidly disappeared after the outbreak of the War with China. This resulted from the tightening of government control and direction of mass-media like broadcasting, newspapers and films, and a stronger demand for collaboration with the execution of the war. Consequently, the freedom of the press for openly criticizing policies underlying the contents of broadcasting programmes was lost. Upon entering the Pacific War, the government tightened the control of cultural activities to the extreme, and in order to suppress all conducts considered uncooperative with the war effort, it passed the Law for the Provisional Control of Speech, Press, Meetings and Organizations.

As a result, expressions of opinions regarding the reliability of the contents of broadcast programmes centered on news completely disappeared; and now what opinions were expressed consisted principally of those concerned with terms and modes of expression used in newscasts. For old people and women who were unable to read newspaper articles easily and quickly, the radio was practically the only source of information on the war situation. Consequently, it was a matter of real importance for these people that the radio news could be easily understood. Indeed, many letters were sent to NHK complaining that radio news were difficult to understand. NHK, therefore, made efforts towards improving news scripts on the basis of the studies made by the existing "News Terms Survey Committee" (see Chapter 7, "Broadcasting Programmes", Section 2).

II

Postwar Period (1) —From controls of broadcasting by GHQ to promulgation of the Broadcast Law—

1. Without desks and without blackboard, the teacher conducts outdoor class work around a radio receiver which had escaped the fangs of war fire. 2. The quiz programme "Twenty Questions". The first broadcast of this programme took place on 1 November, 1949. 3. NHK Radio & TV Culture Research Institute established in June 1946. Scientific public opinion surveys have been undertaken periodically. A scene of a survey by interview. 4. Audience participation programmes, such as "Amateur Talent Contest" became highly popular. The first national contest for amateur talents 21 March 1948.



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1. The Helsinki Olympics in which Japan took part for the first time after the war. ④ Japanese athletes entering the arena. ① Announcer reporting the events. 2. The Japan's Overseas Radio Service was resumed on 6 February, 1952. ③ Poster announcing resumption. ② NHK Symphony Orchestra performing in the celebration programme. 3. Turnstile transmitting antenna for experimental telecasting. This was erected on the roof of the Tokyo Headquarters of NHK (1 October, 1952). 4. TV channel linking Tokyo, Nagoya and Osaka was completed via the TV antenna on top of Mt. Ikoma in Osaka. 5. The microwave rebroadcasting station on Mt. Futago, Hakone.



INTERNATIONAL BROADCAST

Starts



For North America
 Via Philadelphia 4:00-5:00 PM
 Via London 5:00-6:00 PM
 For North China
 Via London 5:00-6:00 PM
 Via Moscow 6:00-7:00 PM
 For Central China
 Via Moscow 6:00-7:00 PM
 Via London 7:00-8:00 PM
 For Southeast Asia
 Via London 7:00-8:00 PM
 Via Moscow 8:00-9:00 PM
 For South America
 Via London 8:00-9:00 PM
 Via Moscow 9:00-10:00 PM
 For Africa
 Via London 9:00-10:00 PM
 Via Moscow 10:00-11:00 PM
 For Europe
 Via London 10:00-11:00 PM
 Via Moscow 11:00-12:00 AM

The Broadcasting Corporation of
NIPPON HOSO KYOKAI *Japan*



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a
b



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4



5

I. Broadcasting of Transition Period

1. Early Broadcasting Policy of GHQ

At noon on the 15th August, 1945 Japan accepted the Potsdam Declaration. In other words, the conclusion of the Pacific War was announced to the people of Japan through the Emperor's broadcast revealing Japan's unconditional surrender to the Allies. At the same time, Japan found itself at a great historic turning point. Intensified aerial attacks during the closing period of the war had devastated the broadcasting facilities, and reduced the number of receiving contractors. Now NHK, which had been forced to collaborate in the execution of the war, had, with the entire nation, to face defeat, the first such experience recorded in Japanese history, and to adapt itself to the new situation arising from occupation by the Allied Forces. However, the new age, from the occupation policies of the Allied Powers and their developments, was not necessarily a lamentable period for the broadcasting service.

The initial period of the Allied Occupation was characterized by the adoption of the principle of indirect rule through the Japanese Government, which was placed under the supervision of the Supreme Commander of the Allied Powers (SCAP). As a result, there was almost no instance of the Allied Forces exercising their powers directly upon the people of the defeated nation. The General Headquarters (GHQ) of the Allied Forces, which had decided to enforce such occupation policies, issued directives one after another to the Japanese Government regarding demilitarization and democratization of Japan as stipulated in the Potsdam Declaration. Occupation, of course, was the work of the Allied Powers, but because of the leadership shown by the United States during the war, as well as the enormous sacrifices made by that country for the war effort, occupation measures were enforced mostly from the American viewpoint. The basis for such policies is found in the "Initial Policies Towards Japan after Surrender" announced by the American Government on the 22nd September, 1945. This document was based on the policy that all elements resembling militarism and nationalism should be eradicated so that "Japan will not again become a threat to the United States" and "democratization of Japan" will be promoted in order to "establish a peace-loving and responsible government that will support the American objectives". Consequently, while the views of the Allied Powers had been reflected in policies for such democratization during the early stages, it was clear that the ultimate objective was to enlighten the Japanese people towards the promotion of American world policy so as to make this country a better supporter of the United States. As means to this end GHQ attached importance to the functions inherent in broadcasting, newspapers, and other publications as well as films and expected much through effective utilization of such mass-media.

The first directive issued on the 2nd September by GHQ simultaneously with the historic signing of the Instrument of Surrender was related to the dissolution of the Japanese military organization and munitions industries. Following this, another directive related to mass-media, including

broadcasting, was issued as of the 10th September, in the form of a "Memorandum concerned with the circulation of news". This indicated the standards for editing newspaper articles and broadcasting programmes and regulations against infringements of the standards. Through this Memorandum, freedom of speech and the press, which had been inhibited for a long time prior to and during hostilities, was regained. On the other hand, orders were issued to the effect that news shall be true to facts, be faithful to the policies of the Allied Powers and refrain from skeptical criticisms of the Allied Forces. Incidentally, NHK's overseas service, which was active during the war in international propaganda and sometimes for strategic purposes, was prohibited on that day, thus limiting broadcasting to within the country.

Following the aforementioned Memorandum, other directives related to mass-media were issued. That issued on the 19th September provided the "Press Code for Japan", and the one issued on the 22nd September provided the "Radio Code". In those days when the occupation objective of the Allied Powers rested in the democratization of Japan, these directives were frankly accepted at their face value. As a result, the supervisory powers of the Japanese Government over mass-media disintegrated in fact, the Information Bureau, which had exercised powerful control during the war, was reduced to a mere transmitting organ of such directives and at the end of 1945 it was completely dissolved.

Gleaned from the contents of various memoranda, the broadcasting policies of GHQ during the initial stages of occupation can be summarized as follows: The first point was the establishment of the freedom of broadcasting independent of the national powers. In order to endorse this policy, all regulations related to the control of broadcasting programmes included in the prewar laws and regulations were abolished, and censorship of programmes by the government was suspended. As a result, broadcasting, except for partial supervision of the facilities, engineering and business operations connected with the corporation, was separated from government control. The second point was the protection of the interests of the Allied Powers and the Occupation Forces. This policy, which was explained in the Memorandum issued on the 10th September, was further clarified by the Radio Code outlined in the next section. As a result, broadcasting of items contrary to the interests of the Allied Powers and the Occupation Forces was strictly prohibited. On the other hand, the policy included advice provided for the establishment of programme items contributory to the promotion of democracy and guidance in the selection of contents for such items, thereby contributing to the enlightenment of the Japanese people. The third point was concerned with the securing of means of facilitating the administration under the occupation, and intended to assure conveniences required for expediting occupation policies in connection with broadcasting, but was more concerned with the engineering aspect. One concrete measure taken by GHQ on the basis of this policy was the issuance of a directive dated 10th September which limited programming, for the time being, to news, entertainment and musical items, but news and news commentaries and announcements could be presented only from the Tokyo Station. A directive was also issued dated 20th November to the effect that all changes in the allocation of radio frequencies, including those

for broadcasting and output power must be registered with and authorized by GHQ. Also, at the end of August, the month in which the Occupation Forces landed in Japan, GHQ notified NHK that the broadcasting facilities would be requisitioned for the Armed Forces Radio Service (AFRS).

2. Broadcasting Control Organ of GHQ

In direct charge of the supervision of broadcasting for the implementation of GHQ's broadcasting policy was the Civil Communications Section (CCS) which belonged to the special administrative division and the Civil Information and Education Section (CIE). The former concerned itself principally with the broadcasting facilities, engineering and legal measures, while the latter took charge of directing programmes. Like the general supervision of Japan, GHQ's handling of broadcasting followed the principle of indirect control through the Japanese Government. It was, therefore, common practice to transmit orders and directives to the competent administrative agencies of the Government through CCS and CIE. However, direct guidance and censorship were exercised in the field of programming and the selection of contents.

Censorship of programmes was in the hands of the Civil Censorship Division (CCD), which was under the Staff Division in charge of general information as well as tactical information services. In addition, GHQ sections indirectly connected with the supervision of broadcasting included the Legal Section (LS) and the Government Section (GS). The duties of these were mainly the review of legal problems, such as the Broadcast Bill, submitted by the Japanese Government, from the legal and political aspects. Also, when NHK wished to increase the receiver's fee, the Economic and Scientific Section (ESS) participated in reviewing the plan.

CCD, which took charge of censoring programmes, and CIE, which was responsible for providing guidance in programming in close collaboration with the former, took over part of the NHK Building in Tokyo as soon as GHQ was established. The dual measures consisting of censorship and direction were executed on the basis of the Memorandum Related to the Radio Code, issued to the Japanese Government on the 22nd September. This Memorandum contained a number of points common with those in the press code, since both were expanded and substantiated versions of the Memorandum Related to News Circulation issued on the 10th September. Principal items contained in this Memorandum were as follows:

- (1) News broadcasting
 - a. News broadcasting shall adhere strictly to facts.
 - b. No broadcasts containing items likely to disturb the public peace, either directly or indirectly, shall be presented.
 - c. No false or destructive criticisms of the Allied Powers shall be permitted.
 - d. Movements of the Allied Occupation Forces shall not be announced except such as have been revealed to the public.
 - e. Contents of news shall be completely devoid of editorial views.
- (2) Entertainment programmes
 - a. These shall conform to the requirements for news broadcasts as cited in (1).

- b. No themes considered as furthering propaganda shall be permitted regardless of the purposes of such propaganda.
- (3) Information and cultural programmes
 - a. Data, their interpretation and editing, shall be based on facts.
 - b. No data shall be in the nature of propaganda.
 - c. No comments and statements having the tendency of disturbing public peace shall be permitted.
 - d. No data likely to be interpreted as harmful to the relations among the Allied Powers or casting a slur upon any of the Allied Powers shall be used.

(4) Advertisement programmes

In case any commercial house makes use of the radio for purposes of advertising, such usage shall strictly conform to the aforementioned policies.⁽¹⁾

The control of broadcasting undertaken by the aforementioned sections of GHQ, however, began to show subtle changes from the middle of 1946 in the light of the turn of the Far East policy of the United States, which was the principal occupying power, towards early independence of Japan because of differences of views with the Soviet Union in international politics. As a result, authoritative control, which was apparent in the early stages of the occupation, was gradually eased. In this process, NHK also gradually regained autonomy in business management. The pre-broadcast censorship of programmes was changed to post-broadcast censorship from August 1947,⁽²⁾ and all censorship ceased completely in October 1949. Of course, the Radio Code remained effective until April 1952, when the Peace Treaty was signed and went into effect. Viewed from the domestic and international situation revolving around GHQ's Anti-Communist policies and Japan's dependency on the United States,⁽³⁾ it must be said that the Radio Code contained not a few points that no longer conformed with actual conditions. Broad freedom and responsibilities for programming were

(1) It was not clear whether the advertisement programme standard provided in Item 4 of the Radio Code postulated the possibility of establishing commercial broadcasting in the future or envisaged advertisement broadcasting, which had been prohibited strictly, by NHK, which was a public service corporation. As will be seen later, this matter, however, made the Japanese Government and NHK gravely concerned over the possibility of introducing some innovation into the broadcasting policy of Japan then in force, i.e., that of unified monopolistic operation by NHK. It appears that the basic broadcasting policy had not been definitely decided at GHQ when this Memorandum was issued.

(2) Among mass-media placed under CCD censorship, broadcasting was the first to shift to ex post facto censorship. Broadcasting was followed by books in October, records in November and magazines in December 1947. With respect to newspapers, however, ex post facto censorship was adopted gradually with local papers after the turn of the year, and it was not until July 1948 that newspapers in the major cities like Tokyo and Osaka, papers published by news agencies and the Communist Party organ "Akahata" were placed under post censorship. Censorship of these mass-media was rescinded in October 1948. The aforementioned "Akahata" was indefinitely suspended by order of GHQ after the outbreak of the Korean War in June 1950.

(3) The Potsdam Ordinance (ordinance based on the "Item Related to the Order Issued in Connection with Acceptance of the Potsdam Declaration" (Imperial Ordinance 542, 1945) issued in April 1949 provided for enforcement of the Organizations Control Ordinance. This prohibited establishment of militaristic and anti-democratic organizations and provided procedures for public announcements of the internal affairs of political parties, but its real object was suppression of the activities of leftist organizations. This Ordinance required registration of the members of the Communist Party. Seen from the consequences of the registration, it at least served as effective data for the "red purge" that took place the following year. The cabinet formed by the conservative party, which had faithfully implemented the occupation policy since the end of the war, followed the course of "heavy dependency" on the United States which offered advice and aid for economic rehabilitation, thus naturally fostering an anti-Communist trend.

transferred to NHK through the abolition of censorship, and what further endorsed this fact was the legislative spirit of the Broadcast Law, which was promulgated under advice and guidance of GHQ in 1950 (see Chapter 2, "Process of Establishment of the New Broadcasting System", Section 4).

Guidance provided by CIE on programming soon after the establishment of GHQ in Tokyo emphasized democratization of Japan. The method of guidance was not limited only to the contents of the programmes but touched upon programming patterns and production (see Chapter 4, "Broadcasting Programmes", Sections 1 and 2). The guidance was, on the whole, provided amicably on the basis of exchange of opinions and ideas between CIE and NHK personnel in charge of programming, but there were not a few cases in which opinions in an American style of thinking were forced upon the Japanese. However, large numbers of improvements were introduced into programming through such guidance, and most of these are still being followed in NHK's and commercial broadcasting even today as basic standards for programming and production. In this sense, it is impossible to underestimate the contributions of CIE to the development of the broadcasting service in Japan.

Registration with GHQ of all radio frequencies, including broadcasting frequencies, was required by the Memorandum Related to the Control of Telecommunications issued on the 20th November, 1945. And allocations and changes of frequencies had to be authorized by GHQ. On the other hand, GHQ reported all frequency allocations to the International Telecommunications Union (ITU) Secretariat. Despite the fact that Japan was a member of ITU, its rights of having a voice in international negotiations were restricted because of defeat in war. However, when GHQ notified the Japanese Government of its recognition of autonomy in the radio frequency administration in October 1949, international registration of frequencies was put in the hands of the Radio Regulatory Agency which was then in charge of radio administration.

Control over radio by GHQ was gradually eased from about 1949 along with the policy of abolishing censorship of broadcasting programmes. Furthermore, the directive prohibiting overseas broadcasting, which was issued immediately after the occupation, was rescinded, and a notice permitting its resumption was sent to the Japanese Government. The Government, however, decided to clarify the basis for the overseas service in the new Broadcast Bill then under deliberation and adopted the policy of waiting till the Bill passed the Diet before considering a concrete programme for the service. As a result, resumption of overseas broadcasting was delayed until February 1952, when NHK was appointed to operate the service.

3. Democratization of Business Management

It was extremely difficult for NHK to determine the future direction of the broadcasting service amid the miserable feeling of liberation under peace brought about through defeat. Moreover, the Corporation was a unified monopolistic organization of nation-wide scale specially licensed by the government as a public enterprise. It had been operated under government supervision, and during the war undertaken all-out collaboration with

the authorities for the prosecution of the war. In the circumstances, with the occupation of Japan by the Allied Forces, some people were gravely concerned about the possibility of an order being issued for complete dissolution of NHK.

This concern was also held by some government officials. The Board of Communications (reorganized Ministry of Communications), gravely concerned about the confusion that might ensue in the event such a situation occurred, conceived the idea of establishing American style commercial broadcasting companies in addition to NHK. The Board, therefore, obtained approval of the Cabinet on this idea towards the end of September 1945 and applied to GHQ for approval of the plan, but received no reply to this proposal. However, the broadcasting policy of GHQ, which began to reveal itself through various memoranda issued along with progress of occupation administration, was found to be based on the democratization of broadcasting by separating it from the national authority. Meanwhile, regarding the form of NHK's business operation, for the time being, GHQ adopted the policy of recognizing the status quo.

Under this situation, NHK finally realized the future objective towards which it should advance hereafter, and that the first step it should take was to obtain autonomy in its business management. As stated already (see Section 1), the government's regulations related to the control of broadcasting programmes were deleted from the provisions of related laws and ordinances by the GHQ Directives, but the supervision of business management, facilities and engineering was left in the hands of the government, which would exercise such powers under the advice or order of GHQ. Consequently, for the purpose of expediting democratization of business management, NHK requested the government to remove the necessity for obtaining government permission or approval excepting for minimum unavoidable control items, such as setting the amount of the receiver's fee, radio regulations like frequency allocations and determining the output. Also, since the Articles of Incorporation of NHK contained items such as the appointments of officers and dissolution of the corporation, which required government approval, the special general assembly of NHK members held in October 1945 resolved to request the government to delete all such items. At the same time, for the purpose of democratization of NHK's organization, the following resolutions were voted and newly added to the Articles of Incorporation: The provision in the NHK's Articles allowing exercise of special voting rights to the President and Directors, which constituted an exceptional provision from the standpoint of Civil Law, shall be deleted. The members of the Board of Trustees, who had been selected from the NHK members by recommendation of the President, shall be mutually elected from among the members. However some will be recommended widely from among learned and experienced persons. The Board of Trustees shall be the electorate of the directors who will elect the President from among themselves. However, while approving these amendments to NHK's Articles of Incorporation in accordance with the indication of the GHQ memorandum related to separation of the government and broadcasting, the Board of Communications requested further steps towards democratization of NHK's organization.

Although independence and democratization of NHK's business opera-

tion were thus being promoted, there was, at that time, no objective assurance that NHK would maintain the same status. This point was not definitely settled until the memorandum regarding the "Reorganization of NHK" was notified to the Japanese Government on the 11th December of the same year. This Memorandum was highly significant as the first indication of GHQ's views relative to the broadcasting system of Japan (see Chapter 2, "Process of Establishment of the New Broadcasting System", Section 2). The gist of this Memorandum included the following: (1) In order to establish the public nature of NHK, the will of the people at large must be reflected in the management. Concretely, 15 to 20 representatives should be selected from among various classes of people and an "Advisory Committee" should be formed. (2) The aforementioned committee will make it its primary duty to select candidates for the presidency of NHK and recommend them to GHQ. The Committee will, as an advisory organ for the president who will be chosen by GHQ on the basis of its recommendation, continue to deliberate on business policies in general. In addition, the Committee will draw up ethical standards for broadcasting and submit them to GHQ. (3) NHK will transfer or discharge those among the incumbent officers and high-ranking employees who had relations with militaristic or undemocratic organizations during the war. The Memorandum also contained, for the purpose of excluding government control over NHK, items related to contraction of the Board of Communications regarding the implementation of the items of Memorandum and denial of the controlling powers of the Bureau of Information over broadcasting.

This Memorandum indicated a rather thoroughgoing reorganization and at the same time, the intention of allowing NHK to continue its operation. It contained nothing relative to the question of establishing commercial broadcasting companies, which was broached by the Board of Communications because of the concern for possible dissolution of NHK, immediately after the end of the war. On the contrary, it clarified GHQ's intention of allowing a unified and monopolistic system of broadcasting in this country. It was not clear on what political conception GHQ based its formulation of such a policy but it was assumed that GHQ came to understand the broadcasting service of Japan after three months' experience and considered it premature to allow commercial broadcasting to be commenced under the extremely precarious economic conditions and felt it better for the execution of its occupation policies to maintain the existing unified and monopolistic form of broadcasting.

In any case, the democratization of NHK's organization indicated in the Memorandum was far more radical than that which NHK itself had been considering. The Board of Trustees which was provided for in the new Articles of Incorporation would lose its function and meaning if the president should be selected by GHQ upon recommendation of the Advisory Committee. Moreover, from the intent of the Memorandum, the overall organization of NHK, including the Board of Trustees, would be re-examined by the new president using the opinions of the Advisory Committee as reference. As a result, the new Articles of Incorporation had again to be amended in order to meet the new situation arising from the issuance of the Memorandum.

4. Reorganization of NHK

On the basis of the GHQ Memorandum on the reorganization of NHK cited in the preceding section, seventeen persons were selected as members of the newly established Advisory Committee. These included scholars, writers, critics, labour leaders, journalists and publishers, who were considered capable of entertaining critical and constructive ideas regarding broadcasting. The selection was made jointly by CIE and CCD on the basis of a list of candidates drafted by the Board of Communications. An outstanding feature of the selection was the inclusion of a number of persons belonging to leftist groups. It was a natural outcome since the leftist groups were regarded important as having resisted the war efforts, and considering the growth of labour movement under the confused national conditions. It was also rumoured at the time that through this selection of committee members a certain friction developed between CIE, which belonged to the radical, New Deal faction, said to have held the leadership in the determination of policies at GHQ, and CCD which belonged to the moderate group.

The initial meeting of the Advisory Committee was held in January 1946, and its first work was to select candidates for NHK's presidency. Three candidates were recommended to GHQ. The person selected by GHQ happened to be Iwasaburo Takano, former director of the Ohara Social Problems Research Institute. Incidentally, President Hachiro Ohashi, who had been responsible for the management of NHK during the closing years of the war and the most difficult early years of occupation, had voluntarily resigned before the new President took office. Mr. Takano was one of the progressive Japanese economists, who mothered the Department of Economics as an independent department from a mere course at the University of Tokyo. In his message delivered on assuming office, he stated, "The real popularity of radio is in its walking with the public, going with the public hand in hand and in taking a step ahead of the public." He thus clarified the new direction in which lay the future of broadcasting.

At the General Assembly of the members of NHK held in May of the same year, directors and auditors other than the president were elected by the new Board of Trustees provided for in the new Articles of Incorporation, and the executive officers were elected at the meeting of the new Board of Directors. In this way, the executive organ of NHK was completely renovated. At this time the former government bureaucrats, who for twenty years since the inauguration of the service held leadership in the operation of NHK, all retired. The postwar broadcasting service thus made a fresh start after complete reorganization of the management. The immediate objective was rehabilitation of the broadcasting facilities badly damaged by war and regaining the drastically reduced receiving contractors so that difficult conditions might be remedied as soon as possible and broadcasting developed into an organ of news reporting, entertainment and education worthy of a new country.

Soon after the assumption of the presidency by Iwasaburo Takano in June 1946, NHK undertook a broad internal reorganization for the first time after the war. Subsequently five important internal reorganizations were undertaken through the period of reconstruction and stabilization

until it restarted as a new public corporation under the Broadcast Law promulgated in 1950. Meanwhile, as will be stated later (see Chapter 4, "Broadcasting Programmes", Sections 1 to 3), programming systems and production methods seen in American commercial broadcasting were introduced into NHK's programming under the advice and guidance of CIE. Many new programmes were also introduced and a number of these really contributed towards improvement of programmes. Also, policies meant to provide the listeners with a wider choice of programmes by extending and enriching those of the second network and to regularize local programmes directly related to local people to meet the situation being created by the reinforcement of local autonomy in the field of political administration were drawn up and their implementation was expedited. The Broadcast Culture Research Institute was established at the time of the aforementioned first internal reorganization, and the basic research efforts made for the development of broadcasting and scientific surveys of the reactions of the listeners to various programmes undertaken at the Institute deserve special mention (see Chapter 4, "Broadcasting Programmes", Section 8).

On the other hand, reconstruction of damaged broadcasting facilities and maintenance work on facilities as a whole were promoted under conditions of postwar shortage of materials and the still unstable financial state of NHK. The network extension plan, suspended on account of the war, was newly drafted. Also, for the purpose of catching up in broadcasting engineering that had fallen behind, basic researches in television and other engineering subjects were promoted (see Chapter 5, "Broadcast Engineering").

Furthermore, for the purpose of regaining the drastically decreased receiving contractors, the primary need was considered to be production of receivers and components and reorganization of the servicing system (Chapter 6, "Listeners", Section 2). In short, there were large numbers of important projects that had to be undertaken for the promotion of reconstruction and stability of the business in all aspects.

In spite of the importance of the duties imposed on the Advisory Committee, its legal status was lacking in clarity. In fact, there were no domestic laws and ordinances to serve as the basis for the establishment of this committee, and after the Board of Communications took part in the selection of the members, it kept its hands off the management of the committee. Furthermore, no provisions that would establish any relationship with the committee were found in the organization of NHK, and all the Corporation could do was to provide clerical aid for the management of the committee. In the mean time, the committee, after discharging its primary obligation of selecting candidates for NHK presidency, met frequently to deliberate on various policies. However, because the occupation policies of GHQ began to show changes under the international tension between the United States and the Soviet Union, and because the work of deliberation and planning of the new broadcasting system, which was the most important subject with respect to broadcasting policies, was left in the hands of the Ministry of Communications (new name for the former Board of Communications) under advice of the Civil Communications Section (CCS) of GHQ, the actual voice of the Advisory Committee was gradually lost. And ultimately early in 1949, the Committee appears to have ceased to exist as a matter of course.

The strike that would mark an epoch in the history of broadcasting took place in October 1946 under President Takano, who was a pioneer in the labour movement. It was an indication of changing times. The labour union of NHK in those days constituted a chapter in the All-Japan Press, Communications and Broadcasting Labour Union, which was formed in answer to the movement for the organization of unified labour unions by industries under the direction of the Communist Party. NHK's labour unions, in fact, then occupied a leading position in the so-called "Press Union". The aforementioned strike took place as a part of the general strike led by the Press Union, and in addition to demanding raises in salaries and conclusion of a collective negotiations agreement, it was to a large extent of a political nature. While negotiations with the management failed to reach agreement, the Union on the 5th October finally began a general strike. In the circumstances, the government decided to place broadcasting under State control and obtained authorization of GHQ for this purpose. Broadcasting was transferred on the 6th of the month to State control, and for twenty-one days afterwards normal broadcasting came to a stop, bringing about an emergency situation under which a minimum number of programmes, including news and weather forecasts, were presented. The control of broadcasting by the State was an instance of the application of the order attached to the licence issued at the time of the establishment of NHK. This order stipulated that "broadcasting will be placed under State control in case it is deemed necessary for the public interest", and it was the first instance of such application since the establishment of NHK.

From March to September 1947 frequent disputes took place between NHK's management and labour union at almost every personnel shift attending changes in position classifications. Meanwhile, the second labour union called the Japan Broadcasting Labour Union was formed in March 1948 by those who withdrew from the existing union. As the name indicated, the new union was an independent NHK union not affiliated with the unified industrial one. This new union soon absorbed most of the members from the old one, and in November of the same year, it concluded a collective negotiations agreement with the management, thus establishing its position firmly at NHK.

2. Process of Establishment of the New Broadcasting System

1. Initial Concept

With regard to the establishment of the broadcasting system for postwar Japan, the first suggestion was made in the Memorandum on the Reorganization of NHK issued in December 1945 (see Chapter 1, "Broadcasting of Transition Period", Section 3). Later it was decided that, in consideration of the projected new Japanese Constitution (promulgated in November 1946) all the laws and ordinances of the land would have to be re-examined, and in view of the influence of broadcasting on national life, obsolete elements

contained in the laws and ordinances related to broadcasting would also have to be revised sooner or later. Studies on new laws and ordinances had already been in progress at the competent government agencies since the beginning of 1946.

In October of the same year GHQ demanded that the Japanese Government revise and rearrange laws and ordinances related to broadcasting and made the following suggestions: (1) Such laws ordinances should be made to conform to the new Constitution. (2) Communications should be completely democratized and all marks of the influence of military control on communications should be removed. (3) All regulations that do not fit into the existing conditions should be revised and modernized.

The suggestions were intended to bring about revisions in the Radiotelegraphy Law, which was the basic law related to radio communications.

The Radiotelegraph Law in its Article 1 provided that radiotelegraphy and radiotelephony should be placed under government control, and in Article 2 provided that the government, if need arose, would permit private installation of such facilities as exceptional cases. In short, these provisions obstructed impartial utilization and smooth application of radio waves and stipulated limited operation of the facilities under exclusive ownership or control of the government. They were clearly objectionable from the spirit of the new Constitution. Moreover, no clear written provisions were made in connection with the broadcasting service, which had achieved remarkable development since its establishment. As a matter of fact, broadcasting was considered a type of private radiotelephony provided for in Article 2, and its licensing and supervision were left to the administrative procedure of the competent minister. Consequently, discreet powers of the minister were very great, while the independence of the broadcasting organization was precarious, because the government was able to regulate broadcasting with a strong hand.

As outlined in the preceding chapter, the government's controlling powers over broadcasting programmes were first eliminated under GHQ's broadcasting policy soon after the occupation started. This was followed by a directive stipulating separation of the business management from government control. Also, as a result of NHK's own efforts towards securing greater autonomy, the government's supervision of broadcasting was limited to the minimum necessary items. Although laws and ordinances related to broadcasting remained effective as before, the effect of the principal parts thereof had already been nullified from the standpoint of the broadcasting policy of GHQ. Moreover, in light of the spirit of new Constitution based on the principle of the sovereignty of the people and democracy, it was clear that these laws and ordinances were not in accord with the new situation.

The Ministry of Communications immediately established Provisional Laws and Ordinances Deliberation Committee on the basis of the aforementioned directive of GHQ and commenced overall revision of the Radiotelegraphy Law and related rules and regulations, while keeping close contact with CCS of GHQ. The work was expedited on the premise of keeping the unified monopolistic broadcasting system by NHK along the lines of the policy indicated by the GHQ Directive. In the government, however, there were some who still held the opinion that the plans for the establishment.

of commercial broadcasting companies proposed by the Board of Communications immediately after the end of the war should be re-examined and materialization of the plan should be expedited. This arose from the fact that criticism of the strike by the NHK labour union in October 1946 (see Chapter 1, "Broadcasting of Transition Period", Section 4) coupled itself with the attitude of viewing the unified monopolistic broadcasting system as unsuitable. In spite of the existence of such opinions in the Japanese Government, the Allied Council for Japan composed of the representatives of the United States, Great Britain, the Soviet Union and the Republic of China, an advisory organ to GHQ which met three times between December and January of the following year, confirmed the policy of continuing with the unified monopolistic system adhered to by GHQ from the standpoint of facilitating the implementation of various policies at the existing stage of the occupation.

Therefore, the Ministry of Communications limited its efforts at revising the laws to the line indicated by GHQ and undertook repeated deliberations on drafting of the bills. As a result, definitive plans were evolved by June 1947. These indicated separation of rules and regulations related to broadcasting from the general laws and regulations connected with radiotelegraphy and radiotelephony and proposed the Radio Law to provide for overall supervision of radio communications facilities, including broadcasting stations. In addition, the plans included promulgation of the NHK Law for regulating the organization and operation of the broadcasting service. In the Radio Law, moreover, a provision that would serve as legal basis for monopolistic operation of medium-wave broadcasting by NHK would be included. The proposed NHK Law was the first independent law intended to regulate the operation of the broadcasting service in the history of Japan, and the prototype of the Broadcast Law now in force. The initial draft of the bill, however, not only delegated too much power to the competent minister but there were opinions that it would be improper to leave the broadcasting service, which had grown to the stage of serving 6.5 million receiving contractors, to the monopoly of a private corporation having only 6,500 employees (NHK was a public corporation with an organization of private characteristics) even though the object of broadcasting was solely for the public interest. Therefore, the Provisional Laws and Ordinances Deliberation Committee re-examined the draft using the British, Australian and Canadian laws related to broadcasting as reference materials and produced a draft bill of the "Broadcasting Enterprise Law of Japan" in July of the same year. This draft law provided for reorganization of NHK and establishment of a public corporation called the Japan Broadcasting Commission to take charge of the monopolistic operation of medium-wave broadcasting. It also provided for the establishment of a Broadcast Advisory Committee for the purpose of reflecting the opinions of the listeners on programmes, as one of the means to democratize broadcasting. As long as the proposed commission was a public corporation, it was natural that items related to the supervisory powers of the government over the organization, business operation and finance should have been provided in the draft law. However, NHK, to which this draft law was indicated, strongly opposed it on the ground that it was a reversion to bureaucratic control of broadcasting. Editorials of

the newspapers agreed with NHK's views and criticized the draft law in strong terms. Thus, the draft law suddenly became the focus of attention, and the situation became confused. The point that should be noted in this draft law was that broadcasting services other than the medium-wave could be operated by anyone upon securing authorization from the competent minister. And this was the first provision in any legal bills that indicated the possibility of licensing broadcasters other than NHK.

2. Advices of GHQ

Under bombardment of public opinion and NHK against the aforementioned draft Broadcasting Enterprise Law of Japan, the Ministry of Communications decided to revise it and expedited preparations. It so happened that on the 16th October, 1947 an important advice was given to the Ministry of Communications by GHQ regarding legislation on the broadcasting system of Japan and this had a decisive effect on the establishment of the existing legislations on broadcasting. The contents of the advice may be summed up in the following manner: (1) The new law should satisfy the four principles, including the freedom of broadcasting, political impartiality, fulfilling of the responsibility for service to the public and observance of various technical standards. (2) For the purpose of administration and operation of broadcasting, an autonomous organ completely independent of the government, political parties and all other organizations should be established. (3) The autonomous organ should comprise the division in charge of making policies for all sorts of broadcasting as well as for licensing and supervising broadcasting facilities, and that which will succeed to the facilities formerly operated by NHK to continue with medium-wave and international broadcasting. (4) Provisions related to possible establishment of commercial broadcasting companies and the promotion of the growth thereof should be included in case the economic conditions of Japan should allow such commercial broadcasting in the future.

The four principles indicated first in this advice clarified more democratic principles of direction than those contained in the provisions of the aforementioned draft broadcasting enterprise law proposed for the purpose of creating a public corporation out of NHK. However, there was nothing new in the advice when viewed from the standpoint of the broadcasting policy that had been followed by GHQ. What should be noted were attempts at establishing an autonomous organization independent of all authoritative control to place the administrative and operating phases of broadcasting in its hands and the intention of changing the policy of maintaining the existing monopolistic system by adopting the plural competitive system between public service and commercial broadcasters. In the new autonomous organization, the administrative division envisaged was a type of administrative commission system in the order of the Federal Communications Commission (FCC), and it appears that the Japanese Government, which had generally been less favourably disposed towards the administrative commission system, was rather embarrassed by this advice. Also, the system under which the new autonomous organization was to take charge of both the administrative and operating phases of broadcasting simultaneously was a direct imitation of that employed by the ABC (Australian

Broadcasting Commission). This was one of the models used for the broadcasting commission system provided for in the Broadcasting Enterprise Law which had previously been proposed but which aroused opposition of the public.

Recognition of commercial broadcasting by GHQ was a clear indication of changes in the American Far East policy. GHQ originally must have been interested in the plural competitive system because of the American philosophy of seeking guarantees for freedom in free competition. And in the process of changes in the American Far East policy towards early independence and dependence of Japan on the United States in the face of intensifying cold war with the Soviet Union, it must have been adjudged that it would no longer be wise to adhere to the maintenance of the existing unified monopolistic system of broadcasting as a provisional occupation measure and expedience, when a permanent basic broadcasting system that would last far into the future after Japan has regained independence was considered.

In the face of the abovementioned advice from GHQ, the Communications Ministry's work on legislation related to broadcasting had inevitably to start over again from an entirely different point of view. The most important issue at this juncture was whether the administrative and operating divisions should be placed under a single autonomous organization or separated into two independent organs. GHQ followed the policy of leaving this question to the Japanese Government. The Ministry of Communications, therefore, invited the opinions of NHK and various other circles and ultimately decided on the basic policy of establishing a "broadcasting commission" under a representative system, which would assume the work of administration under the jurisdiction of the Prime Minister and of setting up a new public corporation in place of NHK to take care of the operation of the broadcasting service under the supervision of the "Broadcasting Commission."

On the basis of this policy, the Ministry of Communications drafted the bill for the broadcast law and submitted it to GHQ in February 1948 for review and advisory opinions. As a result, certain revisions were made in the text by advice of CCS and on the basis of opinions expressed by related organs. The bill was submitted to the National Diet for deliberations in June of the same year. The draft law comprised seven chapters and 106 articles, including the general provisions and those for the broadcasting commission, NHK, general broadcasting stations (commercial broadcasting), procedures for public hearing and grievance procedures, legal proceedings, penalties and miscellaneous regulations. A step forward was taken in the materialization of a new broadcasting system through the introduction of this draft at the Diet, but two years were required before it could be passed and promulgated. The reasons were as follows: Amendments proposed at the related committees of both houses of the Diet, new advices by the competent sections of GHQ, opinions of NHK and organizations planning to establish commercial stations and the conclusions of the public hearings, which were held frequently for widely seeking opinions of thinking people, were incorporated into the bill. Also, though drafting of the bill for the "Radio Law" was in progress with a view to promulgating it simultaneously with the proposed Broadcast Law, work on this bill fell

behind the target date because of diversified revisions needed. Finally, changes in the cabinet and reforms in the administrative mechanisms brought changes in the thinking of the government itself, as will be stated in the following section, on matters connected with control of broadcasting and radio waves in general. As a consequence, complications had to be smoothed out before the final version of the draft law was completed.

3. Problems Involving Supervision of Broadcasting

In September 1948 a GHQ Memorandum related to the organization of the Ministry of Communications was delivered to the Japanese Government. This Memorandum provided for separation of the Ministry of Communications into the Ministry of Postal Services, which would take charge of postal services, and the Ministry of Telecommunications, which would be in charge of telegraph and telephone services. Under this system, supervision of radio communications in general, including broadcasting, was to be placed in the hands of the Radio Regulatory Agency, an extra-ministerial agency of the Ministry of Telecommunications, which was established in June 1949. The legislative work related to broadcasting, which had been undertaken at the Ministry of Communications, was naturally transferred to the Radio Regulatory Agency. And this agency began its work with a review of the draft broadcast law, which involved most complications, from a new viewpoint. The essentials of the new draft thus completed were submitted to CCS for further review. What should be noted in this new draft included discarding of the broadcasting commission under a representative system, which had been envisaged in the former concept of the supervising system of broadcasting, and placing of the powers of supervising broadcasting in the hands of the Minister of Telecommunications under an independent system. Also, for the sake of promoting impartial administration, decisions on important matters would be made in consultation with the Broadcasting Council, to be set up as an advisory organ to the Minister of Telecommunications.

The government's policy on the supervision of broadcasting thus made in a concrete form was a clear denial of the concept of GHQ (see Section 2), which envisaged supervisory administration of broadcasting by a new autonomous organ independent of the government. It was true that the government was desirous of following the policy of the reforms in the administrative organizations and reduction in government personnel which it had adopted previously, but on the other hand, it had been rather unfavourably disposed towards various administrative commissions established after the war making decisions on important matters of policy independently and outside the direct control of the Cabinet, and was strongly hesitant to leave the administration of broadcasting, so important as to possess powerful influences on the thoughts and life of the people, to the proposed administrative commission system. Such government belief was reflected also in the general regulations related to the personnel affairs of NHK whose officers were empowered to manage the public broadcasting service. In other words, these regulations stipulated that the president and auditors of NHK will be appointed by the Minister of Telecommunications on the basis of recommendations by the Broadcast Council, and the

vice-presidents and other officers will be appointed by the president with the consent of the Minister of Telecommunications. These regulations were considered a measure towards strengthening of government control over the personnel affairs of NHK.

The new draft law brought out with implications of regaining the government's authority was inconsistent with the basic policy of GHQ related to the administration of broadcasting. CCS, which reviewed the aforementioned essentials submitted by the Radio Regulatory Agency, made the following recommendations to the Minister of Telecommunications: (1) The Radio Regulatory Commission should be placed under the Prime Minister. (2) NHK should be organized as a public service body and the government's supervision should be limited to the minimum. In addition to the above, the CCS recommendations contained two other items. The Radio Regulatory Commission cited in (1) amounted to following the administrative commission system advocated by GHQ from the beginning. The duties of the Commission, moreover, included also general administration of radio waves including broadcasting. The system represented a revision of GHQ's former concept of a dual establishment, i. e., leaving the administration of broadcasting to a new autonomous organ, the Broadcast Council, and the general telecommunications administration to some government agency. It was, in fact, similar to the American FCC system. And the Radio Regulatory Agency, which had just been established, was attached to the abovementioned Radio Regulatory Commission. The relation of NHK to the government mentioned in (2) was clarified as a whole in the draft broadcast law, but the aforementioned recommendations aimed at suppressing government's power over the personnel affairs of NHK advised that a board of governors whose members will be appointed by the Prime Minister with the consent of the Diet should be formed and that the president of NHK should be appointed by the said board.

These recommendations of CCS reversed the government's policy of placing both the administration and operation of broadcasting under its own supervision. In accordance with these recommendations, the Ministry of Telecommunications started the revision of the proposed broadcast law and the radio law, the legislation of which was in preparation along with the former. In the process it was decided that a Radio Regulatory Commission Establishment Law should be drafted in addition to the Broadcast and Radio Laws, and the organization and powers of the radio regulatory mechanism provided for in the draft radio law and the deliberative procedures related to the administration of broadcasting provided for in the draft broadcast law should be stipulated in the new bill. In the process of preparing for the legislation of these three draft laws, the greatest issue developed around the Radio Regulatory Commission Establishment Law, particularly concerning the relationship between the Cabinet and the Commission.

As has already been stated, the government had been taking a passive attitude towards various administrative commissions established after the war for democratizing administration for reasons of disunity in administration. It was, therefore, the government's desire to suppress establishment of new commissions of similar nature as far as possible, and even if they should be established, it wished to secure adequate controlling

powers for the Cabinet. Like the American FCC, the Radio Regulatory Commission envisaged was a typical independent one with sublegislative and judicial powers. Moreover, because it was an administrative organ over the mass-media that could exercise broad influence on the people, the government was rather dissatisfied with its establishment. In the circumstances, considerable difficulties were experienced in the process of negotiations with CCS and GS on the various provisions before the final version of the draft of this Establishment Law was completed. The government from the beginning of drafting the bill had in mind the policy of appointing one of the State Ministers as the chairman of the Commission as well as of reserving for the Cabinet the right to reverse the decisions of the Commission. On these points, the government remained sharply opposed to the views of GS. Ultimately, however, the aforementioned policy of the government was denied in its entirety, and when General MacArthur's letter advocating the independence of the Commission was delivered to the Prime Minister, Shigeru Yoshida, in December 1949, the government was forced to give in to the views of GS (as will be stated later, this commission system was discarded when Japan regained independence as a result of the San Francisco Peace Treaty in July, and the radio administration as a whole was transferred to the government agency, i. e., the Ministry of Posts and Telecommunications).

4. Promulgation of Three Laws Related to Broadcasting

The three laws related to broadcasting (the Broadcast Law, the Radio Law and the Radio Regulatory Commission Establishment Law) went through the process outlined above before the final drafts were made available in December 1949. These were presented at the Diet for deliberations, were passed and put into effect on the 1st June, 1950. And through their passage, radio administration in Japan, including broadcasting, underwent an epoch-making reform. The three laws closely related to one another constituted the overall foundation for radio administration; the Broadcast Law and the Radio Law provided the substance of administration, while the Radio Regulatory Commission Establishment Law provided for the organization, powers and business of the Radio Regulatory Commission as the administrative organ related to radio waves, including broadcasting.

The object of the Radio Law (Article 1) was the promotion of public welfare through impartial and efficient utilization of radio waves. It provided for licensing of wireless stations, including broadcasting stations, conditions for installations, operation and supervision. The Broadcast Law was aimed (Article 1) at promoting the sound development of broadcasting through its utilization, under certain principles, in a manner compatible with the public welfare. It provided for the organization, scope of business, finance and ethical criteria for broadcast programmes of the broadcasting organization. In short, from the standpoint of the utilization of radio waves, rules for general use of such waves were provided for in the Radio Law and rules for special utilization of radio waves as a means for mass-media were provided for in the Broadcast Law.

The Prewar Radiotelegraphy Law, which constituted the basis for radio wave administration, gave broad powers to the administrative agencies of

the government and guaranteed practically no freedom for private utilization. The new laws, however, provided for equitable utilization of radio waves by anyone, whether it be for public or private use, so long as stipulations of the laws were observed. However, because of the limitations in the frequency bandwidth allocated to Japan under the international agreement, utilization of radio waves was premised on being "effective and compatible with the public interests". In particular, in view of the importance attached to the functions and the rôle of broadcasting as a mass-medium, it was placed also under the Radio Law like wireless stations. With regard to the licensing standards for broadcasting stations, the Fundamental Standards for the Establishment of Broadcasting Stations was attached to the Regulations for the Radio Regulatory Commission, thus establishing standards viewed differently from those of wireless stations in general.

When the fact that prewar operation of the broadcasting service was not based on the regulations provided by the laws but on the administrative measures issued by the Minister responsible for radio wave administration and was conducted in an undemocratic manner is recalled, promulgation of the independent Broadcast Law to establish order in the administration of broadcasting was an indication of the distinction accorded broadcasting as being different from general radio communications as well as of the importance attached to it. It must, therefore, be said that the establishment of this law brought about a noteworthy turning point in the history of broadcasting in Japan. This law stipulated three principles for the accomplishment of its purposes. These included: (1) Broadcasting shall be spread among the people and its maximum utility shall be assured. (2) Freedom of expression in broadcasting shall be secured by guaranteeing impartiality, truth and self-discipline. (3) Broadcasting shall contribute towards sound development of democracy by clarifying the duties of those who are engaged in it. It was the intention of these principles to make broadcasting compatible with the public welfare.

Points contained in (1) included reorganization of NHK, which had been under the management of a small number of members as a corporate juridical person under civil law, into a special public corporation based on the support of the entire population and recognition of private broadcasting enterprises other than NHK, which meant abandonment of the former monopolistic system. The principle (2) has made apparent the importance of guaranteeing the freedom of speech and expression, which had been suppressed by the government in prewar days, for indicating national will. The principle (3) demanded of those who were engaged in broadcasting, a medium that exerted powerful social influence, to realize clearly the value of their work, especially the rôle broadcasting played in contributing to the development of democracy, and to be constantly aware of the need for the most careful conduct of the broadcasting service.

The promulgation of the Broadcast Law established the system under which NHK, the public service broadcaster, and private broadcasters could operate side by side in Japan. Regarding the legal basis for financial resources, which formed the foundation for business operations, NHK was guaranteed the privilege of collecting receivers' fees direct from the receiving contractors, as in the case of the old Corporation. In addition, NHK

was permitted to issue broadcasting bonds to meet funds required for construction of new stations and repairs on the existing facilities. Thus, as NHK's stability of business operation was not tampered with, it amounted to obtaining protection in its financial affairs. On the other hand, NHK was rigidly prohibited from conducting advertisement broadcasts and operating incidental business aimed at profit. With respect to broadcasters other than NHK, no provisions were made for the nature of the principles of their managements, and by stipulating regulations for advertisement broadcasting, use of revenues from such broadcasts as financial sources was recognized. Most of the general broadcasters, which have attained rapid and phenomenal growth after the enforcement of the Broadcast Law, are commercial services organized as business companies, and their operations are based on revenues from advertising.

Nevertheless, the Broadcast Law consisting of a total of 59 articles devoted only a few articles to matters related to general broadcasting; the remainder of the articles were devoted to rules and regulations concerned with NHK. This resulted from the fact that the spirit of the legislation was founded upon public service broadcasting, but it also implied the idea that the operation of commercial broadcasting should be left to the free will of the operators for the time being and measures necessary should be enforced while observing the growth of such services. In the first place, commercial broadcasting, as stated before (Section 2 of this Chapter), was permitted by recommendation of GHQ. The economic scale and differences in the level of cultural attainments between the metropolitan and rural areas were dissimilar to those existing in the United States. If the commercial broadcasting on the American style should be transplanted to Japan, the focus of business operation, it was feared, would be pointed in the direction of large cities where good advertising markets are found. Also, in the case of commercial broadcasting, the operators had to attain stability of management by pursuing profit even while observing the objectives of the laws, which constituted the promotion of public welfare through broadcasting. There was a possibility of the sort of an antinomic position being disrupted by the policy of business management or by business conditions.

In view of such nature of commercial broadcasting, the Broadcast Law stipulated, as the business purpose of NHK, that broadcasting will be conducted in such a manner as to be receivable anywhere in Japan (Article 7), thus suggesting expansion of the broadcasting facilities. In the field of programming, the Law made it obligatory for NHK to reflect, considering the entire population of the country as sponsors, the opinions of the people and, moreover, to exert efforts towards contributing to the elevation of the cultural level of the nation.

3. New Start of NHK

1. Characteristics of the Organization

NHK, which became a new public corporation under the Broadcast Law, succeeded to all rights and duties of the former corporate juridical person

and made its start under a new organization on the 1st of June, 1950. The scale of NHK at the time of its restart included 83 broadcasting stations (37 of these operated the 1st and the 2nd networks), 8.7 million receiving contractors, net assets (after deducting liabilities) of about ¥160 million (approximately \$450,000) and about 8,000 employees.

The new NHK, in a word, was similar to a public corporation. In Japan real public enterprises comprised the National Railways of Japan and the Monopoly Corporation, both different in character from the government. The independence of their management was recognized, but for the purpose of undertaking business-like management of government enterprises, they were established by government investments and managed the business in place of the State. On the other hand, NHK was a public corporation created out of a private corporation. It did not receive any government investments or monetary aid; it depended exclusively on the assets of the people for its financial resources. It was a business organization financed entirely by receivers' fees and the issue of broadcast bonds. Consequently, NHK was different in character as well as in the process of establishment from the aforementioned public corporations. The Broadcast Law, on the premise that all assets of NHK should revert to the people, provided special regulations regarding the appointment of officers and financial affairs such as drafting of budgets. The Law provided that the budget, balance sheet, business plans and financial plans of NHK for each business year should be submitted to the Diet, and the amount of receiver's fee should be fixed on the basis of the approval of aforementioned reports. However, as NHK was neither a recipient of government investments nor part of an administrative organ, documents submitted to the government were not subjected to detailed deliberations like the national budget. A form of approval in toto was followed by the government. This arose also from the policy of enforcing measures that would not obstruct the growth of the broadcasting service.

The most outstanding feature of the organization of the new NHK was the establishment of the Board of Governors as an organ for determining important policies and power and responsibilities for directing and controlling business management. The Board was not only an organ for setting the policies of NHK itself but also for appointing the President, the highest executive officer, and the auditors who covered the business operation. The members of the Board of Governors were appointed impartially from the fields of education, arts, science, industry and others at the rate of one each from eight districts into which the country was divided, but in view of the purpose of the Broadcast Law based on the principle of guaranteeing impartiality of broadcasting, officers of political parties and public service personnel were excluded from those having qualifications of appointment to the Board. The power of appointing the members rested with the Prime Minister, but the consent of the Diet was required. This system was adopted because it was necessary to reflect the opinions of the people, who had direct interests, in the business management of NHK and also because it was not democratic for the Prime Minister to appoint certain persons chosen on his own judgment. The Broadcast Law also provided for participation of the NHK President, the executive officer, at the meetings of the Board of Governors, the policy-making organ, as one of its

members. This measure was taken from the view that, since the Board of Governors operated under a representative system, the decisions of the Board may not necessarily be in accordance with the will of the President. The primary duty of the President was to preside over the execution of business policies determined by the Board of Governors.

As the first chairman of the Board of Governors, Ichiro Yano (President of the Daiichi Life Insurance Company) was elected by the Board. The Board in turn appointed Tetsuro Furukaki (former director of Asahi Newspaper Co.), who was the last president in the days of the corporate juridical person, as the new president. By the consent of the Board of Governors, the new president appointed the vice-president and three directors, who constituted the Board of Directors. The Board of Directors was to deliberate and decide on important items related to business execution of NHK. Under the old juridical person the Board of Directors was an organ for voting on important matters abovementioned, but in the case of the new corporation, all responsibilities of business execution rested with the president, to whom the Board of Directors became an advisory organ. This was an outstanding difference between the organizations of the old and new corporations.

Although the Articles of Incorporation constituted the fundamental document providing for the purpose, organization, business, finance, etc. of the Corporation, the above items for NHK were stipulated in the provisions of the Broadcast Law under which NHK was established. Consequently, NHK's Articles of Incorporation were no more than a formal document. As there were points that required detailed regulations on the basis of the provisions of the law, however, a draft of the Articles of Incorporation was prepared by the Committee for the Establishment of the New Corporation. The articles were put into effect simultaneously with official establishment of the new corporation.

2. Business

The reforms (see Chapter 1, "Broadcasting of Transition Period", Section 4) in business organization, which were put into effect frequently in the early postwar years for improving the efficiency of business operation, chiefly featured emphasis on programming, which was the essential element in the broadcasting service. In prewar days, business management policies placed greater weight rather on the construction and administrative fields, such as construction of a nation-wide network and increase in the number of receiving contractors, which were contributing factors to the growth and stabilization of the service. It was around the time the Pacific War broke out that programming, which was the original purpose of broadcasting, began to receive more attention. After the war, GHQ promoted utilization of mass-media as a means of expediting the spread of democracy in Japan, and for that purpose NHK, which operated the nation-wide broadcasting network in the form of unified monopoly, proved to be a convenient organ. As a consequence, advice and guidance in planning and presentation of broadcast programmes were provided abundantly by GHQ. In order to meet such situation, the business organization of NHK was frequently changed with the programming department as the centre of interest.

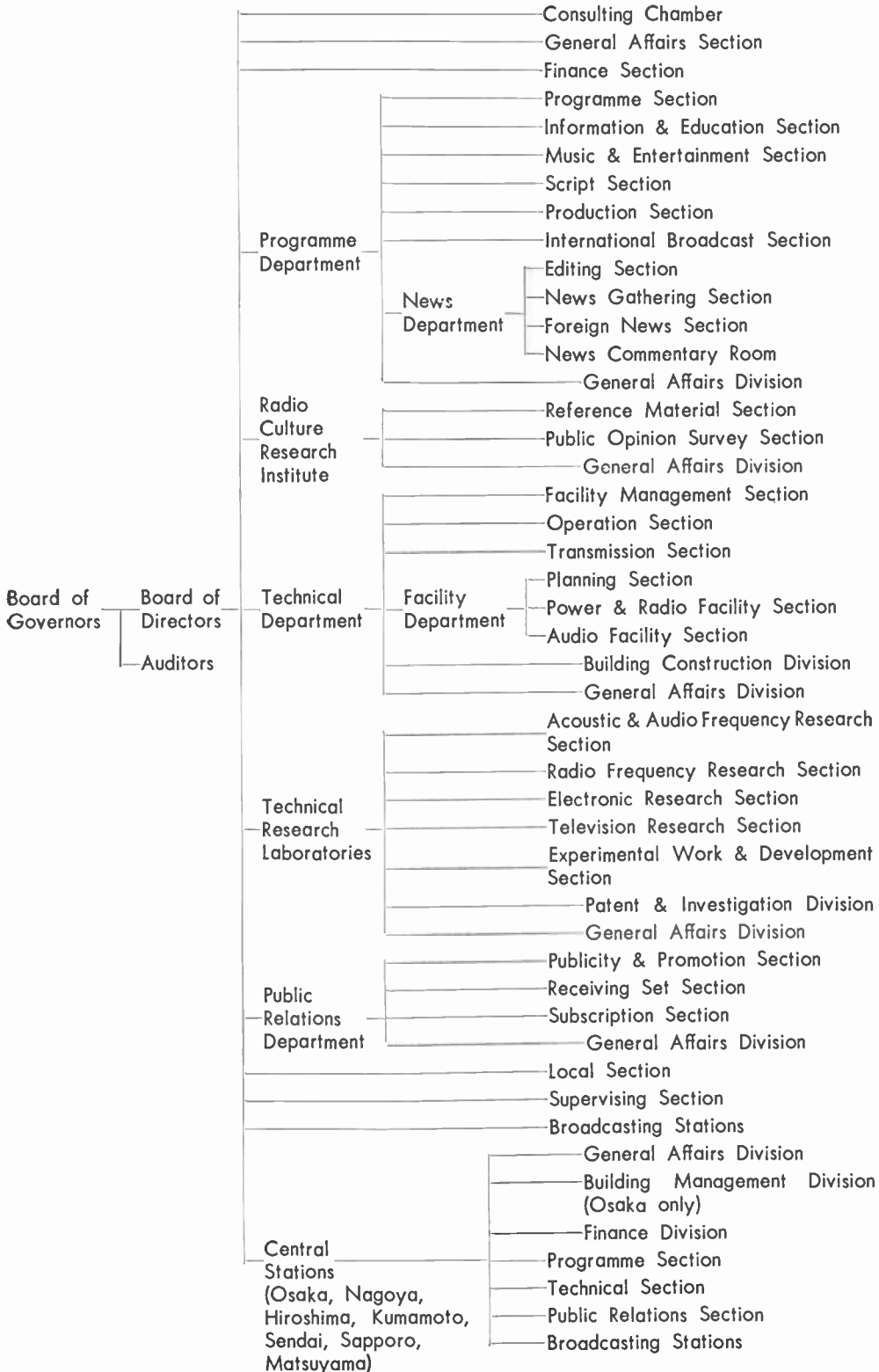
Japan was still under occupation when the Broadcast Law called into being by the advice of GHQ was enforced. And about this time, because of changes in its Far East policies, the United States recognized anew the value of Japan and began to follow a policy of conciliation. In the circumstances, it could well be said that control of broadcasting by GHQ had practically been removed. In July 1951, the year following the enforcement of the Broadcast Law, NHK undertook an overall revision of its business organization with a view to arriving at one compatible with the purposes of the new business entity. This reorganization was planned and executed voluntarily by NHK. The principal point of reorganization was placed on the "presentation of broadcast programmes in such a manner as to be receivable throughout the country". In order to conform to this purpose, enrichment and consolidation of news and local programmes were stressed in the programming field; in the engineering field, stress was laid on the construction of new facilities and repairs on the existing facilities; and in the field of administration, establishment of stable local organizations received the greatest attention.

In other words, this reorganization was based on the recognition of the need for establishing NHK's *raison d'être* as a public corporation in the light of the character of commercial broadcasting companies. This attitude became one of the important guideposts in the subsequent revision of NHK's business organization (see attached table on business organization⁽¹⁾).

The Broadcast Law provided requirements and selectives in NHK's business operation. Requirements included establishment, operation and maintenance of broadcasting stations, programming and establishment of research facilities directly linked to programming and engineering, all of which were essential to any broadcasting service. The selectives included optional business affairs likely to be necessary in connection with the execution of the requirements (provided they were not aimed at the pursuit of profit). As a matter of fact, most of the selective business affairs were no more than documentation of those already undertaken in the days of the old corporation. For example, the following were included as selectives: (1) Maintenance, training and subsidization of dramatic groups, musical groups, etc. necessary for programming. (2) Sponsoring or support of public concerts and other functions chiefly intended for broadcasting. (3) Publications necessary for dissemination and development of broadcasting. On the other hand, there was certain business undertaken by the old corporation that was prohibited. For instance, NHK had been making notable contributions towards betterment of reception through approval of makers' receivers and components for promoting popularization of those of good quality, designating repair shops as being efficient and diagnosing and offering some repair services on defective receivers all for the purpose of improving reception. However, from the viewpoint that these activities were accompanied by the danger of NHK's exercising con-

(1) The International Broadcast Section under the Programme Department was newly established in preparation for resumption of international broadcasting (overseas service of prewar days) in February 1952. The Television Research Section belonging to the Technical Research Laboratories was newly established in connection with commencement of periodical experimental telecasts in Tokyo, which began in November 1950. These two classes of broadcasting will be described in detail in Part III.

Business Organization of NHK (Revised July 1951)



trolling power over the radio industry, aforementioned approvals and designations were prohibited by the new Law, and NHK was not allowed to intervene in the business undertaken by the radio manufacturers regardless of the pretext under which such acts were resorted to. However, the Law also provided that if, by periodical survey undertaken by the Radio Regulatory Commission, it should be found that certain receiving contractors had difficulty in contacting repair shops or if it should be deemed necessary in the interests of the receiving contractors, NHK may conduct repair services at places specified by the Commission.

3. Finance

The scope of NHK's finance greatly expanded after the war when compared with prewar days, and it showed a trend towards further expansion year by year. Total business revenue for financial 1946, shortly after the end of the war, nominally corresponded to 62 per cent of the total revenues for twelve years from 1934 to 1945, the years before and during hostilities. Furthermore, revenue for 1947 showed 260 per cent increase and the following year, 1948, it went up by 760 per cent. The situation did not represent sound growth of business but the unprecedented speed of inflation.⁽¹⁾ In the circumstances, expenditures even exceeded increasing revenues, and until the middle of 1947, prospects for the reconstruction of the service were rather uncertain. The only means available for reimbursing the increased business expenditures was to increase the receiver's fee. However, because of the public nature of the service, a raise in this fee required government approval after that of the Economic and Scientific Section of GHQ was obtained. For this reason, there was a limit to the range of increase even though receivers' fees constituted the only financial source of NHK. The monthly fee of ¥1.00 at the end of the war was increased by 5 times in September 1946, by 17.5 times in September of the following year and by 35 times in July 1948. Even these increases were far below the rate of rises in general commodity prices (commodity price index in Tokyo in 1948 was 48 times that of 1945).

In the midst of inflation, the cold war between the United States and the Soviet Union brought about a change in the occupation policy of GHQ. This was indicated in the aid provided for economic independence of Japan on the condition of this country's dependency on the United States. Around 1947, fresh breath was injected into the receiving set manufacturing industry, which had been in a state of asphyxiation because of the shortage of materials since the end of the war and destruction of production facilities during hostilities. This meant that production of receiving

(1) With the defeat in war, the unemployed reached nearly 10 million arising from dissolution of the Japanese Army, Navy and Air Force, closing of munitions factories and repatriation from overseas areas. Abnormal rise in the prices of consumer goods took place. Limitless government expenditures continued for enormous war indemnities, construction of facilities for the Occupation Forces and allowances for discharged servicemen, etc. The national bonds amounting to tremendous sums issued for the prosecution of the war became pieces of waste paper. For containing inflation, the government enforced Emergency Financial Measures and Provisional Assets Survey Measures. Moreover, the government put a stop to the drawing out of savings, issued new yen currency but limited exchange with the old yen, and froze any savings above the exchange limit. But even such measures were practically ineffective in containing the inflation.

sets and components, which were indispensable to increasing the number of receiving contractors, was put on a smooth course. Then NHK's finances, which went into the red to the unprecedented amount of ¥19 million (about \$53,000) for financial 1946, turned in the direction of producing some profit from the following financial year. This in part resulted from raises in the receiver's fee already mentioned, but the more important reason was increased receiving contractors stimulated by the resumption of set production. For example, listeners increased by 740,000 in 1947 and by 1.5 million in 1948.

During the latter half of 1948 inflation, which had been mounting at a tremendous rate, began to show a tendency to level off. Meanwhile, the national income just about tripled in comparison with the preceding year, and general consumption began to show an upward turn three years after the end of the war, which meant the direction towards stabilization of national life. NHK, which had just about completed reconstruction of the broadcasting facilities, drafted a new five-year programme beginning in 1948 for the extension of network (see Chapter 5, "Broadcasting Engineering", Section 1), and successively implemented measures designed to promote the development of the service as whole. However, as stated before, though the period of confusion in financial affairs passed and the business management began to show stabilized expansion, increased revenues arising from increased receivers' fees were channelled largely into meeting greater expenditures on programming as well as increased personnel expenses. Under such situation, it was impossible to even hope to reimburse expenses needed for construction of facilities and repairs on equipment from NHK's own funds. As reference, business revenues and expenditures during eight postwar years are given in the attached table.

The fundamental principle of the financial policy of NHK since its establishment was to meet operating expenses with receivers' fees and construction expenses with membership fees and loans. As has been stated in Part I Chapter 4, "Organization and Finance" Section 3, facility expansion programmes of considerable scale centering around the construction of networks were implemented before the war, but rapidly increasing receiving contractors served as sources of funds sufficient to meet not only the oper-

Business Revenues and Expenditures

Year	Revenues	Expenditures	Balance
1945	5,883	6,798	-915
1946	22,428	24,346	-1,918
1947	94,511	93,702	809
1948	274,204	258,104	16,100
1949	372,814	372,286	528
1950	390,011	388,698	1,313
1951	588,588	561,885	26,703
1952	637,173	620,698	16,475

Note: (1) The unit for the above figures is ¥10,000 or about \$30.00 U.S.
 (2) In the revenues column, broad increase over the preceding year arose from raises in the receiver's fee.

ating expenses but also those needed for construction work. Consequently, while the aforementioned principle had not been abandoned, NHK actually was able to meet all operating expenses with its own funds; only for two years in the closing period of the war was the Corporation obliged to resort to loans from outside.

Because of very sharp rises in commodity prices and wages on account of abnormal inflation in the postwar period, the acute need for reconstruction of facilities damaged during the war, expedition of the production of programmes reformed and expanded under CIE advices, it had become impossible to maintain the prewar system of financial manipulations. As already stated, NHK tried to raise the required operating funds by successive raises of the receiver's fee, but most of the financial resources were used for meeting immediate needs for business operations, and construction funds for improving the facilities had naturally to be limited. In the circumstances, NHK's original policy of meeting the operating expenses with receivers' fees and the funds required for construction and allied projects with loans was reconfirmed and put into effect.

The inflation was contained and Japanese economy was evidently stabilized in 1949. The Korean War which broke out in June of the following year, the same month in which the new Broadcast Law was promulgated and NHK made a new start, served as an important factor in the rehabilitation of Japanese economy. With the recovery of basic industries, a war boom set in and consumer life in Japan improved and living standards were elevated. Meanwhile, NHK's network expansion five-year programme was implemented smoothly from 1948. Then in September 1951, Japan's very first commercial broadcasting commenced in Osaka and Nagoya, and by the end of the following year, nineteen commercial stations were in operation. These three phenomena became factors for increasing the number of receiving contractors, and by August 1952, the total crossed the 10 million line.

The Broadcast Law provided that anyone operating equipment capable of receiving NHK's standard broadcasts (broadcasts using frequencies between 535 kc and 1605 kc) shall conclude a receiving contract with NHK regardless of the originating stations of the programmes he receives, thus providing for securing the financial source for NHK, a public service organization. Prohibition of advertisement broadcasts and rejection of business operations aimed at profit have deprived NHK of the means of procuring funds by itself, but on the other hand, government subsidies or the intervention of authorities had to be avoided for a public service mass-communications organization.

It was for this reason that the virtually forcible contract system already in force was retained. In the process of establishing the Broadcast Law, this point was never brought up as a subject of discussion even during deliberations on the question of the receiver's fee. It was the receivers' fees collected under this system that had meaning as the nation-wide financial source for maintaining a public service business organization. Because NHK was operated on the basis of the receivers' fees that had a sort of tax-like character, the Diet intervened in its finance (see Section 1 of this Chapter) and the Board of Audit was to audit NHK's accounts.

The business scale of NHK based on 10 million receiving contractors

expanded in the fields of facilities, programmes and management and balancing of business revenues and expenditures was attempted. Meanwhile, for the purpose of procuring funds for construction of facilities and repairs on the existing equipment, issuance of broadcast bonds (limited to a total of ¥3,000 million or about \$8.3 million) was authorized under the Broadcast Law, provided approval of the Minister of Finance was obtained. In short, it was a kind of privilege accorded NHK for the sake of allowing it to attain the object of establishment, which consisted of spreading the receivable range over the entire country and eliminating the fringe areas not covered. On the part of NHK, because of the nature of the receiver's fee, funds needed for expanding broadcasting facilities were sought from future receiving contractors who were to benefit from such expansion and tried to avoid, as far as possible, the use of existing receivers' fees for such purposes. The issuance of broadcast bonds enabled NHK to procure the financial source for facility construction; it has also been playing an important rôle in the management of the Corporation until today.

NHK's scale of assets in the three years after the enforcement of the Broadcast Law increased as follows: The ¥3,450 million (about \$9.6 million) at the end of financial 1950 (end of March 1951) increased by 1.4 times to ¥4,780 million (about \$13.3 million) at the end of financial 1952. Meanwhile, NHK's liabilities also increased from ¥1,210 million (\$3,360,000) to ¥2,340 million (\$6.8 million) or by nearly 1.4 times. The capital increased yearly at about the same rate, and it reached ¥2,440 million (\$6,780,000) by the end of financial 1952.

4. Broadcasting Programmes

1. Changes in the Basic Programming Policy

With concrete indication of the control system for broadcasting under the policy adopted by GHQ immediately upon occupation of Japan, the broadcasting service was removed from government control and placed under the supervision of GHQ (see Chapter 1, "Broadcasting of Transition Period", Sections 1, 2). As the object of occupation policies was to purge Japan of militarism and foster democratic tendencies, various directives issued with regard to mass-media, including broadcasting, were all designed towards this end. Consequently, a policy of permitting the broadcasters freedom of speech and expression, which is one of the fundamental principles of democracy, so long as they did not violate the restrictive clauses contained in the Radio Code was adopted. In the circumstances, changes that were unthinkable in prewar days were introduced into NHK's broadcasting both in content and form. The pivotal agency that provided guidance in the introduction of such reforms was the Radio Section of CIE, and since CIE's ideas were modelled on the American-style commercial broadcasting, programming systems and production methods common to sponsored programmes were adopted one after another.

Regarding this matter, Captain Ross, the CIE officer in charge of broadcasting, issued a statement titled "Criticisms and Requests Regarding the Existing State of NHK's Broadcasting" in October 1945. The gist of his statement was roughly as follows:

"I do by no means wish to Americanize Japanese radio. What I desire is to present what the Japanese public demands. From what I see, NHK is not exerting efforts to find out what the Japanese public desires. It has not grown out of the attitude of permitting the people to listen to radio, which has been the attitude taken by NHK right along. The strangest feeling we experience in listening to Japanese radio is that there are 'dead spots'. It must be said that programmes organized in intermittent continuity lack the power of leading the listeners on. I also think that some definite scheduling of programmes should be established. Programmes should be scheduled so that those in the same series will always be presented at the same hour, and they should end definitely at the appointed time. If any programmes should be likely to exceed the scheduled time, it should unhesitatingly be cut off. It is necessary to accustom the listeners to know in advance as to what programmes are going to be on the air at what time of the day. Impressions we get from the entertainment and musical programmes are that the atmosphere is too serious. As it is clear that the public prefers modern music to neo-classics, programmes higher in entertainment value should be presented in dynamic manner. Furthermore, the mechanism related to planning and presentation of programmes is extremely complicated, and it is possible to point out that there are too many captains. It is hoped that the organization in this field will be further simplified."

This advice was frankly reflected in the NHK's programming. In the first place, a programme schedule without dead spots, i.e., what is called the "blanket coverage" system in American commercial radio, was adopted in November of the same year. Under this system, programmes began to be presented without interruption from 6:00 a.m. till 10:10 p.m. on NHK's first network. However, as the programme production system at NHK was not adequate to meet the new demand, American style light music began to flood the contents, and though this resulted in faithfully following the aforementioned advice, the listeners were not necessarily pleased with the new development. Also, in the matter of establishing fixed schedules for programmes, a quota system in imitation of the American system was enforced from December. At the same time, a programme schedule covering a whole week was drafted for the first time. Through this system, selection of programmes on the part of the listeners was greatly facilitated, and the formation of the habit of tuning in to certain programmes according to the schedule was promoted. As a result, various programmes began to attract a stable number of listeners in accordance with their respective contents and aims.

In short, such reforms in programming were based on better service to the listeners. In other words, they were aimed at providing programmes that the listeners will "choose and listen to". Broadcasting of call signs that had been suspended at all the stations during hostilities was resumed from March 1946. Now, the call sign "NHK" of the Corporation began to be inserted at every change of programme to identify it as being presented

by NHK. From January 1947, in addition to the identification sign "NHK", spot news and programme announcements were inserted as a means of familiarizing the listeners with NHK's broadcasts. Meanwhile, the need for definitely grasping preferences and reactions of the listeners with respect to programmes was felt, and the Broadcast Culture Research Institute (see Section 8), which was established in June 1946, decided to undertake periodical surveys of listeners' preferences and programme ratings using scientific methods.

2. Programme Production Techniques

With changes in the fundamental programming policy, production of programmes also underwent radical changes. The fundamental principle of American commercial broadcasting was how to make sponsored programmes pleasant and attractive to the largest possible numbers of listeners, and their programme production techniques were systematized. The guidance policy of CIE attached primary importance to the production of programmes and pointed out the futility of programmes without direction. Under the guidance of CIE, therefore, obsolete cottage industry methods based on isolated individual ideas, seen in the existing programmes, were completely changed.

The revision of business organization which took place at NHK in June 1946 attached the greatest importance to the programming department. The chief aim of this revision was to separate planning and production of programmes and to introduce specialization in overall programming. In order to establish a production system and to promote greater skill in techniques, the Production Division was added to the Programming Department, and the producer system was adopted. This was undertaken in part to conform to advice and guidance policies of CIE. CIE definitely indicated the need for production, even for the round table talks in educational programmes, though something like production was by no means absent even in the customary manner of programming. However, such definite guidance provided by CIE greatly assisted to educate those in charge of the production phase of programmes. In the CIE guidance were included positions of the chairs around the microphones, the number of microphones to be used, creation of an atmosphere facilitating free discussion by the performers and even the manner of bringing the theme to their attention. In the campaign programmes, adequately calculated methods of production for achieving, within a specified period, the cumulative effect of integrated programmes formed of combinations of talks, dramas, music and news were introduced.

In the programmes, such as "Man on the Street", in which the microphone was kept wide open to the people on the street to express their views, and in quiz programmes like the "Fountain of Knowledge", production served as a decisive factor in heightening their effect. The technique of expression by the announcers assigned to such programmes was also changed to the standardized style by suppressing the former emotion-oriented subjective style, thus making it possible to exploit the announcers' individualistic expressions. The programme titled "Radio Experiment Room" played an important role towards training in expressions and techniques related

to radio dramas. The idea was an overall imitation of the object and principles of the "Radio Workshop" established by CBC in the United States. Nevertheless, the staffs in charge of scripts, production, acting, control techniques and sound effects benefited much in the field of theory and application based on this course. The knowledge and experience thus acquired exerted no little influence on the subsequent production of radio dramas.

In addition to the foregoing, methods and techniques designed to attractive opening, development and dynamic announcing of programmes were introduced. In short, the "show" style was successively introduced into broadcast programmes. However, because of differences in national character and the living habits between Japan and the United States, these reforms included some items that could not be easily acceptable to the Japanese people under the conditions of the time. However, the meritorious work of introducing a new tempo and present-day sense into the production methods of the unidimensional Japanese mood, woefully lacking in tempo and variety, cannot be underestimated.

The trend towards mass-production of programmes became evident along with increases in the items broadcast. Under this situation the former cottage industry style programming, in which a single person took charge from planning to production, had to be reformed. And in March 1947, reorganization was again undertaken and the so-called production system adopted. Under this system, planning, negotiations with talents and production were separated as independent units to which separate staffs were assigned, even though close collaboration of the three divisions was the prerequisite for producing a programme. The division of labour in the manner of modern industry may have been an ideal setup as a means of mass-producing programmes, but because of the lack of training on the part of the staffs and the ambiguity of the responsibility, for instance on which of the three divisions the final responsibility for a programme rested, the effect initially expected could not be obtained.

The quality of broadcast scripts was an important factor along with the production techniques. The script writing was changed to the American style in order to adapt them to the new methods of production enforced under CIE guidance. This included coded indications of effect and insertions and their positions, intensities and continuities. In this way various kinds of production codes and terms written-in began to be produced. In view of the importance attached to the scripts, NHK separated the script writing staff from the Production Division, and established a new Script Division in May 1948 to embrace all script writing. Towards the end of the same year, NHK employed more script writers to have them learn the new style and establish some formula for educational programmes.

3. Broadcast Items

Broadcasting during the war was rather imposed on the listeners for presenting the policies of the military and the government. After the war, programmes in which the general public could take part increased because of the belief that broadcasting was of the people and for the people.

The role played by broadcasting in fostering democratic trends among the Japanese can never be overlooked. Programme items, such as "Letters from the Listeners", "Man on the Street" and "Round Table Talks", which were inaugurated shortly after the war, opened up means of expressing opinions through broadcasting, and provided opportunities for airing freely views on political, economic and social problems. This never could have been imagined before and during hostilities. Meanwhile, constant efforts were made to reflect the views of the listeners on broadcast programmes. In short, the policy of "what should be provided for the listeners?" was changed to that of "what do the listeners prefer?" Surveys of the views and preferences of large numbers of listeners were undertaken and these were considered of primary importance as reference materials in the establishment of programme items. Programmes such as "Request Music" and "Request Variety Theatres" were among those established with this idea in mind.

The "Amateur Talent Contest" established in January 1946 brought amateur singers on to the stage so that performers and listeners could enjoy it together. At the first call for participants by the Tokyo Central Station, nearly 900 amateur singers applied for a chance to sing in front of the microphone. This programme aroused much interest and, since then, it has developed into an extremely popular item. Today a national amateur talent contest is held annually among those who have passed local preliminaries. Also, various types of quiz programmes, including the "Fountain of Knowledge" were inaugurated, inducing enormous numbers of letters and applications for participation from the public. Among these new programmes, some, like the "Amateur Talent Contest", were originated by NHK itself, but most of them, including the "Man on the Street" and "Round Table Talks", were modelled on similar programmes popular in the United States. All were programmes of new genre not heard in previous Japanese broadcasts, and the production techniques broke through what had hitherto been considered proper. The audience participation system was generally adopted for these programmes, and new ideas were incorporated in their production for the purpose of achieving greater sense of presence by including applause and laughter of the audiences. In this way, the effect of these new programmes was raised to unprecedented heights.

Programme guidance undertaken by CIE with a view to promoting democratization of Japan attached the greatest importance to the wide-spread unfolding of political education campaigns through various social education programmes. In the prewar days and during the hostilities, expression of critical views on national politics through broadcasting had been strictly prohibited, but after the war free discussion on political issues were allowed so long as such discussions did not impede occupation policies; in fact, such freedom was fostered and encouraged from the standpoint of democratic education. The round table discussion on the "Emperor System", which was presented in November of 1945 deserves special mention as the first of such programmes attesting to the freedom of speech allowed to broadcasting. This broadcast, in which issues related to the absolute powers of the deified Emperor were discussed among the participants, including a leader of the Communist Party, aroused extraordinary reaction from listeners, who were accustomed to undemocratic ideas, and

a great many denounced it. Nevertheless, there was no denying that it served as a stepping stone towards greater freedom of speech for broadcasting, which was useful for the political education of the general public.

The "Round Table Talks" already mentioned was typical of those aimed at political enlightenment of the people. The same item was also adopted successively by local stations ahead of the quiz programmes and others like the "Man on the Street" and became highly popular for audience participation. Also, in the "From Last Week's Diet", centred on discussion by representatives of various political parties, important issues taken up at the Diet sessions were ramified. Through this programme, the current political situations were brought into the limelight and helped to intensify the people's interest in politics. At the first postwar general election in April 1946, the first step, as will be described later (Section 6), was taken towards regular "election broadcasts" (broadcasts by candidates of their political views). Through such programmes, the capacity and the rôle of broadcasting for contributing to political education campaigns won high evaluation.

In October 1945, shortly after the occupation began, GHQ issued a directive on the "Removal of Restrictions on Political, Civil and Religious Liberty". It then followed up with issuance of a directive related to five major reforms for democratization of Japan. These directives included suffrage for women, fostering of labour unions, liberalization of school education, abolition of autocracy and democratization of economic systems, the enforcement of which GHQ demanded of the Japanese Government. These directives served as the basis for planning and organization of broadcast programmes, and the significance of their contents was explained to the people through such programmes as "Women's Hour", "Labourers' Hour", "Management Hour", "Students' Hour", "Farmers' Hour", "Tomorrow's Citizens" etc., some of which had already been presented while others were newly established items. In conformity with successive directives related to democratization of Japan and attendant amendments to pertinent laws, campaign broadcasts were undertaken through various programmes. Before promulgation of the new Constitution, a number of programmes related to it were established. Also, for the purpose of contributing towards postwar economic rehabilitation, programmes like the "Farmers' Evening" and the "Miners' Evening" were produced as special items. Also, utilizing the spot news form of broadcasting, campaigns connected with savings, sanitation, housing, food supply, electric power economy, tax payments and so forth, which embraced important immediate problems, were actively undertaken. In January 1948, an unusual measure was taken to present the "Information Hour", a thirty-minute daily programme integrating various campaign programmes mentioned previously into a unified continuity, during the evening "golden hour" in order to promote wider dissemination of democratic ideas.

For nearly three years after the end of hostilities the Japanese people were caught in the flood of inflation, gasped under food and housing shortages and waited in painful concern for demobilization and repatriation of relatives and friends from overseas. Under such situation, bulletins, such as the "Food Allocation News", "Repatriation News" and "Missing Persons" were presented as special programmes symbolizing the times. Also, through programmes like "This Is the Truth" and "Report on the Trial of War

Criminals" facts that had been hidden from the public were brought to light. These programmes, while plunging the national sentiment into abysmal darkness on one hand, provided an opportunity to rise up for the sake of liberation. It can be said that, from the reactions people showed towards these programmes, their desire to get a firm hold of the changing environment on the basis of radio programmes was markedly strengthened.

Meanwhile, it could not be denied that a strong desire for entertainment was cultivated among the people along with aspirations towards recognition of the environmental conditions in their true aspects. In the first place, what people wanted of broadcasting was its function to provide entertainment. In the postwar period, entertainment programmes, including the aforementioned "Amateur Talent Contest", popular songs and folksongs, regained their popularity; especially light music of American style literally filled the air. Also, along with establishment of various quiz programmes, new types in the nature of "shows" were planned and produced. Long-lasting serial dramas also definitely found their place in radio at that time. These programmes fitted perfectly the taste of the people who were in search of a breathing spell amid the gloomy atmosphere of postwar life. At the same time, foreign literary works and musical compositions were liberated from wartime restrictions and actively taken up in broadcasting. The fact that such programmes served as pointers towards the development of purely artistic programmes should not be overlooked. The "NHK Symphony Hall", a new programme performed by the Japan Symphony Orchestra, with a long history and tradition, suited perfectly the expectations of lovers of Western music. Incidentally, this programme served as a starting point for the organization and growth of the NHK Symphony Orchestra.

In 1950, when the Broadcast Law was promulgated, NHK's programme items had reached 180. NHK, which had been reorganized into a new special corporation under the new law, placed emphasis in its programming of new items on the cultivation of international outlook, contributions toward education of youths, and entertainment programmes which took into consideration the listeners in remote areas. At the same time, in preparation for the appearance of commercial broadcasting, NHK promoted enrichment of news and local programmes. One of the features of programme organization was the provision of flexibility in scheduling for the purpose of including special programmes freely and over a long period, in addition to those with fixed places in the schedules. This represented a partial revision of the programming pattern indicated by CIE immediately after the occupation began.

With the complicated international situation, such as the outbreak of the Korean War and signing of the San Francisco Peace Treaty as background, it was natural that emphasis should have been placed on programmes organized from the international point of view.

In July 1951, NHK dispatched special correspondents overseas for the first time since the end of the war and thenceforward the range of activities abroad was greatly broadened. Also, from the end of 1951, NHK commenced programme exchanges with various overseas broadcasting organizations. These two events deserve special mention. School

broadcasts, which formed the basis for educational programmes intended for young people, had developed over many years since they were inaugurated in April 1935. As a matter of fact, school broadcasts, viewed from systematic organization and presentation and the high rate⁽¹⁾ of utilization, had grown to the stage where they could compare favourably with similar programmes presented by the broadcasting organizations of major nations. In November 1950, a national organization of broadcast education study societies principally membered by schools utilizing school broadcasts was established, and this served as a powerful supporting pillar in the development of educational programmes. Although NHK's entertainment programmes were bound to compete with those of commercial broadcasters, the Corporation maintained the view that it was the obligation of a public service broadcaster to provide programmes desired by the people, and established new items that were pleasant and rich in contents but of a respectable standard. The "Three Songs", which commenced from November 1951, proved outstanding for its original idea even among the many quiz programmes, including those of commercial broadcasters. The melodrama titled "What's Your Name?", which started in April of the following year, aroused unusual interest among the listeners, so much so that it literally overshadowed in popularity all the serial dramas that were inaugurated one after another in the postwar period.

After 1950, handling of various campaign programmes evolved under the guidance of CIE was transferred to NHK. As NHK's character as a public corporation was further reinforced by the enforcement of the Broadcast Law, it obtained campaign materials every month from the government agencies, public enterprises and other public utilities, and on the basis of such materials produced monthly campaign data which contained more than a hundred important items classified into those related to the "United Nations", "political information and education", etc. And campaigns based on these data were unfolded more actively over NHK's nation-wide network and local broadcasts. The "Year-end Help the Needy Campaign" for sending money and goods to needy homes concentrated into a certain fixed period, and "Summer Time Mobile Consultative Service of NHK" (a campaign for enlightening people in areas comparatively poor in cultural facilities in public health, civil law, etc.) were created anew at this time for promoting better social welfare.

4. Voluntary Control of Programming

The Broadcast Law provided that "programming shall not be interfered with or controlled by anyone except on the basis of authority provided for by law", thus legalizing the freedom of programme organization. In general, freedom of speech is guaranteed by the new Constitution in so far as no violation of public welfare is perpetrated thereby. In the case of broadcasting, this point was clarified by especially including the above provision, but it has premised on the condition that the broadcaster himself will

(1) In 1950, 26% of lower primary grades, 30% of upper primary grades and 22% of middle schools utilized school broadcasts. The ratios had increased to 36%, 39% and 36% respectively in 1952.

guarantee to be impartial and observe the truth of broadcasting and self-regulation. The Law provided means of correction or deletion of any broadcast that was not true, and with regard to self-regulation in programming, essentials of the broadcast standards were indicated for their strict observance.

The standards can be summarized as follows: (1) Public peace will not be disturbed. (2) Political impartiality will be observed. (3) Facts will not be distorted in newscasts. (4) Issues, on which opposing opinions are expressed, will be discussed from as many angles as possible. NHK, however, had already established the Broadcast Standards in December 1949 to take the place of the Radio Code provided by GHQ. This measure was taken because, with the abolition of censorship by CCD in October 1949, NHK felt the need for certain standards that would clarify the rules and limits of programme organization. These standards were based on the aforementioned four principles indicated in the process of deliberations on the draft Broadcast Law by the government agencies. These included criteria related to twelve items, i.e., politics, religion, race, nationality, citizenship, language, drinking, narcotics, honour, marriage and home, sex, professions, crime and detection, issues on public questions and advertisements and propaganda, as well as for programmes related to news, talks, entertainment, audience participation, small children and school education. These items were classified and standards for each item were provided.

The work of programme monitoring, which commenced in May 1948, was purported to undertake objective review of programme contents and presentation to obtain data useful for improving and enriching programmes so that the results might be reflected in programming. With the enforcement of the Broadcast Law, evidences of the establishment of commercial broadcasting companies in various areas became visible. For this reason, NHK, from the standpoint of a public service broadcasting organization, came to feel the need for reinforcing the monitoring work in order to examine whether or not its broadcasts were compatible with the above-mentioned Broadcast Standards, the designs of planning were enforced effectively and the programmes were properly arranged.

Formerly, monitoring of programmes was principally undertaken for those already presented, but from May 1950, reviews of scripts to be presented began to be enforced concurrently with monitoring of programmes being presented. Points that received the most serious attention in monitoring were related to advertising and publicity. The Broadcast Law provided prohibitive clauses on the matter of NHK's presenting advertisements in order to secure for the commercial broadcasters financial sources in the form of advertising. However, there was a proviso to the effect that items necessary for programming objectively recognized as not being advertisements for others' business would not be deemed a violation of the prohibition. Under this situation, not a few instances of "advertisements" were adjudged and disposed of case by case.

In April 1949, the monitoring system was established as a means of reflecting the views of the listeners on the programmes. These monitors, who were not employees of NHK, were chosen from both sexes and various age and occupation groups, and the data compiled from their reports served as a pointer in programming.

The Broadcast Law demanded that NHK's programming respect public opinion and avoid self-righteousness. For the purpose of reflecting the views and requests of general listeners on the programmes as well as for obtaining opinions of the authorities and learned and experienced persons outside NHK, the Broadcasting Programme Council was established in October 1950 at the NHK Headquarters. This Council was composed of twelve members, and its chief duty was to deliberate on the fundamental policies of programming in accordance with the request of the President of NHK and submit a report on the results of its deliberations. As a rule, it was to meet once a month. Following the establishment of this Headquarters Council, similar organs were set up in the regional key and local stations to deliberate on local programming policies directly related to local communities and to contribute towards the improvement of the quality of local programmes as well as to the planning of new items.

Meanwhile, various committees composed of outsiders (committees on farm, women's, youths', school, and literary and theatrical programmes) were established at the Headquarters and local stations for the purpose of obtaining advice on the planning of programmes for various types of items. In this manner, management of the broadcasting service, which had to depend on the guidance provided by CIE since the beginning of occupation, finally regained independence.

5. Broadcasting Hours

NHK's broadcasting hours after the end of hostilities were as shown in the attached table. What should be noted in this table is the fact that in the first seven years after the war, the broadcasting hours for the second network increased rapidly in proportion to those of the first network, and by 1952, the hours of these two networks had become practically equal. Originally, the second network was planned shortly after the establishment of NHK chiefly to exploit the educational capacity inherent in broadcasting. However, as has been stated in Part I Chapter 7, "Broadcasting Programmes", before the war the second network facilities were provided only for the Tokyo, Osaka and Nagoya stations. For this reason, the chief object of the second network, which was to provide equal educational opportunities for all the people of the country, could not be attained. As a result, school programmes were presented on the first network to those living in areas where no second network facilities were available. This had made it difficult to distinguish clearly the characteristics of these two types in the overall programming.

After the war, the chief object of NHK's network constructions was the expansion of the second network (Chapter 5, "Broadcast Engineering", Section 1). This policy was adopted, not entirely with the idea of using the second network for enriching educational programmes, which was the initial object, but rather for the purpose of distributing the increasing programme items over the two networks, thereby offering greater freedom of choice for listeners. By the end of financial 1950 the second network had been expanded to link thirty-seven of the total forty-six broadcasting stations in the country, and its coverage had reached 79 per cent of the entire archipelago against 93 per cent for the first network. As a result, the principal task

of programming became the clarification of the character of the two systems and rational and effective presentation of programmes. Furthermore, the work of maintaining organic relationship between the nation-wide programmes presented on these two networks and local programmes, which will be described later, to complete an integrated public broadcasting service came to be considered very important. Ultimately, it was decided that programmes intended for the general public, such as news, talks of common interest, entertainment, women's and children's programmes and those suitable for home service, would be presented on the first network, while the second network would present school broadcasts, programmes of higher level intended for specific audiences, relays from the Diet and special functions such as sports events which would require comparatively longer broadcast time. (see the following table).

Ratios among various categories of programmes were maintained without marked variations from year to year. The results for three years from 1950 were as shown in the following table.

Broadcasting Hours by Networks

Year	1st network		2nd network		Total per day
	Total time	Average per day	Total time	Average per day	
	hrs	hr. min	hrs	hr. min	hr. min
1946	5801	15.53	2799	7.41	23.34
1947	6235	17.05	3204	8.42	25.47
1948	6316	17.19	3426	9.22	26.41
1949	6298	17.17	5224	14.17	31.34
1950	6376	17.28	5933	16.15	33.43
1951	6406	17.30	6186	16.54	34.24
1952	6489	17.47	6387	17.30	35.17

Ratios of Broadcasting Hours by Categories

Items	Year	1950	1951	1952
	News		15.6%	16.3%
Social programmes		12.3	13.3	13.0
Farm	"	3.1	3.1	2.9
Educational	"	12.1	12.3	12.6
Cultural	"	2.0	2.1	2.9
Women's	"	7.5	7.4	6.8
Entertainment	"	10.3	10.8	12.8
Japanese music		4.7	3.8	3.4
Foreign music		25.3	23.7	22.4
Sports		7.1	7.2	7.2
Total		100.0	100.0	100.0

According to the table, news and information programmes accounted for about 55 per cent of the total, and entertainment, music and sports about 45 per cent. An outstanding feature of each year was the highest percentage occupied by foreign music. This arose from the increased use of foreign light music after the war and active inclusion of classical music in the second network programmes.

Local broadcasts conducted individually by local stations of NHK were finally put on a routine course after the war. The use of local broadcasts as a means of presenting the views of candidates during the general election that took place in April 1946 served as an opportunity for winning recognition of the value of these local broadcasts. During the same year, two 15-minute programmes were specified as regularly scheduled local programmes for digesting various campaign items related to politics, social problems, economy and cultural matters. Since then facilities at the local stations were improved and personnel were increased, making it possible to extend their programme hours. By 1949, an average of three hours per day were reserved for each regional key station for local programmes, while the local stations were presenting one hour and forty minutes of local programmes daily.

In the revision of the programming system undertaken in July 1950, immediately after the enforcement of the Broadcast Law, time spaces for independent local programmes outside the framework of the national network were specified over a wide range. At the same time, programme hours for which each local station had to provide independent programmes were set aside. In 1950 local programmes accounted for an average of three hours and thirty-two minutes at each regional key station and two hours and thirteen minutes at each local station. The following year, however, the former were presenting four hours and twenty-seven minutes and the latter two hours and forty-one minutes of local programmes, thus plainly indicating the increasing trend of such programme hours. Of the total broadcasting hours cited in the following table local programmes in 1951 accounted for about 13 per cent at the regional key stations and for 8 per cent at the local stations.

The keynote for local programming was to provide services directly connected with local communities. For this reason, the ratios of local news

Ratios of Local Programmes by Categories (for 1951)

Items \ Stations	Regional station (Average per station)	Local station (Average per station)
News	28.6%	39.3%
Social programmes	20.1	26.1
Foreign music	18.8	10.9
Entertainment	7.7	5.5
Educational programmes	7.0	5.2
Farm programmes	6.6	8.1
Sports	6.0	2.6
Others	5.2	2.2

and campaign programmes were generally high, but certain differences were seen between the regional key stations located in urban areas and local stations in rural areas, as shown in the table on the preceding page.

6. Commencement of Election Broadcasts

The first postwar general election held in April 1946 had the historic significance of being aimed at the establishment of a democratic political structure.

At that time, NHK made its first plans for conducting broadcasts presenting party policies and the opinions of individual candidates, thus taking a step towards use of its facilities for the so-called "election broadcasts". The party broadcasts were to be used by representatives of various political parties for presenting their respective principles and policies over the nation-wide network. The broadcasts of the political views of individual candidates were to be made over NHK's local facilities for the purpose of directly addressing the voters. The fact that in these first election broadcasts more than 2,000 candidates out of a total of 2,782 desired to express their views on the radio was probably a phenomenon rarely seen anywhere. Time was allocated evenly and fairly to the candidates, and as measures for preventing any mishaps in the operation were necessary in view of the importance of such an event as the general election, each local station had to take the utmost care in conducting these broadcasts.

The outline of the election broadcasts was originally drafted at the direction of GHQ; it was not conceived independently by NHK. Moreover, the scripts had to be placed under the strict pre-broadcast censorship of CCD. In any case, despite the fact that this broadcast was undertaken at a time when postwar rehabilitation of technical facilities had not been completed, all went very smoothly. On the other hand, as it was the first election for a suddenly increased electorate arising from the lowering of the eligible age and granting of the franchise to women, the interest of the general public was intense, as a result of which the rating of election broadcasts proved very high. These broadcasts that closely linked broadcasting and democratic politics were considered as being of special importance in NHK's programming, and through experiences gained in later election broadcasts, a system for their operation was gradually established.

The second election broadcasts conducted in April 1947 handled four elections associated with the projected promulgation of the new Constitution in May of the same year. In other words, these involved the elections of the members of the House of Representatives, members of the House of Councillors, chiefs of local autonomous bodies and the members of local legislatures. The scale of these broadcasts, therefore, was very large. Nevertheless, inasmuch as it was impossible to place the broadcasting facilities at the disposal of all the candidates for all the elections, partial limitations were imposed on the broadcasts of opinions by the candidates for chiefs of local autonomous bodies and members of local legislatures. Of the total numbers of candidates, 70.5 per cent of those for the House of Representatives and more than 90 per cent of those for governors, mayors and the House of Councillors took part in the broadcasts. In the case of the election for members of local legislatures, which was conducted in

small constituencies, it was possible to find means other than broadcasting for addressing the voters with political views. For this reason, no more than 30 per cent of the candidates resorted to the radio for expressing their political opinions for the benefit of the voters.

The "Law for Provisional Exceptions for Election Campaigns" established in July 1948 provided a legal character for the election broadcasts NHK had been operating voluntarily. In other words, the law made it obligatory for the broadcaster (1) to allow the candidates to broadcast their political opinions and (2) to let the voters know about the candidates. At the same time, this law provided that funds required for the conduct of such broadcasts would be borne by the State. It took effect from the general election for members of the House of Representatives, which took place in January of the following year. At the abovementioned general election, NHK broadcast the opinions of the candidates and their personal histories on the basis of the rules and regulations for broadcasts by candidates for the House of Representatives drawn up by the Election Administration Committee, which was the administrative agency for elections, and working rules established by NHK itself. The results differed according to the number of candidates in various constituencies, but most candidates presented their political views to the listeners two to three times at the rate of about six minutes per broadcast. Information on each candidate was presented about ten times, but the contents were very brief. What should be noted about the quick reporting on the opening of ballots was the eight-dimensional relay system executed at that time by posting the master announcer in Tokyo and reporting the results as they were sent in from the eight regional key stations scattered throughout the country. By this means, audiences were informed from time to time of the results of ballots for the entire country. It was a wonderful display of the mobility and quick-reporting function inherent in broadcasting.

The Provisional Exception Law mentioned previously was revised to the "Election Law for Public Offices", which was enforced in April 1950. The applicable scope of the new law was broadened, by additions covering lower and upper house elections, gubernatorial and mayoral elections and elections for members of local legislatures, to those for members of the boards of education. In other respects it was practically identical with the old law. It was partially amended in August 1952 to allow election broadcasts to the commercial stations, which were established one after another from September of the preceding year, in addition to NHK. In other words, one candidate was given a maximum of three opportunities to broadcast his political views from either of the two broadcasting systems freely chosen by himself. Also, though no recorded broadcast had been authorized in former election broadcasts, all such broadcasts were changed to recordings because recording techniques had developed to an adequate level. It must be noted that the responsibility for the contents of the candidate's broadcast rested entirely on himself and not on the broadcaster.

7. Establishment of an Independent System for News Material Coverage

Before the war, materials for NHK's newscasts were almost entirely

provided by newspaper companies and news agencies. After 1936, in particular, these were provided almost exclusively by the government-controlled Domei News Agency, established on recommendation of the government. For this reason, it was undeniable that the will of the State based on the information and propaganda policies of the government should have been woven, more or less, in all the political, military and important diplomatic news presented after the outbreak of the hostilities with China. The fact was that the newscasts were presented while the news editors were unable to grasp the essential points hidden behind the materials. After the occupation, GHQ ordered the aforementioned news agency dissolved, rejected government control of broadcasting and indicated editing standards based on the idea that newscasts should include nothing but facts. Meanwhile, NHK itself confirmed the propriety of independent material coverage activities, in view of the quick-reporting capacity of broadcasting.

Because of such changes, NHK decided to establish an independent news material gathering system as soon as possible. In the early stages, stress was placed on the establishment of such a system centred in Tokyo, and by July 1946, thirty-nine radio reporters were available for covering political, economic and social events. However, the number was woefully insufficient to cover all the press clubs in the government agencies and various other organizations. Moreover, the news material gathering setup in the regional key stations was so inadequate as to be negligible. For example, at the Osaka Station situated in a city next in population to Tokyo, only three desk editors and five or six reporters were available and even when the editorial staff was added, the total number of men in charge of news did not exceed ten.⁽¹⁾ The reporters ran in and out of the press clubs where they were finally accepted, and other places where they were likely to find materials, to obtain enough for local newscasts. There was not one reporter assigned to the local stations. As a result, these local stations were still obliged to accept materials from the Kyodo News Agency, the former Domei News Agency democratically reorganized in November 1946, and from local newspapers.

However, a nation-wide system of news material gathering was established at NHK between 1950, when the Broadcast Law was enforced, and 1953, in which year television broadcasting was inaugurated. The commercial broadcasting companies, which had completed preparations for commencing broadcasting in the various cities under the aforementioned law, established close relations with the leading local newspapers, and through the use of materials provided by such newspapers, they evidently intended to compete with NHK in this particular field. NHK, therefore, was obliged to consolidate its news material gathering system, especially that of local stations, in order to be prepared for such competition. This resulted in employment of large numbers of radio reporters for posting at various local stations. Radio reporters increased year by year, and by March 1953, there were more than two hundred. In addition, a policy was formulated for posting correspondents in the leading cities in the service areas as a means of strengthening the material gathering system in 1951. These correspond-

(1) As of 1946 the Asahi and Mainichi Newspapers of Osaka, which had nation-wide circulations, each had more than 400 editorial staff, while among local papers, the Osaka Newspaper had 129, Osaka Jiji 90, the Evening News Shin Osaka 74 and Osaka Daily had 61.

ents were commissioned with the work of gathering materials in their respective cities and vicinities. In this way, NHK's independent news material gathering activities were firmly established and developed to the stage where they could be pitted against those of newspapers claiming a longer history and tradition. This helped to bring about a radical change in the concept fixed in the mind of newspaper publishers that radio news should serve as an appetizer for newspaper articles and that it should not be placed in a position to compete with newspapers.

In parallel with the increased number of radio reporters, NHK provided radio cars, portable recorders and so forth for the local stations between 1950 and 1952 in order to facilitate news covering activities. The leading newspapers and news agencies had been using FM cars and obtaining good results in reporting various events. NHK, therefore, began with assignment of FM radio cars to Tokyo and other regional key stations so that direct spot reports of events could be made. These cars added a new power to the quick reporting of news. Also, as compact portable tape recorders on shoulder straps were perfected at NHK in 1951, these were distributed to all the stations in the country. These tape recorders rapidly found wider application as a powerful instrument for gathering news materials.

In comparison with the establishment of the independent news material gathering system in Japan through the process described above, delay in the systematization of material gathering activities overseas was conspicuous. At this period, the situation differed little from that which had existed before the war. Materials for overseas news were practically dependent on the Kyodo News Agency, and shortage of materials from the above source was filled in with those provided by AFP and Radio Press with which NHK concluded a contract after the war. However, as the prospects for defeated Japan regaining its position on the international stage as a full member of the society of nations grew brighter, the need for dispatching special correspondents overseas began to be felt. What provided the first opportunity was the Korean War, which greatly affected Japan both politically and economically. NHK's direct news gathering abroad took the first step in July 1951 when some reporters were sent to cover cease-fire talks in Korea. The NHK reporters were to cover various areas in Korea as U.N. war correspondents, and though personnel changes were made from time to time, they stayed there for two years to engage in reporting on conditions.

Four special correspondents were sent to cover the signing of the San Francisco Peace Treaty in September 1951. While reporting news and interviews before and after the Conference, these reporters also undertook spot reporting of the signing of the treaty. With further dispatch of NHK special correspondents to cover the Preliminary Conference on Japan-Philippines Reparations held in Manila in 1952 as well as to the Japan-China Peace Treaty Conference in Taipei, NHK's overseas news covering activities became brisk. Aside from dispatch of such special correspondents, NHK posted correspondents in Paris in March 1952, in New York in August 1953 for the purpose of covering Europe and America as well as acting as agencies for exchanging programmes with various broadcasting organizations in these areas. These provided the starting point for the establishment of NHK's overseas bureaus in the leading cities overseas.

8. Programme Surveys

Public opinion surveys on programmes for reflecting the preferences and opinions of listeners on programming, and basic researches for elevating broadcast culture had been continued since the commencement of broadcasting till about 1944, towards the end of hostilities. However, it was difficult to reflect the results of opinion surveys adequately on programming under the control of the government in prewar days as well as during the hostilities. Broadcasting was rather utilized as a means of disseminating government policies among the people. So that under this situation, there were not a few instances in which public opinion was ignored. It was therefore natural that democratized broadcasting should have confirmed the importance of opinion surveys on programmes and to consider as a matter of acute need the broadening of areas of researches to prevent the level of Japan's broadcast culture from falling behind that of other countries, since it had been at a standstill during the war.

The NHK Radio Culture Research Institute (now Radio and Television Culture Research Institute), which was established in June 1946 as an organ for undertaking opinion surveys, together with the NHK Technical Research Laboratories, became important for supporting the growth of NHK's broadcasting service from the flanks. The principal work of this Institute in the early period of its establishment included public opinion surveys on programmes, study of language usage for broadcasting, investigations into the broadcasting situations in various foreign countries and collection, production and arrangement of basic materials for broadcasting, thus covering a wide range of fields. To carry out such multifarious duties, the Institute employed about 70 staff members as of July 1948. Progress made at the Institute in surveys and investigations may be described as follows:

Opinion Surveys on Programmes: As the scientific sampling methods of opinion surveys had not developed sufficiently in prewar days, surveys in those days employed the deliberate sampling method in which the samples were selected with a purpose in mind. In the programme survey undertaken in November 1948, the sampling theory based on the stratified random sampling method was followed for the first time. This theory was reportedly conceived and developed in America for predicting presidential election results. In Japan it was adopted for the first time by NHK under the guidance of CIE. And in order to take the best advantage of this method, the personal interview system was adopted, for which purpose 528 interviewers were employed throughout the country.

Since then, with consolidation of the survey network on nation-wide scale, the contents of surveys and analyses of the results were made more and more accurate and precise. Surveys on programme hours, programme ratings and programme preferences have been undertaken for various categories periodically and with mobility to obtain scientific data to serve as materials for programming. Also, as stated before, enrichment and extension of local programmes had become one of the fundamental policies of NHK, which had made a new start as a special corporation under the Broadcast Law. In order to implement this policy, surveys aimed at clarifying the local programme ratings were begun in March 1950 and have been undertaken periodically for all the local stations in the country.

Panel surveys for seeking systematically and continuously evaluations of specific programmes were also begun from October 1951. The programme analyzer, which made it possible to strike out into a new departure in the surveys, was developed and demonstrated in March of the same year. This was similar to the device used by CBS in the United States. The reactions of the listener were graphically recorded during the listening behaviour, and the recording was analyzed to obtain data on programme evaluation. It is now no longer a novel device, but in those days, it attracted wide attention as being a means of developing a new field in programme surveys. In 1953, a large-scale programme analyzer was completed and installed in studio No. 1 in the Tokyo Headquarters building. Since then it has been utilized effectively, and has made important contributions towards the study of programming.

Surveys and Study of Broadcasting Language: NHK's work on the study of terms and expressions used in broadcasting had been suspended since May 1945, just before the hostilities were brought to an end. After the war, however, when reforms related to the Japanese language were included among the government policies, an early establishment of the broadcast language compatible with the new age was required. The government's policy on the Japanese language consisted of reforming the method of traditional writing to bring it closer to pronunciations used in daily conversation and of limiting Chinese characters assimilated into Japanese writing so as to eliminate many of the more difficult ones from the written language. The results were publicly announced in November 1946. Since then the new form of writing has been adopted by government offices, schools, newspapers, etc. This was an epoch-making reform in the history of the Japanese language.

In April of the same year, NHK set up a broadcast language study group and resumed the work of surveys using the aforementioned situation as background. Several noted Japanese language scholars were invited to be members of this group, and improvements in the broadcast language were attempted through examinations of the terms and phrases that posed problems in broadcasting and those used in broadcast scripts. At the same time, various publications on the broadcast language were issued for use as pointers in the operation of broadcasting. In 1949 NHK began a demonstrative study under the theme of "Relationship between the language conditions and degree of understanding in broadcasting". Thereafter NHK continued with work on "basic studies for the establishment of criteria for the understanding of the broadcast language" and "studies on the style of radio news". The latter work consisted of studies of the effect of the vocabulary, lengths of sentences and the duration of broadcasting on the understanding of the listeners. In this study, specific students were principally selected as subjects. The results of these experiments contributed greatly to the establishment of the basic theory on the style of the language.

Survey of Broadcasting Situations Abroad: The history of surveys in this field is long. In fact, study of broadcasting situations in foreign countries, though in small scale, were conducted even before the commencement of broadcasting in Japan, and activities in this field became lively along with collection and arrangement of foreign literature on broadcasting.

However, with the progress of hostilities, data became scarce and the work declined. As normal relations with foreign countries were disrupted for a defeated nation even after the end of the hostilities, the route for securing pertinent data remained closed to Japan. Consequently, it was not possible to obtain information on the changing conditions abroad. In those days, data available for studies in this field were limited to those obtainable at the library set up by CIE and such weekly magazines as "Time" and "News Week", which provided intermittent information on conditions overseas.

Some dozen books related to American broadcasting, which CIE donated to NHK in 1948, constituted very valuable material for the study of the American broadcasting situation. Later, routes for obtaining information direct from foreign broadcasting organizations through diplomatic establishments in Japan gradually opened up. And by 1950 it became possible to obtain magazines and annuals on broadcasting published in America and Great Britain. Furthermore, as NHK became an associate member of the European Broadcasting Union (EBU) in June of the following year, marked conveniences were made available for obtaining necessary data. On the basis of such data, research on the broadcasting situations in foreign countries made a new start, and the results were publicized through various publications. At the same time the work advanced to the stage of publishing the bimonthly "Quick Report on Overseas Information" in October 1950.

Establishment of the Sound Library: In November 1951 NHK decided to collect and preserve systematically and methodically intangible cultural properties related to sound. The Sound Library established on the basis of this policy aimed at recording not only important items taken up in broadcasting but also valuable cultural properties left buried under miscellaneous materials within the country for the purposes of their preservation. Subjects considered worthy of recording included (1) personalities, (2) events and phenomena, (3) theatrical works, (4) broadcasting patterns, (5) sound of natural world, (6) living habits and customs and (7) dialects. As an organ for deliberating on the general rules for their collection, an advisory committee comprising specialists in various fields was established in February 1962. This library will be described in further detail in Chapter 13, Part III.

5. Broadcast Engineering

1. Facility Expansion Plans

NHK expedited rehabilitation of war-damaged facilities amid unfavourable conditions, such as shortage of materials, inflation and the unstable financial situation. At the same time, it was decided that measures appropriate for the restitution of broadcast engineering, such as the review of network expansion plans that had been suspended because of the war and induction of new techniques to make up for the blank period created by the war should be expedited. Many of the low-power broadcasting stations constructed provisionally during hostilities for the purpose of facilitating

radio wave control were used for expanding and consolidating the broadcasting facilities in the postwar period. Also, standby broadcasting facilities set up for jamming enemy broadcasts were converted as second network facilities in four regional key stations. Further, short-wave and VHF equipment used during the war for interstation contacts were used as they were after the war. These may be considered a few items of equipment that were available for use in the postwar reconstruction of facilities.

By 1947 when first steps for emergency measures in the reconstruction of the broadcasting facilities were completed, bright prospects became visible in the rehabilitation of the domestic radio industry and regaining receiving contractors. With such a situation as background, the five-year network expansion programme was drawn up that year. The basic policy of this programme was aimed chiefly at revising the prewar programme and completing the dual broadcasting system capable of covering every corner of the country, in order to fall in line with the distribution of population that had changed radically since the war, with the existing situation related to receiving sets and with other new situations which had developed.

The prewar programme called principally for a small number of medium-power stations and a large number of low-power stations scattered throughout the country. This system was suitable for local broadcasting, but it also involved unfavourable problems such as difficulty in frequency allocation and possibility of interference. Also there was a strong tendency towards giving priority to areas likely to provide larger number of receiving contractors because of financial limitations imposed on the establishment of the stations. The new programme made it its basic policy (1) not to consider regional orders of preference for the sake of meeting the technical requirements for the nation-wide equalization of radio distribution, (2) to adopt a system in which certain high-power and medium-power stations would be included among large numbers of low-power stations scheduled for establishment, (3) to provide the second network facilities with identical output power for each station. The reason for stressing establishment of large numbers of low-power stations, as in the case of the prewar programme, was due to the physical conditions of Japan where mountainous areas prevail, regional differences in cultural levels, and the very few high-quality receivers in use because of the low purchasing power of the people in general.

The network expansion and consolidation programme based on this policy was revised to a certain extent in the light of GHQ policies and was adopted for implementation. It was implemented as a five-year programme with 1948 as the starting point and called for the establishment of high-power transmitters at Osaka and Fukuoka, suspended because of the war, and large-scale construction work including six new 10 kW transmitters (concurrent installation of the first and second network facilities), and addition of the second network facilities for some two dozen low-power stations. CCS, which was in control of technical facilities at GHQ, at first strongly opposed such an expansion.

It was the opinion of CCS that in a small country like Japan (about 370,000 square kilometres in total area) some ten 100kW stations (or 15 to 20 stations with 20 kW output) would cover the entire country without trouble. This system of using a small number of high-power stations

was reasonable for a country like America where the nature of broadcasting enterprises and their distribution as well as widespread use of high-quality receiving sets endorsed such a system. It was, however, an opinion which ignored the special conditions prevailing in Japan. On the other hand, this was the time when the Japanese government was deliberating on some new broadcast system under the advice of GHQ, and CCS was considering measures for allocating frequencies to the commercial broadcasting stations, the establishment of which was to be inevitably authorized under the system then being considered. However, on the basis of data clarifying the propriety of NHK's plans CCS recognized their reasonableness and ultimately accepted the draft plans.

Through implementation of the plans, NHK had provided itself, by the time the Broadcast Law was promulgated, with 83 first network stations with a total output power of 171.15 kW and 37 second network stations with a total output of 152.7 kW. Immediately before the outbreak of the Pacific War, there were 42 first network stations with a total output of 227.9 kW, 3 second network stations with a total output of 170 kW and a short-wave station with an output of 10 kW. New techniques were incorporated in the stations built under the new plans, and the facilities showed marked renovations. As is evident from the figures cited above, however, construction of the second network facilities was delayed when compared with those of the first network facilities. Consequently, at the time NHK made a new start under the Broadcast Law, a partial revision was made in the aforementioned plans to shift the emphasis to expediting construction of the second network facilities. In addition, it was decided that re-broadcasting stations would be built in weak field intensity areas as a measure against interference from foreign radio waves. As a result, NHK facilities as of the end of January 1953 were as shown in the following table.

Severe damage had been inflicted on the broadcast programme lines, and, moreover, repairs and maintenance work had not been adequate during hostilities and immediately after the end of the war. In the circumstances, available lines were insufficient, and because of the deterioration of electrical characteristics, transmission of signals had become unstable, rendering it impossible to expect the relaying of high-quality broadcasts. As a matter of fact, difficulty was experienced even in inter-regional station contacts for business purposes. Consequently, it was all the more difficult to secure programme lines for operating the second network facilities of local stations, which was the principal objective of the aforementioned network expansion plans. While exerting efforts towards rehabilitation of

NHK Network (as of end of January 1958)

Network	Power (kW)								Total	Coverage (%)
	100	50	10	0.5	0.3	0.1	0.05			
1st network		2	12	30	2	3	34	83	97.9	
2nd network	1	1	12	28	2	3	7	54	93.2	

these programme lines in cooperation with the Ministry of Communications, NHK undertook to evolve a nation-wide radio link system. As a result, while concurrently using short and medium wave link channels, receiving stations were built at strategic points to complete the radio link system for the entire country. The short-wave facilities brought good results for securing stable broadcasting channels, and even after the programme lines were rehabilitated, they were preserved for emergency use.

Although progress in the consolidation and improvement of land lines was slow, repaired repeaters were provided, from around March 1948, for part of the trunk lines to improve the low sound range characteristics, and the bare carrier lines formerly used in parts of other sections, which were subject to frequent trouble, were replaced with high-standard lines of non-loaded cable sound system, specially designed for broadcasting use. Under these measures, characteristics of the programme lines were comparatively stabilized and the need for depending on the radio link system was practically eliminated. In January 1949, NHK in consultation with the Ministry of Communications drafted the "Five-year Plan for Broadcasting Programme Line Consolidation" with a view to further improvement of the land lines which would be needed in parallel with the progress of the previously cited Five-Year Network Expansion Programme. With the implementation of this plan, improvement of the standard was accomplished by replacement of the principal trunks with non-loaded cables, and new programme lines were laid for increased second network facilities and for building more rebroadcasting facilities. By the end of financial 1951, the greater portion of the construction work on the trunk lines was completed. The programme lines for the second network facilities for the rapidly increasing rebroadcasting stations, however, barely avoided shortage through the adoption of the FM carrier system utilizing the existing channels.

Frequency allocation became a serious question in the radio administration along with progress made in NHK's facility expansion programmes, commencement of the Armed Forces Radio Service and possible opening of commercial stations. When the opportunity arose of extending medium-wave frequencies usable in Japan from 535 kc to 1605 kc by the resolution of the International Telecommunications Conference held in Atlantic City in 1947, the Ministry of Communications decided on a new policy of frequency allocation, and in October of the following year, a nation-wide frequency reallocation was enforced. As a result, most of the low-power stations with 500 to 50 W output were designated to operate common frequency broadcasting in groups of several stations, on the condition that no deterioration in reception would be allowed. In April 1951, the first preliminary licences were issued to sixteen commercial broadcasters. Moreover, in view of the increasing trend of applications, frequencies for 108 stations out of the total of 135 in active service across the country were changed for the purpose of working out means of finding available frequencies in July of the same year. The task of allocating frequencies for so many facilities without causing interference or disturbance was in itself a difficult matter, and as the number of stations increased, it became necessary to enforce operations on common frequencies. The need therefore became acute to establish a definite frequency allocation policy and undertake a nation-wide reallocation and, in order to bring about an early solution of

the problem, the Ministry of Posts and Telecommunications (reorganized Ministry of Communications) was obliged to take the necessary steps. More will be said on this matter in Part III Chapter 2.

What deserves special mention was the transfer of a part of NHK's facilities, including technical duties, to the Armed Forces Radio Service by order of GHQ immediately upon the commencement of occupation by the Allied Forces. This service was put under the supervision of a branch of AFRS which had its headquarters in Los Angeles. The branch office was at first located in Yokohama, but later moved to the NHK building in Tokyo. From September 1945, the branch office commenced broadcasting services for the Armed Forces in Tokyo (WVTR), Osaka (WVTQ), Nagoya (WVTC) and other cities, where the Occupation Forces were stationed, by utilizing NHK facilities. The programmes of AFRS included those produced in Japan and recorded discs and tapes supplied by the headquarters or rebroadcasts of short-wave programmes transmitted from the headquarters. For rebroadcasts in Japan transmitters operated by International Telecommunications (Kokusai Denki-Tsushin) Company were used. When the Korean War broke out in June 1950, short-wave transmissions of AFRS programmes to the United Nations Forces in Korea were commenced.

The AFRS, operated as a part of the occupation policy, was abolished when the San Francisco Peace Treaty and US-Japan Security Pact were put in force in 1952, and was replaced by the Far East Network (FEN) of the US Far East Forces. NHK continued for a while to supply services to FEN as in the case of AFRS, but all such services were discontinued in August 1954, with Osaka being the last place to cease operations. Since then until today, this broadcasting service has been operated entirely by the US Forces stationed in Japan.

2. Induction and Development of New Techniques

World electronic technology registered a remarkable development in the postwar years on the basis of researches and developmental work undertaken during hostilities on radio weapons and military radio communications equipment. In particular, remarkable progress was made in the application of pulse techniques (pulse communications, television, electronic computers, etc.), in the manufacture of electron tubes for use in the ultra high frequency and microwave regions and in the development of new materials and components. In 1948 the invention of transistors was announced by the Bell Laboratories of the United States and caused a sensation in the science of electronics.

In the postwar period, NHK, in the process of rehabilitating its broadcasting facilities and implementing plans for expanding and consolidating them, exerted unstinting efforts towards the improvement of materials, components and equipment systems for the purpose of elevating the engineering level. Meanwhile, with introduction of the latest techniques, such as mentioned above, and developed in the United States and other countries, the objective of technical reforms ceased to be retrogression towards the prewar level but an advance towards the highest levels achieved by other countries. Thereupon, development and improvement of equipment compatible with the new age began by introducing the latest foreign tech-

niques as well as by taking advantage of the results of researches undertaken during hostilities. For example, it was during the few postwar years that air-cooled 10 kW transmitters using forced air-cooled electron tubes, the dual power supply system for beaming two different signals simultaneously from a single antenna, highly advanced disc recorders and new tape recorders, VHF-FM and PTM (pulse time modulation) systems were developed to the stage of practical application. Also, along with diversification of programmes and reforms in the production systems in the postwar period, the art of programme production saw remarkable progress, and the appearance of new types of microphones gave rise to control techniques entirely different from those of prewar days.

The NHK Technical Research Laboratories, which had been compelled to collaborate in the researches on military equipment during the war, was re-established after the war and resumed the original work of researches on broadcasting techniques. While stressing work valuable to the rehabilitation or consolidation of the broadcasting facilities, the Laboratories reinforced research efforts on new techniques and applied the results to the development of practically applicable devices. The Laboratories also publicly announced the results of research work so as to contribute to the furtherance of knowledge related to the radio science technology, which was advancing towards higher levels. Among the subjects of researches, the study of acoustics, which had been removed from the list of principal research subjects during the war, was reaffirmed as being essential to broadcast engineering, and the research establishment in this division was gradually consolidated. Work on television, which had followed a fortune similar to that of acoustics, was also resumed and technical developments made smooth progress, soon reaching the stage of practical application. These are some of the achievements worthy of special note.

In order to collaborate in the elevation of the quality of technicians that had declined during the war and to help in the rehabilitation of the equipment manufacturing industry, NHK undertook various measures. Quick training of technicians undertaken during the war for securing supply of technical personnel was switched after the war to retraining and professional lecture courses for already employed technicians and training of new employees. Meetings for providing opportunities of reporting on the results of researches were held periodically from about 1947. Later, engineers of commercial stations began to attend these training courses and meetings for reports, and thus they developed into effective organs contributing towards the advance of engineering. It should also be noted that close technical cooperation and guidance were provided for allied manufacturers to promote rehabilitation of the production of broadcasting equipment, receiving sets, electron tubes and components.

Through establishment of research organizations, as mentioned above, by introducing new techniques as well as through measures undertaken to train technical personnel and to promote output increase by the manufacturers, NHK succeeded in overall reconstruction and consolidation of obsolete facilities of various broadcasting stations. Also, for the purpose of procuring equipment adequate to meet the requirements of new programmes, NHK formulated the "Five-year Plan for the Improvement of Broadcasting Facilities" and the "Five-year Plan for the Maintenance of

Equipment" (see Section 1) and implemented them side by side from 1948. For promoting standardization, simplification and specialization of equipment systems and components compatible with the broadcasting equipment used in Japan, in connection with these plans, the "Broadcast Technical Standards" (BTS) were established. These were later adopted also for equipment used at the commercial stations as well as to export products and contributed markedly to the standardization of Japan's broadcast engineering.

Broadcast engineering during the occupation was placed under the direct and indirect control of GHQ, and no little restrictions, such as intervention in the expansion of facilities, frequency allocation, technical researches, and demand for equipment and services for the Armed Forces broadcasting, were imposed by GHQ. On the other hand the roles played by CCS in assisting rehabilitation of the communications facilities and related industries and by CIE in providing guidance for the development of postwar broadcast engineering can never be ignored.

3. Changes in Transmitting Equipment

As policies for repairs and consolidation of broadcasting facilities assumed a concrete form after the war, demand for large quantities of transmitting equipment became evident. In cooperation with related makers, NHK reviewed new standards for various transmitters of economic design and rational operation and tried to standardize the types. Various types of transmitters installed anew or repaired after 1948 were generally made to conform to these standards. The latest foreign technology was introduced at the time of determining the standards, and the 10 kW RCA transmitter installed for AFRS in the autumn of 1946 provided the first valuable data on the technology. For example, materialization of domestic production of forced air-cooled transmitting tubes used for this RCA transmitter greatly simplified installation and maintenance. Similarly, through the adoption of the cathode follower system, improvement of the distortion and characteristics of transmitters was realized.

The grid modulation system had been almost exclusively used for transmitters operated during the war for the purpose of economizing on materials. Also, components and construction were designed as tightly as possible. After the war, however, the water-cooled type of the final-stage plate B modulation system built on the basis of standard specifications gained the widest popularity. Furthermore, transmitters of foreign manufacture used for some of the broadcasting stations since the prewar days were all replaced with domestic products by 1950. The dual power supply system for the antenna was not applied before the war, but it was adopted unanimously by all the NHK stations after October 1945, thus promoting economy in equipment and materials.

The radio ST links connecting the studios and transmitters consisted of 30 Mc band transmitters and receivers for emergency use which were prepared during the war. These were provided for the regional key stations, and even after the war, they were put in good order for use as spare devices when there was trouble with the land lines. As this equipment was of AM system and poor in characteristics, replacement with the FM

system was desired as the VHF techniques made progress. However, the basic patent on FM was in possession of an American, and as GHQ did not authorize its use, the NHK Technical Research Laboratories examined the possibility of developing the PTM in place of the FM system. This system featured good signal-to-noise ratio and easy multiplex communications, which points were amply demonstrated as a result of experiments in 1947. The PTM system was adopted for the first time for the ST link of the 10 kW transmitters to be established under the five-year facility expansion programme.

NHK has been engaged in the study of the automation system for transmitters adopted in some foreign countries, and in August 1951 an automated rebroadcasting station was built for the first time in this country. The station was provided with two identical 50 W transmitters, which were automatically started and stopped by means of clock system relays. In case of trouble with any of the transmitters, the operation was automatically switched to the spare unit. In case trouble developed with the programme line, the link could automatically be switched to radio link at the key station. This sample of automated rebroadcasting station, indeed, pointed the way for subsequent establishment of low -and medium-powered rebroadcasters of similar system.

In order to meet the requirements of radically changed programme planning and production, studio equipment and control devices which had become obsolete during hostilities had to be repaired or increased under new techniques, which opened up the road towards quality improvement and further development of broadcasting. Early in 1946 a specialized mixer system was adopted for the purpose of improving the control techniques. The following year, the Control Technique Improvement Committee composed of writers, musicians, critics and scholars was organized to further promote study of control techniques. The control devices were repaired and improved under the policy which included the following: (1) A high level system will be adopted for microphone mixing to improve the signal-to-noise ratio. (2) Limiting amplifiers will be installed to raise the level of mean modulation as well as to facilitate control. (3) The sound volume indicators, which were diversified, will be standardized by using VU meters of American specifications. Under this policy, control devices at the various stations were gradually consolidated.

Production of high-performance microphones and loud-speakers, which constituted the essential parts of sound equipment, had become one of the important postwar tasks in broadcasting. Studies in these fields were expedited smoothly on the basis of the theory of equivalent circuits in electro-acoustics, and as the initial achievement of such studies, a 6.5-inch free-edge dynamic loud-speaker was developed in 1947 and was commercialized in the following year. Subsequently loud-speakers of international standard were developed through researches and experimental manufacture. Meanwhile, in order to improve the automatic measuring instruments and accuracy of measurements required in the study of microphones, an anechoic chamber was built at the Technical Research Laboratories in 1951, using glass fibres, which were new materials in those days, as the principal sound absorbers. This facility served effectively in promoting studies related to the directionality of acoustic devices. In other words, the

facility made it possible to conduct a series of basic theoretical and experimental studies on the directionality of microphones and loud-speakers. One of the results of such studies was the designing of a high-fidelity unidirectional condenser microphone. The Laboratories, as a result, succeeded in developing condenser and special microphones with capabilities even above the international level. These were commercialized in cooperation with the manufacturers.

In the United States and other countries polycylinders aimed at sound diffusion and absorption of low-range sound have been tried on walls for improving the acoustic characteristics of studios. The same method was also adopted at NHK for studios remodelled or newly built after 1950. Aside from research efforts related to polycylinders, studies related to designs of the studios of other systems were expedited at the Technical Research Laboratories and an interior wall of new standard and its construction method were developed, to take the place of polycylinders. Research efforts on sound absorbents using the picture tube system reverberation meter invented at the Laboratories were also put in hand, and in 1953 an architectural acoustics laboratory comprising an anechoic chamber, echo chamber and an experimental studio was established. Meanwhile, new sound absorbents were developed and new type studios were built. This systematic research laboratory on architectural acoustics later actively cooperated with design and acoustic measurements of studios for the commercial broadcasters.

4. Relay and Recording Techniques

Very high-frequency (VHF) and ultra high-frequency (UHF) techniques which made such progress during the war were applied to broadcasting after the end of hostilities, and brought about marked development in broadcast engineering. For outdoor pickup broadcasting, the AM system used during the war was largely replaced by FM and PTM systems using VHF relay methods, thus achieving marked progress. NHK in 1948 used the FM relay system for the first time in a relay broadcast from the top of Mt. Fuji. This broadcast proved practically free of noise when compared with prewar relay broadcasts of similar nature. The knapsack type FM rebroadcaster developed on a trial basis for the radio microphone realized the long-standing dream of liberating the microphone from the cord and added a new convenience to field pickup broadcasting. Along with researches on FM rebroadcasters, the Laboratories have been expediting study of PTM rebroadcasters. The use of the FM rebroadcaster, as aforementioned, was temporarily suspended on account of the patent question, but in 1950 official authorization was obtained, and regular operation of FM rebroadcasters become possible. New devices, such as radio cars, were also provided for various stations one after another, as a result of which mobile radio relay techniques were greatly improved.

Equipment other than the radio relay units were also increased and improved along with increasing field pickup broadcasting and establishment of new programmes. As outdoor microphones, compact dynamic types were developed and used from around 1947. These found active use in programmes like the "Man on the Street". Sound collectors began to be used

effectively indoors as well. Especially for the "Radio Panel Discussion", parabolic sound collectors installed at both sides of the stage served effectively in making questions from the audience just as audible as the discussions by those on the stage. In the outdoor relaying of orchestral performances, the one-point pickup system was adopted as in the studio, and in this connection, the use of a hanging microphone was conceived. As the loud-speaker units became one of the important items of technical equipment in the outdoor pickup relays, portable megaphones were provided for various stations.

After the war recorded programmes rapidly gained weight in the overall programming. Consequently, recording and reproduction equipment and supply of recording discs became more important. At the same time, improvement of the sound quality and performance of recording discs was also demanded. The disc recorder (using a 16-inch disc at low revolutions of $33\frac{1}{3}$ per minute) made by the Prest Company of the United States, which was rented by CIE in 1946, was much better in sound quality and performance than the Telefunken recorder, using 10-inch discs and operating at 78 revolutions per minute, used in Japan since prewar days. For this reason, NHK studied this type of recording equipment jointly with a manufacturer, and in 1947 succeeded in making the first unit on a trial basis. However, it was bulky and heavy and not suitable for moving about. NHK, therefore, made repeated efforts to design more compact and lighter recorders, and in 1950 a portable recorder feasible for practical use was developed. For stationary recorders, a high performance type using 16-inch discs and with revolutions of $33\frac{1}{3}$ and 78 per minute was completed and installed at all important stations in the country in 1949.

Production of disc recorders was thus put on an industrial basis, and by 1950, 90 per cent of the recorded programmes could be digested with discs. Meanwhile, research work and experimental manufacture of cutters and pickups and the methods of measuring their characteristics were undertaken at the Technical Research Laboratories for the purpose of improving them. Also, stimulated by the excellence of the vinyl records used by the Armed Forces Radio Service, studies on the materials and production of vinyl copying discs were expedited in connection with the production of packaged programmes, thus starting the manufacture of recording discs for preservation as well as for broadcasting.

In 1948 NHK used a tape recorder made by the Wilcox-Gay Company of the United States for the first time. From the following year portable tape recorders, such as "Magne recorder" made by the Magne recorder Company of the United States, "Sound Mirror" made by the Bush Development Company of the same country, shoulder tape recorders like the "Minitape" of the Stansil-Hoffman Company and stationary high-performance Ampex recorders were imported. About this time the micro-group recording system (LP discs) made its appearance in the United States in competition with tape recording.

Using the aforementioned foreign products as reference materials, researches in the tape recording system commenced at the Technical Research Laboratories in 1949. These studies resulted, by the following year (1950), in the development of the BH curve measuring instrument, trial manufacture in 1952 of a measuring instrument for magnetic heads and the develop-

ment of the method for testing the characteristics of magnetic heads. Researches on LP recording began in 1951, and by 1953 an LP recorder was installed at the Laboratories.

Domestic production of tape recorders was promoted in parallel with progress of researches at the NHK Technical Research Laboratories. In 1950, an experimental portable tape recorder (Sony Corporation product) made its appearance. From the following year, stationary, portable and shoulder strap types of tape recorders were produced one after another. These were provided for all the NHK stations in the country. And through the development of tape recorders, nearly 70 per cent of the recorded programmes came to depend on tapes by the end of 1952. Domestic production of magnetic tapes, however, fell somewhat behind, and up till about 1958, all those in use were Scotch tapes manufactured by the Minnesota Mining Company of the United States.

6. Listeners

1. Factors Leading to Increase of Listeners

The number of receiving contractors, which had reached 7,470,000 at the end of March 1945, decreased radically to 5,720,000 within one year. This abnormal phenomenon was an evidence of the cruel claws of war. Causes of such decrease consisted of widespread destruction of receiving sets by air raids against the urban areas, increased number of people whose addresses had changed through evacuation into rural areas and the loss of the people's purchasing power because of postwar economic and social confusion. The greatest single problem in regaining the listeners was to rehabilitate the receiving set production facilities that had almost been wiped out during hostilities. However, because of the shortage of materials and labour for reconstructing destroyed facilities and further, because of the difficulty of anticipating future commodity prices on account of mounting inflation, it was practically impossible to realize speedy rehabilitation of the manufacturing facilities.

Soon after the end of hostilities, the Government, manufacturers and NHK held frequent discussions by recommendation of the Electric Equipment Control Association to set up ratings for standard receiving sets suitable for the general public. Mass-production of such receivers, however, could not be expected so soon because of the aforementioned reasons. Production of vacuum tubes was also very slow, and the manufacturers' stock rooms were soon full of receiving sets without vacuum tubes. In view of such conditions, NHK placed emphasis on the maintenance of existing receiving contractors and tried hard to secure components, vacuum tubes in particular, for the set operators and to train repairmen. Even then, immediate results could hardly be expected.

Prospects for the economic rehabilitation of Japan became somewhat brighter around 1947. By this time, the production facilities of the manufacturers had been reconstructed to a certain extent and shipments of sets and components had become active. The inflation that had reached its peak

in July of the following year, also began to show a decline and a trend towards economic stability became visible. Under the improving objective circumstances, the number of receiving contractors began to show increases, as per attached table. As a matter of fact, the increase was so rapid by February 1949 as to exceed the highest prewar record. As reasons for such a rapid increase may be cited the implementation of NHK's five-year plan for network expansion, active presentation of diversified programmes acceptable to the listeners and NHK's active collaboration with the power companies and set dealers in their efforts to undertake special sales campaigns.

The Korean War which broke out in June 1950 brought the so-called "special procurement boom" to Japan, when industries recovered through increased exports, thereby laying the foundation for future growth. However, the receiving set industry was somewhat outside this unexpected boom. In other words, commodity prices went up along with upward trends in business conditions. This put more stress on general consumer life and tended to lower the power for purchasing radio sets, which were comparatively costly for the income level of the people. It was evident, from the following table, that the effect of the abovementioned situation slowed down the rate of increase in the number of receiving contractors.

Development of competition between the commercial stations to be established under the Broadcast Law and NHK through programmes was anticipated. So long as the receivers' fees constituted the principal financial source for the business operation of NHK, it was necessary for the Corporation to attract as many listeners to its programmes as possible in order to make collection of the receivers' fees easier. On the other hand, it was a matter of primary importance for the commercial operators to make the listeners, who had been listening to the NHK programmes only, switch the dial to their programmes in order to secure sponsors. With increases in the number of broadcasters as well as stations, programmes became richly diversified through competition, thus further broadening the listeners choice of programmes.

It was undeniable that this trend served as a factor in the increase of receiving contractors. Meanwhile, NHK, while expanding its networks

Increases in Receiving Contractors by Year

Year	Increase	Total as of end of fiscal year	Percentage against total households
1944	126,759	7,473,688	50.4
1945	-1,745,612	5,728,076	39.2
1946	-22,608	5,705,468	38.6
1947	737,738	6,443,206	40.6
1948	1,149,419	7,592,625	47.2
1949	1,057,412	8,650,037	53.8
1950	542,897	9,192,934	55.4
1951	519,081	9,712,015	58.6
1952	827,578	10,539,593	63.6

on one hand, on the other exerted great efforts towards signing up new listeners by actively publicizing overall phases of NHK as a public service broadcasting organization. In addition to broadcasts and publications, NHK's public relations efforts included dispatch of servicing cars to various areas, display of various data on broadcasting at shows and exhibitions and opening of popular programmes to the general public. Business conditions improved around 1952, and with increased radio set output and adoption of the monthly payment system of marketing, the radio industry regained vitality. In August of the same year, the number of receiving contractors passed the 10 million line. This proved to be the radio's peak of popularity prior to imminent commencement of television broadcasting.

2. Production and Marketing of Receiving Sets

In the rehabilitation of postwar Japanese economy, the Government continued, for the early years, with price controls on general consumer goods and the system of rationing. Similar measures were also adopted for radio receivers and components. Deserving of special mention with regard to the radio receiver industry was the authorization of short-wave receiver production, which was strictly prohibited before and during hostilities. As a result, the path was opened up for the manufacture of all-wave receivers. Nevertheless, because of control of materials and the straitened consumer life in those days, the supply and demand in the all-wave and other high-performance receivers were inevitably limited. The objective of receiver production, therefore, was set at making as many popular-class receivers available as possible in order to utilize the allocated materials to the best advantage.

Even then more than two million receivers were needed before the decreased receiving contractors could be regained to the former level. Moreover, far greater number of receivers were in potential need when replacements for defective parts and vacuum tubes of those left without repairs for a long time were considered. As stated in Section 1, it was impossible to expand production at an early stage because of the crumbled down production system found in the early postwar period. For example, actual output of receivers was no more than 650,000 sets against the target of 1,600,000 and the output of the so-called high-quality sets was only 44,000.

As an agency for rationing out the receivers and components, vacuum tubes in particular, the Central Rationing Commission was formed in November 1946, with the representatives of the manufacturers, dealers and NHK as members. The Commission was placed in charge of rationing receiving equipment in the various areas (areas under the jurisdictions of NHK's regional key stations). The local rationing commissions formed as sub-organs in turn took care of the matter in smaller subdivisions of these larger areas. Rationing was made as impartially as possible by taking into consideration the state and scope of damage to the sets and the distribution of population, but because of overall shortage of goods, the balance of demand and supply could not be maintained as desired. As a result, "black market" prices became widespread in transactions involving the receivers and vacuum tubes, and it was difficult for general users to obtain them at official prices.

Production of receiving equipment was put on a smooth track to a certain extent from the latter half of 1947. In October the existing regenerative radio-frequency type receivers were switched to the superheterodyne system by recommendation of GHQ, thus opening up the way for manufacturing receiving sets of higher performance. As prospects for the rehabilitation of the receiving equipment manufacturing industry became brighter, the demand for removing the rationing of materials and price control to allow free transactions became strong. In November 1947, the production material control organ was first dissolved, followed in February of the following year by complete abolition of the receiving equipment rationing system. Price control on the receiving sets and components, excepting vacuum tubes was also removed in October 1948, and that on the vacuum tubes was done away with in June of the following year.

The receiving equipment were thus moved from controlled distribution to free transactions, but after 1949, both production and sales slowed down because of the deflation measures enforced on the basis of the "Dodge Line"⁽¹⁾ economic stabilization policy and the pressure (Section 1) of the Korean War which broke out the following year. The 1950 output of receiving equipment was limited to 290,000 sets, which was far short of the requirements obvious from an increase of 1,170,000 receiving contractors during the same year. Of these new contractors, only 33.8 per cent were able to purchase new receivers, while the remainder had to be satisfied with second-hand sets or those assembled by themselves. With respect to the types of receivers, high-performance types were in general demand because of the expansion of NHK's networks and the advent of commercial broadcasting. As a result, the regenerative radio frequency sets which were predominant before began to be replaced by the superheterodyne sets (see the following table). However,

Proportion of Receivers Used by Types

	1950	1951	1952
Regenerative type	3.9%	0.6%	0.03%
Superheterodyne type	84.3	86.9	91.52
All-wave sets	7.3	9.9	7.39
Radio phonographs	1.9	2.6	1.02
Others	2.6	—	0.02
Total	100.0	100.0	100.0

(1) Towards the end of 1948 the State and Defense Departments of the United States announced the "Nine Fundamental Principles" on the economic stabilization of Japan. These consisted of a series of measures including setting of a single exchange rate, balancing of the budget, adjustment of subsidies, strengthening of tax collection system, etc., which should be enforced by Japan. In other words, the American policy aimed at promoting a self-sufficient Japanese economy while reducing its aid. In order to accomplish this purpose, the United States recommended lowering the living standards of the Japanese people and reduction of costs through more rational management of enterprises. In February 1949, President Dodge of the Bank of Detroit came to Japan in the capacity of a Minister and imposed on the Japanese Government a draft budget based on the aforementioned principles. Thus, the so-called "Dodge Line" came to be enforced. Through enforcement of this "Dodge Line" a deflated business recession set in, resulting in a decline in prices, bankruptcy of numbers of small and medium enterprises and an increase in the unemployed. The Japanese economy was now plunged into panic, but the outbreak of the Korean War in the following year involved the economy in an amazing war-time prosperity.

until about 1951, more than half the receivers purchased consisted of the regenerative radio frequency type.

With better business conditions after 1952 as the background, production of receiving equipment increased, and most of the newly contracted listeners purchased the superheterodyne sets. However, as these sets were still too costly for the purchasing powers of the people, the radio dealers felt the need for resorting to the easy payments system for sales from the point of view of expanding the market. The system was considered an effective means of developing areas with a low rate of dissemination and increasing the number of receiving contractors for NHK as well. NHK, therefore, supported the policy of the manufacturers and dealers and provided flank aid in the form of indirect financing. Thus, the easy payment system was established in all parts of the country, and this played a conspicuous rôle in the sales of receivers and increases in the number of listeners.

With the prosperity of the receiving equipment manufacturing industry, larger manufacturers, which had been devoting themselves to the production of communications and power equipment in pre-Pacific War days, began to take up production of radio receivers. Meanwhile, manufacturers which had expanded their facilities for the production of military supplies, also completed their mass-production system on the basis of industrial recovery. However, as there were some manufacturers whose technical level was not up to the standard, the NHK Technical Research Laboratories accepted commissions for testing their products and for providing technical guidance, thus cooperating towards the improvement of quality.

3. Repairs of Receivers and Prevention of Interference

As stated in the preceding section, for two to three years after the end of the hostilities, receiving set production facilities had not been recovered and the general consumer life was still in distressing circumstances. Under such situation, many of the receiving contractors were obliged to repair or improve the old sets on hand. Servicing of receiving sets, therefore, became a field on which emphasis had to be placed by NHK in order to maintain the existing number of listeners. This work was undertaken by the radio consultant offices directly under the control of NHK and servicing shops designated by the Corporation.

Radio consultant office under direct control of NHK included those originally maintained at all NHK stations and other convenient points to provide consultant services for listeners in general, those opened for certain specified periods by NHK repair technicians and those that periodically visited specified rural areas with technicians prepared to provide advice and simple free repair services. These offices and teams handled as many as 202,000 cases during 1946. Cases handled increased markedly since then, and by 1949 the total had risen to as many as 379,000.

Paid repairs of receiving sets were, of course, left to the servicing shops, but NHK designated some skilled repairers as NHK-recommended servicing operators. These operators, in close contact with NHK's radio consultant offices served as effective agencies in the maintenance of receiving sets. However, as the technicians were drafted into military service in droves.

and many of the servicing shops were forced to change their business, the result was a radical disruption of the servicing chain. After the end of hostilities, many radio technicians were released from the munitions industry and others were repatriated from overseas areas and they soon opened retail and servicing shops. The number, in fact, increased to several times the existing dealers, but as the level of skill was uneven and components needed were difficult to obtain, confusion developed in the maintenance of receiving sets then in operation.

In the circumstances, NHK undertook training courses for repairmen throughout the country in order to improve services to listeners. It also consolidated the chain repair shop system then in existence to promote more effective servicing. At the end of March 1950, there were 3,464 such chain servicing shops in Japan, which made notable contributions towards rehabilitation of receiving sets. When the Broadcast Law was enforced in June 1950, however, the aforementioned system of designating servicing shops and even NHK's own radio consultant offices were abolished. In other words, from the standpoint of protecting the dealers' freedom of business operations, the Law prohibited NHK from regulating or interfering with business undertaken by the manufacturers, dealers and repairmen of radio receivers under any pretext whatsoever.

It was thus that servicing of radio receivers was transferred completely into the hands of specialists. However, with respect to listeners living in remote and isolated areas or in those where repair services were difficult to secure, NHK was permitted to provide such services under specific instructions of the Radio Regulatory Agency (later Minister of Posts and Telecommunications) for a certain period each year. Areas so specified during financial 1952 totalled 4,340 towns and villages in the country, which accounted for 44 per cent of the total number of towns and villages (9,804). NHK's repair services were thus restricted, but it adopted the policy of providing flank support for the repair shops. In particular, for the purpose of maintaining the existing receiving contractors, NHK effectively backed up plans implemented by the service shops in areas subject to interference by the signals from the commercial stations or areas where damage to receiving sets resulted from natural calamities like storms and floods.

Measures necessary for eliminating interference with radio reception had been taken since prewar days, but after the war interference by noise radically increased. According to requests for investigating causes of interference made to NHK by the listeners, there were 5,623 cases in 1949, but the following year, the number of similar requests doubled to 11,767 cases. Subsequently, such requests increased by leaps and bounds, and in 1952 they totalled 37,860 cases. The largest number of cases of interference came from electrical devices, especially fluorescent lamps, which began to be used widely after the war. For evolving campaigns intended to prevent interference, NHK sponsored the establishment, from around 1950, of the "Reception Interference Countermeasure Councils" composed of the representatives of the organizations of electrical appliance manufacturers, whose products were the main cause, and of radio dealers whose business suffered therefrom, in the various cities where broadcasting stations were located. These councils were instrumental in actively campaigning for the need to manufacture electrical appliances provided with noise suppressors or for

using noise suppressors on appliances. With regard to the rapidly increasing use of fluorescent lamps, NHK campaigned for the inclusion of a restrictive article in the Japan Industrial Standards on the prevention of noise. This was finally incorporated into the JIS in 1953.

4. Popularity of Broadcasting

In the confused postwar period, broadcasting served as a powerful means of providing information. This arose from the need of the people, who, in the period when the system of values had been completely disrupted, were in a state of uncertainty and prostration, to find their own criterion of behaviour. It was also undeniable that hopes for acquiring new knowledge and experience compatible with the new age through listening had germinated in the minds of the general public. And in order to meet the requirements of the new age, programmes not heard in prewar days and during hostilities were planned and produced. In particular, programmes like the "Man on the Street" and "Radio Panel Discussions", which were transplanted from the American radio, gained high popularity because they provided opportunities of free expression of opinions. It was undeniable that hopes for postwar rehabilitation of Japan were rooted in the expectations for and demands on these programmes. Also, there were many requests for religious broadcasts, specially for programmes related to Christianity, which would serve as a guiding star in the period of confusion.

It was also impossible to overlook a strong interest of the people in the function of providing entertainment inherent in broadcasting. Programmes that aroused the greatest reactions shortly after the end of the war were "Request Music" and "Amateur Talent Contest", which released the microphone to the people through the adoption of the audience participation system. Also the "Bell on the Hill" and "Neighbours on All Sides" in the style of American serial radio dramas not only depicted the existing state of society in the form of dramas but also became tied up inseparably with the daily life of the people. It is, in fact, not an overstatement to claim that the people found their hopes for the future in the world of fiction created by these dramas.

The first programme survey by NHK was undertaken in March 1946. In this survey, 23,000 households were sampled from among all the receiving contractors in the country. They were asked questions related to the best time to listen to the radio and the types of programme they preferred. They were also asked whether they preferred old programmes or those newly produced during the six postwar months. As a result, it was found that 87 per cent of the people preferred new types of programmes against 13 per cent for the old. It was also found that from seven to nine in the evening constituted the best possible listening time for the people, more than 80 per cent expressing their preference for this time belt. In the forenoon, six to seven-thirty formed the most convenient time for listening for 35 to 40 per cent of the people. With regard to the beginning and ending times, more people preferred 5:30 a.m. as the commencement time and 10:00 p.m. for ending. In the matter of programme preference, the entertainment items, as usual, ranked first. In particular, with the commencement of the quiz programmes, the "Fountain of Knowledge" and the

“Twenty Questions” towards the end of the same year, ratings of entertainment programmes climbed steadily.

The evening programme rating survey undertaken at the Radio and Television Culture Research Institute (then Broadcast Culture Research Institute) in November 1948 revealed that the programme with the highest rating was “Twenty Questions”, followed by the “Request Programme” presented at the request of listeners, “News”, the “Fountain of Knowledge” and “Rakugo and Manzai” (comic stories and comic stage dialogues by two performers) in the order mentioned. Men preferred news to all others, while women gave the “Twenty Questions” the highest rating. The 14 to 25 age group preferred “Twenty Questions”, 26 to 50 news while the group above 50 preferred traditional Japanese entertainment. This situation has not changed much in subsequent surveys, showing the continuing popularity of quiz programmes.

A survey conducted in 1952 to see what was the average time per day spent listening to NHK broadcasts resulted as shown in the following table. According to this table, people were listening to NHK’s first network programmes for an average of about two hours and fifty minutes per weekday and three hours and fifty minutes on Sunday. The average was longer by thirty to forty minutes than time spent in listening to commercial broadcasts, which were inaugurated one after another in the leading cities after September of the preceding year.

In any case, the listeners were spending approximately four hours a day in listening to the radio, which shows the rôle it played in their daily life.

Among commercial broadcasters, whose programmes in most cases were built around entertainment items, some began to show a marked tendency to copy NHK’s popular quiz and light music programmes in order to enhance the effect of their advertisements. In these circumstances, the order of popularity of NHK’s programmes was somewhat disturbed, and in the survey conducted in June 1952 the “Radio Variety”, a conglomeration of stage entertainments unique to Japan, came out on top with a 66 per cent rating while the “Twenty Questions” had dropped to 9th place with a rating of 51 per cent. Formerly, there were only NHK’s programmes to listen to, but with the commencement of commercial broadcasts, people gradually

Radio Listening Duration (1952)

Items	Weekday	1st network		2nd network	
		hrs.	mins.	hrs.	mins.
News	Weekly average	.48		.01	
	Sunday	1.05		.01	
Information	Weekly average	.52		.02	
	Sunday	.43		.01	
Entertainment	Weekly average	1.09		.08	
	Sunday	2.02		.03	
Average	Weekly average	2.49		.11	
	Sunday	3.50		.05	

formed the habit of selecting programmes of their own preference. Nevertheless, NHK's programmes as a whole enjoyed higher ratings than most of the commercial programmes. A survey of Tokyo people was taken in January 1952 by the Tokyo Newspaper Company in which the question "Which do you tune in to the most, NHK or the commercial Radio Tokyo programmes?" was included. Answers to this question favoured NHK programmes by 65 per cent to 21 per cent. Incidentally, 73 per cent of the listeners in those days obtained information on programmes from the newspapers, those who said they obtained similar information from radio announcements accounting for only 17 per cent.

5. Evaluation of Broadcasting

With production of various new programmes aimed at providing better service to the listeners in the postwar period, broadcasting began to take root among the people as something really essential in their daily life. So much so that diversified opinions about the programmes began to pour in to the broadcasting stations from listeners. The number of such letters, in fact, increased to many times those received in prewar days. These included some opposing views depending on differences in age, occupation, sex, living habits, as in urban and rural areas, and cultural levels, but as a whole, they were related mostly to entertainment programmes.

Criticisms of broadcasting began to be actively taken up by newspapers around 1947 and 1948, when the "Bell on the Hill" and the "Twenty Questions" began to enjoy wide popularity. In this matter, a gradual shift from former objective criticism to a subjective style could not be overlooked. It may be said that the newspapers began to take up broadcasting as a subject of discussion because they recognized the fact that it had become part and parcel of the people's daily life in an inseparable relationship. Requests for more entertainment programmes were always included in the newspaper evaluation of broadcasting in those days. This may be considered a reflection of the social conditions which were really unstable both economically and ideologically. The question of the cultural level of broadcasts was also taken up by many newspaper writers. Such opinions generally conceded the necessity of reflecting listeners' preferences in the programmes, but they unanimously opposed their vulgarization in any way leading to a lowering of the cultural level of the nation. There also were opinions to the effect that instead of merely letting people express their views openly, such as in programmes like the "Man on the Street", the broadcasting stations on their part should draw out clear conclusions, such as devising means of finding solutions to questions brought up in the programmes, on the basis of frank opinions expressed by the people. Such views considered broadcasting as a means of free discussion, while at the same time placing hopes in broadcasting as a healthy social influence.

When the bill for the new law related to broadcasting was presented to the Diet towards the end of 1949 and its passage and promulgation became virtually certain, newspaper editorials began to take up the bill and express critical views. Legal measures related to fostering of commercial broadcasting also became the butt of criticisms. And as concern with regard to the social influence of broadcasting intensified, newspaper criticisms of

broadcasting also became more active, and most of the papers established regular columns on the subject. Of special note in such evaluations of broadcasting was the stress placed on functions unique to broadcasting, such as the FM system then beginning to be used for field pickup broadcasts and tape recorders used for opening a new phase in the editing of news and social programmes.

With the growth of commercial broadcasting, the tendency to compare NHK's and commercial programmes became strong. Letters from listeners to NHK conspicuously recognized the higher quality of NHK's programmes. At the same time, there were opinions to the effect that while commercial broadcasts tended to vulgarize programmes, NHK should abandon any competitive attitude and devote itself to presenting programmes for the entire family which could be listened to without concern for possible undesirable influences. As the broadcasting companies as well as stations increased, programmes also became highly diversified and accompanying problems became manifold, and in order to meet the requirements of such a complex situation, newspapers expanded their columns devoted to broadcasting. Newspaper articles demanded that NHK clarify the characters of programmes presented on the first and second networks and arrange the programme items in line with the clarified characteristics. They also suggested that NHK should emphasize programming at a level higher than before and provide greater flexibility in scheduling so as to permit freer programme organization, without being too rigidly restricted by scheduled time.

In April 1952, The Mainichi Newspaper in its radio column pointed out the following, as typical opinions common among all listeners, "It was a good thing that commercial broadcasts came into competition with NHK which was liable to fall into a self-righteous attitude. It was wise for NHK to clarify its attitude regarding presentation of programmes that listeners would want to listen to because of the advent of commercial broadcasting, but NHK should be careful not to lower the quality of its programmes. The commercial broadcasters present too many quiz and vulgar entertainment programmes." This year was also a starting point for the weekly magazines to establish radio columns, and frank criticisms of broadcasting began to appear in every issue. Monthly magazines also began to take up broadcasting now and then, bringing it into the limelight as a promising subject for discussion by journalists.

Appendix

Commencement of Commercial Broadcasting

1. Background of Commercialization

After the war, the monopolistic broadcasting system, which was operated by NHK through the prewar-hostilities period, was revised, and a plural system under which NHK and private broadcasters would operate side by side was adopted. The outline of the GHQ policies and the views of the Japanese Government that constituted the basis for the establish-

ment of this new broadcasting system have already been given in Chapter 1, "Broadcasting of Transition Period", Section 3 and Chapter 2 "The Process of Establishment of a New Broadcasting System", Sections 1 and 2. Although certain repetitions cannot be avoided, the process for the establishment of commercial broadcasting will be described in this section, focusing attention principally on the background of the event.

Immediately after Japan's defeat, the Board of Communications controlling radio administration held the opinion that, from the policies of the Allied Powers based on the fundamental principle of democratizing and demilitarizing Japan, there was strong possibility of an order being issued for the dissolution of the unified monopolistic broadcasting system operated by NHK. The Board of Communications, therefore, hurriedly drafted a plan for "the establishment of a popular broadcasting organ" for the purpose of preventing confusion arising from such a directive. This draft plan was approved by the Japanese Cabinet on the 25th September, 1945. The plan adopting the commercial broadcasting system prevalent in the United States, which was the chief occupation country, aimed chiefly at the establishment of a private broadcasting organization which would be allowed to operate in parallel with NHK. The concepts incorporated in the plan were as follows:

- (1) It will be organized as a joint-stock company with radio set makers, newspapers, theatre and film, record, power companies and department stores as the leading shareholders.
- (2) The company will operate 10 kW medium-wave transmitters in Tokyo and four other cities and two 10 kW short-wave transmitters in Tokyo.
- (3) In addition to conducting general broadcasting and advertising, the company will operate radio set marketing and other business incidental to broadcasting.
- (4) The financial source of the company will be from advertisements and income from incidental businesses; it will not be permitted to collect receivers' fees.
- (5) Licensing of VHF and television broadcasting services to this company will be considered in the future.

Although no overt provision was made in this plan, the drafters had in mind establishment of a single company for the time being in order to watch its growth before establishing others. They also had in mind transfer of NHK's second network facilities to the company's medium-wave service. Faced with the possibility of complete dissolution, NHK adjudged that a sacrifice of such extent would be unavoidable if the Corporation would be allowed to continue operations and accepted the proposal. In any case, approval for the establishment of a new broadcasting organization by the Cabinet was a significant policy decision in the postwar history of broadcasting.

The trend towards establishment of a commercial broadcasting company became definitive by the adoption of the aforementioned policy, and preparations for organizing such a company were put in motion in Tokyo and Osaka with the financial leaders of the two cities as the chief supporters. Meanwhile, major newspapers began to indicate their hopes for the establishment of such a new broadcasting organization through editorials advocating

the abolition of monopoly by NHK and articles favouring commercial broadcasting. However, no policy conceived by the Japanese people could be put in force without the approval of GHQ which had made no indications with regard to the idea of establishing such an organization suggested by the Board of Communications.

The policy of GHQ related to the broadcasting system was indicated in the memorandum titled "Reorganization of NHK", which was sent to the Governor of the Board of Communications on the 11 December, 1945. This memorandum directed the reorganization of NHK for the purpose of its democratization and continuing with the existing unified monopolistic broadcasting system.

This memorandum suppressed the surging movement for the establishment of a commercial broadcasting company for the time being, but it did not mean complete abandonment of the plan. There were several organizations which submitted applications for establishment of such a company to the Board of Communications even after the memorandum was issued. Meanwhile, GHQ was frequently approached by those desiring to commence commercial broadcasting with the request that it change the policy. The Board of Communications also sounded out the intentions of GHQ with regard to this matter, since it was this government agency wherein lay the hopes of those anxious to promote commercial broadcasting. The abnormal state of affairs brought about by the strike that took place in October 1946 gave the leaders favouring commercial broadcasting an opportunity to claim that this exposed the defects of the unified monopolistic system, and they used it as opportune material for promoting the establishment of commercial broadcasting. Similar opinions were held by some government officials who renewed their efforts to verify the policy of GHQ. However, no change in the attitude of GHQ was evident and the drive for the establishment of commercial broadcasting continued to remain stagnant.

As stated in Chapter 2 "Process of Establishment of a New Broadcasting System", Section 2, the question of commercial broadcasting entered an entirely new phase with the advice given by GHQ on the 16th October, 1947. This included an important item related to provision for the establishment of commercial broadcasting companies in the new Broadcast Law along with the request for providing for some public organization to supervise and operate broadcasting, which became the basis for the restart of NHK as a special public corporation. This was the first indication of GHQ's policy for revising the existing unified monopolistic broadcasting system and adopting a pluralistic competitive one through parallel operation of commercial broadcasting. While drafting the bill for the proposed new law on the basis of this advice, the Ministry of Communications (renamed Board of Communications) expedited measures designed to secure frequencies in preparation for the commencement of commercial broadcasting. In the request for allocation of frequencies for medium-wave broadcasting submitted by Japan at the Conference of the International Telecommunications Union held in Geneva in May 1949 were included those intended for commercial stations.

In parallel with such moves, the campaign for the establishment of commercial broadcasting companies, which had remained silent for a while, regained momentum. Offices of the organizations, with applications already

submitted were enlarged, and new applicants increased rapidly. By 1948 there were nine organizations, which increased to 23 in the following year until there were 70 cases at the end of 1950. As will be stated later (see Section 3), the leaders behind promotion of commercial stations in most areas were newspapers, news and advertising agencies. Newspapers in various parts of the country reported that a radical change was about to take place in Japanese broadcasting, and that when commercial broadcasting materialized, the people will be able to listen to interesting programmes free of charge, thus giving the impression that the establishment of private broadcasting stations was near at hand.

2. Commencement of Broadcasting

The Radio Regulatory Agency brought into being through the enforcement of the Radio Regulatory Agency Establishment Law on the 1st June, 1950 assumed supervisory powers over radio waves and broadcasting under the Radio Law and the Broadcast Law, enforced on the same day. In the exercise of such administrative powers, however, it was necessary to establish Cabinet Ordinances and rules and regulations based on the two laws. The most important item involved in the process of drafting such rules and regulations was the adoption of a fundamental policy towards licensing of broadcasting stations. In fact, this fundamental policy was determined after careful deliberations in October 1950 after every possible problem was discussed for five days at a public hearing. This system was established for the purpose of preventing unfair results arising from the self-righteous exercise of powers by the administrative offices of the government, as well as for arriving at impartial conclusions through discussions among interested parties and persons of learning and experience. These fundamental standards formed one of the items of legal assessment in case any application for the establishment of a broadcasting station was accepted, and any applicant unable to satisfy these standards could be denied licence. Consequently, concern of the applicants for commercial broadcasting in this matter was particularly intense, and practically all participated in the public hearing and expressed their respective views.

Simultaneously with the enforcement of these fundamental standards in December of the same year, the Radio Regulatory Agency announced its policy for licensing commercial stations. The contents included (1) considerations for distribution of commercial stations throughout the country instead of concentrating them in larger cities, (2) the target of licensing two in Tokyo and one each in other cities because of limitations in available frequencies. The announcement was intended to bring about voluntary mergers of plural applicants in each city by clarifying the prospects for commercial stations in areas where there were large numbers of applicants. It was particularly intended for Tokyo and Osaka as there were many applicants in each city. In the process of the mergers of applicants in Tokyo and Osaka, serious troubles developed between those of opposing interests, and there were cases in which political and financial leaders had to intervene to adjust matters.

Applications for the establishment of commercial stations were ultimately limited to forty-one for the entire country, including five from non-profit

making corporations. As a result of careful examinations of the applicants' qualifications on the basis of the aforementioned standards, the Radio Regulatory Agency issued preliminary licences to sixteen applicants in April 1951. This proved to be an epoch-making act because it meant the parallel operation of NHK and commercial broadcasts, each displaying its merits while at the same time mutually offsetting each other's faults, which built up the broadcast culture of the present day Japan. The Shin Nihon Broadcasting Company of Osaka and the Chubu Nippon Broadcasting Company of Nagoya, whose preparations made good headway, commenced Japan's very first commercial broadcasting on the 1st September, 1951. These were followed by four other companies, including the Radio Tokyo Company, by the end of the year. Preliminary licences were issued later to other applicants, and up till the end of 1952 there were nineteen commercial stations operating in the leading cities.

It was possible for anyone, whether a natural or a juridical person, to become a broadcasting operator, aside, of course, from NHK which was a special public corporation, but all the licensees were joint-stock companies except one of the two in Tokyo which was a non-profit foundation of strongly religious character. However, this one foundation among the commercial broadcasters met financial difficulties and was reorganized in the form of a joint-stock company at the beginning of 1956. Reasons for the joint stock organization of all the broadcasters other than NHK were as follows: (1) The joint stock company had the greatest possibility of realizing the policy of close and widespread relations with the community both in human relations and with regard to capital. (2) As large funds were needed for equipment and for its improvement and expansion, the joint stock company offered the easiest means of soliciting investments. (3) The broadcasting enterprise, while in the nature of a public service of a high degree, required special management ability as a modern enterprise and operations independent of capital, and such characteristics were considered compatible with the form of joint-stock company.

Stimulated by the growth of commercial stations, interest in the establishment of others intensified throughout the country. On the other hand, commercial stations already in operation made increased demands for power increases, change of frequencies and establishment of rebroadcasting stations in order to expand their respective service areas and improve reception. At the time the first licences were issued for the commercial stations, NHK already had 135 stations in operation which used most of the available frequencies then. The Radio Regulatory Agency in July 1951 undertook radical reallocation of frequencies for 107 out of 135 NHK stations in order to provide some for the commercial stations. However, in order to meet successive applications for the establishment of new commercial stations and demands by the existing stations for increased frequencies, changes for better frequencies, power increases, etc., the Agency could do no better than to adopt a basic policy related to frequency allocation and undertake overall reorganization of the system. In the circumstances, large numbers of applications were shelved at the Government administrative office, and reorganization of the frequency allocation system was undertaken at the end of May 1953, when the effective terms of the existing licences expired. Details of this point will be given in the pertinent

chapter in Part III.

3. Management in the Early Period

Newspapers, news and advertising agencies had the deepest interest in the establishment of commercial stations and did most for their promotion. The reasons were that (1) their sharp sense of the value of mass-media made them realize the value and future potentialities, (2) they realized the possibility of the strong pressure that would be applied to their revenues from advertisement because of the effectiveness of broadcasting as an advertising medium, and they wished to adjust the interests of the two and ultimately to increase the revenues of both through securing close connections between newspapers and broadcasting, (3) they were confident that experience in newspaper editing and advertising could be applied to the field of broadcasting and, in particular, they realized that collaboration of newspapers, news and advertising agencies were necessary for collecting materials and selling advertisements.

The newspapers, in particular, played a leading rôle in establishing the business foundations in the early period of commercial stations. In other words, both in the metropolitan areas and local cities, leading newspapers in the communities made investments and sent officials to the newly established commercial stations. At the same time, the newspapers exercised their influence in the campaigns conducted by commercial stations, in soliciting investors and in selling advertisements. They also collaborated with the broadcasters by supplying news materials, producing news programmes and providing space for publicizing programmes. Many of them also supplied the broadcasters with housing and personnel. Such close and almost inseparable ties between the newspapers and the broadcasters constituted one of the special features in the early stages of commercial broadcasting in Japan. In accordance with requests from the commercial broadcasters, NHK also provided cooperation in training the announcers and engineers as well as testing the acoustic properties of studios.

In the early period of commercial broadcasting, interest on the part of the general public was not widespread. For the listeners, who had been tuning in to NHK for 25 years, commercial broadcasting was yet an unknown world, a mixture of expectations and doubts. On the part of commercial broadcasters, too, though they were burning with zeal for breaking up the monopoly of NHK as well as for creating a free broadcasting system, they were yet unable to definitely grasp favourable prospects for business. Most of them had started on the project in the belief that a few years of deficit operations might be unavoidable. However, with the rapid recovery of Japanese economy after the outbreak of the Korean War, a quick reversal of their pessimistic observations came about, and commercial broadcasting began to show unexpected growth.

For the Korean War, which broke out in the peninsula across the sea of Japan in June 1950, all the industries of this country were mobilized to meet the so-called "special procurement" demand by the United States Army. Prosperity brought about by this situation gradually spread as general business revival, and the average per-capita income increased by 16 per cent in 1951 and by 15 per cent in 1952. Per-capita consumption

also increased by 12 per cent in 1951 and by 23 per cent the following year. Thus, the prewar levels were regained both in income and consumption. As consumption increased, the tendency to utilize broadcasting as an advertising medium became conspicuous in the industrial circles. By this time, the number of receiving households developed by NHK had reached a total of 10 million. It must be admitted that broadcasting had now grown to a giant medium for effective advertising.

Reservations for programme time with the commercial broadcasters increased smoothly. Especially in Tokyo and Osaka where potential large sponsors operated their businesses, the broadcasters were unable to meet all requests for time-spaces. Revenues of the commercial broadcasters from advertising in 1951 totalled some ¥300 million (approximately \$830,000), but the following year it jumped by nearly eight times to ¥2,200 million. Of course, radio advertising in the total amount spent in newspapers, magazines and other media in Japan accounted for only 1.2 per cent in 1951 and 5.7 per cent in 1952, which was still negligible. As can be seen from these rates, however, radio advertising may be considered to have already taken a big bite out of the shares of other media. Business results of the commercial stations thus described rapid upward curves, and the operators were able to show a profit two years, at the latest, after commencement. According to statistics compiled in June 1952, industries utilizing broadcasting as an advertising medium ranged from miscellaneous industries with the ratio of 16.7 per cent, food (13.1 per cent), medical supplies (12 per cent), cosmetics (10.5 per cent) to the fibre product industry (8.2 per cent). Thus, utilization of broadcasting as an advertising medium was not concentrated in certain specific industries but spread almost evenly over a wide range.

What posed problems in connection with the management of commercial broadcasting was how the balance in programming could be maintained to satisfy the public nature of broadcasting and the pursuit of profit as joint-stock companies. In the early stages, programming staff strongly supported the public nature of broadcasting, but those who believed in the establishment of a firm foundation for business operations as being more urgent demanded programmes that would be more useful in attracting sponsors. The differences in opinions were not identical at all the commercial broadcasters but such opposing views were general. Many of the commercial broadcasting companies were established in the form of joint ventures with the influential local newspapers, with whom their business operations were closely connected. In the circumstances, it was inevitable that programming at the commercial stations should have attached importance to the news reporting capacity of newspapers on which their editing was patterned. For example, at the Osaka and Nagoya stations, which were the first to commence broadcasting, news supplied by newspapers were presented seventeen times and fifteen times a day respectively. NHK at that time was presenting news twelve times a day. Both also relayed stock market quotations. They also relayed scenes of deliberations at the National Diet. Such news reporting activities became common to all newly established commercial broadcasters. As sales of programme time increased and the sponsored programmes became the principal items, it became impossible to ignore the opinions of the sponsors in programming. As a result, a tendency to-

wards concentrating on entertainment programmes in the forms of audience participation and recordings before the public became strong because of the need for attracting as many listeners as possible. New quiz programmes giving away large amounts in prize money and premiums were generally popular, but they were also criticized in some circles on the ground that they stimulated speculation.

In the early stages of commercial broadcasting, little attention was paid to the commercial message (CM), which formed the most outstanding feature of this type of broadcasting service. In fact, most CM's were mere copies of newspaper advertisements and were either too stiff, too long or off the target. The advertising effects, of course, were low and impressions given to general listeners were anything but favourable. It was from around 1953, two years after the commencement of commercial broadcasting, that studies of advertising effects unique to broadcasting bore fruit and CM techniques had a tolerable effect.

The question of developing network linking of programmes became important because it was such networks that would serve as a supporting pillar in the overall development of commercial broadcasting and greatly affect the business operations of local commercial stations. Originally, commercial broadcasters were limited in their areas of activity by the circular notice issued on the basis of the "Basic Standards for the Establishment of Broadcasting Stations", which was part of the regulations set forth by the Radio Regulatory Agency. They were, therefore, not permitted to construct a fixed nation-wide network, such as operated by NHK. Today, a certain number of local stations are linked, with key stations in the metropolitan areas at the central positions, to materialize network-like functions. In the early period, however, what may be called case-by-case exchange of programmes was the rule, and programmes produced at the stations in Tokyo and other cities were distributed among local stations as recorded tapes. Consequently, it may be said that Japan's commercial broadcasting, from the standpoint of engineering, came into being and developed on the basis of taped programmes.

In the process of the growth of Japanese commercial broadcasting as described in the foregoing, the Federation of Commercial Broadcasters in Japan was established as an organ for maintaining contacts among the broadcasting companies as well as for investigating and disposing problems common to all. The Federation had, in fact, been established in July 1951, before the commencement of commercial broadcasting and soon began drafting standards for operation, which were adopted in October of the same year. In the preamble of these standards the mission and responsibility of commercial broadcasting are clearly defined. The substance of the standards include the general standards, those for programming and advertising, which constitute the fundamentals of voluntary control of broadcasting. While the inseparable relationship between recorded tapes and commercial broadcasting was as aforementioned, an expert engineering committee was organized at the Federation in April 1952, standard tape speeds were set and tapes to be used were selected. In those days, all the tapes were imported products, so in those circumstances, the Federation took steps for obtaining allocation of foreign currency for all the members and took charge of the import and distribution of tapes.

III

Postwar Period (2) —From commencement of TV to 1965—

1. NHK's Tokyo TV Station commenced full service on 1 February, 1953. 2. Tokyo Tower, the symbol of the developing television enterprise in Japan. After completion of the tower in December 1958, transmitting antennas of NHK and three commercial stations were installed here. 3. National network broadcasting of the wedding ceremony of the Crown Prince on 10 April, 1959 attracted nationwide interest and greatly promoted diffusion of television throughout Japan. Parade from the Imperial Palace to the provisional Togū Palace.



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1. From programmes covering overseas nations ... ① "Across the African Continent"—A visit to a pigmy village (1959). ② "New Age in Europe"—Hyde Park, London (1963). ③ "Across the Soviet Union"—The Red Square (1961). ④ "Young Peoples of the World"—A street scene in New York (1962). ⑤ "Nature in South Pacific" Bathing Tahitian beauties (1962) 2. The annual year-end "Grand Musical Parade" presented over radio and television from the stage has increased



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the popularity of this programme (31 December, 1961). 3. Recording car climbing a mountain road (June 1960). 4. "Operation on the Stomach" presented from the central operating room of the Tokyo University Hospital (August 1957). 5. A scene during the overseas performance tour of NHK Symphony Orchestra (at La Scala, Milan, August 1960.) 6. A unique, regularly scheduled programme "TV School for the Deaf", which is aimed at an early education of deaf children (April 1961).



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1. The "Record of a Branch School in the Hills" proved the utility of television in the education of children in remote areas (November 1959~March 1960). 2. Opening ceremony of the Second International Conference of Broadcasting Organizations on Sound and Television School Broadcasting (at NHK Hall, April 1964). 3. A location scene in Alaska for shooting the "Story of Alaska", a television drama (December 1962). 4. Invitation to the Symphony of the Air materialized the



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first visit of a great orchestra through prewar and postwar days (May 1955). 5. The Vienna Boys' Choir enchanted Japan with their clear and charming voices (December 1955). 6. The Lirica Italiana invited to Japan four times since September 1956 contributed greatly to cultural exchange between Japan and Italy. Photo shows Scene 2, Act 1 of "La Traviata" presented at the Tokyo Bunka Kaikan in October 1963.



1. Crowd demonstrating against the revision of the Japan-U.S. Security Treaty. 2. Chairman Asanuma of the Socialist Party at the public speaking forum of the heads of three political parties. He died at the hands of an assassin (October 1960). 3. H-5 studio provided with a remote control system (October 1961). 4. The Broadcast Museum. Photo shows the exhibition room when opened in March 1956. 5. The NHK Hall with 700 seats is the crystallization of the results of years of research at the Technical Research Laboratories and contains the essence of acoustic architectural design.



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6. The 54th International Olympic Committee meeting at the NHK Hall in the presence of the Emperor (May 1958). 7. The Asian Broadcasters' Conference, which brought representatives of the Asian broadcasting organizations together, developed in 1964 into the Asian Broadcasting Union after five preliminary conferences. Photo presents a scene of the first conference. 8. Transistorized television camera mounted on a helicopter and used for picking up Tokyo scenes. 9. NHK Broadcasting Centre at Yoyogi, Tokyo.



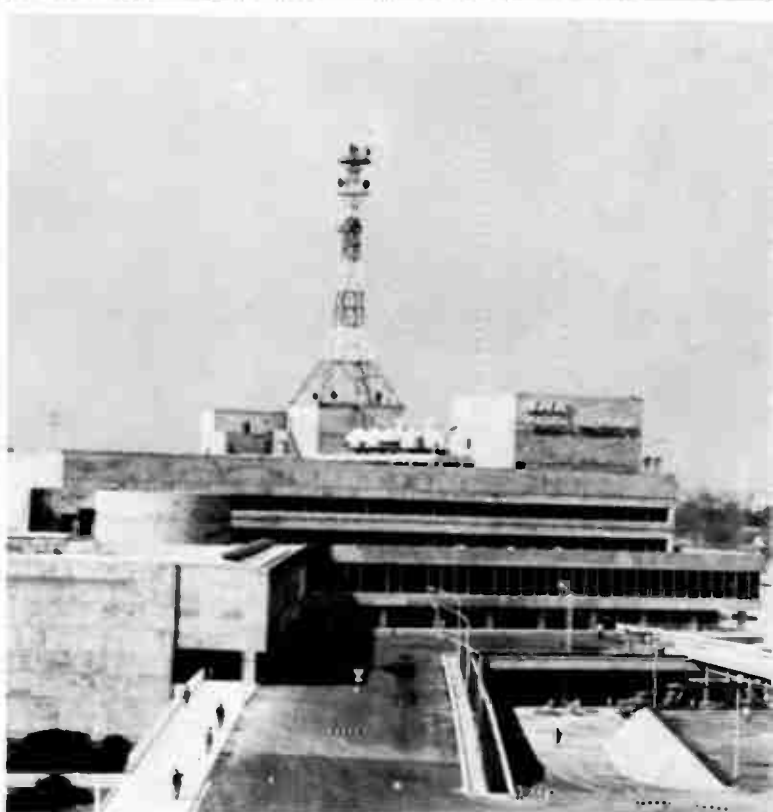
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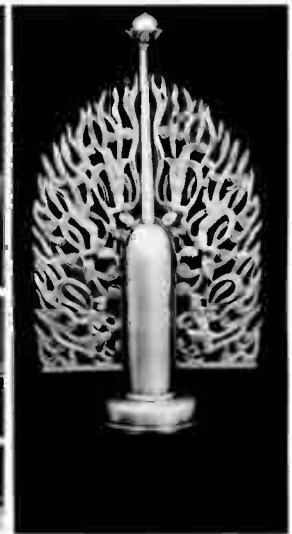
1. Events of the Tokyo Olympic Games were broadcast in Japan and the American region simultaneously via communication satellite III. 2. One year before the Olympics, the first space relay experiment between Japan and the United States was successfully made. ④ Funeral of the late President Kennedy. ⑤ The earth station of the International Telegraph and Telephone Company, which took an active part in the first Japan-US space television relay. 3. The first Japan Prize International Education Programme Contest was successfully held under participation of many countries desirous of promoting educational broadcasts. ⑥ Photo shows the producer of the Finnish Broadcasting Corporation which won the Japan Prize. ⑦ The Japan Prize trophy.



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1. The Birth of Television Broadcasting

1. Technical Researches and Experiments

Research in television engineering began at NHK in 1930, and by 1939 television had been developed to a stage where public demonstrations of picture transmission and reception could be made. However, as Japan was then in a national turmoil arising from prolonged hostilities with China, which ultimately led to the outbreak of the Pacific War, further research had to be suspended (see Part I Chapter 9, "Broadcast Engineering", Section 4). Great Britain and the United States, the pioneers in television, were also affected by World War II, but in these countries microwave techniques, etc., related to television, which had achieved remarkable development during the war, were used as the basis for postwar research. As a result, television in these countries entered a period of rapid development.

Research on television was resumed at NHK in June 1946. However, it was not possible to build up an adequate system because of the straitened national economy, confused social conditions and the occupation policies of GHQ. In the circumstances, the immediate object of research was set on the investigations of television engineering in the more advanced countries and basic research on the pickup and receiving tubes and their materials. The results of such research efforts included collection of measurement data on pickup tubes, improvement of the iconoscopes and fluorescent substances, experimental manufacture of receiving tubes and some work on portable television equipment.

From about 1948, when prospects for economic rehabilitation of Japan became brighter and evidences of renewed social order became visible, NHK began technical experiments aimed at materializing the television service. As the number of receiving contractors had increased rapidly from the latter part of 1948, and the financial circumstances of NHK had improved for the first time since the war, it was possible to adopt the aforementioned policy of conducting technical experiments.

Meanwhile, NHK began improving transmitters, antennae and studio equipment that would be required for experiments in telecasting. NHK also decided to adopt provisionally a television standard comprising 525 scanning lines (441 lines in the prewar system) and 25 picture frames per second. An experimental television station was constructed at the NHK Technical Research Laboratories in February 1950, and in the following month, Japan's first demonstration of telecasting was made in commemoration of the 25th anniversary of Japanese broadcasting. Television signals in this demonstration were beamed from the experimental station and received at the Mitsukoshi Department Store in Nihonbashi, Tokyo. Then from May through August, a "television train" equipped with line-connected transmitter and receiver was dispatched to give demonstrations in all the principal cities. Through these demonstrations, NHK succeeded in arousing public interest in television as well as in stimulating manufacturers and amateur technicians to begin assembling television receivers.

In November 1950, a policy was therefore adopted for conducting periodical experimental telecasting (once a week for three hours) at the afore-

mentioned experimental station. At that time, the antenna power was 10 W both for picture and sound and the frequency range from 102 to 108 Mc. As the standard system had not yet been adopted by the Radio Regulatory Agency (later the Ministry of Posts and Telecommunications), which was the competent administrative government agency, NHK Technical Research Laboratories undertook various basic researches on television engineering in parallel with this experimental service. The results achieved in these researches were incorporated from time to time into the engineering phase of the experimental service. In January 1951, the transmitter output was increased to 500 W (video); and it was further increased to 3 kW in July of the same year. In the early stages of the experimental service, test patterns on slides, recorded music and short films were principally transmitted as a means of assisting technical investigations, but in preparation for the inevitable regular service, study of programme production and its techniques was commenced from September 1951, resulting in the inclusion of some live programmes in the experimental telecasting.

All the television cameras in those days were of the iconoscope system developed at the Research Laboratories. From around April 1952, however, image orthicon cameras imported from RCA and GPL (General Precision Laboratories) of the United States began to be used. Using these imported cameras, study and trial manufacture of the image orthicon cameras were promoted at the Technical Research Laboratories with a view to realizing their domestic production. The first image orthicon camera produced in Japan was used in June 1954. Through the use of such cameras, which were excellent both in principle and construction, notable changes were introduced into programme production as well as television engineering. Formerly, poor camera sensitivity required bright lights. As a result, the studio temperature frequently rose to an intolerable level, or the performer's gold teeth or brass musical instruments reflected the light to such extent as to disturb the programmes. Such troubles were eliminated through the use of new cameras. They also made possible the pickup of outdoor scenes in the dusk, which was impossible with the old cameras. As a result, overall changes were introduced into the lighting and the manner of programme production.

In February 1952, the Radio Regulatory Agency announced the standards for monochrome television in anticipation of full-scale television service in the near future. This, of course, gave the impression that the official sanction for full-scale television service was near at hand (see Section 2). In order to meet the situation thus developing, NHK constructed a full-scale television studio within the headquarters building. It also provided itself with a new 3 kW transmitter, a transmitting antenna and other necessary equipment. NHK moved the experimental station at the Technical Research Laboratories to the headquarters building in October 1952. All the equipment thus provided was designed and developed at the Laboratories, with the exception of the cameras and certain parts of other devices, and with removal of the experimental station as the turning point, outdoor pickup programmes were added to live studio programmes. Television cameras were then taken into Diet to present scenes of debates; and they were also taken to sports arenas to report scenes of athletic competition. Even under the experimental service thus operated, the people's expecta-

tions of what television had to offer were almost satisfied.

As progress was made in research in programming, training of the staff and consolidation of the facilities since the establishment of the Tokyo Experimental Station, the telecasting time was also extended, and by then, television programmes were being presented daily for an average of three hours. So as to be better prepared for a full-scale service the Television Programming and Engineering Divisions were added to the business organization. In January 1953, the transmitter output was again increased to 5 kW, and then the decision was made that a full television service would officially begin on the 1st February, 1952.

In the meantime, an experimental television station was established at Osaka in February 1952, and another at Nagoya in November. These stations also operated telecasting regularly twice a week. As a result of studies on the microwave relay trunks linking these stations at the Technical Research Laboratories, a plan was made for constructing five re-broadcasting stations between Tokyo and Osaka separated by 484 kilometres. This was implemented in February 1952, and with the completion of the stations, the microwave channel started operations in January 1953. NHK's own television network comprising these three stations remained in operation from this time for a year and a half, but the construction and operation of microwave channels after May 1954 were put entirely into the hands of the Japan Telegraph and Telephone Public Corporation.⁽¹⁾ The use of NHK's own microwave channels was therefore suspended, but though this project of NHK ended after a short period of operation, it must be mentioned as an important factor in the promotion of nationwide dissemination of television.

2. Standard TV System and Licence Standards

Soon after the commencement of NHK's experimental television service, the "Resolution on the Promotion of Television Service Establishment" was introduced in the Diet in May 1951 and approved. The reason for the proposal included the notable development of television abroad and the obvious desire of the Japanese people for such a service.

The resolution was worded in abstract terms, merely requesting the government to take "appropriate steps" regarding various facilities needed for a television service, but in answer to the resolution the government agencies concerned discussed matters related to the materialization of such service. Principal items discussed were as follows: (1) A television service will require large facility investments, and would it be wise to hurry with its establishment under the existing economic and social conditions of the country? (2) Should television be in the form of a public or private enterprise, or should it be operated in parallel by a public corporation and private organization, as in the case of the radio? (3) How

(1) By the government administrative organization revision carried out in August 1952, the Ministry of Telecommunications was abolished, and the telegraph and telephone services were placed under the newly created Japan Telegraph and Telephone Public Corporation. This Corporation, as in the case of the National Railways and the Monopoly Corporation, was established by government investment to operate the communications services. All the relay channels used by NHK for domestic services are rented from the Corporation.

should the standard television system be decided? (4) How should the production and marketing of receiving sets be managed?

NHK, which had been studying television engineering for a long time took the stand that, in view of the potentially powerful social influence television would be bound to exert, NHK, as a public corporation, should be accorded priority in the operation of the service. In fact, NHK had repeatedly discussed concrete measures for the establishment of a television service on the basis of the aforementioned stand since early 1951. However, it was NHK's opinion that the commencement of the television service on a full-scale basis should be decided in consideration of the production capacity of the electronics industry. However, the Yomiuri Newspaper Company, publishers of one of the leading newspapers in Tokyo which had been desirous of establishing a television service on its own, announced its plans for the "Nihon Television Network Company" (NTV) in September 1951. With this announcement, commercialization of television rapidly became an important issue of the time. The gist of the plan included direct import of transmitters and receivers from the United States and monopolistic operation of a nation-wide network by the proposed private company. This plan, however, completely ignored the efforts expended in the process of research and development and was diametrically opposed to NHK's stand that it should be accorded priority in the industrialization of television. Consequently, NHK was forced to make public its "First Five-year Programme for the Television Service" which had been under study for some time, and to apply for a licence at the Radio Regulatory Agency.

Meanwhile, deliberations were in progress at the Radio Regulatory Agency as to which of the following two systems should be adopted as the standard television system, which was the most fundamental prerequisite for the establishment of a television service:

- (1) The American system (525 scanning lines, 30 picture frames per second, 6 Mc frequency band-width.)
- (2) Provisional Japanese system (525 scanning lines, 25 picture frames per second, 7 Mc frequency band-width, which NHK had been using after consultation with the competent officials of the Radio Regulatory Agency and the manufacturers).

The Radio Regulatory Agency made investigations on the literature published both in Japan and abroad on the subject, tried to grasp the actual state of television services in other countries and finally in October 1951, came to a conclusion that the American system should be adopted. The Agency, therefore, drafted a document purported to justify this conclusion, and it was placed before a public hearing, in accordance with the provision of the Broadcast Law, attended by those concerned and persons of learning and experience. The focus of attention at this public hearing was the question of the frequency band-width, i. e., whether it should be 6 Mc or 7 Mc. The NTV favoured the 6 Mc system proposed by the Radio Regulatory Agency, but NHK and the manufacturers, who had already taken steps to produce equipment based on the 7 Mc system, advocated the adoption of the latter. The claims of the opposing parties showed both merits and defects with respect to the quality of the pictures, difficulty or ease of shifting to colour television, the number of available channels,

etc., and the Radio Regulatory Agency finally decided to adhere to its original proposal on the basis of the report on the public hearing. In February 1952, the Agency established and announced, the rules and regulations related to the standard system.

The Director of the Radio Regulatory Agency stated as follows with regard to the adoption of the American system: "The claim that the frequency band-width of 7 Mc provides clearer pictures and makes production of equipment easier is only a theoretical claim and is not backed up sufficiently with technical proofs. On the other hand, the adoption of the 6 Mc system will permit a saving of 1 Mc band-width, and this can be allocated to the educational broadcast on VHF, which is in demand in various circles. Also, in shifting to the colour system, the 6 Mc will afford better chances of introducing the American technology, which is highly advanced."

Following the adoption of this standard system, the Radio Regulatory Agency proceeded to study the licence standards for television stations. However, because of opposing interests of the parties concerned with regard to the form of the television service—whether it should be a public or commercial service or monopolistic or competitive, and whether television and radio broadcasters should be separate or concurrent—the Agency was unable to come to a definite decision. In the first place, the Agency was destined to be abolished ⁽¹⁾ at the end of July 1952 in accordance with the government's policy of revising the administrative organization, and the affairs under its control were to be transferred to the Ministry of Posts and Telecommunications. For this reason, there was an intense general concern as to whether the licensing standards for television stations could be set while the Agency was in existence. However, the standards were adopted just before its dissolution and the principal items were as follows:

- (1) The television service should not be monopolistic.
- (2) Two to three television stations in Tokyo and one to two in other cities are deemed appropriate for the time being, and the parallel operation of NHK and commercial television should be the rule.
- (3) Transmission of television signals should originate in Tokyo for the immediate future, and the programmes should be relayed to local cities gradually along with completion of relay channels.

In accordance with the above policy, the following steps were taken with regard to the five organizations in Tokyo, which had filed applications for a licence: (1) Experimental licence will be issued to the Nihon Television Network Company. (2) Experimental licences for NHK and the Radio Tokyo Company will be reserved. (3) Licences will be denied the other applicants. Reservation of the decision on the licensing of NHK and the Radio Tokyo mentioned in (2) was based on the reasons that NHK's business plans, budget of revenues and expenditures and financial programme

(1) On the occasion of the regaining of sovereignty when the Peace Treaty took effect in April 1952, the Japanese Government decided on a broad revision of the extremely complicated administrative organization. One of the standard objects of this revision was the dissolution of some of the numerous administrative commissions established on the advice of GHQ. In other words, it was decided that the administrative commissions other than those with judiciary functions would be abolished and the affairs of such defunct commissions be transferred to the ministries concerned. The dissolution of the Radio Regulatory Agency was considered a matter of course because of the circumstances in which it was established by the strong demand of GHQ despite opposition of the Japanese Government.

were still to be approved by Diet, and it was considered more appropriate for Radio Tokyo, which had just commenced radio broadcasting, to go into concurrent operation of a television service after firmer establishment of its business foundation.

As the Radio Regulatory Agency was dissolved shortly after announcement of the policy mentioned above, this resulted in the issue of an experimental licence to NTV without taking steps towards frequency allocation, which was necessary for proceeding with licence issuance. For this reason, the question of frequency allocation became the first matter to be considered by the Ministry of Posts and Telecommunications which succeeded to the affairs of the defunct Agency. The Ministry thereupon began to draft frequency allocation plans premised on the future nation-wide spread of television. The first step taken by the Ministry was to select Tokyo, Osaka and Nagoya, where the establishment of television stations was most likely, and used these as the starting point in drafting plans. These plans were referred to the Radio Regulatory Council,⁽²⁾ a subsidiary organization of the Ministry, in October 1952 for advice. They were also referred to leaders in various walks of life for opinions because of the importance attached to the matter in question. Then, in December of the same year, the final version of the frequency allocation plans was announced to the public.

The plans included six channels in the VHF band that could be used for television, but actually only four channels were available as two were reserved for the Armed Forces of the United States stationed in Japan in accordance with the Japan—US Administrative Agreement. Consequently, three channels were assigned to the Tokyo area and two respectively to the Osaka and Nagoya areas in order to make best possible use of the available frequencies. Under this policy, the experimental licences intended for the two applicants in the Tokyo Area, i.e., NHK and Radio Tokyo, previously deferred, were issued between the end of December 1952 and January of the following year. Prior to the issuance of this experimental license, NHK had drafted an additional budgetary appropriation for operating the television service and had obtained Diet approval via the Ministry of Posts and Telecommunications.

3. Commencement of Telecasting

Among the three organizations in Tokyo to which the experimental licences were issued, NHK was the first to commence telecasting as a full-scale service. As stated in Section, 1, NHK had enough experience in programming and engineering because of the experimental service it had been conducting. Switching to the regular service, therefore, was easy for the Corporation. The Tokyo Television Station of NHK beamed Japan's first regular television signals on the 1st February, 1953. On the other

(2) The object of this Council was to investigate and deliberate on matters related to regulations of radio waves and broadcasting and make necessary recommendations to the Minister of Posts and Telecommunications. It was composed of five members. At that time, the members included a former staff member of the Asahi Newspaper Company, a Tokyo University Professor (a jurist), a businessman, former deputy director of the Board of Communications (predecessor of the Ministry of Posts and Telecommunications) and former director of the National Radio-Physics Research Institute.

hand, NTV, whose preparations for the television service were delayed, was the first commercial stations to commence telecasting which took place on the 28th August of the same year (opening of Radio Tokyo's television station was delayed till 1955).

With the inauguration of the television service, the age of "radio only" became a thing of the past for the Japanese broadcasting industry. Moreover, public and private operations under the plural competitive system were adopted for both of these media, which were expected to play diversified rôles in the world of mass-communications.⁽¹⁾

The results of research and experiments conducted during the experimental telecasting at NHK were effectively incorporated into programming and production during the early stages of the operation of NHK's Tokyo Television Station. Also, experiences accumulated during the many years of radio broadcasting were applied to the establishment of the principal programme items for television. However, as television programme production required several times more funds as for radio the television staff had to operate the service with a limited budget, personnel, materials and facilities, which, of course, was generally the case with all new enterprises. The daily programming in the early period of the service was, as a rule, limited to four hours. The number of television receiving contractors, who were the sole financial source for NHK, was no more than 1,000 households. In the circumstances, for a few years up till about 1956, when the receiving contractors increased and business operations became stabilized, it was impossible to avoid annual deficits in the television division. As a result, comparatively inexpensive field pickup programmes, simultaneous presentation of popular radio programmes and gratuitous short films had to be used in large numbers in order to fill the four-hour daily programme presentation. Only a few television programmes of full scale could be made available.

In the early period of the full television service, much of the equipment trially manufactured at the Technical Research Laboratories during the experimental telecasting period was utilized. However, as important equipment, such as cameras, image orthicon tubes, film projectors, etc., could not be produced in Japan, and also as the production of receiving sets was not adequate, these had to be dependent upon imported products. Furthermore, as there was still room to learn from foreign technology with regard to the transmitters, transmitting antennae and microwave equipment, though they could somehow be manufactured in Japan, imported equipment and facilities were used in the early period, as in the case of radio broadcasting.

The early transmitter used at the Tokyo Television Station was of the 5 kW output type. The antenna was of the turnstile type with six-stage coaxial open half-wave-length doublet system. Both were developed at the

(1) Around 1953, when the NHK Tokyo Television Station commenced telecasting, the United States, Great Britain, France, West Germany, the Soviet Union, Canada, Cuba, Mexico, Brazil and Venezuela already had television services. Besides, Italy, the Netherlands and several others were conducting experimental telecasts and there were 420 television stations and some 31.4 million television receivers in use throughout the world. However, nearly 90% of the stations and receivers were in North America, and the American television industry and technology led the world.

Technical Research Laboratories and erected on the roof of the NHK building in Tokyo. However, when a new transmitting station was built in November of the same year, a 10 kW transmitter and a six-stage superturnstile antenna were imported from RCA to consolidate the facilities. Meanwhile, television transmitter manufacturing techniques based on years of experience in the radio transmitter production made rapid progress, and the equipment supplied for the stations subsequently established were domestic products. In addition, technology required for constructing UHF transmitters and automatic equipment for the unattended rebroadcasters made notable progress so that the development of such equipment was soon established on a regular basis.

2. Radio Wave Regulations

1. Reallocation of Frequencies for Radio Broadcasting

Because of a new legislation regulating the administrative acts related to broadcasting and radio waves (see Part II Chapter 2 "Process of Establishment of a New Broadcasting System", Section 4) Japan's radio broadcasting entered a period in which numbers of different broadcasting organizations were permitted to operate side by side under the competitive system involving public and commercial services. NHK as a public service broadcaster also exerted efforts towards the extension of its facilities to expand its coverage to every corner of the country, which was the object of its establishment as stipulated in the Broadcast Law.

Meanwhile, stimulated by the favourable results obtained by the commercial stations established in the leading cities, active efforts to establish broadcasting stations in other cities became visible. Also, as outlined in the preceding chapter, commercialization of the new medium of television, had made its start. In this manner, the rôle broadcasting played in the life of the public became highly significant and weighty within only three years after the promulgation of the Broadcast Law.

Postwar broadcasting was liberated from the tight government control and freedom of speech was in principle guaranteed for broadcasting by law. However, in the matter of regulating radio waves, the government still maintained control under the domestic laws and international agreements. The greatest issue in radio administration in the process of development of the broadcasting service was the basis for the broadcasting frequency allocation and the impartial allocation of frequencies for the purpose of fulfilling the stipulation in the Radio Law that "the welfare of the public shall be enhanced through securing the equitable and effective utilization of radio waves." This question should have preceded the licensing of new broadcasting stations, and the manner of handling it would have affected the growth of the broadcasting service. For this reason, it was a matter of serious concern for all those concerned.

On the side of the government, too, there was serious concern as to whether the licensed operators would utilize the limited and valuable radio waves effectively for the promotion of public welfare. The Broadcast Law

also stipulated that the term of licence for any broadcasting station shall not exceed three years,⁽¹⁾ which excluded any guarantee for the renewal of such licence. In the circumstances, it was inevitable that a sense of uneasiness should have been felt by the licencees since it was not certain whether they could secure, even when their licences were renewed, allocation of frequencies and output powers no less favourable than those in use. It may, therefore, be said that one of the fundamental questions related to the broadcasting system was the coordination of indirect social responsibility arising from the manner of the government's radio regulation and the independence of the broadcasting organizations.

Under the international agreement, medium-wave broadcasting frequencies allocated to Japan included 107 between 535 kc and 1605 kc. Of this total, there were 12 that could not be used because part were taken up by the United States Armed Forces stationed in Japan and the remainder subject to intolerable interference by signals originating in foreign countries. As a result, only 95 frequencies were available for domestic broadcasters. As of the end of 1952, all of these frequencies had been allocated to the existing NHK and commercial stations. Allocation of frequencies for newly established stations, therefore, had to depend entirely on the revision of the system of frequency assignments, even though hope could be placed on the relinquishment of some by the Armed Forces Broadcasting Service. With the end of May 1958 just around the corner, when the licence terms of all the stations were to expire for the first time after the promulgation of the Radio Law, the Ministry of Posts and Telecommunications drafted the "Policy for the Reallocation of Medium Wave Broadcasting Frequencies" and a concrete programme for reallocation based on the abovementioned plans was indicated, thus attempting to break through the impasse.

Two plans were referred to the Radio Regulatory Council for advice. In view of the importance of the problems involved, the Council sought opinions of persons of learning and experience in various walks of life, NHK, and the Federation of Commercial Broadcasters in Japan, and reported that the original plans were deemed approximately sound. The policy adopted on the basis of this report was in essence as follows:

- (1) NHK's first network will be assigned as low frequencies as feasible, which are higher in efficiency, making regional broadcasts covering the entire country receivable. For the second network, frequencies within the limit necessary for receiving the same programme throughout the country will, as a rule, be allocated. Also frequencies for stations with an output power lower than 100 W, which are considered necessary for the nation-wide expansion of the two networks, will also be allocated.
- (2) With regard to the commercial stations, in order to make broadcasting programmes receivable in the principal areas of the country, frequencies for the stations in the cities outside the service areas of the

(1) Reasons for limiting the term of licence issued to the wireless stations (including broadcasting stations) in the Radio Law were: (1) possibility of the revision of international agreements on the utilization of radio waves, (2) possible increase of the demand for radio waves in the future, (3) rapid development of radio science and technology. In view of the above, it was thought that revisions and adjustments would become necessary from time to time in matters connected with the frequency allocation and the utilization of radio waves.

existing stations will be allocated in the order of the number of households. In addition, frequencies for the stations with below 100 W output will be allocated.

Prior to the adoption of the aforementioned policy, the Federation of Commercial Broadcasters in Japan suggested that in view of the regional character of the commercial broadcasters, i. e., independent managements locally operated in close relations with local communities, the commercial stations should be assigned frequencies of higher efficiency as in the case of NHK networks. The Federation claimed that some frequencies could be made available by merging and consolidating NHK's two networks. NHK, on the other hand, protested that the policy of presenting the same programme across the country on the second network would be making light of the regional differences required for educational programmes scheduled for this network. Opinions and requests presented by parties of opposing interests differed considerably, and the adjustments met with much difficulty. The Ministry of Posts and Telecommunications introduced certain revisions to its policy, but in essence, it adhered to its original stand and finally settled on allocating 35 frequencies to NHK's first network, 31 to the second network and 29 to the commercial stations. New frequencies were assigned to most of the existing stations in accordance with the allocation plans thus adopted.

2. Post-reallocation Revisions

After the Ministry of Posts and Telecommunications undertook reallocation of medium-wave broadcasting frequencies as aforementioned, further revisions were made in the frequency allocation plan every three years, when the term of licences expired. Slight amendments were also introduced in the interim. The greatest factor necessitating such revisions was the increasing interference by the broadcasting signals originating in neighbouring countries. In particular, as the stations in the Soviet Union, the People's Republic of China and the People's Democratic Republic of Korea were not under control of IFRB, interference by the broadcasts from these countries intensified almost from day to day.

At the time of licence renewals in 1956, items of amendments related to frequency allocation and designation of output power were determined in consideration of the increasing interference by foreign broadcasts as well by those in Japan. The amendments called for an increase of the output power to 100 kW at four NHK stations. Also, for the benefit of areas experiencing poor reception, the amendments permitted some NHK and commercial stations to increase the output power and to build additional low-power rebroadcasting stations. Furthermore, measures for arranging parallel operation of the NHK and commercial stations in areas considered important were included. In the case of interference by foreign broadcasts, however, attainment of desired results was extremely difficult, as counter-measures had to be implemented while meeting the situations created by construction of new stations and changes in the technical conditions, such as increase of power at the stations abroad. Around 1958 the number of households suffering more or less from interference by foreign or domestic broadcasts totalled 1.5 million or about 10 per cent of the entire listening

households in the country. NHK presented a five-year programme to the Diet starting in 1958 to clarify the contents of its overall long-term programme aimed at a nation-wide coverage. Inclusion of the building of additional stations and increase of output power in the plan as one of the principal projects was due to the need for solving problems related to interference mentioned above.

In any case, every time the frequency allocation plans of the Ministry of Posts and Telecommunications were revised, the frequencies assigned to the commercial stations increased. For example, as a result of the planned revision of allocations undertaken in 1959, six more frequencies than in 1953 were assigned to the commercial stations, which now totalled 391.1kW in output power against 233.7kW in 1953, an increase of 1.7 times. On the other hand, NHK's first network was reduced by two frequencies, while the second network was reduced by four.

The broadcasters expected the radio administration to allocate to them frequencies of higher efficiency from the standpoint of protection against noise and interference. They also desired permission to increase the output so as to enable them to expand the service area, and assignment of new frequencies that would make building of additional facilities possible. In short, what the broadcasters desired was the solution of the fundamental problems, the powerful key to the growth of their business in ways favourable to themselves. However, as the expansion of the facilities of both NHK and the commercial broadcasters made progress, frequencies available were almost exhausted, allocation of frequencies to the new applicants became difficult; the situation, moreover, was expected to grow worse. Consequently, the only course left for the Ministry of Posts and Telecommunications was either to undertake an overall revision of the basic policy of frequency allocation or resort to the use of frequencies other than medium waves.

In those days, the use of the FM system in the VHF region for sound channels had already been developed to a practical stage in the United States and Europe. In Japan, too, inauguration of FM broadcasting was expected to play an important part in the field of sound broadcasting, because of the excellent technical characteristics. It was also a powerful means of solving the shortage of medium waves. In the circumstances, NHK began experimental FM broadcasting in the VHF band from the end of 1957. Furthermore, in anticipation of the possible inadequacy of frequencies for FM broadcasting in the VHF band, NHK commenced researches on FM broadcasting in the UHF band from April 1960. Then, in preparation for the future establishment of a full-scale FM service, NHK presented to the Ministry of Posts and Telecommunications data necessary for establishing the standard system for FM broadcasts. This was done with the object of collaborating in the development of FM broadcasting to a stage of practical application.

From the viewpoint that FM was the final means left for radio broadcasting, great expectations were placed on the realization of this service, and the number of applicants for establishing such a service increased year by year. The Ministry of Posts and Telecommunications, however, was very cautious about determining the licensing policy in consideration of the potentialities latent in the undeveloped regions of the FM system. The

Ministry, therefore, approved only NHK's experimental FM broadcasting and one other station operated by a university. A large number of applications for licences are still reserved at the Ministry (see Chapter 4, "FM Experimental Broadcasting and Colour Television", Section 1)

3. Frequency Allocation Plans for Television

The public and commercial television services commenced almost simultaneously in 1953. Unlike the case of radio broadcasting, the fundamental policy of frequency allocation for television had been definitely established at the Ministry of Posts and Telecommunications, thus making it possible to take adequate administrative measures. However, under the situation in which applications for the establishment of television stations did not cease, because of the very high general evaluation of the social influence of television, which is said to be several times as high as that of the radio, the question of frequency allocation has also become a serious administrative affair.

As stated in Chapter 1 "The Birth of Television Broadcasting", Section 2, the Ministry of Posts and Telecommunications selected Tokyo, Osaka and Nagoya as the starting points of frequency allocation and decided to use six channels in the VHF band. In this policy was implied an intention of providing a pointer for the design and manufacture of equipment both for transmission and reception in anticipation of the future nation-wide dissemination of television. As telecasting in the three great areas was implemented, the number of receiving contractors gradually increased. Meanwhile, besides investigating various technical conditions that would serve as a premise in the drafting of the nation-wide frequency allocation plans, the Ministry expedited surveys and studies of the supply and demand relations of receiving equipment and prospects for the implementation of the microwave relay channel construction from the social and economic viewpoints. In January 1956, the Ministry drafted the basic policy related to the frequency allocation and put it into effect in February after it was scrutinized by the Radio Regulatory Council. The principal items in this policy included the following: (1) Six channels in the VHF band, which were determined at the allocation to the three major areas, will be used. (2) Allocation will first be made to the seven main areas of the country in consideration of the density of population, economic conditions and cultural levels, and then be spread to other areas. (3) Plural stations will be established in the same areas as far as possible.

This fundamental policy was significant for indicating the future nation-wide spread of television. However, as the trend towards demanding the establishment of television stations became brisk in all parts of the country, with the announcement of this policy, it became difficult to expect proper establishment of stations with the six channels (as two of them were used by the Armed Forces Radio and Television Service, only four were available for the Japanese.) The Ministry, therefore, expedited study of the means to increase the channels and possibilities for successful operation of television services. As a result, the Ministry amended its original basic policy in May 1957 and decided on the policy of adopting 11 channels. To fill the increased channels, frequencies used for other forms of communication

were adjusted, while at the same time negotiating with the Armed Forces authorities for return of some frequencies, thus attempting to release them for the television services.

The first frequency allocation plan drawn up on the basis of the new channel system, which was adopted in June 1957, was later partially revised several times, but it served as the basis for the nation-wide allocation of frequencies in the VHF band, including plans for the future. According to this basic policy, (1) NHK and commercial stations should operate side by side as far as possible in the same area, (2) plural number of commercial stations should be possible in the principal regions. In addition, in consideration of the educational functions possessed by television, reservation of some frequencies for exclusive or semiexclusive educational stations was suggested. Under this allocation plan, it became possible to establish a total of 107 television stations in the 50 areas of the country, including the aforementioned seven main areas. Of the frequencies available, two for the Tokyo area and one for the Osaka area were secured for exclusive educational television stations. (Incidentally, Channel 12 used by the United States Forces stationed in Japan was allocated for exclusive educational use in the Osaka area).

In October 1957, experimental licences were issued simultaneously under the abovementioned allocation plan to seven NHK stations established that year and 36 commercial stations (34 companies). This promoted construction of television stations in all parts of the country, and by the end of March 1961 telecasting commenced in most of the areas included in the allocation plan. The coverage expanded to 79 per cent of the total households in the country and the number of receiving contractors increased to about 6.9 million. In this way, nation-wide dissemination of television broadcasting was established.

The Ministry of Posts and Telecommunications undertook an overall revision of the basic policy of the first allocation plan in April 1961 and determined the second allocation plan on the basis of this new policy. The purpose of the revision was to promote construction of additional stations for the small cities and areas experiencing difficult reception, and enrichment of educational programmes. Essential points in this plan included the following: (1) Although the frequencies used in the VHF band will be the standard, those in the UHF band may also be used provided there is no means of meeting the situation with VHF frequencies. (2) The use of channel 12 will be promoted. (3) NHK's general service and educational service stations will operate side by side with the commercial stations in all parts of the country.

Under the newly revised policy, parallel operation of NHK's general and educational services throughout the country was made possible, and this fact deserves special mention. It was two years after this event that actual allocation of channels and frequencies in the UHF band took place, the use of which was determined for the purpose of securing new broadcasting frequencies.

In order to promote the establishment of stations in such a way as to realize reception of television programmes in all parts of the country, the Ministry of Posts and Telecommunications decided on the second revision of the aforementioned allocation plan in May 1963. By this revision,

frequencies were newly allocated to areas centred on principal towns and villages having 3,000 or more households, and of such areas, those deemed to experience difficulties in reception because of topographical conditions for the first time were assigned frequencies in the UHF band. The new frequencies were not only highly suitable for sound broadcasting under the FM or AM system but also pregnant with possibilities of utilization in the undeveloped regions inherent in these frequencies. Consequently, as in the case of FM broadcasting mentioned in the preceding section, the Ministry of Posts and Telecommunications took the stand that overall utilization of radio waves should be determined after careful examination of their future possibilities, including utilization in broadcasting. This question, as will be stated later (Chapter 5, "Revision of the Broadcast Law", Section 3), was taken up as one of the important issues, when re-examination of the amendments to the existing Broadcast Law was made.

3. Networks

1. Radio Facilities Expansion Programmes

With the completion of the first postwar five-year programme for expansion, which began in 1948 and ended in 1952, both the first and the second networks of NHK were on a nation-wide scale. As a result, the coverage of the first network expanded to 97.9 per cent and that of the second network, to 93.2 per cent of the total households in the country (see Part II Chapter 5, "Broadcast Engineering", Section 1). NHK followed this up with a long-term facilities expansion plan starting in 1954, with a view to fulfilling its obligations stipulated in the Broadcast Law, i.e., NHK shall "make it possible for broadcasts to be received widely throughout the country". This plan was in line with the radio regulatory policies and measures of the Ministry of Posts and Telecommunications (see Chapter "Radio Wave Regulation", Sections 1 and 2). As in other programmes of similar nature, the chief object of this new plan was to eliminate areas with inadequate field intensity, with particular importance attached to the improvement of reception in such areas as had been subject to interference by foreign as well as domestic broadcasts and electrical appliances increasingly used in households.

Under this policy, numbers of low-power stations were built and the output power of existing stations was increased between April 1954 and the end of 1957. Similar measures were also undertaken for the second network. Also the output power of the first and second network transmitters in the four key areas, namely, Tokyo, Osaka, Fukuoka and Sapporo, was increased to 100kW, thus completing the first-stage high-power broadcasting programme. With such progress made in the consolidation of facilities there were 115 NHK stations as of April 1958 for the first network and 94 for the second. The coverage also increased to 98.7 per cent for the former and to 95.2 per cent for the latter.

In 1958 NHK drafted the first-stage five-year programme as part of

its long-term plan aimed at an overall development of programming, engineering and management in the period of parallel operation of radio and television services. In the field of radio, the principal aims were to bring every corner of the country under the coverage of the first and second networks, to prevent noise and interference and to modernize the facilities by replacement of obsolete equipment. With the implementation of this programme, new and additional constructions of the facilities were expedited, and by March 1961, those of NHK were brought to the stage shown in the following table. In other words, in the past three years, twenty-six first network stations and thirteen second network stations had been added to NHK's facilities. These additions naturally expanded the coverage to nearly 100 per cent. However, as interference by foreign broadcasts at night further increased, there were many areas suffering from difficult reception even though the field intensities had been brought to the legal level. As a result, the effective night-time coverage was actually no higher than about 70 per cent.

On the basis of the radio regulatory policy of the Ministry of Posts and Telecommunications, which aimed chiefly at the elimination of areas where reception was difficult, NHK continued to undertake frequency changes and power increases for large numbers of the existing stations and built a number of low-power ones in areas requiring such measures. The situation was similar with the commercial broadcasters. Consequently, the availability of medium waves grew worse with each year, and great expectations came to be placed on the future possibilities of FM broadcasting in the VHF band (see Chapter 4, "FM Experimental Broadcasting and Colour Television", Section 1).

In order to promote stabilization and growth of the service management in the face of a new situation created by the rapid development of television and the addition of FM broadcasting which had been brought to the practical stage, NHK drew up its second-stage six-year programme starting in 1962. In this programme, the principal object with regard to the radio facilities was set on the elimination of areas experiencing difficult

NHK's Radio Stations (as of March 1961)

Power	1st network	2nd network
100 kW	4	4
10	13	13
5	1	1
3	2	1
1	33	25
0.5	3	12
0.1	61	44
0.05	23	7
0.02	1	0
Total	141	107
Coverage	99.5%	96.8%

reception, which could be accomplished by the establishment of ultra-high-power stations and smaller ones for localized broadcasts on the periphery of areas covered by the high-power stations. As a part of the ultra-high-power station establishment, the second network transmitter in Tokyo was increased to 300kW, the construction work on which was completed in December 1963. This resulted in marked improvement in the reception of the second network programmes in and around Tokyo. It also helped to improve night-time reception in the remote areas.

As a result of the foregoing measures, NHK's facilities as of March 1966 included 170 first network and 129 second network stations. However, by March 1968, when the six-year programme aforementioned is scheduled for completion, 182 first network and 129 second network stations are expected to be in operation, and their respective coverages will reach 99.9 per cent and 98.5 per cent of the total households in the country.

Automation was adopted for the operation of radio facilities for the first time in August 1951. As the need for simplifying the business management increased along with the expansion of networks and modernization of facilities, NHK adopted the policy of applying the automation system not only to all low-power rebroadcasters but also to some medium-power stations. Special attention was paid to the design of housing and securing the safety of equipment for these automated stations. For this reason, switching of such stations to the unattended system was greatly facilitated. (see the following table)

2. Television Facility Expansion Plans

NHK established a television station in Tokyo in February 1953, followed by Osaka and Nagoya in March 1954. Since then NHK had studied

NHK's Radio Stations

Year	1st network	2nd network
1953	88	67
1954	93	71
1955	96	80
1956	101	84
1957	109	88
1958	115	94
1959	129	103
1960	141	107
1961	150	117
1962	155	119
1963	166	125
1964	168	127
1965	170	129

Note: Financial years begin in April and end in March of the following year.

the nation-wide expansion of television facilities. However, the expansion programmes had to be implemented in consideration of the frequency allocation plans of the Ministry of Posts and Telecommunications and the construction of microwave relay trunk lines by the Japan Telegraph and Telephone Public Corporation. For realizing the early dissemination of television, the Ministry in 1956 designated Sapporo, Sendai, Hiroshima and Fukuoka as new key areas and issued licences for establishing NHK stations in these cities. As a result, NHK's television network linking the seven key stations, including the aforementioned three areas, was completed.

NHK, which had been examining the construction of a national television network, incorporated concrete programmes in the first five-year plan beginning in 1958, which was drafted on the basis of the frequency allocation plan adopted in May 1957 by the Ministry of Posts and Telecommunications. This programme contained the following principal items:

(1) Basic policy

In the light of NHK's mission made obligatory by the Broadcast Law, the Corporation hereby adopts the following plans in order to achieve the early dissemination of television throughout the country, thereby meeting the wishes of the people and contributing to the elevation of the cultural level through broadcasting: (a) In television, as in radio, the first and second networks will be constructed so that the character of NHK as a public service broadcaster will be effectively demonstrated. (b) Programmes of general nature intended for households in general will be presented on the first network, while educational programmes will be taken up on the second network. (c) The latest television engineering techniques will be inducted, researches in technical problems will be actively conducted and study and experiments in colour television will be promoted.

(2) Aims of the programme

(a) In the first network (general service) the fifteen stations as of the end of March 1958 will be increased by thirty-four stations in the coming three years so that reception will be possible in all the key areas of the country. Also, for the relief of those areas experiencing difficulties in reception, fifty low-power stations will be built within five years. (b) In the second network (educational service), broadcasts will begin first in Tokyo and Osaka, and subsequently, be established in parallel with progress of the establishment of the first network stations. The number of such second network stations to be established within five years will total forty-nine.

NHK's construction of television stations under the above programme made smooth progress from 1958, and the general service stations scheduled for various areas under the first-stage frequency allocation plan were just about completed. However, the establishment of low-power stations for those areas of difficult reception and of the educational service stations did not make the expected progress until the second frequency allocation plan was drafted in April 1961.

A satellite was built in 1958, but as no frequency could be obtained, no further establishment took place for a while. As more key stations were built and as demanded by people living in the peripheral areas of the coverage of such stations, the Ministry of Posts and Telecommunications

took a provisional measure to allocate frequencies for a score of satellites. An educational television station was established in Tokyo in January 1959 and another in Osaka in April, but as the Ministry's basic policy for the educational television frequency allocation plan did not take shape, further expansion of such stations was suspended for some time. However, reflecting public opinion that educational television should be developed as soon as possible in line with the spirit of "equal educational opportunities for all", the Ministry undertook partial revision of the first-stage allocation plan in January 1960 and assigned frequencies in the VHF band to twenty-seven areas where NHK's stations could be established. By this allocation, the possibility of concurrent establishment of educational facilities along with general service ones throughout the country was endorsed.

The commercial television services also achieved rapid growth after the first-stage allocation of frequencies. These operated side by side with the NHK stations in the major cities. In larger cities, such as Tokyo, Osaka and Nagoya, in particular, commercial competitors operated side by side, and these began competing vigorously with one another. On the Tokyo Tower (333 metres in height) erected towards the end of 1958, transmitting antennae of NHK's general and educational services and three commercial broadcasters were concentrated (each with output power of 50kW). These stations, while beaming large numbers of programmes towards their respective service areas, supplied most of them to affiliated stations forming respective networks. The Tower was symbolic of the future development of television in Japan.

The general and educational television services of NHK, for which establishment of stations in the major and medium cities had been practically completed, were placed in a position for further expansion by a partial revision of the frequency allocation plan in May 1963, which included smaller cities and narrow strips of areas called the "trough of radio waves" as sites for television station construction. In order to meet such changes in the situation, NHK drew up the second-stage "six-year programme", including 1962, which was the final year of the first five-year programme. This programme envisaged completion of 461 stations for the general and educational services respectively by 1967, which was the final year, and these were expected to expand the coverages to 95 per cent respectively.

Allocation of television frequencies in the VHF band had become rather difficult by 1961 because of the rapid progress of station establishment both by NHK and the commercial broadcasters. In order to obtain data useful to the development of the UHF band as a new region for television, NHK in December 1961 established its first experimental UHF satellite. Using this station, tests on relaying, possible interference and reception were conducted. As a result, partial revision of the frequency allocation plan was again undertaken by the Ministry of Posts and Telecommunications and allocation of some frequencies in the UHF band was made. By this allocation, it became possible to build stations using the frequencies in the UHF band. As of the end of March 1966, NHK's general service television network comprised 397 and the educational service network, 386 stations of which 101 and 100 were UHF stations.

In parallel with NHK's network expansions, automation of television equipment and switch-over to the unattended system were actively

promoted, as in the case of radio. As a result, all the newly built low-power stations as well as most of the existing low and medium power ones were switched to the unattended system. Also, additions and improvement of relay channels were undertaken in connection with increased stations and the switch-over to the unattended system. As a result, NHK's own wireless channels were built and operated in addition to those operated by the Japan Telegraph and Telephone Public Corporation. (see the following table)

4. FM Experimental Broadcasting and Colour Television

1. FM Experimental Broadcasting Plans

An FM rebroadcaster was developed at NHK in 1950 and applied to the sound system of the television service inaugurated in 1953. Through such experience, NHK's researches related to the FM system had been advanced to a considerable degree, but the important question was how and when this system could be organized into a new sound broadcasting service. After NHK made a fresh start as a new public corporation under the Broadcast Law, it made plans to create programmes patterned after the third network of the BBC, and applied for frequency allocation to the Ministry of Posts and Telecommunications. As stated in Chapter 2, "Radio Wave Regulations", Sections 1 and 2, however, creation of NHK's third net-

NHK Television Stations

Year	General service	Educational service
1952	1	0
1953	3	0
1954	3	0
1955	6	0
1956	8	0
1957	18	0
1958	32	1
1959	44	2
1960	60	10
1961	87	21
1962	117	94
1963	162	152
1964	252	244
1965	397	386

Note: Financial years begin in April and end in March of the following year.

work in the medium-wave band was practically impossible because of the drastic shortage of frequencies after allocations were made to NHK's first and second networks and to the commercial stations. NHK, therefore, studied the possibilities of creating such a network in the FM broadcasting system. Meanwhile, as interference from foreign broadcasts and noise generated by electrical appliances intensified year by year, the general public also began to show evidences of a desire to find relief in FM broadcasting.

Though the administrative policy of the Ministry of Posts and Telecommunications with regard to FM broadcasting may still be indefinite, NHK, in anticipation of its materialization in the future, felt the need for expediting researches in this region and established Japan's first FM experimental station in Tokyo in December 1957 for the purpose of gaining experience in FM broadcasting in the VHF band. This was followed in February of the following year by the establishment of a similar station in Osaka. The initial output of both the Tokyo and Osaka stations was 1kW, but this was increased to 10kW in June 1961, thus expanding the respective service areas. In the meantime, NHK undertook the work of collecting technical data on FM transmission and reception and of improving the equipment manufacturing techniques, as well as the study of items necessary for establishing technical standards for broadcasting in the VHF band and programmes suitable for FM broadcasting. In addition to NHK, the Tokai University in Shibuya, Tokyo, also set up an experimental station for the purpose of investigating into the technical standards for FM multiplex broadcasting in December 1958.

The FM experimental service was commenced in anticipation of the possibility of obtaining frequency allocation in the VHF band, the current television band, when the service was regularized. With the unexpected growth of television, however, hopes for utilizing the limited frequencies in the VHF band began to fade. As a result, the administration of frequencies in the UHF band usable for television and FM broadcasts became a matter of importance from about 1959. In April 1960, NHK began beaming FM experimental broadcasts in the UHF band to obtain data on transmission and reception. NHK further undertook researches into high-power broadcasting in this band. Later, however, as an administrative policy for using the VHF band for FM broadcasting and reserving the UHF band for television satellites was adopted by the authorities, work on the UHF-FM system resulted in a sort of detour. The research work, nevertheless, served as a useful basis for further development of television.

After 1961, when the output power of NHK's Tokyo and Osaka FM stations was increased to 10kW, trends towards materialization of FM broadcasting became more brisk. In September of the same year, the Ministry of Posts and Telecommunications established an FM Broadcast Investigations Committee to compile questions to be examined in connection with FM broadcasting and to invite the opinions of all concerned. NHK, which had been accumulating the results of researches and experience in FM broadcasting over a number of years, submitted in April 1962 a memorandum to the Ministry of Posts and Telecommunications. This contained NHK's view to the effect that since FM was expected to become the principal system of radio broadcasting in the future, the Corporation was desirous of operating two national networks of FM broadcasting; also as

a system feasible to stereophonic broadcasting in the VHF band was desired, consideration would be necessary to prevent narrowing down of the coverage when such broadcasting should be put in operation. By this time, public interest in FM broadcasting had been aroused to a considerable degree, and a number of commercial broadcasters, newspapers and other organizations announced themselves as candidates for implementing this type of broadcasting and demonstrated persistent desire to secure licences.

In view of the abovementioned situation, NHK in 1962 established seven new FM experimental stations at strategic points in the country in order to expand the coverage. By this means, the FM coverage was at once expanded to nearly 50 per cent of the total number of households. On the other hand, the FM Experimental Broadcasting Council,⁽¹⁾ which was organized by the parties concerned, expedited investigations into the question of channel separation and others in the monaural system and the comparative merits of various stereophonic systems. At the Radio Engineering Council⁽²⁾ attached to the Ministry of Posts and Telecommunications a conclusion⁽²⁾ was reached with regard to monaural broadcasting on the results obtained from surveys conducted by the aforementioned private council and a report submitted on the various technical standards. With regard to the FM-stereo system, no international agreement could be reached because of opposing opinions at the 10th General Assembly of CCIR, which was held in Geneva in January 1963. However, in view of the rising enthusiasm for FM broadcasting, the aforementioned Government Council reported that it considered appropriate the adoption of the AM-FM system as the technical standard for stereo broadcasting. In this way, the Ministry's engineering policy related to FM broadcasting was now taking a definite form.

Licensing policy for FM broadcasting had not been formulated in those days, but the Ministry of Posts and Telecommunications in October 1963 clarified its policy of increasing the number of NHK experimental stations for promoting dissemination of FM receivers, improvement of programmes and development in the field of engineering. Under this policy an experimental service linking twenty-six stations throughout the country was realized by July, 1964, and the coverage expanded to about 70 per cent.

Nearly 1.2 million FM receivers were in operation at the end of 1963, but with increased FM stations, the demand for receivers also rapidly increased. While considerations were given in programming to the promotion of receiving set dissemination, stereo broadcasting based on the technical standards previously adopted came to form an outstanding feature of FM broadcasting. Since then, music programmes, taking advantage of the characteristics of FM broadcasting, increased, and the total daily programme reached eighteen hours. In Tokyo a studio used exclusively for FM-stereo broadcasting was built, while stereo recording equipment were distributed to all regional key stations. Then in March 1965, an FM net-

(1) Composed of the representatives of NHK, the Federation of Commercial Broadcasters in Japan, the Electronic Industries Association of Japan and the Tokyo Tower Company, Limited.

(2) A council for investigating and deliberating on radio engineering when referred to by the Minister of Posts and Telecommunications. It was composed of 25 members or less, half of whom were people of learning and experience and the remainder competent government officials.

work linking fifty stations throughout the country was completed. For this reason, though NHK's FM broadcasting was operated under the title "experimental", it was just as rich and diversified in programme contents as a full service. As indicated in Chapter 2, "Radio Wave Regulations", Section 2, the Ministry of Posts and Telecommunications nevertheless was extremely cautious about commercialization of FM broadcasting, and the licensing policy as of 1966 had not been definitely formulated.

2. Colour Television Plans

Basic researches in colour television had been conducted at the Technical Research Laboratories of NHK since 1950. A UHF colour television experimental station was established in December 1956 at the Laboratories for the purpose of working out technical data useful for deciding on the colour television standards in preparation for the possible shift to colour in the future. Frequencies in the UHF band were used for this experiment in order to avoid interfering with the monochrome service already in operation. After conducting intensive researches in the UHF band for about a year and with further preparations completed, NHK commenced an experimental colour service in the VHF band. For this service 10kW output was used for the video and 5kW for the sound transmitters. Most of the equipment used, including the transmitters, consisted of those manufactured on a trial basis at the Laboratories.

Experimental colour television in the VHF band was also commenced almost simultaneously by the Nihon Television Network Company (NTV). These experiments were started with the idea of studying the effect of colour on programme production along with experiments in the technical aspects. Another object was to investigate the practicability of the NTSC system already officially adopted as the colour television system in the United States, in collaboration with the aforementioned Colour Television Investigation Committee⁽¹⁾ formed by the government offices and private organizations in June 1957. The results were to be used as data for determining the colour television standards for Japan.

Although the NTSC system was an extremely elaborate one, it was compatible with the monochrome system. However, as complex colour signals had to be confined to the 6Mc band-width, as in the case of the monochrome system, the circuitry was very complicated and consequently the receiving sets were costly. It had been reported that this point formed a bottleneck in the early stages of colour television popularization in the United States and so naturally they posed serious problems in adopting colour television standards for Japan. In the circumstances, the Ministry of Posts and Telecommunications acted very cautiously in determining the standards. There were also many thinking people who suggested that colour television was still premature for Japan. The aforementioned Colour Television Investigation Committee, however, came out with a conclusion that included the following points: (1) As compatibility was indispensable, adoption of the NTSC system would be basically sound. (2) This will fix the basic system

(1) It consisted of representatives of government offices, academic societies, manufacturers and broadcasters.

of transmission, but with regard to receiving sets, there was still room for improvement and simplification through further study. The Ministry of Posts and Telecommunications, after inviting the advice of the Radio Regulatory Council, settled in June 1960 on the NTSC as the standard colour television system.

In the meantime, NHK expedited its researches on various equipment to make domestic production possible and also it concentrated efforts on improving the facilities and programme production techniques, thus preparing itself for a full-scale colour television service. The colour television studio was removed from the Technical Research Laboratories to the headquarters building in September 1959, and the following year the output of the transmitter was increased from 10kW to 50kW; it was then transferred to the Tokyo Tower.

The Ministry of Posts and Telecommunications, which adopted the colour television standards, estimated it would take considerable time for the construction of the microwave trunks for relaying colour signals, and for the time being decided to issue licences only for existing Tokyo and Osaka stations. By this act, NHK's Tokyo and Osaka stations, including the general and educational services, and four commercial stations in the same cities simultaneously commenced the colour service on the 10th September, 1960. However, as the construction of microwave channels by the Japan Telegraph and Telephone Public Corporation did not make the expected progress, colour television links between Tokyo and Osaka had to wait until June 1962. Since then, specifications of various microwave trunks were improved and stations operating the colour service gradually increased. In particular, eighty NHK general service stations were provided with colour facilities between September and October 1964 in preparation for reporting the Olympic Games. As of the end of March 1966, NHK's colour television stations numbered 393 in the general and 382 in the educational service with a total coverage of 92 per cent. Colour programmes, including those presented during the golden hour, totalled three hours a day.

With the expansion of the colour network, NHK undertook further consolidation and improvement of the facilities in Tokyo and other important cities. In October 1963, the first colour pickup broadcasting was undertaken when the Italian Opera visited Japan. In this operation remote pickup cars mounted with colour video tape recorders were used effectively. NHK also developed the separate luminance system image orthicon colour camera, first of its kind in the world, thus contributing notably to the improvement of the picture quality and compatibility. Colour cameras of this system were used for the Olympic Games and they provided highly efficient services.

Meanwhile, the Technical Research Laboratories took up the work of improving and simplifying the circuitry of colour receivers. Design data for such receivers were provided for the manufacturers. At the same time, NHK engineers offered guidance to the manufacturers' engineers in order to cooperate in the improvement of receiver manufacturing techniques. Receivers then in use when colour television service commenced in 1960, however, were still trially made models, which were inevitably poor in picture quality and complicated in adjustment. Their prices, too, were

very high, a 17-inch type having been priced at ¥400,000 or about \$1,100. Such price was far-fetched in proportion to the level of commodity prices of that time. Since then, technical improvements made marked progress, output increased to some 97,000 sets by 1965 and the price was reduced by nearly a half, to about ¥10,000 or \$ 30 per inch of the picture tube dimension. Quantity production of colour sets was rapidly put on routine in the following year, but it was aimed at the American rather than the domestic market. In Japan itself, colour receivers in operation totalled no more than 100,000 at the end of 1965, which was a very low rate of dissemination when compared with the highly substantial broadcasting facilities and programmes. Even though the colour receivers were enough in performance to bring about a colour boom, it was premised on further reduction of prices, which were still three times as high as for monochrome sets.

5. Revision of the Broadcast Law

1. Circumstances Leading to the Revision

There was not one commercial station in operation when the Broadcast Law was promulgated in 1950; neither was there any definite administrative policy related to television. Consequently, the majority of the provisions related to NHK's radio service, which claimed a long history and tradition, concerned with new regulations aimed at its reorganizations. A few provisions, of course, were incorporated with regard to the commercial service, but there were no concrete provisions on television. In spite of this situation, the commercial service was inaugurated in 1951, and its growth proved to be far beyond initial expectations. Also administrative policy and measures with regard to television were adopted and in 1953 NHK and the commercial services successively commenced in the Tokyo area. Japan's broadcasting, thereupon, entered a period of transition. For NHK also, it was a period of the completion of nation-wide radio networks, resumption of international broadcasting and drafting of national television network plans, all of which required complex business operations and expanded scale of overall management.

These circumstances, brought about in only three years after the enforcement of the Broadcast Law, further heightened the evaluation of broadcasting as a mass-communications medium. It was at this time that some thinking people, who sensed the seriousness of the social influence of broadcasting, began to express opinions regarding the need for revising the Broadcast Law to meet the actual conditions more adequately. As a result of a careful review of the existing law, the Ministry of Posts and Telecommunications presented its amendment bill at the Diet in July 1953. This bill was drafted for the purpose of providing minimum necessary amendments related to NHK's organization and business, since it would have required considerable time to undertake an overall revision of the law. Principal contents of the bill were as follows: (1) The system of regional representation on the Board of Governors will be abolished. (2) NHK will be authorized to commission outside institutions to conduct re-

searches and to subsidize them for such work. (3) The Minister of Posts and Telecommunications will be empowered to issue necessary orders to NHK and require reports on the business operations.

This amendment bill was referred to the Telecommunications Committee of the Diet for deliberation, which invited representatives of the interested parties, such as NHK, the Federation of Commercial Broadcasters in Japan, etc., and leaders in the various walks of life to seek their opinions. Most of the references expressed the opinion that the powers of the Minister mentioned in (3) was contrary to the basic principles of the Broadcast Law as such powers were pregnant with danger of violating the freedom of programming. Newspapers and magazines also published views that broadcast programmes should be supervised and regulated by the people themselves and that the Government should not intervene. President Furukaki of NHK, who was present at the meeting of the Committee opposed it saying, "while NHK is an organ of expression and a public entity, it is a business organization different in nature from public enterprises organized with government investments. NHK, therefore, should not be placed under supervision similar to the other public corporations. The government supervision should be limited to the minimum necessary scope so that the freedom of programming, which is the life line of broadcasting, will not be infringed upon."

Some of the Committee members held that a basic revision conforming to actual conditions should be undertaken instead of such a partial one. A representative of the Federation of Commercial Broadcasters in Japan also stated that priority should be given to the solution of fundamental problems facing the broadcasting service. He added that in the Broadcast Law, the commercial broadcasters should be treated on equal standing with NHK and that further investigations should be made with regard to the questions of merger and rearrangement of NHK's first and second networks, independence of the research organs,⁽¹⁾ and rationalization⁽²⁾ of the receiver's fee system. These remarks attracted wide attention as the first official expressions of opinion by the commercial broadcasters with regard to the revision of the Broadcast Law.

While critical views on the supervisory powers of the Minister of Posts and Telecommunications and opinions favouring overall revision of the law were being exchanged, the bill was shelved at the Diet. As a result, the Ministry adopted the policy of re-examining all the laws and ordinances related to broadcasting as a preliminary step towards broader revision of the Broadcast Law. About this time, the commercial broadcasters had made astonishing development, and as a result of keen competition in the programming among them, entertainment programmes intended to appeal more to vulgar tastes began to fill the air. And as voices criticizing such a tendency became louder, the principal aim of the revision of the laws came to be set at the improvement and propriety of programmes. In March 1954, the Ministry, therefore, indicated the following points as those requiring examination: (1) The propriety of the existing programme

(1) The intention was to make NHK's Technical Research Laboratories and Radio and Television Culture Research Institute completely independent so that they might be utilized both by NHK and commercial broadcasters.

(2) It should be collected as tax and subsidies should be granted to NHK and others.

standards. (2) Means of voluntary discipline in programming. (3) Should the commercial broadcasters be allowed to use the entire programme hours for sponsored programmes? (4) The propriety of limiting the number of stations belonging to a single broadcasting company.

A certain college professor present at the meeting of the Telecommunications Committee in May of the same year stated, "In the broadcasting system of this country, NHK should be the principal and the commercial broadcasters should be subsidiary to the Corporation." In October, the aforementioned Committee passed a resolution that the "Government should be cautious about issuing licences to commercial broadcasters." Thus, criticism of commercial broadcasting came to the surface. In a press interview held in August of the following year, the Minister of Posts and Telecommunications stated that provisions intended to tighten the government's control over NHK and to prevent vulgarization of commercial programmes should be contained in the revised Broadcast Law.

In spite of such opinions, the most important and difficult question in the legalization was how to harmonize the freedom of speech guaranteed in principle by the Constitution and the Broadcast Law with the public service nature of broadcasting. If greater emphasis should be placed on the latter, the freedom of broadcasting might be so much more infringed upon. In particular, the aforementioned statement of the Minister of Posts and Telecommunications was taken as unreasonable intervention in the operations of an organ of expression, and it was made a butt of criticism not only by those connected with broadcasting but also by some sections of the general public.

In view of such situation, the Ministry adopted the policy of soliciting widely the opinions of authorities on mass-communications in addition to those of the Ministry itself, and established in March 1956 a Provisional Broadcast Law Deliberative Council⁽³⁾ as an advisory organ to the Minister. The Council soon made a report on the overall views related to broadcasting, including NHK's organization and operations, measures for commercial broadcasters and the supervisory and administrative policies of the government. On the basis of this report, the Ministry drafted and presented a new amendment bill to the Diet in March 1958. This draft bill, however, was gradually reduced in content as a result of repeated shelving. In the amended Broadcast Law approved by the Diet in March 1959 most of the provisions related to tightening the government control had been deleted and it simply clarified the principle of voluntary regulations in connection with broadcasting, particularly in connection with programmes. The amended Broadcast Law took effect on the 22nd April, 1959.

2. Contents of the Revised Law

The revised Broadcast Law, which saw the light of day six years after the initial proposal was made, included provisions related to the improvement and rationalization of programmes, clarification of NHK's obligations, smoother operation of NHK's services and certain items connected with commercial broadcasting. The general tones of these provisions were as

(3) It comprised 15 members who were persons of learning and experience.

follows:

Improvement and Rationalization of Broadcast Programmes: How the contents of programmes could be improved, while maintaining editorial freedom, was the most serious question faced in the revision of the law. In the present revision, anticipating voluntary efforts of the broadcasters in improving their programmes, the measures mentioned hereunder were stipulated both for NHK and commercial broadcasters.

(1) Consolidation of the guiding principles of programming

In addition to the four principles stipulated in the law, i. e., respect for public order, political impartiality, truth of news reporting and multiangle views on various issues, a provision for assuring presentation of programmes the contents of which would be such as not to be a hindrance to desirable customs and manners was included. Also, a new provision for maintaining harmony among educational, information, news and entertainment programmes was added. However, the meaning of such terms as "desirable customs and manners" and "harmony among programmes" were vague and abstract. In particular, nothing concrete was provided as to what constituted a harmony among programmes and where the standard for such harmony was to be set. The percentages of programme time might have served as a sort of standard, but there were cases presenting difficulties in the classification of programme contents, and possibilities of disturbed balance on account of the processing of individual programme materials and distribution of programmes in the schedules. After all, it could only be considered as having been a provision intended to cause reaffirmation of the sound judgment and responsibilities of the broadcasters themselves with regard to the programmes they presented.

(2) Establishment of programming standards

The amended Broadcast Law stipulated that the broadcasters had to establish programme standards upon which their programming would be based. Even before the revision NHK and the commercial broadcasters had their own voluntary programme standards on the basis of which their programmes were produced and improved. The revised law made it obligatory to establish such standards, and in case of the establishment or change of such, the matter had to be referred to the broadcast programme deliberating organ and the entire document had to be made public. Establishment or change of such standards was made obligatory so that the opinions of the receiving contractors could be reflected through the members of the programme deliberative organs, which could be considered the representatives of the receivers. The obligation to make the contents of the standards public was intended to provide opportunities for the people to review and criticize them.

(3) Establishment of broadcast programme deliberative organs

The revised Broadcast Law provided for the establishment of a broadcast programme deliberative organ by the broadcasters. In the case of NHK, the Central Broadcast Programme Council was already set up in Tokyo and the local organs established in all the regional key stations. The members of the former were selected from among learned and experienced persons with the consent of the Board of Governors. Members of the local councils were appointed, with the consent of the NHK president, from among well-read and experienced local people. The Council in Tokyo,

on advice of the President, reviewed the basic programming plans on a nation-wide scale, while the local councils reviewed the basic plans for regional programmes. If the need arose for expressing opinions on the overall programmes of NHK for the sake of passing judgments on the propriety of programmes, this could be done by the councils. The president of NHK was obliged to respect the reports and opinions of the councils and accordingly to take proper measures. These organs were provided not only for merely criticizing the programmes but for assuring voluntary observance of programme standards, thus reflecting the opinions of the receiving contractors and promoting programme improvement and rationalization.

The commercial broadcasters were permitted to fill one-third of the total membership with their own officers or staff members. Also, in case the service areas of the commercial stations doubled up to the extent of two-thirds or more of the total area, the programme deliberative organ could be formed jointly.

Clarification of NHK's Obligations

The revised law legalized the following points in order to further clarify the fact that NHK was in a different category to the commercial broadcasters:

(1) Expansion of the obligation for nation-wide coverage

It was specified that NHK had to conduct medium wave, very high frequency and television broadcasts. Of these systems, NHK was obliged to take steps necessary to make either medium wave or VHF broadcast and television receivable throughout the country.

(2) Guiding standards for editing and presenting domestic programmes

In programming, NHK was required to realize its position as being different to the commercial stations and to present "programmes of rich and worthy content", "local as well as network programmes" and "programmes intended to preserve excellent cultural attainments of the past and to foster new ones."

(3) Expansion of business scope

Surveys and researches NHK had been conducting were limited to fields closely connected with broadcast programmes or broadcast engineering. In the revised law, however, it was stipulated that any field contributory to the development and progress of broadcasting and reception could be taken up as subjects for study, and the results of such studies should be offered for general utilization. It was also stipulated that NHK should provide programmes and materials for domestic commercial broadcasters and even for foreign broadcasters in so far as such acts do not hinder its own business operations. Furthermore, as voluntary tasks, NHK was to undertake surveys and researches under commissions, provide technical aid and training of broadcasting staffs and operate other business necessary for the development of broadcasting by permission of the Minister of Posts and Telecommunications.

(4) Consolidation of regulations related to international broadcasting

A provision stipulating that "NHK shall conduct international broadcasting in addition to its domestic service" was added, clarifying that the overseas service was NHK's integral business. In this connection, establishment of guiding principles for programming, programme standards

and a programme deliberative organ was stipulated, as in the case of the domestic service.

Improvement of NHK Management:

In order to meet the multiplexed and increased volume of business affairs, the revised law stipulated as follows with regard to the organization and financial scale.

(1) Consolidation of the organization

In the past, the Board of Governors, the highest policy-making body of NHK, could also exercise powers related to guidance and control of business execution, which was within the control of the President who was also included as a member of the Board. This was an extremely ambiguous form of organization. The revised law, therefore, limited the powers of the Board to making decisions on management policies and important items related to business management and excluded the President from membership, thus clearly separating the powers of the policy-making and executive organs. Also, in addition to the eight members representing regional interests, four more were to be appointed widely representing the country in general. The executive organ, the Board of Directors, was also increased from the existing three members to not less than seven but no more than ten. The auditors also were increased from two to three. By these measures, smoother management of business was assured by the law.

(2) Reinforcement of financial affairs

The amount of the broadcast bond issuance was formerly limited to ¥3,000 million or about \$8.3 million. However, as increases in construction funds were anticipated when the facility expansion programmes were implemented, the upper limit was extended to three times the value of the net assets of NHK. It was also stipulated that in case NHK's budget of revenue and expenditure should fail to secure approval of the Diet on account of a recess or other unavoidable causes, the Minister of Posts and Telecommunications will be empowered to approve that portion of such budget falling within the range necessary for the normal business operation.

Regulations Related to Commercial Broadcasting:

Under the revised Broadcast Law, the commercial broadcasters were also obliged to take measures for improving and rationalizing their programmes, which were described at the beginning of this section as having been applied to NHK. In other respects, the commercial broadcasters were left practically as before, except that they were prohibited from inserting in their school broadcasts advertisements deemed undesirable for school education and from concluding agreements which would lead to obtaining broadcast programmes only from specific broadcasters or advertising agencies.

3. Trend Towards Overall Revision

In 1959, when the revised Broadcast Law was put into effect, it was a period when the peak popularity of the radio had passed and the age of television was approaching at a rapid pace. Commercial broadcasters had also reached maturity and were ready to operate side by side with NHK on a virtually equal footing. For the commercial broadcasters who had all along been proposing more basic revisions of the Broadcast Law, the extent of the amendment described in the preceding section was entirely

unsatisfactory. In short, the amendment placed NHK in the position of leadership in the broadcasting enterprise of the country and provided means of assisting the Corporation in achieving smoother management of its business affairs. On the other hand, practically no consideration was given to the protection and fostering of the commercial broadcasters who had achieved such remarkable developments and therein lay their dissatisfaction.

Claims advanced by the commercial broadcasters with regard to basic revision of the Broadcast Law rather implied their desire to rise to completely equal footing with NHK by lowering the Corporation's position. The gist of their claims was as follows: (1) the priority given to NHK in radio administration should be corrected and the allocation of frequencies should be made impartial; (2) the commercial stations should bear regional responsibilities in the nation-wide network broadcasts of NHK, and the latter should devote itself to producing educational and cultural programmes, leaving production of entertainment programmes to the commercial stations; (3) some portion of receivers' fees collected by NHK should be spent for the construction and operation of facilities that would be of benefit both to NHK and the commercial broadcasters.

The Federation of Commercial Broadcasters in Japan drew up a document containing the aforementioned claims and approached the various competent circles, thus actively campaigning for the basic revision of the Broadcast Law. It was undeniable that their chief object was to eliminate the imbalance between themselves and NHK, and they, on the other hand, expected the law to prevent establishment of new broadcasting stations in the identical service areas, thus protecting the interests of the existing commercial broadcasting companies.

NHK was a non-profit pursuing special corporation obligated by law to play the pioneering rôle in the nation-wide dissemination of broadcasting. It was a business entity operating under special administrative measures not applicable to the commercial broadcasters. On the other hand, the most important factor enhancing the growth of commercial broadcasting was the securing of income from advertisements. This was dependent entirely on the increase of listeners and viewers. NHK had to undertake work of increasing audiences by expanding facilities and enriching programmes. It may have been unreasonable to compare these two different types of business organizations in the same breath. Nevertheless, it was also considered natural that the demand for basic revision of the law should have cropped up in the process of the remarkable growth of the commercial broadcasters.

In truth, the Broadcast Law provided only the basis upon which commercial broadcasting stations could be established, while the Radio Law simply provided the qualifications leading to the granting of licences. In other words, these laws clarified nothing with regard to the nature of the business organizations, their scope and distribution. All these matters, in a word, were left to the discretion of the Minister of Posts and Telecommunications. Aside from the claims of the commercial broadcasters, therefore, the broadcasting service that was transforming itself into a mammoth business and, in particular, the growing social influence of television gave rise to opinions in the government and among thinking people

that the existing legislations on the broadcasting systems should be re-examined and some new systems be established.

In October 1962, the Ministry of Posts and Telecommunications in these circumstances indicated the intention of establishing a Provisional Investigation Committee for Legislation on Broadcasting⁽¹⁾ to review and study all the legislations connected with broadcasting. As problems requiring investigation by the Committee, the Ministry indicated the licensing standards for broadcasting stations, means of voluntary control of programmes, mutual relations between NHK and commercial broadcasters and the receiver's fee system. In addition, the Ministry suggested deliberations on the organization and supervision of NHK, limitations of the commercial programme networks and the problems related to the Radio and Broadcast laws as a legal system on broadcasting. These covered practically every phase basic to broadcasting.

In anticipation of the overall revision of the Broadcast Law, NHK established a study group as soon as the abovementioned advisory organ was established at the Ministry. Inviting outside specialists to this group, NHK entered into investigation of a system that would be more fitting to the new age. As a result of studies made by this group, NHK drafted its basic concepts with regard to the existing Board of Governors and the receiver's fee system. In this concept, NHK maintained that systems, such as the Board of Governors, the receiver's fee systems, contributory to the preservation of its independence as a public organ should be protected, and in order to establish a broadcasting policy which takes into consideration the social and cultural significance of broadcasting, proposed that the revision of the legal system related to broadcasting should be premised on the following two points: (1) Basic items, such as licensing standards and frequency allocation plans should not be determined merely from the physical regulation of radio waves but be based on the recognition of the discharge of social and cultural functions of broadcasting. Consequently, basic laws on broadcasting, which include the aforementioned physical regulation of radio waves provided for in the Broadcast Law should be promulgated to unify various rules and regulations related to broadcasting. (2) In view of the social and cultural significance of broadcasting and the finite nature of radio waves, priority should be given to the existence of a high-level public service organization, which will be devoted to the interest of the people while meeting their requirements.

While using the opinions and requests of NHK and the Federation of Commercial Broadcasters in Japan as well as those of thinking people in general and the overseas broadcasting situations as reference materials, the abovementioned legislation investigation committee continued for two years to study and deliberate on the various problems related to the existing legislation, and in September 1964 it submitted a report to the Minister of Posts and Telecommunications. The recommendations contained in this report included (1) establishment of the basic policy for the utilization of broadcasting frequencies, (2) securing of an integrated system of radio administration centred on licensing and (3) improvement and enrichment

(1) An advisory organ to the Minister of Posts and Telecommunications with a membership of 15 or less of learned and experienced people.

of the contents of broadcast programmes. In fact, the report contained the results of deliberations on every problem conceivable at that moment. Generally speaking, however, these were common-sense opinions, putting emphasis on partial improvement of the existing legislation; they were by no means opinions advising basic revision of the laws with a view to promulgating fundamental laws on broadcasting.

The report advised caution on the commercialization of FM and UHF broadcasts, the licensing of which the Ministry of Posts and Telecommunications had been considering a matter of urgent need for solving the shortage of broadcasting frequencies. This point attracted special attention, and it became a subject of discussions by people in general. In the opinion of the committee, (1) dissemination of FM receivers should be promoted for the time being through the experimental service operated by NHK, then it should be used as a means of overcoming interference, but general commercialization of FM should wait for a while, (2) the UHF band should be used for eliminating areas having difficulty in television reception throughout the country through NHK and commercial broadcasts and also for securing the service by two commercial stations in each of the areas in the country, but use of UHF for other purposes should be frozen for the time being. These opinions were based on the idea that because of the undeveloped areas in the UHF band, its overall utilization should be reserved for future necessity from the standpoint of impartial and effective utilization of radio waves.

Using the opinions of the investigation committee as the guiding principle, the Ministry of Posts and Telecommunications undertook further investigations of the points to be legislated, and having drawn up the final version, presented it to the Diet, in the session towards the end of 1965, as an amendment bill. However, while time was consumed in adjusting the opinions of the government and opposition parties with regard to this bill, the Diet went into recess, and the bill was carried over to the next session. The points which became issues between the two parties may be summarized as having been questions on the difficulty of distinguishing between the establishment of broadcasting ethics and the control of speech, and the problem related to the feasibility of assuring harmony and development in the rôles played by NHK and the commercial broadcasters. In any case, though it was not possible to anticipate the final contents of the revised law, principal items unofficially agreed upon through joint adjustments in the Diet were as follows:

- (1) As a rule both NHK and the commercial stations in any area should be capable of presenting radio and television programmes.
- (2) In addition to the existing programme standards, obligations to present those contributory to the elevation of the cultural level of the younger generation will be newly stipulated in order to prevent undesirable influence of vulgar programmes on young people.
- (3) NHK and the commercial broadcasters will collaborate in the establishment of a voluntary programme survey organ. This organ must make public the results of its surveys.
- (4) Those who receive NHK's broadcasts had been obligated to conclude a receiving contract with NHK, but this will be changed to an obligation to pay receivers' fees.

- (5) NHK will be authorized to invest in businesses especially connected with its broadcasting service.
- (6) A commercial broadcaster shall not control two or more stations in the same area which conduct the same category of broadcasting (such as medium-wave radio, VHF radio and television).
- (7) The powers of the Radio Regulatory Council, an organ attached to the Ministry of Posts and Telecommunications, will be expanded, and plans related to the utilization of radio waves, renewals of licences for broadcasting stations and other matters, such as the Ministerial ordinances related to broadcasting will all be referred to this Council. The Council will establish a public hearing system to make it possible to widely invite opinions on matters referred to it.

6. Management of NHK

1. Simplification of Organization and Management

The management of NHK, when television broadcasting was started in February 1953, comprised the Board of Governors, the highest decision-making organ consisting of eight members and the NHK President, the President as the chief executive officer, a Vice-President who assisted the President, and three Directors. In addition, there were two auditors for auditing business operations. The term of office of these officers was three years. Important matters related to the execution of business were decided through the deliberations of the Board of Directors composed of the executive officers. This system has remained in effect from the restart of NHK as a new public corporation under the Broadcast Law enforced in 1950. As stated before (see Chapter 5, "Revision of the Broadcast Law", Section 2), in order to handle increasingly multiplexing business affairs and to achieve smoother business operations, reforms were introduced in March 1959 on the following three points: (1) Increase in the fixed number of members of the Board of Governors. (2) Separation of the President and the Board of Governors. (3) Increase of the numbers of Directors and Auditors.

Tetsuro Furukaki, who assumed the presidency of the new corporation, contributed outstandingly to the growth of the service during the six years of his term of office in the transition period of broadcasting marked by parallel operation of public and commercial broadcasting, resumption of international broadcasting and the inauguration of telecasting. In June 1956 he resigned his position, after ably fulfilling his term. Since then the presidency of NHK has been occupied by the following. (see next table)

The business organization of NHK was centred exclusively on radio broadcasting until 1953, when the system of three departments was established for the purpose of preparing for the future development of international broadcasting, which was resumed the previous year, and television broadcasting which commenced in 1953. It took some years before television could accrue substantial endorsement to assure that it was a

rapidly growing enterprise, and it was around 1957 that television began to coexist with the radio on equal footing. By this time, the number of television receiving contractors approached more than 500,000 and the business income of the service began to show profits without relation to the capital income and expenditures. In the administration of radio waves, the first frequency allocation plan aimed at the nation-wide dissemination of broadcasting was formulated. In June of the same year, NHK integrated the radio and television divisions and took steps towards a reorganization incorporating the line-and-staff concept, in order to meet the abovementioned situation. Accordingly, the Planning Department in charge of the overall planning of business operations and the Programming Department, which assumed duties related to radio and television programming, were newly established. These two departments formed the general staff system of the Corporation. Since then, with the expanding business scope and progress made in the implementation of long-term business plans, the system has been revised each year. At each revision, assignments of duties became more detailed and the overall scale of operations was enlarged. In the revision undertaken in June 1961, the line-and-staff organization was definitely established. In this revision the staff department was divided into seven divisions. The first division assumed charge of conferences, public relations and long-term planning. The second division was in charge of programming. The third division took care of engineering, while the fourth division assumed the work of modernizing management. Three other divisions, namely, accounting, personnel and labour, formed the seven new divisions, which respectively took over the duties of planning and management. As the line department, the General Administration of Broadcasting was established to achieve an integrated operation of programme presentations. This department included in its duties everything connected with the practical operations of broadcasting, including programming and engineering. In

Brief History of NHK Presidents

(after enforcement of the Broadcast Law)

Name	Term of office	Previous positions
Tetsuro Furukaki	June 1950 - June 1956	Director of Asahi Newspaper Co., President of NHK, Corp. Juridical Person
Kiyoshi Nagata	June 1956 - Nov. 1957	President, Nisshin Sugar Refinery Co., Ltd.
Hideo Nomura	Jan. 1958 - Oct. 1960	Director of Asahi Newspaper Co., Chairman of the National Public Safety Commission
Shinnosuke Abe	Oct. 1960 - July 1964	Director of the Mainichi Newspaper Co., Chairman of NHK Board of Governors
Yoshinori Maeda	July 1964 -	Manager of Foreign News Division of Asahi Newspaper Co., Manager of NHK News Department, Managing Director, Vice-President of NHK

this manner, NHK exerted efforts to promote rationalization and flexibility of broadcasting. Also, in order to strengthen the top management, management conferences attended by the President, Vice-President and three General Managing Directors (later five) elected from among the directors were held periodically to make policy decisions and undertake flexible processing of urgent business affairs.

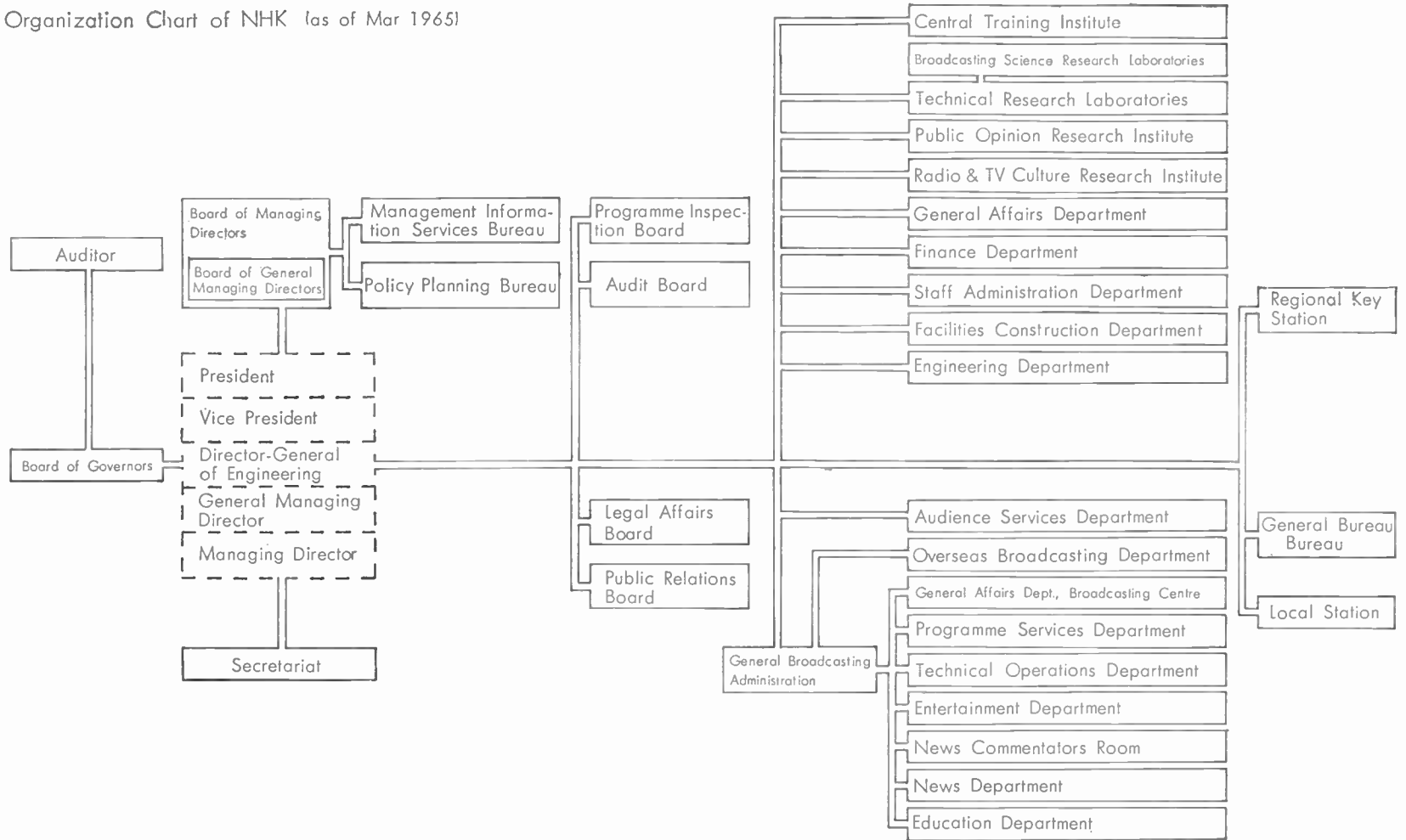
The abovementioned revisions proved successful in promoting efficiency in management of NHK, which was in the process of growing into a giant organization. Furthermore, NHK planned to introduce EDPS (electronic data processing system) as a means of modernizing its management. In 1962 IBM 1401 was installed in the Tokyo NHK Building. In the following year, IBM 7044, which contained IBM 1401 as an integral part, was also installed. And with the establishment of teletypewriter channels, a data transmission network linking all the key stations of NHK was completed in 1964. Then 573 punch system typewriters, which were necessary for compiling data, were distributed among the stations. The EDPS was initially used for handling affairs concerned with accounting and labour management, such as receipts of receivers' fees, calculation of receipts and payments of daily accounts and staff salaries. In programming, NHK clarified its disbursements by compiling programming expenses. Basic accounting for the programme production system was also completed to make the collection of data under the existing system possible. In the field of engineering, studies were made on the station establishment plans, operation of facilities and applications to the maintenance work.

Besides these, for improving the efficiency of management a basic change was made from the customary method of using written papers. Automation of facilities and the establishment of unattended stations were also expedited to modernize the maintenance and management of the broadcasting facilities and to minimize the necessary staff.

In spite of annual successes made in the improvement of management, the successive additions of new business affairs and the growing intricacy of the contents of functions necessitated a marked increase in the number of employees. In February 1953, at the commencement of the television service, NHK employed 8,200 staff members. By the end of March 1965, however, the number had reached 14,056, an almost eighty per cent increase in about twelve years. In this situation, NHK set up an overall system of personnel management in 1961. Formerly, it was based on the position classification system, but the new system adopted the standards of promotion and salary grades based on the ability to perform duties. Various rules and regulations concerning the ability classification, promotion, evaluation of merits, salaries, and education and training were set forth.

One of the characteristics of the new personnel management system was the adoption of systematic and continuous planning and implementation of the training of staff. The Central Training Institute was founded as an organ for that purpose. This institute has become an organ for training not only new employees but also the retraining of experienced staff as well as people on commission from other broadcasting organizations in and outside Japan.

Organization Chart of NHK (as of Mar 1965)



2. Finance

NHK's operating expenses have since its inauguration been met, as a rule, with receivers' fees. The total income was about ¥6,900 million or approximately \$20 million in 1953, when the television service was initiated. Twelve years later, in 1964, it amounted to ¥66,600 million, approximately ten times the 1953 amount (see attached table). Income from the radio receivers' fees was predominant until 1959, when the growth of the television service began to show a rapid pace. Compared with the number of subscribers to television, which had not as yet reached a million households, that for radio totalled 14.6 million, which was a record since the establishment of the service. As NHK could not transfer any portion of the income from the radio for the purpose of meeting expenditures needed for television, a new service, it had to fill the deficits for several years with outside loans and by raising the receiver's fee.

From 1958, NHK and the commercial broadcasting companies found opportunities to construct numbers of television stations through which the weight of television increased. As a result, the number of subscribers to this service increased, and by 1959 the revenues from the radio and television services became practically equal. From the following year income from the television service exceeded that for radio by a large margin. At the same time reflecting a rapid growth of the television service, the scale of the general financial administration expanded, while maintaining a balance in the revenues for the two services.

NHK sought to improve the efficiency of business operations by integrating the budgetary appropriations for the radio and television services from 1960. As radio and television subscribers increased, NHK undertook a

Business Revenues and Expenditures

Year	Income (¥1,000)	Expenses (¥1,000)	Surplus (¥1,000)	Capital outlay (¥1,000)
1953	6,868,626	7,071,428	- 202,802	
1954	9,752,836	9,525,486	227,350	
1955	10,623,935	10,263,307	360,628	
1956	11,821,461	11,552,411	269,050	
1957	13,718,541	13,025,017	693,524	
1958	16,629,450	15,763,702	865,748	
1959	25,157,329	22,302,670	2,854,659	
1960	32,435,582	28,513,220	3,922,362	
1961	40,864,018	35,699,670	5,164,348	
1962	50,421,945	43,224,989	1,653,658	5,543,298
1963	60,123,726	49,879,047	1,991,770	8,252,909
1964	66,635,530	56,415,751	1,362,757	8,857,022
1965	71,301,303	60,694,110	1,820,205	8,786,988

Note: (1) The fiscal year begins in April and ends in March of the following year.
 (2) Unit amount ¥1,000 or about \$3.00.

revision of the receiving contract system in 1962 in order to simplify it. In this revision the receiving contracts, which had been concluded separately for radio and television, were unified as those who installed television receivers began to cancel the radio receiving contracts in large numbers. However, as there were still some who had no television, the contracts were classied into A and B, A for both the radio and television and B for the radio only. The receiver's fee for contract A was set at ¥330 a month (less than a odollar) and at ¥50 for B.

As television subscribers increased more quickly than expected, business income and expenditures based on the receivers' fees annually showed far greater surplus than estimated in the budget. Part of the surplus was appropriated for the improvement of facilities so as to put NHK's own capital on a more solid basis.

Meanwhile, NHK's assets, liabilities and capitals fluctuated as shown in the following table. NHK's scale in 1964, when compared with the position at the outset of the television service, had grown fourteen times in assets, 10 times in liabilities and twenty times in capital. The rapid increases in liabilities after 1958 were due largely to outside loans necessitated by the construction of radio and television networks under the first-stage and second-stage long-term facility expansion plans. In particular, as the ceiling for the broadcast bonds as a means of meeting funds required for improving the facilities was raised by the stipulation of the revised Broadcast Law of 1959, liabilities arising from the issuance of bonds increased considerably. The ratio of NHK's own capital against outside capital was 40:60 in 1953, but later its own capital increased every year and after 1963 the ratio turned in favour of NHK, as a result of which it has been maintaining a sound financial state at the ratio of about 55:45.

NHK's Balance Sheet and Capital

Year	Assets	Liabilities	Capital
1953	5,663,616	3,409,559	2,254,057
1954	7,558,380	3,963,050	3,595,330
1955	8,251,452	4,268,360	3,983,092
1956	8,978,971	4,809,031	4,169,940
1957	10,207,210	5,343,410	4,863,800
1958	15,370,299	9,617,360	5,752,939
1959	19,993,585	11,502,550	8,491,035
1960	26,604,644	14,258,581	12,346,063
1961	37,138,396	19,641,570	17,496,826
1962	49,868,304	25,121,198	24,747,106
1963	65,366,805	30,634,066	34,732,739
1964	80,212,460	35,330,173	44,882,287
1965	90,305,625	34,961,695	55,343,929

Note: The same as for Table 1.

3. Related Organizations

NHK was an organization not authorized by the Broadcast Law to make any investments. It was, in fact, prohibited from having any outside organization with which it had capital affiliations. However, there are some organizations closely connected with NHK to assist in the operation of its multiplex business affairs. First of all, there is a group contributing towards enhancing the effect of NHK programmes. This group includes the NHK Symphony Orchestra, a foundation, the NHK Welfare and Cultural Centre, a social welfare corporation and the NHK Gakuen, a legally authorized school. Secondly, there is a group that assists NHK in the efficient management of its business. This comprises the NHK Service Centre, a foundation, the Japan Broadcast Publications Company, Ltd. and the NHK Art Centre, Ltd. In addition, there are organizations which work for the welfare of NHK's staffs. These include the NHK Mutual Aid Association, a foundation, and NHK Health Insurance Union. Brief descriptions of the first and the second groups are given in the following:

(1) NHK Symphony Orchestra (founded in August 1951)

This came into being as a result of reorganization of the Nihon Symphony Orchestra, which had been playing an active role in broadcasting orchestral music since prewar to postwar days. Now it belongs exclusively to NHK, playing a substantially important part both in name and in fact. Its object is to assist the development of music in Japan through cooperation with NHK in broadcasting as well as in giving public performances which are relayed over the national networks.

(2) The NHK Welfare and Cultural Centre (founded in August 1960)

This organization has helped establish a tape-film library preserving recorded NHK programmes intended for utilization by the physically handicapped. It also campaigns for raising funds for the benefit of the needy during the year-end seasons and at times of disasters, operates travelling clinics for the low-income classes, and various consultation offices and engages in various other social welfare work. It collaborates with NHK in promoting the utilization of social welfare programmes and in providing information and materials for programming.

(3) NHK Gakuen (founded in April 1962)

This aims at providing senior high school level education by correspondence methods using broadcast programmes specially arranged for that purpose. This wide-area correspondence education high school was opened for students in April, 1963 for the first time in Japan. In accordance with the results achieved in the correspondence classes, the school provides materials needed to improve the correspondence education programmes.

(4) The NHK Service Centre (founded in February 1951)

The Centre aims to contribute towards the nationwide diffusion of broadcasting through publicizing public service broadcast programmes. NHK entrusts the Centre with the publication of recorded teaching materials, filmed teaching materials and the "Graph NHK". The Centre also takes care of various functions and entertainments, acts as an agent for receiving contracts and manages the Broadcast Museum.

(5) Japan Broadcast Publications Company, Ltd. (founded in April 1931)

This is the oldest of all organizations connected with NHK and is en-

trusted with the work of publishing textbooks utilized for the purpose of enhancing the effect of foreign language programmes to which NHK has attached great importance from the beginning of radio broadcasting. Since then, it has been publishing textbooks for school as well as for various educational and cultural programmes. It also publishes books and magazines related to NHK.

(6) The NHK Art Centre, Ltd. (founded in July 1961)

This company provides stage sets, properties, costumes and titles for NHK television programmes. It also conducts researches to promote the development of television stage art.

7. Broadcast Programmes

1. Changes in the Principles of Programming in Radio

In connection with the speed with which diffusion of television as a new broadcasting medium took place, the process of the development of NHK's radio broadcasting may be divided into the first (1953—1957) and the second (1958—) periods. But in spite of the deep interest and expectations of the people for television, its service areas were limited to larger cities and vicinities during the first period. On the other hand, radio broadcasting, based on years of experience and achievements, had made remarkable strides in developing fields in which its characteristics could be fully exploited. In the second period, however, the advent of television into the fields where the influence of the radio was predominant enabled television to establish a leading position in mass-communications circles, which included not only the radio but films and publications. In radio broadcasting, therefore, new ideas and techniques in programming were sought from various angles to work out a system of coexistence with television. This may be considered an outstanding feature of the second period.

Statistically speaking, in February 1953, when the Tokyo Television Station of NHK initiated telecasting, the radio broadcasting hours totalled eighteen hours a day on the first network and seventeen hours and thirty minutes on the second network for a total of thirty-five hours and thirty minutes. The radio stations scattered throughout the country counted 85 on the first network and 54 on the second. The coverage of these networks were 98 per cent and 94 per cent respectively, and the number of receiving contractors totalled 10,360,000 households, which accounted for 62.5 per cent of the households in the country.

March 1955 was a memorable month, for it was the 30th anniversary of radio broadcasting. NHK presented special programmes on this occasion, including the "Thirty Years' Strides of Broadcasting", "What Do You Expect of NHK?" (a street corner recording programme linking 8 stations), "The Growing Radio", "Ten Years after the War" (network programme linking 47 stations), "The Radio Links the World" and other programmes of similar nature. In addition, other colourful programmes were also pre-

sented in large numbers. The occasion, in fact, marked an outstanding record, symbolizing the peak of popularity in the history of radio broadcasting.

In television, four hours a day of initial broadcasting was extended to nine hours in 1957, five years from the start. In those days, radio programmes were being presented for thirty-five hours a day on the first and second networks. The receiving contractors totalled, as of the end of 1957, 14.6 million for the radio (81.2 per cent coverage) and 910,000 for television. In short, the radio was still able to maintain its importance even in the face of the gradual invasion of the television service. However, while the radio gradually declined in subsequent years, television spread at a rapid pace, and the rôles these two media played in the world of mass-communications began to reverse.

Television enterprises began to achieve stabilized growth around 1958. Factors making this possible included the following: (1) With the adoption of the first frequency allocation plan by the Ministry of Posts and Telecommunications in 1957 for promoting a nationwide diffusion of television, NHK and the commercial broadcasters competed in the construction of stations. (2) Reflecting the remarkable growth and development of Japanese economy,⁽¹⁾ mass-production and price reduction in television receivers were speeded up through induction of new technology into the electronic industry. (3) The demand for electrical appliances increased so much as to lead to a home electrical appliance boom because of the elevation of living standards.

As television spread more widely, it became the medium for the whole family even where both radio and television receivers were available. In particular, television became the king of evening entertainment in place of the radio. In the circumstances, the radio was obliged to consider television in programming. In other words, it was realized in 1958 that programmes, such as news that takes advantage of the quick-reporting ability of the radio, music and extended information and entertainment programmes suitable for appealing to the auditory sense should be given greater weight in radio broadcasting. In the meantime, the fact that the most popular listening time was shifting from evenings to mornings in the face of increasing popularity of television was confirmed by surveys undertaken at the Radio and Television Culture Research Institute of NHK. Under this situation, enrichment of morning and daytime radio programmes from 1959 was considered, even while following the previous programming policy. The programming method was to compile programmes best suited to the new listening situation. In the first place, differences in the classes of audiences for various listening hours were considered. For example, programmes suitable for farmers or women would be presented during the hours suitable for these people. In the second place, several types of pro-

(1) Japanese economy which recovered on the basis of the special procurement demands of the American Armed Forces during the Korean War further developed along with expanded exports stimulated by worldwide business prosperity ushered in after 1955. As a result, technological innovations, such as the automation system, were introduced into the key industries. The industrial output of 1956 was double that of the average prewar year and the national income had increased by 50%. This rate of economic growth continued for the years that followed.

grammes would be unified into a single mood and be presented as an extended programme so that the people would be able to listen to it while taking a meal or while working.

Despite such measures, the range of radio programme utilization continued to narrow down because of the astonishingly widespread diffusion of television. As of March 1965, households operating both radio and television receivers exceeded 17 million (83 per cent coverage), with an additional 2,750,000 households operating radio only. The broadcasting facilities and programme hours of television were also expanded to equal those of the radio in quantity. Consequently, viewing of television was not only limited to evenings but spread to the forenoon and afternoon, which were considered as hours reserved for radio listening. Meanwhile, the demand for portable transistor radios increased in the face of wider diffusion of television. This was an indication of the increased individual utilization of radio programmes. In the circumstances, considerations came to be given radio programmes so that they would be utilized effectively by students wishing to listen continuously to foreign language lessons, by blind people and patients in hospitals who wished to enjoy entertainment programmes, by intellectuals desiring high-level cultural and artistic programmes and by teachers and students wishing to use educational programmes as teaching or learning materials. These were specific audiences. The rôle thus played by the radio and its evaluation, therefore, had to be considered distinct from television programmes viewed largely by the whole family.

2. Television Programmes and Ethical Regulations

Broadcasting, by taking advantage of the characteristics of radio waves, has played an important part in providing information and entertainment as well as in transmitting knowledge and experience to an unspecified multitude. It has also made notable contributions to widening the field of vision and formulating opinions and attitudes of the people. Furthermore, television programmes going into private homes helped create happy family circles, and this was an outstanding phenomenon brought about by its development. Consequently, it was a matter of course to consider carefully the quality of programmes being sent into the homes as a one way traffic. In fact, a number of programmes that demonstrated such needs were produced. Home dramas, light comedies and quiz programmes were presented, which enjoyed high ratings over a long period. Songs, dramas and television films were also excellent programmes of high entertainment values.

On the other hand, competition among the commercial broadcasters for securing sponsors through entertainment programmes of higher ratings began to show evidence of becoming intensified as independent commercial broadcasting stations were established one after another in all parts of the country. In major cities larger commercial broadcasters desiring to bring such new local stations under their respective wings operated side by side. Mass-production of entertainment programmes became a common practice, and moreover, there were some containing sensational expressions and descriptions intended to appeal to the vulgar tastes of the general public. Even action thriller films produced in the United States began to appear among the programmes presented during the golden hour. It cannot be

denied that even NHK, whether consciously or not, began to show phases that could be taken as being under the influence of such programming trends of the commercial broadcasters. And it was such trends in the broadcasting services that gave rise to discussions on the desirability of the influence of television among certain groups of the public, with 1958 as the peak.

The Broadcast Law was partially revised in March 1959. The principal objective of this revision was to provide measures for preventing debasement of the programme standards as well as enhancing greater service for the public good (see Chapter 5 "Revision of the Broadcast Law", Sections 1 and 2). The points worthy of attention follow.

In the revised law, individual broadcasters were obliged to establish broadcast standards and a programme deliberating organ. However, the observance of such standards and the adoption of opinions of the deliberative organs depended solely on the judgment and responsibility of the broadcasters themselves who were not subject to any rules.

At NHK the contents of the existing voluntary rules, the NHK Broadcast Standards, were reviewed and consolidated and the "Domestic Programmes Standards" demanded by the revised law were established in July 1959. The contents were divided into the standards related to broadcasting in general and those concerned with various categories of programmes. The former contained thirteen items including human rights, personal character, honour, ethnic groups, race, international relations, religion, politics, economy, disputes, trials, social life, family, customs, crimes, expressions, advertisements, prizes and corrections of errors. The latter set separate standards for cultural, educational, school, children's, news, sports, stage art and entertainment programmes. All articles of these standards were made public through broadcasting.

A notable point in the revised law was that it sought to maintain harmony among such items as cultural, educational, news and entertainment programmes in the total framework of broadcasting without distinction between NHK and commercial stations. This harmony was not meant to be an exact mathematical proportion but something understood by common sense. It involved complicated problems of defining cultural and educational programmes and of drawing a demarcation line between them. For instance, in 1957, when the Ministry of Posts and Telecommunications issued experimental licences to a number of applicants for establishing television stations, it presented some conditions with regard to proportion of time to be devoted to cultural and educational programmes in the entire range of the service. The Ministry stipulated that more than thirty per cent of the total broadcast time should be devoted to these two items. In this case, all the entertainment and sports programmes containing some cultural and educational elements were included. After all, the question of proportion had to be left to the free judgment of each broadcaster.

The revised law was a success in the sense that it caused the broadcasters to rerecognize their social responsibilities. NHK as a public corporation had strived to attain harmonization and up-leveling of programme contents irrespective of the revision of the law. In 1958 it strengthened its programme inspection organ to check all the pre-broadcast scripts, recorded matters and films, thus assuring more careful examination of the

contents.

Later, when a trend towards treating lightly the value of human life became a grave social problem, reflecting the darkened social conditions in which political confusion, brutal crimes and man-made and natural calamities were the order of the day, NHK undertook measures to delete from its programmes scenes that tended to give impressions of undervaluing human life. In July 1960 a bold step was taken to cut all murder scenes in television dramas and to reject any entertainment programmes depicting scenes of violence, even though the intentions may have been to censure brutality. These measures were based on the idea that such depictions of violence would stimulate younger people psychologically.

The aforementioned programme deliberating organ attached to each broadcasting organization was not merely an advisory one on the fundamental problems of programming but was, at the same time, in a position to criticize programmes on behalf of the audience. Such organs, however, not being independent either organization-wise or financially, were not effective enough to bring about improvements in the programming of broadcasting as a whole. With the rise of critical opinions among the people with regard to the influence of television, Government circles considered it appropriate to establish a neutral council, separate from the aforementioned organs and not directly connected with the broadcasters, so that purification of programme contents might better be promoted. Around autumn of 1963, the Ministry of Posts and Telecommunications took the lead to realize the idea, and in December of the following year, a Committee for Broadcast Programme Improvement consisting of persons of knowledge and experience was established. This committee was not a government organ but a private entity organized as a juridical person. Its objective was to examine the contents of both NHK and commercial programmes and to supply the broadcasters with data useful for improvement.

3. Broadcast Items

NHK, in the period of parallel operation of radio and television, placed great emphasis on establishing such broadcast items as would be effective. While doing so, considerations were given to the functions and characteristics of radio and television as media, as well as to maintaining a balance between the two. Further thought was given to the means of reflecting upon individual programmes the standards of NHK as a public corporation different from the commercial broadcasters. The point worthy of special attention was the positive steps taken in the fields in which the commercial broadcasters were likely to find themselves restricted. In other words, enrichment of programmes directed to specific audiences, intensive compilation of long programmes and the development of experimental programmes particularly suited to the second network radio were good examples.

Programmes intended for specific audiences, unlike those taken up in the general service, included comparatively high-level cultural and artistic types centred on educational programmes. Educational programmes, which formed the most outstanding feature of NHK broadcasts, will be described in the next chapter. In addition to regularly scheduled cultural and artistic programmes, such as "Special Culture Series", "Appreciation of Japa-

nese Music", "Masterpiece Theatre" and "NHK Symphony Hall", dramas and operas requiring more than an hour and a half were also presented from time to time during the favourable evening hours. In 1956, NHK's "Special Culture Series", an extended programme, was newly established. This was patterned after the programming policy of the BBC's third network and commenced with "Discovery of Japanese Beauty" in July of the same year. Since then, this series has been presented once or twice a month as a five-evenings series. The themes covered various fields, including such titles as the "Tides of Present-day Culture", "History of Education of Women", "The Focus of Modern Medicine", "Kabuki Plays", "Special Series of Foreign Radio Dramas" and "Special Shakespearian Dramas". Programmes in this series sought to clarify the causes leading to issues or present systematic interpretations of masterpieces. It was a unique attempt made by NHK.

Taking the so-called "ashes of death" incident⁽¹⁾ (March 1954) as an opportunity, programmes dealing in scientific problems for the purpose of elucidating the public began to gain greater importance. The scale of researches in science and technology expanded notably in this country, with exploitation of nuclear power for peaceful uses, with aroused national interest in the development of space, Japan's participation in international projects of Antarctic observation and technological innovations for more rational operation of enterprises as the background. Reflecting such situation, a great number of programmes useful for encouraging and developing science and technology were introduced into broadcasting.

Music programmes taking advantage of the characteristics of radio constituted one of the most important items in the whole programming structure. As television developed, the number of works composed specifically for radio broadcasting increased. In this process, studies were made to utilize new performance techniques, such as the use of stereophonic and electronic music. In November 1954, "Stereo Music Hall", the first regular programme of this nature in the world, was established; this subsequently became a popular programme item through which new works were presented. Works taken up in this programme were often awarded prizes in the annual Art Festival sponsored by the Ministry of Education, as well as at international music contests and festivals. The Italian Prize-winning musical poem drama "Ondine" was a result of such studies on electronic music and its sound effects became a basis for the later development of new music forms. New technical experiments employing characteristic of radio were made with enthusiasm not only in musical programmes but also in radio documentary and three-dimensional dramas.

Around 1958, when the nation-wide dissemination of television began to take a regular course, the scale of programme planning became more and more enlarged in radio and television broadcasts, with a remarkable increase of free programme compilation without the time limit as in the cases of regular scheduled programmes. Examples of this kind included special

(1) The American hydrogen bomb experiment at the Bikini Atoll in March 1954 caused a shower of the 'ashes of death' over the Fukuryu Maru No. 5, a Japanese fishing boat operating outside the off-limit area. Subsequently the crew suffered from an atomic disease, reminding the Japanese people of Hiroshima and Nagasaki atomic bombs.

programmes handling topics from political, economic, and social fields, special ones for various commemorative functions, overall campaign programmes mobilizing different divisions such as news, culture, entertainment and etc., and other special schemes using new relay techniques. Programmes aiming at international cultural exchanges were also developed actively as indicated later (See Chapter 10, "International Cultural Exchanges"). In July 1958 a VTR was put into practical use, which introduced favorable changes in the compilation and production of programmes.

After the effectuation of the San Francisco Peace Treaty, debates on various important bills in connection with the political system based on Japan's dependency on the United States tended to intensify between the conservative and progressive parties. Especially, demonstrations organized against revision of the US-Japan Security Treaty by trade unions and students' organizations drove the parliamentary political system into an uncontrollable crisis which climaxed around May to June 1960. The fact that NHK broadcast a series of special programmes titled 'Direct Appeal to Japanese Politics' was one of the indications of the tense atmosphere of those days.

To cope with serious problems happening in political, economic and social fields at home and abroad, NHK arranged numerous special programmes outside regular schedules to elucidate the context and focal points of the issues. Special events such as the Crown Prince's Wedding (April 1959), Rome Olympics (August 1960), and Television Forum held by the three major political parties (November 1960) were memorable among these special programmes. In broadcasting these events, NHK gathered materials representing all the broadcasters, and branched transmissions to the key stations of the commercial broadcasters.

NHK's campaign broadcasts established a new 'General Campaign Programme' opening with 'Fair Election' in May 1958, in addition to the 'Year-End-Help-the-Needy Campaign' and 'Summer Time Travelling Advice' (Part II Chapter 4, "Broadcasting Programmes", Section 3). This broadcast searched widely for topics in various fields, such as politics, economy, science, and culture. It was compiled with materials collected from forty to fifty related programmes, and presented several times a year. Principal items included "Culture for Remote Areas", "Human Rights of Mothers and Children", "Japan in the World", and "Extermination of Polio".

NHK succeeded in broadcasting "Surgical Operation on the Stomach" in August 1957, and since then has tried such new programmes one after another in order to utilize new relay techniques. For example, "Science of the Sea Bottom", "From the Basin of Kegon Fall", and "Limited Express Kodama on Tokaido" were among such programmes. The technical results obtained in these programmes promoted further new technical exploitations leading eventually to the epoch-making success in the broadcasting Tokyo Olympic Games (See Chapter 2, "Tokyo Olympic Broadcasting"). Unique programmes of this period included, "A Record of a Deaf Child and its Mother" on radio and a television programme, "A Record of a Branch School in the Mountains". The former treated the process of gradual removal of speech impediment with the power of love and education given by the mother and a teacher, while the latter recorded the process of a school heightening the effect of television in the education of children in a remote area. Each of

these covered details over a long period and edited them to suit broadcast programmes, which aroused the sympathy of the listeners and viewers. NHK has continued to collect and arrange useful materials for programme compilation and production and the quantity of such materials swelled year after year. In Tokyo alone, as of March 1965, the preserved materials included 39,700 on personalities, 159,500 on incidents, 701,000 news items, 712,000 photographs, 102,500 historical investigations as well as 214,500 copies of music scores, 208,000 records, 21,100 recorded tapes, 490 musical instruments, and filmed materials with a total length of 34,790,000 feet.

4. Broadcasting Hours

In April 1958 NHK radio broadcasting hours were increased to nineteen per day on the first network and eighteen hours and a half on the second network which were considered the peak in the development of radio broadcasting. However, in comparison with the time when television was inaugurated, the addition was an hour for each network. The 1958 situation continued without change until 1966. Broadcasting started daily at 5:00 a.m. on the first network, and at 5:30 a.m. on the second, while both ended at midnight. Thus without any intervals from morning till night the first network presented general service programmes and the second network, those directed to particular classes of listeners either on the national network or as local programmes.

The ratio of broadcasting hours by categories varied from year to year. The situation in 1960 is shown below.

The high percentage of information programmes seen in this table was due to the fact that literary works and classical music which used to belong in the category of entertainment were changed to that of information.

NHK's television programmes were presented for an average of four hours a day at the outset, but the hours increased year by year until it reached eighteen hours after twelve years, in 1965. Broadcasting hours of the NHK Educational Television Service inaugurated in January 1959 with a goal of a nation-wide diffusion of educational telecast were only four hours and twenty minutes at first. However, as a result of rapid development of the parallel system with the general service, the programme hours increased to fifteen by 1965. Changes in the broadcasting hours on these services are given in the following table. (see next page)

Each broadcasting station belonging to NHK, while transmitting nation-wide network programmes, also took up local programmes directly related

Ratios by Programme Categories (as of 1960)

	1st network	2nd network	Total
News	29.2%	7.8%	18.5%
Information	35.6	43.2	39.4
Education	6.8	28.9	17.9
Entertainment	27.3	4.4	15.9
Sports	1.1	15.7	8.3

to the community. Consolidation of local broadcasting was one of the policies most emphasized by NHK after the enforcement of the Broadcast Law

Average Length of Broadcasting Hours per Day

Year	General TV	Educational TV	Total
	hour, minute	hour, minute	hour, minute
1953	5 : 21	—	—
1954	6 : 24	—	—
1955	7 : 07	—	—
1956	7 : 31	—	—
1957	9 : 08	—	—
1958	10 : 56	—	—
1959	12 : 34	5 : 20	17 : 54
1960	13 : 33	6 : 37	20 : 10
1961	15 : 34	8 : 47	24 : 21
1962	17 : 01	10 : 05	27 : 06
1963	18 : 01	11 : 40	29 : 41
1964	17 : 58	13 : 33	31 : 31
1965	18 : 03	15 : 23	33 : 26

Percentage of Broadcasts by Categories

Section	Year	1953	1960	1963
General TV				
news		21.9%	23.3%	27.7%
culture		25.1	29.0	35.9
education		4.1	8.7	9.1
entertainment		31.3	23.8	27.3
sports		17.6	15.2	—
Educational TV				
news			4.0	1.6
culture			16.8	24.0
education			79.2	74.4
entertainment			—	—
sports			—	—
Total				
news		21.9	13.7	14.7
culture		25.1	22.9	29.9
education		4.1	43.9	41.7
entertainment		31.3	11.9	13.7
sports		17.6	7.6	—
		100.0	100.0	100.0

Note: Sport programmes in 1963 were included as culture

in 1950. It aimed not only to perform the duties assigned to NHK by the law but to compete with the commercial broadcasts, which came into existence as independent local enterprises in many parts of the country to achieve outstanding development. NHK strengthened its programming structure to consolidate local broadcasting by setting aside the hours in which each local station might present programmes freely, instead of using network programmes, outside the framework of scheduled net programmes. Local programme broadcasting hours of the local stations totalled in 1964 approximately four hours daily in the case of radio and about an hour and twenty minutes in the general television service. The proportion of these local broadcasts accounted for twelve per cent in radio and eight per cent in television. Local news, information items and weather forecasts, accounted for more than sixty per cent for radio and more than eighty per cent in telecasting. Cultural, educational and campaign programmes based on local conditions followed the first items in the ratio. On the other hand, all entertainment programmes depended on the nation-wide network.

Percentages of items in programme production were as shown in the preceding table. This table shows comparisons of the proportion of each item in 1953 soon after the initiation of the general television broadcast, in 1960, the early period after the Educational service was initiated and in 1963 on the occasion of the Tokyo Olympic broadcasts. The points made clear in this table are decrease in the proportion of entertainment and sports, each of which maintained a high percentage in the whole programme at the beginning of NHK broadcasting, and the major increase in the proportion of educational programmes.

8. Educational Broadcasts

1. Educational Policy and School Broadcasts

NHK broadcasting to schools, which has made valuable contributions to the development of school education in Japan, marked its 30th anniversary in 1965. These broadcasts, originally patterned after those of BBC, had characteristic features in their systematic and continual programme compilation and high utility rate as well as the systematized study activities on the part of utilizers. The NHK Tokyo Educational Television Station was founded in 1959. Since then, as the construction of the nation-wide television network specifically intended for educational use made progress, effective production of school programmes appropriate for the respective characteristics of radio and television served as a factor further enhancing their utilization. The achievements of this broadcast attracted much attention from the broadcasting organizations in different countries through several international conferences on educational broadcasting. When the International Conference of Broadcasting Organizations on Television and Sound School Broadcasting was held in Tokyo in April 1964 with 171 participants, representing 77 broadcasting organizations in 58 different countries following the Rome Conference of 1961, the existing state of school broad-

casts was introduced to all the delegates. In the following, the process of the development of such broadcasts after the war will be outlined in relation to the educational policies of Japan.

The school broadcasts, which had to be suspended for approximately six months, from the end of the Pacific War to the immediate postwar days, was first re-established in October 1945, to propagate to the school teachers the new principles of education in accordance with the various directives of GHQ concerning educational reforms. Since then, broadcasts directed to children were taken up one after another. These schemes aimed to attain the effects impossible with other educational methods while searching for new teaching materials. On the other hand, the idea of connecting these broadcasts closely with school lessons was considered to be of secondary importance. Guidance and advice in the production of these programmes were actively offered by those who were in charge of broadcasting at CIE.

In March 1947, the Fundamental Education Law and the School Education Law were enacted and enforced, establishing the new educational system for postwar Japan. Under the new system, the character of the textbooks which had been compiled on the basis of the centralized policies of the State changed completely. These were now published by private firms and authorized by the Ministry of Education, the administrative authority, and the schools were to choose freely from those available. School broadcasting came under the article . . . "those useful and appropriate may be used as teaching materials" provided in the aforementioned School Education Law. While textbooks were restricted in their use under the authorization system, the use of school programmes was left entirely to the teachers' judgment. This was due to the high estimation accorded broadcasting as an audio-visual teaching material which was introduced by CIE with the empirical educational ideas. In other words, based on the principle of democratic education, autonomy of teachers was respected and the educational capacity of broadcasting was undoubtedly estimated as high due to the popular trend of educational ideas based on empiricism. The Ministry of Education, simultaneously with the promulgation of the new school system, published the Course of Study to provide the ground upon which each school might formulate its curriculum and course of study. The school broadcasting programmes were also to be produced using the Course of Study as reference.

Reflecting the changes in the occupation policies of GHQ, control of broadcasts was markedly eased from 1950, and guidance in programming by CIE practically ceased. By 1953 when NHK's independent programme production system had been put in order, school broadcasting was transferred entirely to the second network and the number of programmes rapidly increased, establishing the foundation for the present school broadcasts. However, the government policy after its recovery of sovereignty in April of the previous year, evidently tended to restrict excessive democratic political activities. As this policy was reflected on the administration of education, school broadcasting had also to change as a matter of course. In 1953, with a practical revision of the School Education Law, the textbook authorization system was strengthened, and consequently the importance of textbooks increased. The following year, 1954, the "Law for Provisional Measures Regarding the Securing of Political Neutrality for Compulsory Edu-

cation" was enacted. In 1955 the revision of the "Objectives and Contents of Social Studies" was published by the Ministry of Education. Further, in 1958, the "Essentials of the Implementation of Moral Education" was laid down.

Accompanied by the decisions on such series of policies as mentioned above, the binding effect of the Course of Study published by the Ministry of Education was increased. In August 1958 when a new curriculum was enacted, a provision that the standard of curriculum should be based on the new Course of Study to be announced by the Ministry of Education, was set forth. Consequently not only was it obligatory for educational activities, such as regular courses, extra curricular activities and school events, to follow this standard but the maximum hours assigned to each subject, the objectives and contents of studies were determined concretely for each school year. In these circumstances, it became difficult to produce school programmes as freely as before. The schools utilizing them were also bound by the standard so that it became impossible for the teachers to accept them on their own independent judgment.

After the war, when just after school broadcasts were resumed, the policy of programme planning was "to be useful to the educational goals of schools rather than to play a subsidiary rôle in the learning activities." However, the aims gradually changed to "to be useful to the learning activities." Due to the adoption of the aforementioned standard for educational curriculum, NHK came to the conclusion that it was appropriate for its school broadcasting "to be useful to the unit study of each school year." Thus the programmes were to be made so as to be closely related to the unit subject assigned to each school year. The broadcasting schedule was also revised as a whole in consideration of the unit of study period (45 minutes for elementary schools and 50 minutes for junior high schools). The school broadcasting under the new system started from April 1960.

At present it has become a matter of common sense in educational circles to use broadcasts as a powerful means in teaching with efficiency and great effect. This is due to the fact that the functions and features of radio and television were highly evaluated. At the same time it owes much to the fact that NHK has strengthened the structure for school broadcasting and enriched the programmes. In 1957 the School Broadcasting Division was created in the Education Department which was newly established through the reform of NHK business organization. In 1959 it was divided into the radio and television school broadcasting divisions. As the structure became amplified, the programmes advanced in quality and quantity, thus increasing in utility.

2. Development of Radio School Broadcasts

NHK's radio broadcasting facility plans after the war were promoted, as mentioned before, with the principal aim of amplifying the second network. As a result, by the beginning of 1953 the coverage was expanded to 93 per cent of the total households in the country, which was comparable to the 98 per cent of the first network (See Part II Chapter 5, "Broadcast Engineering", Section 1). The second network was originally expanded to digest programme items that had increased remarkably since the war. The programmes

transmitted over this network were arranged according to a policy which placed emphasis on presenting something different from those of the first network. In other words, educational programmes, cultural programmes of higher order, and those which would respond to the demand of particular classes of audiences were intended for this network. Formerly in the areas where the second network was not yet fully equipped, school programmes were transmitted over the first network. However, after the second network coverage spread over the entire country, as already mentioned, these programmes were totally transferred to this network from April 1953. This measure made it possible to establish the foundation on which school broadcasting could simplify its programme compilation and unify the management.

The shift of school broadcasting to the second network was accompanied by a soaring increase in the programme items, which now totalled fifteen, and three hours and fifteen minutes per day in the broadcasting time (an hour more than before). An outline of the broadcasting hours by categories is shown in the following table.

Programmes for schools were, as a rule, transmitted over the nationwide network and their production was mainly undertaken by the division in charge at the NHK headquarters in Tokyo. This system was followed because of consideration for the great importance and the effect of broadcasting as an educational means and also because of greater convenience in securing the script writers and performers. One of the greatest reforms in the educational administration of the postwar period was the decentralization of education as in the case of other administrative organizations. In school broadcasting, the demand for programmes closely connected to edu-

Radio School Programme Schedule (as of 1953)

Programme hours	Programme items
A.M. 8:15 - 8:30	Radio exercise, music
8:45 - 8:55	School Newspaper
8:55 - 9:00	Today's School Broadcast (For primary schools)
9:00 - 9:15	Japanese Language, Music (Alternately for all classes)
9:15 - 9:30	
10:00 - 10:15	For lower grades
10:15 - 10:30	For middle grades
10:30 - 10:45	For higher grades
10:45 - 11:00	For junior high schools
11:00 - 11:15	Lower and middle grades, primary schools (repeats)
11:15 - 11:30	Higher grades, primary schools (repeats)
11:30 - 11:45	Junior high schools (repeats)
11:45 - 12:00	For senior high schools
P.M. 1:00 - 1:15	Japanese language and music for junior high schools
6:30 - 6:45	Homes and Schools

cation based on locality was never small. In 1954, NHK, therefore decided to produce at least three local educational programmes a week at each local station.

The examination of various fundamental problems concerning school broadcasts and the selection of year-long serial programmes were made with the advice of the Central Advisory Committee (Tokyo) created in the previous year and the Regional Advisory Committee (in each key station), both consisting of teachers, competent administrative officials, and representatives of broadcast education research organs. In addition to these committees, a special one of outside specialists was instituted for each serial programme, to discuss concretely their objectives, contents and forms. Thus the production of a programme of this kind was decided with much consideration of specialist opinions, avoiding the danger of the self-complacency which might possibly be seen in those in charge of programming. In the programming during this period, the keynote was that they were subsidiary to study courses. This meant that emphasis was placed on such programmes as news, those related to phonetic languages, music, and programmes for guidance in daily life. After 1959, when the educational television service was established, radio in its programming attached primary importance to the contents designed to make the listeners think, while leaving those likely to achieve better effects by appealing to the eye, to television. Thus, the steps to take full advantage of the characteristic features of radio were promoted.

As already mentioned, (see Section 1) in 1960, expecting the new education curriculum to be put into practice, an overall revision of programming aimed at coordinating with school courses was undertaken so as to produce programmes closely adhering to the system of unit study. In this, broadcasts to junior high schools which had not been organized by school grades took the school year classification system, as in the case of elementary schools. In such manner, the present structure of radio broadcasts to schools was established.

Around 1947, before this system was organized, broadcasting education study societies began to be formed in various areas with school teachers as the principal members. These study societies proved to be useful organs for the improvement, diffusion and promotion of school programmes by mutual sharing of opinions on the theories and practices regarding broadcasting education. In 1950, the National Federation of Broadcast Education Study Societies was formed. The federation holds annual conferences, studying and discussing the utility of programmes, guidance for receiving, the evaluation of the effect and the diffusion of receiving facilities. In 1953 special study meetings aimed at training leaders in broadcasting education were held in many parts of the country under the sponsorship of the Ministry of Education and the aforementioned federation. In 1950 NHK entrusted at least one school from among primary, junior and senior high schools respectively in each prefecture, as a model for the study of broadcasting education.

One of the important policies adopted by NHK with the object of the nation-wide diffusion of school broadcasting was to encourage its use in remote areas. NHK also selected similar schools, in expectation of obtaining good results from their researches. Simultaneously NHK drafted a five-

year programme starting in 1955 for presenting transistor radio sets to schools in non-electrified areas with the intention to eliminate those schools unable to receive the broadcasts.

3. The Development of Television School Broadcasting

In February 1953, when NHK's Tokyo Television Station was opened for the first regular service in Japan, the time allocated to school programmes was only fifteen minutes a day, or one hour and thirty minutes per week, and only four schools took advantage of the programmes as an aid to classroom work on an experimental basis. There was, however, none among those connected with education who questioned the utility and the future possibilities of television as an educational medium.

Needless to say, the use of television to increase the effect of learning and the way of material selection in relation to the media already in use as audio-visual aids, such as the cinema, slides and radio, were new tasks to be handled first in the process of developing television school broadcasts.

At this level one could not expect any systematic and continual programming so important to educational programmes and any consideration given to relate them to school subjects. In other words, emphasis in the programming was placed on evoking children's interest and providing them with general knowledge and culture by presenting such teaching materials as would not be obtainable in classrooms.

In promoting the utility of television broadcasts, in the light of the objective of school broadcasts, which were providing equality in educational opportunities, the first step was to disseminate receiving sets. In those days, under the radio administration policies of the Ministry of Posts and Telecommunications, the contribution of the broadcasting establishments was sanctioned only in the three largest cities, Tokyo, Osaka and Nagoya. Also, as television set production by the manufacturers was not yet operating smoothly, the schools which were not favoured financially found it difficult to purchase the expensive sets. NHK took two measures to promote the utility of broadcasts in the three major cities. One was the weekly gratuitous distribution of television school broadcast news to schools utilizing the programmes. The other was the "Touring Television Class" under which receiving sets were loaned to schools for a certain fixed period.

As the number of schools using television increased, discussions on its value became active in the broadcasting education study groups in various areas. In February 1955, the scenes of an actual class utilizing the programmes were transmitted for the first time. This showed the teaching methods by means of television to a number of teachers who had been feeling uneasy about its use; and this played a significant role in promoting its future utility. At the general convention of the National Federation of Broadcast Education Study Societies held that year, television and radio were taken up as important study media. And under the research theme of "How to Use Radio and Television to Enrich the Contents of Learning and Enhance the Effect of Teachers' Instructions", a study was made on the use of radio and television, taking advantage of their respective characteristics.

In 1956 NHK stations in Sendai, Hiroshima, Fukuoka and Sapporo opened successively for operation, completing the television network linking the key stations, including the three aforementioned, thus markedly expanding the coverage. In May 1957 television school broadcasts were increased to an hour daily, while programming was changed to a systematic and continuous method, with contents useful to school lessons. By then the number of schools using television had reached 2000 throughout the country. Later, due to the extension of NHK's television network into medium cities and the realization of price reduction through mass-production, television diffusion to schools was further promoted. According to the first survey on television school broadcasting undertaken in June 1958 by the NHK Radio and Television Culture Research Institute, using 2562 schools as samples, the utility of television programmes had reached 84.5 per cent in elementary schools and 61.9 per cent in junior high schools, showing, in the case of elementary schools, a higher rate than the 68 per cent for radio programmes.

Two key stations for the second television network were opened, one in Tokyo in January 1959 and the other in Osaka in April of the same year. These stations were established exclusively for educational broadcasts. In the circumstances, NHK named the conventional broadcast 'General Television' and the abovementioned network, 'Educational Television'. Programmes were arranged in these services in such a way as to have different characteristic features respectively, as in the case of the radio. In the Educational Television, systematic and continuous educational programmes aimed at children, juveniles and the general public, and cultural and artistic programmes of a higher order were to be presented, but with school programmes as predominant items. It took, however, a considerable time for the Educational Television to become comparable with the General Television network. The temporary situation in which school broadcast programmes were presented both on general and educational networks continued for some time.

The year, 1959, when the Tokyo and Osaka Educational Television Stations initiated their broadcasting, was a turning point for NHK television and also for school education in general. In the previous year the shift began toward the new Course of Study decided by the Ministry of Education (see Section 1) Consequently, television programmes, as in the case of the radio, were obliged to be composed of such contents as to enhance directly the learning effect in close relationship with the unit system for different subject matters. Simultaneously demands on the programming rose from the rapidly increasing receiving schools. NHK, therefore, decided on the following points as directions for programming in order to meet the aforementioned situation; (1) To compile several programmes for presentation, as a rule once a week, by merging those which used to be broadcast every other week or once a month. (2) To coordinate in planning programmes, especially those of the same subject matter, in consideration of the inter-relationship existing between radio and television programmes. (3) To enrich programmes in natural science and social studies. (4) To increase the range of time for repeats for the convenience of those who use them.

The broadcasting time became about two hours daily, with thirty-five different items presented in a week. Thus the first step was taken towards

programming based on the school year system in elementary and junior high schools.

NHK's colour television inaugurated in 1960 proved helpful in improving the learning effect further by presenting some of the school programmes in colour. From this year programmes for senior high schools were added to school broadcasts. The contents of these programmes were chosen so as to be suitable for club activities, instead of being related to the units of subject matters.

The network of educational television expanded rapidly after 1962. In 1965 its service area became equal to that of the general television, the coverage having reached 90 per cent of all the households in the country. Subsequently, television school programmes were concentrated in the educational network. In the broadcasting hours and the number of programmes, television school broadcast developed to the stage of equal standing with the radio school broadcasts, which have enjoyed a long history and tradition.

4. Establishment of Correspondence Education and NHK School

In April 1953, as one of the NHK radio school broadcasting programmes, the "Senior High School Courses" (in English, Japanese language and mathematics) was inaugurated. This was aimed at assisting senior high schools students in their studies as well as those who would avail themselves of the correspondence education system, which enabled them to acquire the qualification of high school graduates by studying the courses given in schools while working. The correspondence education system was enacted in 1948 and applied to the courses of senior high school and universities. But it was five years after the enactment of the system that broadcasting began to be utilized as a means of correspondence education.

Broadcasts of the aforementioned courses enjoyed a high utility among correspondence high school students with close cooperation given by seventy schools which practiced correspondence education throughout the country. The Ministry of Education adopted the policy of sanctioning special treatment for correspondence students who had shown notable results through utilization of this programme, such as exemption from not more than thirty per cent of the total time required for personal guidance, guidance in special educational activities, and substitution for correction guidance. The recognition of broadcasts as a part of important teaching materials for correspondence education was not only a great boon for working youths but an event of epoch-making significance in the history of correspondence education.

With the inauguration of the Tokyo Educational Television Station in 1959, a programme, "High School Course" (including English, mathematics and physics), using various techniques inherent to television for visualized lessons, was adopted. The following year, a course addressed only to correspondence education high school students (chemistry, electric machinery in general, machine draftsmanship, descriptive geography and etc.) was added. By these measures the foundation of the correspondence education through television was established as in the case of radio broadcasting. The Ministry of Education, rating the role of broadcasts in correspondence education high, revised the aforementioned sanctions regarding the

special privilege of personal guidance time exemption up to thirty per cent for the radio and fifty per cent for television, and sixty per cent when both media were used in parallel.

The use of broadcasting correspondence education was gradually extended to universities until the "University Correspondence Course" was taken up in April 1961. This programme had two goals. One was for the university students who were taking correspondence education courses to qualify for credit acquisition by submitting required written reports and taking required examinations through utilization of broadcasts. The second goal was the opening up of such education widely to the public as university extension courses. At the time of the initiation of this programme, the number of universities offering correspondence education courses had reached eleven, with the students totalling over 70,000. In these universities this course was regarded as a regular means for learning and the studies accompanied by the use of this programme were considered a part of the units required for their graduation. The courses taken up in broadcasts were English, economics, jurisprudence and philosophy, which were specified for each school year.

NHK correspondence programmes for high school students increased the broadcast items as well as the broadcasting hours, thus building up its programme structure. Further, NHK decided to set up its correspondence school and support its management to promote active use of educational programmes. This school was called NHK Gakuen High School, authorized as a school foundation and opened in April 1963. The school attendance term was four years, requiring 86 units for boys and 85 units for girls to graduate. The number of students registered in the first year totalled 11,756. The educational method here was fundamentally the same as in any other correspondence schools. The following points comprise its outstanding characteristics. (1) The first school in Japan to offer correspondence education on a national scale. (2) Overall utilization of correspondence education broadcast programmes offered by NHK in learning activities. (3) A score of screening sessions held each year at this school and various other places throughout the country, in consideration of the living conditions of the working youth and for the benefit of students living in local areas.

Results of the first year after the opening revealed that 89.8 per cent of the students registered at this school utilized broadcasts in their studies, and about a half of such students used radio and television in parallel.

While units were credited on the results of the examination given four times a year, almost fifty percent of the students in each subject acquired credits. Thus the significance and success of correspondence education broadcasts were further increased by the establishment of this NHK Gakuen High School.

5. Other Educational Programmes

NHK's educational broadcasts were not limited to directly useful programmes for pupils and students in elementary, junior and senior high schools, such as school and correspondence broadcast education programmes. Programmes to provide teachers with materials for guidance in receiving broadcasts and those for promoting mutual understanding between parents

and teachers on education, such, for example, as "Teachers' Hour", "PTA Hour", "Home and School", and "Education Consultant Room" were arranged. A series of annual functions sponsored by NHK such as "Chorus Contests", "Concert Contests" and "Drawing Contests" have also been helpful in cultivating higher sentiments in pupils and students. Among them, "Chorus Contests" have been highly popular since they commenced in 1932, with participating schools increasing annually until, in 1964, 1,349 elementary schools, 1,239 junior high schools and 745 senior high schools throughout the country took part. The "Drawing Contest" was initiated on the occasion of the inauguration of the Tokyo Educational Television Station in 1959. The first entries totalled 173,000 works, an unusual number for the event of this nature. NHK now broadcasts the prize-winning chorus, concert, and drawings on its national network.

NHK placed emphasis on arranging programmes that were directly or indirectly related to school education as already described. On the other hand, among programmes addressed to the general public, those taking full advantage of the educational functions inherent in broadcast were increased. In these programmes, the greatest emphasis was placed on those considered to serve as an objective of behaviour, or a guiding principle in daily living for youth destined to assume the responsibilities of the next generation. For example "To Friends of Seinen Gakkyu" (Young People's Study Groups) which was taken up as a radio programme in 1953 was one aimed at working youths who were unable to avail themselves of high school education. The 'Seinen Gakkyu' were for cooperative learning formed spontaneously by young people. At that time the number of such groups were 11,000 with members totalling 1,300,000. Through the abovementioned broadcast programme, NHK offered help to the growth of these 'Seinen Gakkyu'. "The Youth's Assertions" (a new radio programme commenced from 1954), too, was a programme to provide working youths with an opportunity to express their opinions. As the programme advanced in the number of presentations, enthusiasm of the participants was so aroused that from the second year a national contest was started as an annual event. Besides these, various programmes were devised aimed at developing knowledge, providing life guidance and supplementing professional techniques for the benefit of youths. The following two may be pointed out as outstanding tendencies found in the programmes addressed to youths after 1955. The first point was that the programmes helpful to the development and promotion of science and technology to meet the coming of the so-called 'atomic age' were increased and enriched. The second, that the campaign programmes aimed at preventing juvenile delinquency, when it had become a serious social problem, were arranged in large numbers. Among the former, "Atomic Power and the New World", and "Today's Atomic Power" were programmed to play an introductory role to the rudiments of theoretical physics and its application. They also introduced the achievements of researches made by the advanced countries. A television programme "Atomic Power Age and Physics" produced through the collaboration of NHK and the American Association of Teachers' Colleges was broadcast for about two years from October 1959, drawing much attention as a high standard educational programme. As an example of the second point, "Hopes for Youths" was compiled in May 1960 as a special campaign programme by

mobilizing the radio and television. Since then many educational programmes for young people produced under this theme were broadcast as regular or special programmes.

Programmes that enjoyed unique positions in education included those for mentally retarded and deaf children. The former was taken up on the radio addressed to the homes of mentally retarded children and the teachers in institutions for such children in April 1962. The programme mainly presented advice in guiding these children. In April 1964 a television programme was initiated, intended directly for the mentally retarded. And television teaching materials proved effective for evoking their interest in learning. In the field of education for the mentally retarded children, activities consisted mainly of learning in concrete living situations so that the guiding methods tended to lack continuity, and because of this, considerable pains were required in programme production. However, by putting much effort in getting feedback from the actual teaching situations, it was possible to put it on smooth running track. For the latter, a programme addressed to the homes of deaf children under six was broadcast from 1961. This contained instructions on practicable home guidance in speaking.

6. International Conference on School Broadcasting and the Japan Prize

In 1964 NHK's newest facilities and techniques were mobilized for broadcasting the events of the Tokyo Olympic Games. Another event of significance, from the viewpoint of international exchange through broadcasting (see Chapter 10 "International Cultural Exchanges"), was the Second International Conference of Broadcasting Organizations on Television and Sound School Broadcasting in Tokyo in April (9th to 15th) of the same year. This conference, following the first conference held in Rome in 1961, was sponsored by NHK on commission by EBU (the European Broadcasting Union). As in the case of the first conference, various problems faced by existing school broadcasting as well as reports on the present situations in different countries were discussed. The opening ceremony was held in the NHK Hall on the 9th April attended by the representatives of 77 broadcasting organizations from 58 nations, observers, foreign ambassadors and ministers in Japan, the representatives of Japanese government, totalling 400 persons. The scene was broadcast on NHK colour television and radio networks all over the country and part of the film that recorded the ceremony was transmitted to Europe by way of a communications satellite.

The conference consisted of a general meeting and eight commissions. In the plenary session a representative of a broadcasting organization chosen from each region gave a report on the present situation of school broadcasting in his country. At the commission meetings the following eight topics were set forth on which to exchange opinions separately. (1) Fundamental purposes of school broadcasting and characteristics of radio and television—especially systematization of receivers and review of educational effects. (2) Necessary conditions required for the initiation of school broadcasting. (3) Offering of aid and information to the developing countries—especially in training specialists and others. In a special room of the

conference 134 radio programmes and 160 television programmes from different countries were auditioned. Such reference materials as photographs, printed matters and models, more than 10,000 in number, were also exhibited. These were useful in assisting understanding of the actual situations in programme production and utility in different countries. On the last day of the conference the representatives and observers paid visits to some kindergartens, elementary and junior high schools to observe the use of NHK school broadcasting.

In the final plenary session John Scapham (head of the BBC Education Department) as a general speaker, gave a report on the various opinions and ideas proposed at the commission meetings, especially on the policies regarding the aid and information to be provided for the developing countries. He also spoke of his impressions of the present situation of NHK school broadcasting, "I could see closely during this week a school broadcasting system that is most advanced in the world, . . . we rate high the breadth of the educational ideas of NHK. . . ." Shinnosuke Abe, the honorary chairman (NHK president) announced a plan for an international contest of educational programmes for the Japan Prize to be awarded works of excellence.

The first Japan Prize contest was held in October 1965 in Tokyo with a jury comprising twelve members representing different countries. The number of participating programmes was 185 including both radio and television programmes, which were entered by 70 broadcasting organizations from 46 nations. For the first contest of educational programmes in the world, it was a remarkable success, even beyond anticipation. For the Japan Prize, the entry of the West German Broadcasting Corporation was selected in the radio division and the Finnish Broadcasting Corporation's entry in the television division. The Prize was awarded at the opening ceremony of the Second General Assembly of ABU (see Chapter 10 "International Cultural Exchanges", Section 3) which was held in the NHK Hall in Tokyo.

9. International Broadcasting

1. Resumption of International Broadcasting

Simultaneously with Japan's defeat in the Pacific War, NHK's shortwave broadcasts directed abroad, which had been in operation for the main purpose of propagandizing the war efforts all through hostilities, were prohibited by GHQ. There was about six years and five months' blank before the service was resumed under the name of 'International Broadcasting.' The prohibition was the reflection of the policy of GHQ to control Japanese activities in general in the international field. This blank period, however, was a preparatory one for NHK to organize a new broadcasting system aimed at promoting international peace and friendship. It was in the latter half of 1948 that participation in the international conference regarding radio waves and the reinstatement of Japan in the International Telecommunication Treaty were sanctioned along with changes in the occupation

policies of GHQ which considered that the time was ripe for Japan to regain its autonomy in radio administration. GHQ's ban on overseas broadcasting was removed in July 1949.

The Broadcast Law enacted and enforced in May of the following year provided that NHK take charge of international broadcasting by order of the Radio Regulatory Agency and that a part of the necessary expenses be borne by the State. However, as to the management of broadcasting, the law set forth that all business should be managed by NHK under an autonomous system rejecting interference of the State power, which had persisted during the war. In anticipation of the resumption of international broadcasting, NHK in October 1949, newly established the International Division in its business organization so that preparations in various phases might be expedited.

At the plenary session of the Diet in March 1951, when the prospects of Japan's recovery of sovereignty and re-entry into international society became apparent, a decision to promote the resumption of international broadcasting was approved. As soon as the US-Japan Treaty of San Francisco was signed in September of the same year, the operation of international broadcasting was decided at a Cabinet meeting. In January of the following year the enforcement order was issued to NHK by the Radio Regulatory Agency. In the preamble it was stated, "With the recovery of the international position of our country, it is necessary to resume international broadcasting in order to inform other nations of the real situation in our country, to promote reconstruction of the country with the understanding and support of others and contribute to international amity through cultural exchanges, and especially, due to the importance of foreign policies after the conclusion of the peace treaty and before ratification, it is desirable to put it into operation as soon as possible." After this preamble, the details concerning the operation of international broadcasting, namely, broadcast areas, broadcasting hours, terminologies, and broadcast items, were designated.

The international service was resumed officially in February 1952, two months and a half before the US-Japan Peace Treaty went into effect. It was named "Radio Japan" as opposed to "Radio Tokyo" used before the war. At the outset of the resumption, broadcasts were very small in scale, beamed to five directions in only English and Japanese, with an aggregate time of five hours a day and two 50 kW transmitters. The staff engaged in this service numbered less than thirty. Nevertheless, the resumption of broadcasts aroused a response greater than expected, bringing many reports on reception, requests and opinions from various parts of the world. In fact, in 1952, the year of resumption, such letters reaching NHK totalled 554. Of course, it was not an astonishing number. However, the reactions came not only from areas, such as North America, North and Central China, the Philippines, Indonesia and India where the programmes were directed but also from Australia, New Zealand, South Africa, South America, England and Sweden, outside the service areas. This greatly encouraged those in charge and all the contents of these responses showed interest in the reopening of Japan's international broadcasting and an overwhelming majority desired information on the actual situation of postwar Japan in political, economic, and cultural fields.

The interest overseas in "Radio Japan" had a tendency to increase as Japan's position in international relations improved. NHK added five new directional transmissions from August 1953, increasing its broadcasting hours to ten per day, while adding Spanish and Portuguese to Japanese and English. Thus the service was gradually developed so as to be worthy of being termed "international broadcasting". The International Division was then elevated to an International Department, where programming, news, and production, required a staff of more than one hundred.

2. Progress of Expansion

NHK's international broadcasting made its first expansion after its resumption in August 1953 and continued expanding year by year and the progress of such expansion is shown in the separate table. From April 1965, the daily total of broadcasting hours rose to thirty-six, the number of directional transmissions, eighteen, the languages used, twenty-three, and the transmitters in use, ten (six 100 kW, two 50 kW, and two 20 kW). Radio Japan was thus developed to cover the entire world.

Before the war, the output of any transmitter was never more than 50 kW and for some time after the war 50 kW transmitters were used. After the war the overseas services of various countries were competitively strengthened on the basis of their experience during hostilities. As a result, overlapping of the short-wave broadcasting frequency bands became conspicuous. Faced with the necessity for preventing jamming by the increasing radio waves of other countries which were all moving in the direction of high-power broadcasting, NHK also adopted the policy of using high-power transmitters, and two 100 kW types were installed in 1955 for the first time. However, the shortwave facilities for international broadcasting were not owned by NHK but by the Kokusai Denki-Tsushin (International Telecommunications Co.), which supervised and operated them, and NHK paid specified fees for the use of the facilities by which the programmes were transmitted.)

With a view to promoting the overall development of the business, NHK put into practice its first five-year plan which started in 1958. In this plan, the expansion of international broadcasting was one of the major goals. As clearly shown in the table, the broadcasting hours were increased greatly by 1959. However, viewed from the point of overall scale, it did not reach the level of the overseas service of AIR (All India Radio) in the same Asian area, not to mention VOA, BBC and Moscow, ranking somewhere in the middle among some sixty international broadcasting services.

Among the increases of the aforementioned broadcasting hours, the highest rate was shown in transmissions to East Asia, which were increased from an hour to five hours and a half by August 1959. The transmitter output of this service was also increased from 20 kW to 100 kW, so that it actually covered all Asian areas. The characteristics of this broadcasting were that the programmes, in consideration of conditions peculiar to various areas, were distinguished between those intended for time bands in particular regions and news and news commentaries addressed to all Asia. From September 1960 the latter became the general service broadcast beamed simultaneously to three directions, Asia, America, and Europe, using

one frequency respectively, thus making it possible to present almost all the areas of the world with the same programmes beamed at the same time.

The 'general service' programmes were at first beamed for six hours. From 1961 two hours were added every year, amounting to twelve hours a day by 1963, thus establishing what may be called an 'all-day system.' All the three transmissions used high-power transmitters (100 kW). Thus, an epoch-making broadcasting system unprecedented in the world was completed, and Radio Japan's programmes became receivable at any time and anywhere.

Scale Expansion of International Broadcasting

Starting date	Total prog. hrs.per day	Transmit. directions	Languages		Transmitters used
			No.	Additions	
Feb. 1952	5	5	2	Japanese English	2(50k-2)
Aug. 1953	10	10	8	Thai Spanish Portuguese French Chinese Indonesian	2(=)
Apr. 1954	12	12	12	German Arabic Fukienese Cantonese	2(=)
Jun. 1955	13	13	13	Italian	2(=)
Aug. 1955	13	13	14	Hindi	3(100k-1, 50k-2)
Oct. 1955	13	13	16	Russian, Urdu	4(100k-2, 50k-2)
Jun. 1957	15	15	16		4(=)
Apr. 1959	19.5	16	16		5(100k-2, 50k-2, 20k-1)
Aug. 1959	25	16	16		5(=)
Dec. 1959	25	16	16		6(100k-3, 50k-2, 20k-1)
Apr. 1960	29	17	18	Korean Swedish	6(=)
Sep. 1960	29	17	18		9(100k-3, 50k-2, 20k-2, 10k-1)
Apr. 1961	32	18	20	Bengali Vietnamese	9(=)
Sep. 1961	32	18	20		9(100k-6, 50k-2, 20k-2, 10k-1)
Sep. 1962	34	18	20		10(100k-6, 50k-2, 20k-2)
Apr. 1963	34	18	21	Malay	10(=)
Sep. 1963	36	18	21		10(=)
Apr. 1964	36	18	22	Swahili	10(=)

As to the frequencies usable for international broadcasting, due to the blank period after defeat in the war, only four were available on the resumption of the service, which were manipulated to make two frequencies usable for each transmission. Later, as transmissions increased, frequencies also were increased gradually until ten were used in 1959, when simultaneous beaming became possible for the first time. With the opportunity of the enforcement of the frequency control system by the International Frequency Registration Board (IFRB), eighteen frequencies were finally made available. Later because of the increase in the transmissions and the completion of the 'general service', the frequencies had increased to more than twenty by 1963. However, when compared with the overseas services of major countries which simultaneously beamed on six to fifteen frequencies at high outputs, the Japanese radio waves suffered a wide gap as they had to "corkscrew their way through the crevices" of foreign frequencies.

3. Programming

The international broadcasting service was operated from the resumption by the order of the Radio Regulatory Agency (the Ministry of Post and Telecommunications from August 1952). In programming, however, the autonomy of NHK, which was the operator, was respected unless its programmes were considered such as might be injurious to international friendship. This broadcast was resumed with the effectuation of the US-Japan Peace Treaty, aiming to recover Japan's international prestige. After that, as a reflection of the improvement of Japan's position and the weight of her voice in international affairs arising from her participation in the United Nations (December 1956), the role of the international service was taken more seriously. The government revised a part of the Broadcast Law in March 1959 to make two points obligatory upon NHK, namely, to set up programme standards for international broadcasting and to institute an advisory organization to deliberate on the outlines of programme arrangement.

NHK established the 'Standards for NHK International Programmes' in July of the same year. This was divided into three parts, the general standards, those based on receiving areas, and standards for each broadcast programme. They set forth fundamental directions, containing such items as respect for the spirit of the United Nations Charter, objective information, consideration of public opinion, presentation of sound entertainment, etc. The plans for international broadcasting for each year were put into practice on the basis of the order from the Ministry of Posts and Telecommunications designating service areas, program items and other necessary matters as well as on these programme standards. In programming the opinions of the International Broadcast Programme Council, an advisory organ composed of learned and experienced outsiders, and various special committees were given much consideration. In order to meet the desires and opinions of receivers overseas on programmes, an overseas monitor system was established to receive regular reports. Those monitors chosen for each region reached a total of 300 in 1960.

The international broadcasting service, since its reopening, has placed much emphasis on news and commentaries. The ratio of these two pro-

grammes in the entire broadcasting hours was always between fifty and sixty per cent. This tendency was similar to the cases of the overseas services of other countries, such as VOA, BBC, and RAI. The materials for broadcasts were not only gathered by NHK itself but were also provided by the United Press, Jiji Press and various newspapers, magazines, articles and materials of the Ministry of Foreign Affairs, and those presented by foreign embassies and legations.

One focal point in arranging programmes in the international service was to announce the standpoint and attitude of Japan in the current of important and difficult international political problems. As international functions held in Japan increased and as the heads and leaders of different countries visited this country more often, the role of international broadcasting, which was to inform of these events, was considered more important than ever. For example, the Second General Assembly of ECAFE held in Tokyo in March 1955 was the first conference of organizations related to the United Nations sponsored by Japan. The procedures of the conference and the speeches made by the delegates from different nations were reported daily according to the different transmission directions. This broadcast played the role of campaigning to demonstrate the international position of Japan with a view to entering the United Nations the following year. Since then many international conferences and functions held in Japan were all used as special programmes for international broadcasting. These, included such international conferences as the World Mayors' Conference (1956), the International Pen Club Seminar (1957), IOC General Assembly (1958), Annual Assembly of the International Rotary Club (1961), Asian Conference of Ministers of Education (1962), the General Assembly of ECAFE (1962), the World Convention of the World Federation (1963), IMF-World Bank General Conference (1964), and such international sports competitions, with Tokyo Olympics as a peak, as the World Speed Skating Championship Tournament (1954 and 1963), the Amateur Wrestling World Championship Tournament (1954 and 1961), the World Table Tennis Championship Tournament (1956), the Third Asian Olympics (1958), Japan Australia Aquatic Sports Match (1958), Tokyo International Sports Meeting (1963), and Japan-US Aquatic Sport Match (1963).

'Current Topics' newly established in 1954 took up certain important domestic or international news to investigate the problematic points as well as to introduce the Japanese government's views and the trends of public opinion towards such problems. Along with news commentators of NHK, other outside committee members on commission, such as editorial writers and heads of foreign news departments of newspapers and news agencies, were in charge of this programme. These committee members held regular meetings to exchange opinions about the information sources on politics, economy, and diplomacy with a view to improving the quality of the programme contents as well as to provide them with objective substantiations. These commentary programmes were later enlarged year by year. 'New Outlook' which gave the overall outlook on important news (1960) and 'From Today's Paper' which introduced the treatment of such by the major newspapers (1960) were established on this line.

Those programmes which introduced the situation of Japan to overseas nations were arranged in series and were helpful in winning the under-

standing of and support for this country. 'Let's Speak Japanese' established in 1959 was aimed at disseminating simple Japanese language among foreigners. Favoured with the times when interest in Japan and enthusiasm to study it were aroused, the programme called forth notable response and became popular with a large stable audience. 'Flash Back in History', a serial programme, which was established in 1963, was sent to ABF (American Broadcast Foundation) to be broadcast through its affiliated stations over USA, and won a high reputation. The collaborated programmes made by NHK and the broadcasting stations of other countries were initiated with 'Answering Your Opinion' and 'East and West' (1959). Later the 'World and Japan' and 'Features of Asia', both collaboration programmes were added.

4. Response

In consequence of the enrichment and expansion of facilities and programmes, the number of reports on the international broadcasting service after its resumption sent to NHK from the receivers overseas increased year by year. The number of reports, no more than 1000 in 1952 when the broadcasting was resumed, reached about 17,000 six years later, in 1958, and 45,000 in 1963. Many of these reports approved the fairness and impartiality of information and news and commentaries. For instance, such comments as "No other broadcasts seem to inform of the latest conditions of a country as Radio Japan" (a listener in England), and "Radio Japan provides us with correct views on various questions existing in the Far East" (the Michigan University Broadcast in America) were typical reports. Concerning the fairness in treating news items, this has been borne out in letters from the Communist Bloc as well as Free Nations. To give an example, a listener in Kranosyarsk said, "Different from such broadcasts which slander our country and our people and all Socialism as VOA, BBC, West European and other broadcasts, your broadcasts provide listeners with far more objective information and the domestic and international situations of both the Soviet and Japan as well as the relationship between them."

A broadcast programme which treated the trends of public opinion and the Japanese academic world regarding the British H-bomb experiment on Christmas Island in April 1957 brought forth wide reactions. A number of letters expressing their support of the appeal made by the Japanese people and respect for "the great resistance of Radio Japan" came from listeners in America, Canada, Soviet, Sweden, Hungary, Poland, Communist China, Australia, and Paraguay. For the third Asian Olympics held in Tokyo in May 1958 emergency measures were taken to extend the broadcasting hours for Radio Japan, besides minute-to-minute broadcasts of the games, and to supply reporters from the participating countries with materials. There was a great response to this broadcast with more than 1000 reception reports.

NHK, while publishing 'Radio Japan News' to announce programmes widely with a view to arousing interest in reception, has produced various printed matters to be used to develop more listeners from whom descriptions of the impressions and ideas on programmes were occasionally solicited. 'International Goodwill Stories' in 1956 treated of pleasant matters

found in the relations between Japanese and foreigners. Thirty-one selected from those submitted were transmitted with the title of "Hands Across the Seas." More than ten nationalities were dealt with in these stories and in America, they were reprinted in newspapers in the West, and also taken up by many broadcasting stations.

In a popularity vote of world broadcasting bodies conducted regularly by the British International Shortwave Club, Radio Japan was ranked seventh in 1961. In the same year in two popularity votes, one by a shortwave club in Denmark and the other by another in the Union of South Africa (Trans-World Shortwave Club of South Africa), it was ranked first in both cases. This indicates that within less than ten years after resumption NHK's international broadcasts had become known widely in the shortwave circles. By 1961 Radio Japan Clubs had been organized by enthusiastic listeners in fourteen countries including West Germany. And the merits and contributions of these to the propagation of Radio Japan's programmes can not be underestimated.

10. International Cultural Exchanges

1. Overseas News Coverage

After the resumption of international broadcasting described in the preceding chapter, one of the outstanding features of NHK's domestic services was active inclusion of international events and issues in the news, educational programmes. This was an outcome of Japan's regaining her position among the family of nations and the direct and indirect effect of international events. It was also the policy followed by successive presidents of NHK to contribute to the enrichment of Japanese culture through introduction of information on other countries.

NHK has long been dependent on the Kyodo News Agency for overseas news, and shortage of materials has been filled with those supplied by two or three foreign news agencies with which NHK had concluded contracts. For this reason, NHK dispatched special correspondents overseas only when there were important events to be covered. For example, NHK's own correspondents directly covered the Cease-fire Talks in Korea and the San Francisco Peace Treaty. However, it was felt the assigning of special correspondents to strategic points abroad was sorely needed in order to present news and commentaries on delicate and complicated international issues quickly and accurately. And so when the Peace Treaty went into effect in 1952, it was possible to establish overseas offices.⁽¹⁾ NHK, therefore, set up the General Overseas Bureau for Europe in Paris in April 1952 and another for America in New York in August of the following year. The duties of the correspondents assigned to these offices were two-fold. One

(1) The Asahi Newspaper Company opened one general bureau and seven branch offices in various overseas areas in April 1952. The Mainichi Newspaper Company similarly established seven branch offices in January 1953. These were the earliest overseas offices established by Japanese press companies after the war.

was to cover the principal events occurring in areas under their respective jurisdictions and the other was to carry out negotiations for programme exchanges with the broadcasting organizations in their areas and for inviting noted musicians and other distinguished persons to Japan. Japanese language staff⁽²⁾ dispatched to BBC and VOA from NHK to assist their overseas services in Japanese also cooperated in gathering materials.

From 1956 NHK's overseas staffs were strengthened year by year, and by March 1965 branch offices were set up in Washington, D.C., Mexico City, Rio de Janeiro, Buenos Aires, London, Brussels, Geneva, Bonn, Rome, Moscow, Belgrade, Cairo, Accra, New Delhi, Bangkok, Saigon, Peking, Seoul, Jakarta and a special correspondent was stationed in Los Angeles. A general bureau was also established in Okinawa in 1964. The activities of the correspondents stationed in these general and branch bureaus covered wide fields, including political, economic, social and cultural phases of various countries. As a result, NHK was able to fill its foreign news almost entirely with materials sent in from its special correspondents. Also outstanding was the activity of these correspondents in maintaining a home programme titled "Reports from NHK Correspondents", devoted to commentaries on overseas information from various angles.

Through the formation of such overseas material gathering network, NHK's bases for independent news reporting activities were established. Dispatch of special correspondents abroad tended to become more active both by NHK and the commercial broadcasters. The purpose, of course, was to cover important events occurring overseas and to investigate situations. Of special note were the activities of NHK's staff sent abroad to gather materials for a programme that commenced in November 1959. The team generally comprised two reporters, one cameraman and a leader. Such teams spend at least three months in the area concerned, during which political, economic, social and cultural conditions were studied. Materials obtained by the team are edited and organized into serial programmes for the radio and television. They have played an important part in disseminating information on the conditions prevailing in other countries. Such activities began with Africa and continued to cover Southeast Asia, Central and South America, Near and Middle East, the North American Continent, Eastern Europe, Asia, Western Europe and Siberia.

The first series "Across the African Continent" covered practically the entire Africa in five months from November 1959 to March of the following year, during which visits to twenty-two countries in Africa were presented. The reports of the team dispatched to Africa provided information on the national movements through interviews with President Nkrumah of Ghana and the top leaders of other developing countries. It also introduced political and economic conditions, cultural heritages, customs and manners and natural scenery of the various countries. The team also visited Dr. Schweitzer's hospital in Lambarene, the Ghabon Republic and successfully photographed and recorded the daily life of the famous humanitarian who was known to dislike cameras and recorders. The NHK teams

(2) Japanese language personnel have been dispatched to the BBC by request since December 1952. NHK men have been cooperating with VOA since September 1951 by request of the United States Department of State.

also produced a series of documentary films in Southeast Asia and other regions under a similar material gathering policy. The fifth series titled "Across the American Continent" which was presented from March to July in 1961, included, as a special programme, a recording of the White House Interview between President Kennedy and the President of NHK, Yoshi-nori Maeda (then General Managing Director) which was made prior to the material gathering activity of the NHK team.

After 1961, programmes aimed at clarification of special issues and those posing problems in relation to Japan were added to the programmes based on materials obtained abroad. In the former category were included such programmes as "Races and Civilizations" which delved into the origin of modern civilization from archeological and historical aspects (1961), the second part "The Origin of Asian Civilization" (1964), "In Search of the Fauna and Flora of Southeast Asia", recordings of the plant and animal life in that region (1961) and "Nature in South America" (1963). The "Youth of the World" which scrutinized the thoughts and behaviours of the young peoples of various nations under several themes (1963), "Farming Villages of the World", a comparative study of conditions in the farming villages of world nations (1964) belonged to the latter class. A television drama using Italy as the setting was produced in 1962 as the first of its kind using a foreign country as the location. Since then, similar programmes using Indonesia and Alaska have been produced. The "Mid-night Sun", jointly produced with a French organization using both Japan and France as settings opened up a new field in television dramas with the use of foreign talent and Japanese.

2. Programme Exchanges with Foreign Broadcasting Organizations

Means of exchanging programmes and recorded tapes between NHK and foreign broadcasters were opened up towards the end of 1951. In the initial stages, NHK received far more than it provided for other broadcasters. BBC and VOA, in particular, supplied NHK with large numbers of exchange programmes. These foreign organs actively supplied their programmes regardless of whether NHK requested them or not. Most of those received consisted of music. As NHK commenced this project for the purpose of broadening its sources of programme materials, even those supplied in such a manner were actively utilized. For example, the programme supplied in 1952 by the Bavarian Broadcasting Station in West Germany contained forty-two tapes recording the works presented at the Bayreuth Music Festival, but NHK broadcast them all as a serial.

At first NHK was passive in supplying its programmes to other organizations because it sent them out only upon request. From 1952, however, the Corporation also began sending out programmes voluntarily in parallel with active introduction of things Japanese through the overseas service, which was resumed in February of the same year. As a result, the tendency of the foreign broadcasting organizations to accept NHK programmes became gradually stronger. NHK, therefore, began to edit⁽¹⁾ materials appropriately selected from among programmes presented on the overseas and domestic services so as to organize exchange programmes.

Descriptions of such programmes were printed and sent out to various broadcasters together with invitations to use any of them. If requests were received, NHK immediately dispatched the programmes without delay. This was the beginning of the transcription service, which had already been undertaken by BBC.

The first NHK transcription was completed in June 1954. This consisted of recordings lasting for three hours, which contained talks in English chosen from the overseas programmes and well-known Japanese classical music, folk songs and popular songs selected from domestic services. Thirty-eight overseas broadcasters requested this transcription, in which Japanese folk songs were entirely predominant. The number of transcriptions produced by NHK increased year by year, forty-four having been made up till 1963. The contents also changed from combinations of various types of music to single-theme programmes. Collections of celebration songs, of avantgarde music and contest prize-winning works were some examples. For each transcription, nearly forty broadcasters throughout the world soon began to place orders with NHK. Meanwhile, domestic programmes incorporating materials supplied by overseas broadcasters also increased notably. In particular, programmes, in which Japanese artists, scholars and engineers staying abroad took part, and which were produced by cooperation of the stations with exchange relations, became popular.

Number of programmes exchanged per year are shown in the attached table which reveals three other facts. Although NHK received far more than it supplied during the early period of programme exchange, a balance of outgoing and incoming programmes was attained in 1957 and subsequently the outgoing programmes exceeded the incoming ones. Secondly, stations having exchange relations with NHK, had been increasing at the rate of about ten per year, but in 1963 a sudden increase of nearly forty stations was seen. Finally, the volume of exchange has shown a six-fold increase in ten years.

Outgoing and Incoming Recorded Radio Programmes

Year	Exchange stations	Programmes supplied	Programmes received
		(hours)	(hours)
1954	70	246	204
1955	80	284	501
1956	90	248	379
1957	100	437	438
1958	110	950	618
1959	120	778	653
1960	130	1,119	1,029
1961	141	993	777
1962	145	1,097	990
1963	183	1,775	995
1964	185	1,558	746
1965	195	1,187	644

Towards the end of 1956, NHK also began periodically to supply foreign broadcasters with tape recordings of foreign language programmes presented on its overseas service. This began when Station 2GB of Australia requested a "news talk". Since then stations requesting such programmes increased, the number reaching fifteen as of March 1961. The principal contents of these programmes were in the nature of information against music for the transcription service. Some sixty such tapes a month containing recordings in English, German, French, Spanish, Portuguese and Thai were generally supplied. Also from January 1961 overseas service programmes in the Japanese language were supplied to the Japanese language broadcasting stations in Hawaii, the West Coast of the United States and Brazil as services to the Japanese living in these areas.

Exchange of television programmes began in October 1957 when cultural news items were exchanged between NHK and a Swedish broadcasting organization. A year and a half later the Italian, Polish, Canadian, Australian and Swiss stations were added to the list of exchange stations, thus establishing a periodical cultural news exchange system with these organizations. In 1959, exchange of news films for children with the European Broadcasting Union member stations began through the intermediary of that organization. Seventeen nations took part in this exchange, including Japan, the United States and Australia, which were outside Europe. Exchange of general television programmes had been in effect since 1958, with programmes entered in international contests, such as the Italia Prize, as the centre of interest. By agreement among the stations having exchange relations, a system of payment for programmes outside the framework of exchange was instituted in 1960. In the same year, NHK's outgoing and incoming programmes reached a total of seventy-one. The number of exchange stations also increased year by year, reaching forty-four by 1963.

On the basis of the policy of actively offering good programmes to overseas broadcasters, NHK decided to begin a television transcription service in a manner similar to that of the radio. As the first work in this service, "Let Us See Japan" was produced in June 1963. This soon became a regular project and requests for transcriptions gradually increased.

3. Establishment of Asian Broadcasting Union (ABU)

Ten years after the end of hostilities the time was considered ripe for creating an organ for exchanging opinions among the broadcasting organizations in the Asian region for the promotion of mutual understanding, amicable relations and interests common to all. NHK, which had been advocating materialization of such an organ and had been expediting preparations, invited the representatives of various Asian broadcasters to Tokyo in July 1957 and held the First Asian Broadcasters' Conference. Eleven nations participated officially in this Conference and five other organizations, including UNESCO and Afghanistan Radio, sent their representatives as observers. The Ministry of Foreign Affairs and the Ministry of Posts and Telecommunications of the Japanese Government also supported this Conference sponsored by NHK. The Conference, which met for eight days, finally adopted a resolution which included mutual exchange

of information, materials and staff related to programmes and engineering, promotion of joint functions, holding of similar conferences periodically, etc.

The second (1958) and the third (1960) conferences were also held in Tokyo. Participating broadcasters increased to fifteen, and the agenda came to include more items covering greater details. These included holding of Asian Music Festivals through broadcasting, establishment of an Asian Prize Contest, television linking of various areas of Asia and the establishment of the Asian Broadcasting Union. Discussions at the conferences thus reflected the fact that the broadcasting organizations in the Asian nations were well on their way to development. And on the basis of a resolution adopted at the Third Conference, the First Asian Music Festival mobilizing thirteen broadcasting organizations was held in December 1960. The participating broadcasters presented folk songs of other countries for one week on their respective domestic broadcasts. The Overseas Service of NHK also started transmitting "Asian News" from February 1961, edited from materials obtained at its short-wave listening facility.

The site of the Asian Broadcasters' Conference moved to Kuala Lumpur, the capital of the Malayan Federation, and Seoul, the Republic of Korea after the third Tokyo meeting. The fourth conference was held in the former city in 1962 and the fifth at Seoul in 1963. At the fourth conference, an agenda including thirty-nine items was discussed at the programming, engineering and joint committee meetings and the focus of attention was the establishment of the Asian Broadcasting Union. At the final voting on the resolution to establish such a union sixteen organizations, including the Australian and New Zealand broadcasters, took part, and in order to expedite the establishment, a committee for drafting the articles was formed. The draft articles were adopted as they were at the fifth conference, thus making it possible to establish officially the Asian Broadcasting Union, on the 1st July 1964, and to hold the General Assembly for the founding of the union in Sydney in the autumn of that year. Thus the historic step was taken toward firmer unity of the broadcasting organizations in the Asian region.

The aforementioned General Assembly was held in November 1964 under the auspices of the Australian Broadcasting Commission. This was attended by fifty-nine representatives, including those of the seventeen regular members, associate members and observer organizations. NHK President Yoshinori Maeda was elected as the first President of the Union at the General Assembly. It was also resolved that the Secretariat of the Union be located in Tokyo. In commemoration of the establishment, the ABU Prize was set up for radio farm programmes and television documentaries. International contests in these categories have been held annually since then. Principal resolutions adopted at the plenary session of the General Assembly included the following:

(1) Proposal for a conference of the broadcasting unions of the world

As the formation of the Asian Broadcasting Union has brought into being such unions in all the regions of the world, a proposal was made for early materialization of a joint conference of these unions.

(2) Consolidation of training facilities

For the benefit of the developing ABU members, training facilities for

programming and engineering staff should be consolidated so that greater conveniences may be provided for members.

← (3) Promotion of educational television diffusion

In accordance with the resolution adopted at the Second International Conference of Broadcasters on Television and Sound School Broadcasts held in Tokyo in April 1964, the ABU members will collaborate with the developing group of nations in the field of educational television.

(4) Opening of farm programme seminar

For promoting development of farm programmes, which occupy an important position in the Asian regions, a seminar should be held with cooperation of the Food and Agriculture Organization of the United Nations (FAO).

(5) Promotion of programme exchanges

In addition to holding an ethnic arts festival of Asians through television programme exchange, emphasis should be placed on the exchange of films depicting fauna and flora peculiar to various countries, collection and distribution of light music works and exchange of children's drawings, compositions, games and scripts for women's programmes.

(6) Others

Joint production of programmes should be promoted, and cooperation be provided for material gathering teams dispatched from member nations as a means of mutual aid.

There were sixty representatives of the ABU member broadcasting organizations in twenty-six countries, who attended the Second ABU General Assembly. At the ABU Prize contest held during the Assembly, prizes were awarded the entries of the Philippine National Broadcasting Station in the radio farm programme division and NHK in the television documentary division.

4. Inviting Foreign Musicians and Notables

In April 1952, the year Japan regained its sovereignty and took the first step toward independence, NHK invited a German baritone Gerhardt Hüsck to perform in Japan. Hüsck gave thirty-six performances in the leading cities during his three months of stay, and many were taken up for broadcasts. As cultural exchanges had been closed to Japan until then, this proved to be a project that opened up the gate to a new field. This was followed in August by the engagement of the Budapest String Quartette from the United States, which widely entertained music lovers through broadcasts and public concerts. The Quartette, incidentally, was invited again in 1954. With success achieved in these invitational engagements, NHK was able to further implement its plans for inviting others, such as noted musicians, ballet and musical groups. Such invitations undertaken by NHK were based on the desire to contribute to the elevation of Japan's cultural level through direct introduction of high-level cultural attainments of other countries.

In 1953, NHK continued with such invitations and brought to Japan such noted artists, as Marian Anderson, a vocal soloist and Isaac Stern, the violinist, from the United States. Also between 1954 and the following year, the French cellist Pière Fournier, an American orchestra The Sym-

phony of the Air, and the Vienna Boys' Choir were invited to this country. The Vienna Boys' Choir gave twenty-eight performances in various cities and left a very strong impression with the Japanese people. As NHK's invitations to foreign musicians became active, a number of show managers began to set up business enterprises in cooperation with foreign musicians desiring to come to this country, in the belief that Japan was a new market for music. And it was significant that this type of enterprise finally developed to a respectable and profitable business.

After 1956 invitations to foreign artists began to be planned by the leading newspapers and commercial key stations in Tokyo. And amid competition among these organizations, it appeared that the supply of world renowned musicians and orchestras abroad worthy of being invited to Japan had been almost exhausted. NHK invited the *Lirica Italiana* four times between 1956 and 1963. In the meantime, NHK also invited the full organization (110 instruments) of the Berlin Philharmonic Orchestra led by Herbert von Karajan in 1957, the New York City Ballet (71 members) the Ricardo Santos Orchestra in 1958, the Kolo Yugoslav National Ensemble, a ballet troupe of Yugoslavia and the Vienna Philharmonic Orchestra under the baton of Karajan in 1959 as well as the Boston Symphony Orchestra led by Charles Munsche in 1960.

The *Lirica Italiana* which came to Japan in September 1956 did not bring so many members, but those who were chosen were the finest singers, conductors and producers in active service. These artists presented superb performances with the cooperation of the Japanese supporting singers, orchestras, chorus and stage managers. This project was significant not only for merely inviting highly talented Italian artists but for materializing cultural exchange between the two nations. As individual artists were those who already had engagements at various opera houses in all parts of the world, negotiations for their engagements required time and patience. However, public and broadcast performances by the *Lirica Italiana* at a time when interest in opera was rising in Japan exerted a powerful influence in the promotion of enthusiasm for opera in this country. In response to the popularity of opera, NHK continued to invite other troupes, including the Slav Opera, which came here in 1965.

In addition to inviting foreign artists, NHK also tried to introduce foreign cultures by inviting personalities in various fields of learning. These included Nobert Wiener, the propounder of cybernetics (1956), Edgar Dale, authority on audio-visual education (1956), Gabriel Marcel, the philosopher (1957), Ralph Bunche, a Nobel Peace Prize winner (1960), Albert Sabin, the discoverer of Polio vaccine (1960), Carl Orff, an educational music artist. These men in their respective specialized fields offered valuable suggestions and elucidations to Japanese audiences.

Funds required for inviting such personalities were enormous. Scenes of concerts and lectures, however, were presented on nation-wide radio and television networks, and some of the concerts were recorded and repeated on many occasions.

5. Foreign Conductors and the NHK Symphony Orchestra

Orchestral music formed the core of NHK's foreign music broadcasts

even before the war. The New Symphony Orchestra, which was reorganized to form the Japan Symphony Orchestra, was subsidized by and under contract to NHK and was active as the mainstay of NHK's presentation of orchestral music since prewar days. In August 1951, on the occasion of the 25th anniversary, the title of the orchestra was changed to the NHK Symphony Orchestra, which became exclusively devoted to NHK's service in the field of orchestral music. While participating in the management of this group, NHK also provided monetary aid.

The performance of the NHK Symphony Orchestra at the time of organization was quite high even at the international level, since it had succeeded to the experience and traditions of its predecessor, the Japan Symphony Orchestra. As a means of further improving its performance, NHK adopted the policy of inviting foreign guest conductors from time to time to provide better guidance and training for the orchestra. During the year the NHK Symphony Orchestra was established, Josef Rosenstock, who was active in prewar days as a permanent conductor of the New Symphony Orchestra, and Kurt Wöss, who was conducting the Tonkünstler Orchestra of Vienna, were invited as conductors. Weiss, in particular, tried to raise the level of the orchestra to the international standard in the three years he served as the regular conductor, and achieved remarkable results. Thus, it was the favourable influence of these foreign conductors that opened up the way for continuing with invitations to others.

Jean Martinon was invited from France in 1953. The NHK Symphony Orchestra developed under German and Austrian techniques, but Martinon was responsible for injecting a refined Latin mood into its performances. In this year, the NHK Symphony Orchestra had the opportunity to perform together with Isaac Stern, a violinist who was on a performance tour of Japan. Then in 1954, Herbert von Karajan came to Japan as a guest conductor of the NHK Symphony Orchestra. And so through performances in the leading cities, the NHK Symphony Orchestra became widely known as the driving force in the campaign for diffusing orchestral music throughout Japan.

Nicholas Eschbacher of Switzerland took over as standing conductor in 1954 from Kurt Wöss. And Eschbacher was followed in 1957 by Wilhelm Leubner who came from Vienna, and by Wilhelm Schüchter in 1959. Jean Fourne, Willie Boskovski, Constantin Schvestry, Earnest Anselmet and many other noted musicians were also invited as guest conductors for short terms.

From early September 1960, the NHK Symphony Orchestra of 119 instruments made a performance tour of Europe and America. This was the first time for a Japanese symphony orchestra to give concerts abroad. Performances were given in twenty-three cities in twelve countries where the high level of techniques attained by the Japanese orchestra attracted much attention. But the rôle of the NHK Symphony Orchestra as a cultural mission must be evaluated even more highly than the results of its performances. Incidentally, the conductor and soloists during this performance tour were all Japanese.

After performing at the First Asian Music Festival in Hong Kong, in September 1962, the NHK Symphony Orchestra made a performance tour of Southeast Asian countries. The full organization of this orchestra also

gave performances in Australia and four other countries in February 1964. In April 1966, the orchestra went to Central and South American countries as a Cultural Mission from the Japanese Government. Its itinerary included sixteen performances in Hawaii, the West Coast of the United States, Mexico, Brazil, Argentina and Chile. The way was thus fairly paved for dispatching the NHK Symphony Orchestra abroad.

6. International Contest Prize Winning Works

After the war, conditions necessary for improving the quality of programmes, such as modernized studios, improvement of various equipment and reinforcement of production staff, were gradually consolidated, and fields unique to broadcasting with regard to the contents and patterns of programmes were developed one after another. Experimental programmes aimed at researches into the possibilities of production and engineering were also attempted. Among such programmes there were some which won high evaluations at international or domestic contests. NHK's programmes were entered at the Art Festival sponsored by the Ministry of Education for the purpose of elevating the cultural level of Japan. This festival has been held annually since 1964, and it has now become almost customary for NHK entries to win either the grand or encouragement prizes.

The first entry of NHK for the Italia Prize was submitted in 1956 and some musical programmes were submitted in the radio division. Since then NHK has made efforts to publicize the level of Japan's broadcasting at various international contests. In 1957 NHK's entry at the radio division of the Italia Prize "The World in the Bottle" won the Italian Broadcasting Corporation Prize. In the following year, another entry of NHK, a musical programme "The Three Images in Words and Music" was awarded the Grand Prize. From that year, an NHK's staff member responsible for programming began to sit on the jury for the Italia Prize. In the television division, NHK's entries were submitted at the Salzburg Television Opera Prize Contest held in 1962 and at the Venice Documentary Film Festival held in the same year. At the former, NHK's work won the first prize and secured the second prize at Venice. These achievements amply indicated the high level of NHK programmes to the world at large. Principal works of NHK which were awarded prizes at international contests are cited in the following table.

7. Training of Foreign Broadcasting Staff

Prior to the establishment of the Asian Broadcasting Union, which is a liaison and coordinating organ for the broadcasting organizations in the Asian region (see Section 3), NHK since 1961 has been dispatching its officers and staff members to some Asian nations, including Pakistan, Malayan Federation, Indonesia and Thailand, whenever requests were received, to collaborate in broadcasting station construction plans as well as in the field of engineering. Furthermore, at the request of the broadcasting organizations in these countries, NHK agreed to undertake group training of their staff members in technical operations and programme produc-

tion techniques. The Central Training Institute, established in 1961, aimed chiefly at providing systematic and continual retraining of NHK staff in the duties related to their respective assignments. The Institute was also used for training staff members of the commercial broadcasters in

Principal International Prizes Won by NHK's Entries

Contest	Year	Prize	Division	Work
Italia Prize	1957	Italian Broadcasting Corp. Prize	Radio music	"World in the Bottle" a musical tale
	1958	Italia Prize	"	"Three Images in Words and Music"
	1960	"	"	"Ondine", a musical poetic drama
	1962	"	Stereo drama	"The Volcano"
	"	Italian Broadcasting Corp. Prize	Radio drama	"The Mountain Was Not Dangerous" (Osaka)
	1963	"	Radio stereo music	"True Sky Blue", musical tale
	1964 1955	Italia Prize "	Radio drama Radio music	"A Mountain Witch" "Phaeton" a musical poetic drama
Salzburg TV Opera Prize Contest	1962	First Prize	TV opera	"Aya-no Tszuzumi—Vindictive Love"
Prague International TV Prize Contest	1965	Gold Prize	TV documentary	"Snowy Herons and Children"
Monte Carlo International TV Festival	1962	Special Jury Prize		"The Buddha"
	1964	International Catholic Broadcasting Federation Jury Prize		"The Grey City"
Australian Prize at Farm Programme Contest (ABU Prize)	1964	Australian Prize	Farm programme	"Early Bird-Village News" (Sapporo)
Alexandria International TV Prize	1962	Third Prize	Documentary-Education	"Japanese Antelopes" a nature album
	1963	Third Prize	Variety	"Collection of Children's Songs"
Munich International Youths Prize Contest	1964	First Prize	Education-Youths	"I Want Friends"—a TV documentary
Venice Documentary TV Film Festival	1962	Second Prize	TV documentary	"Sun's Friends"

Japan and those from foreign broadcasting organizations.

Group training of staff members from foreign broadcasting organizations commenced in August 1962. At the first group training undertaken by NHK thirteen members of ten foreign broadcasting organizations took part. This course using educational television programmes as the theme lasted for one month. Training courses offered since then comprised those shown in the following table. Also, in view of the success achieved in broadcasting the events of the Olympic Games held in Tokyo in 1964, NHK at the request of Mexico, the site of the next Olympiad, has accepted the task of training the Olympic broadcasting staff of the Mexican broadcasting organization. (see the following table)

11. Tokyo Olympic Broadcasting

1. Establishment of Implementation System

Tokyo was selected as the site of the 18th Olympiad in 1959, the year before the Olympic Games were held in Rome. Preparations for covering the events of the Games were immediately put in hand, and while considering the plans for the operation of the facilities, developmental work on new techniques was expedited. Meanwhile, by request of the Olympic Organizing Committee, NHK commenced negotiations with the broadcasting organizations of other countries for gathering materials on the Games. Through these negotiations, it was found that the emphasis was on television reporting rather than for radio. It was also estimated that the number of countries desiring to participate in the reporting of the Olympic events would reach as many as sixty. As a result, NHK recognized the urgent need for providing some fully equipped facilities in order to ensure smooth broadcasting and obtain the expected results.

In the long-term development programmes implemented since 1958, the plan for constructing a television centre was included for the purpose of providing a central base for producing programmes for the television

Foreign Broadcasting Staff Training

Training period	Trainees	Chief courses
1962 Aug.-Sept.	13 from 10 Southeast Asian countries	Educational TV programmes
May	17 from Indonesia	Engineering
1963 Aug.-Oct.	19 from 10 Southeast Asian countries	Educational programmes
Aug.-Oct.	13 from 8 Southeast Asian countries	Television programmes
1964 Jan.-Mar.	13 from 5 Southeast Asian countries	Television engineering
Nov.-Dec.	21 from 14 Southeast Asian countries and Nigeria and El Salvador	Educational programmes
1965 Jan.-Feb.	14 from 8 Southeast Asian countries and El Salvador	Television engineering
Aug.-Sept.	17 from 11 countries in Southeast Asia and Central and South America	Educational TV programmes
Aug.-Nov.	11 from 8 countries in Southeast Asia, Central and South America, and Africa	Television engineering

service, which was growing at a rapid pace. In consideration of the necessity to prepare fully for the Olympic broadcasting, further enlargement of this plan was reviewed. As a result, the plan was revised to include building a broadcasting centre that would serve as the centre of radio and television programme production. In other words, a target was set for completing a structure to serve as a general centre for the Olympic broadcasting, in October 1964. This programme called for further expansion and consolidation of the Centre after the Olympic Games so that it would be capable of meeting the needs of the ever growing broadcasting service. In fact, the Centre was to be developed into such a facility of top-level world standards by 1967. The construction of the broadcasting centre started in April 1963 on a site covering an area of 82,645 square metres. The building to be completed at the end of the first-stage construction work was to have a total floor space of 64,450 square metres and be sufficient to take care of the Olympic broadcasting.

In order to bring preparations for Olympic broadcasting to completion in time, NHK in January 1964 established the General Headquarters for Olympic Broadcasting composed of members selected from the General Broadcasting Administration, Programming, Engineering and International departments. The Tokyo Olympic Broadcasting Committee comprising representatives of NHK and the commercial broadcasters was also formed to operate the Olympic broadcasting efficiently and smoothly. This committee adopted the following policies in February 1964 with regard to securing materials for reporting the events: (1) NHK will provide all video materials and the commercial broadcasters will be allowed to choose freely from the pictures available. (2) NHK and the commercial stations will work independently on the radio coverage of the Games.

By request of the Olympic Organizing Committee, NHK had been negotiating with foreign broadcasters for contracts for the right to broadcast the Olympic events since the autumn of 1963 and these were completed by April 1964. Foreign broadcasting organizations, which concluded agreements with Japan included the Australian Broadcasting Commission (ABC), the Canadian Broadcasting Corporation (CBC), the European Broadcasting Union (EBU), the National Broadcasting Company (NBC), the National Broadcasting Company International (NBCI) and the Organization International de Radiodiffusion et Télévision (OIRT). Through these agreements, arrangements were made for receiving television reports of the Olympic Games in the principal parts of the world.

The operation of the broadcasting facilities was centred on the aforementioned Broadcasting Centre. The Centre contained large numbers of radio and television studios including those provided for use of domestic commercial broadcasters and foreign broadcasting organizations. In addition, it contained a sound switching centre, booking offices, television equipment rooms, film recording rooms, sound recording rooms and business offices. In other words, it was provided with sufficient equipment and facilities to centrally process video and sound materials sent in from the various arenas and to distribute them to the domestic and foreign broadcasting organs.

NHK was also fully prepared with facilities and equipment at the various sports arenas. These included new mobile remote pickup cars with

a camera vibration suppressor unit for picking up the marathon race from the start to the finish, various new equipment for improving efficiency of the pickup work at the different arenas, such as the microphones for close talk interviews, intersyncs, separate luminance system television cameras, slow-motion video tape recorders, etc. These devices had been developed at the NHK Technical Research Laboratories specially for use during the Olympic Games (see Section 2). It must, therefore, be recorded that it was such technical researches that soon developed to successful space relaying (see Section 4) of television programmes.

NHK alone expected to mobilize some 2,500 Olympic broadcasting staff. Since May 1963 the Corporation had been providing special lecture courses on the various events of the Games so that those assigned to them would have sufficient knowledge to undertake efficient reporting of the events. The training particularly emphasized team work among those assigned to the twenty different events of the Games.

2. Relaying of the Olympic Events

The programming policy of NHK with regard to Olympic broadcasting was as follows: The point specially emphasized was that it should be clear enough so that listeners and viewers not familiar with sports events and terms would understand. Secondly, since programmes were to be supplied to foreign broadcasting organizations, the contents should be orthodox, centring on races. During the fifteen days of the Olympic Games, which began on the 10th October, 1964, the radio service presented ten hours a day of news and related special programmes through the intersync system linking an average of ten arenas. Television, on the other hand, presented programmes for an average of eleven hours a day from eight arenas. Furthermore television programmes included two hours of colour presentation. Through these broadcasts, the activities of the Japanese as well as the world's foremost athletes were brought into the homes of both Japanese and people overseas.

Selection of the events to be relayed was based on the main events of the Games popular throughout the world and those in which the Japanese athletes were likely to do well. In other words, the track and field and swimming events formed the centre of interest. Priority was also given to "judo" and volleyball as these had been newly added as Olympic events and Japan had chances of registering good records. Both for the radio and television, master announcers were assigned to the broadcasting centre to intercept reports from the various arenas. The microphones were also switched over to any arena where events of greater interests were taking place. In this case, the intersync,⁽¹⁾ newly developed for the Olympic broadcasting, was used with television. In addition, video tape recordings were inserted from time to time into the programmes in order to follow the events from the preliminaries as occasions deemed it more effective. Also applied were slow-motion video tape recorders, electronic recordings

(1) Intersync : During the Games, relays were undertaken linking sixteen arenas, and through the use of this unit, video switching, special effects, insertion of the telop, splicing of video tapes, etc. could be conducted smoothly.

and picture magnification methods to achieve special effects. The slow-motion video tape recordings,⁽²⁾ in particular, produced excellent effects in track and field, swimming, diving and gymnastics. They proved highly popular also with the foreign broadcasters.

The relaying of the entire Marathon race lasting for three hours was an epoch-making attempt. For this purpose, various facilities and new equipment were mobilized. In other words, six rebroadcasting seats were set up at the National Stadium and along the course, and a mobile pickup unit and twenty-three television cameras were arranged. The designed and manufactured mobile pickup unit was provided with a unique camera vibration suppressor,⁽³⁾ and two transistorized television cameras were installed. Pictures from the mobile pickup unit were transmitted to a helicopter having an automatic microwave tracking unit, which flew over the course at a speed of 20 kilometres an hour. In addition to the wireless pickup unit mounted on the helicopter, time indicators⁽⁴⁾ and other latest equipment were used. Such equipment and the functions of the studio in the Broadcasting Centre for controlling them were important factors for the successful relaying of the marathon.

NHK also presented the opening ceremony and some of the events in colour for the first time in the history of the Olympic Games. The cameras used for these broadcasts were of newly-developed separate luminance system. The use of these cameras gave no degrading effect to the monochrome reception, and, moreover, the colour pictures proved to be as clear and sharp as any monochrome pictures.

The response of the Japanese viewers towards the Olympic broadcasting was notable. This was proved by the surveys undertaken by the Radio and Television Culture Research Institute during and immediately after the Games. In short, the achievements of this broadcasting were evaluated very highly by all. Television broadcasts were specially appreciated as more than 90 per cent of the samples interviewed stated that it was more effective than either the radio or newspapers. For example, 84 per cent of the viewers watched the opening ceremony on their television sets, but only 9.3 per cent of listeners heard it on radio. Reactions towards various events differed according to the item, broadcasting hour and day of the week. The highest rating of 85 per cent went to the report of the women's volleyball match between the Soviet Union and Japan. This was followed by the gymnastics, swimming and marathon, in which the Japanese teams had better chances of making good records. Evaluations of the viewers and listeners on these broadcasts were quite high.

(2) Slow-motion video tape recorder: This was a compact unit with fully transistorized circuits. It had the so-called "instant stop" capacity, to stop temporarily at any spot during the slow-motion playback and restart after a few seconds. Its continuous playback time ranged from thirty to sixty minutes.

(3) Television camera vibration suppressor: In case of pickup operation using a mobile unit some device for preventing the displacement of the light axis of the camera due to vibration of the vehicle is needed. This device was designed for such a purpose and was used for relaying the marathon and the boat races. In particular, zoom lenses with 1,000 mm focal range were used, but through the application of this device, the quality of the pictures showed no degradation.

(4) Time indicator: A special timer designed for indicating the passage of time during the marathon and the lap time in races. An electrical system, which allowed stopping of the timer at the instant of time indication and then catching up with the time passage after a few seconds, was used for this device.

Radio Japan, NHK's overseas radio service, also presented daily reports on the Olympic Games to the world on its general and regional services. In the former, temporary extension of the broadcasting time was made to devote about eight hours a day to this item. By this means the scenes of the opening ceremony and progress of various events were transmitted throughout the world simultaneously. Broadcasting of events covered about thirteen hours a day, including those in which the respective areas were more interested, and recordings of the activities of the athletes of various countries as well as interviews with them were highlighted. Reports from the overseas listeners have shown that the reception in various regions was quite good, and the quantity and quality of the broadcasts received high praise.

The NHK Technical Research Laboratories designed various new equipment in preparation for Olympic broadcasting. Principal items were as footnotes. (see p.308~309)

3. Collaboration with Other Broadcasting Organs

For Olympic broadcasting NHK placed at the service of the Federation of Commercial Broadcasters in Japan and the reporters dispatched from foreign organizations some spaces for liaison and coordination, thus cooperating with their respective activities. At the same time, in accordance with agreements concluded with these broadcasting organs, NHK offered pictures it had picked up at various arenas for use by the other organs (see Section 1).

The Olympic Broadcast Headquarters set up by the Federation of Commercial Broadcasters was used by five radio and five television stations in Tokyo and vicinity, which served as the key stations for all commercial broadcasters. These key stations gathered materials and edited them for distribution under the instructions of the Federation. NHK provided television pictures covering a total of 1,521 hours of programme time. Of this total, pictures equivalent to 323 hours were those obtained with NHK's own remote pickup cars by its own staff specially for the commercial broadcasters. These pictures were transmitted from the Broadcasting Centre to each key station over coaxial cables via the Tokyo Relay Centre (TRC) of the Japan Telegraph and Telephone Public Corporation.

NHK was granted the exclusive television broadcasting rights for the Games by the Olympic Organizing Committee and was also entrusted with the work of consolidating and operating the broadcasting facilities. It was, therefore, one of the important tasks of NHK to provide conveniences for foreign broadcasters reporting the events, which dispatched 656 radio and television reporters and engineers. Those undertaking television material gathering comprised twenty-two broadcasting organizations from nineteen countries, while fifty-five radio stations from forty countries took part in the Olympic broadcasting. Some stations, such as in Kenya, Pakistan and Monaco, sent only one reporter, while others like the European Broadcasting Union sent as many as 280. NHK provided radio rebroadcasting facilities at all the sports arenas so that the reports might be sent directly to the respective countries via the Broadcasting Centre. Provision of conveniences, such as admission to the arenas, recording of

materials, use of studios and international channels, loan of recorders and playback devices for editing, assignment of interpreters, etc., were all arranged by NHK at the booking office.

As stated before (see Section 1), six organizations of broadcasters concluded agreements with NHK, which daily presented scenes from a maximum of eight events daily. Pictures included in these broadcasts were freely offered for selection by the foreign broadcasters, and those chosen were provided for them in the form of video recordings. For this purpose, NHK used twenty-three video tape recorders, three film recorders and six sound recorders for 16 mm films. Such recordings totalled 365, producing tapes and films equivalent to 1,313 hours of broadcasting time. These were flown daily for presentation in television broadcasts in forty-five countries.

Pictures picked up by NHK staff, in addition to being offered to the aforementioned foreign broadcasters, were also provided for the production and distribution of film summaries of the entire Games as stipulated in the Olympic Charter and for various broadcasting organizations in the Asian region. As a result, these pictures were presented by 104 television stations in 70 countries, thus achieving a scale unprecedented in the history of the Olympic Games. NHK also produced films summarizing the events at the request of the Olympic Organizing Committee. These were distributed to the key stations in Japan, while for the foreign broadcasters, summaries edited to about fifteen minutes in length were provided daily along with commentaries in English. These filmed summaries were provided for a total of forty-two organizations comprising thirty-eight broadcasters and four press agencies. In the first place, broadcasting organizations in the Asian region showed little enthusiasm toward televising the Olympic events. This was partly due to the enormous funds needed for securing television rights. NHK, therefore decided to produce special programmes and offer them to the Asian broadcasters at cost, if they desired them. This decision was made in consideration of the fact that the Olympic Games were held for the first time in Asia and the Asian Broadcasting Union had been formed in July of that year. These comprised daily reprints of thirty-minute duration covering various competitive events selected from NHK's Olympic Highlights presented in Japan.

4. Space Relaying of Television Programmes

The successful space relaying of television during the Tokyo Olympics for the first time in the history of the Games was an event deserving special mention. Relaying of the first Olympic Games held in Asia throughout the world via the communications satellite was the strong hope, not only of NHK, but all the related organs in Japan. Ambitious provisions related to materialization of space relays of Olympic scenes were included in the broadcasting contracts NHK concluded with NBC and EBU.

In August 1962 the Liaison Council for Satellite Communications Experimenting Organs was formed jointly by the Ministry of Posts and Telecommunications, Kokusai Denki-Tsushin (International Telecommunications) Company, Ltd., Japan Telegraph and Telephone Public Corporation and NHK. The object of this Council was to coordinate investigations and researches the four parties conducted separately for the sake of consolidat-

ing the experimental facilities. This was because that soon after the successful televising from the United States to Europe via Telstar I, the possibility of international relaying of television programmes over similar channels could be anticipated. Then in November 1963, video and sound reception from the Mohave Base in the United States via Relay I was attempted as the first space relaying experiment between America and Japan. This epoch-making attempt at television relaying was unexpectedly utilized for reporting the tragic assassination of President Kennedy, which took place just before the commencement of the experiment. The picture relayed to Japan was clear and sharp, reinforcing the expectations for international relays of the Olympic events.

In March 1964, a successful television relay from Japan to the United States was achieved by the use of Relay II. In this manner, transmission and reception of television signals between Japan and the United States were made possible. In this experiment, the transmitter and receiver designed at the Technical Research Laboratories of NHK were used. In April of the same year, a successful attempt was also made for relaying television programmes from Japan to Europe via Telstar II. In the former, pictures were transmitted to American homes over ABC, CBS and NBC networks, while in the latter, pictures from Japan were received in twenty-four European countries. Reception in these American and European areas was quite good. As a result, the Japanese Government and other interested organizations began to indicate enthusiastic hopes for space relaying of the Olympic events, and the plans for implementation rapidly took concrete form. However, as Relay I was already past its guaranteed service life and Relay II and Telstar II were expected to be orbiting at positions unsuitable for space relaying of the Olympic events during the period in question, the use of existing satellite was considered unfeasible. Consequently, all hopes for materializing space relaying of the Olympic Games were placed entirely on Syncom III, a stationary satellite scheduled for launching in the spring of 1964.

The top officials of the Ministry of Posts and Telecommunications and related organizations frequently went to the United States to negotiate with the American parties connected with the project in their effort to materialize the hoped-for space relaying. In these negotiations, technical aspects and share of expenses formed the principal subjects. Meanwhile, an agreement was reached on improving the picture quality through the use of the non-linear emphasis system and the band compression unit developed at the Technical Research Laboratories. This necessity arose from the fact that the aforementioned Syncom III was originally designed for telephone repeater use and was unsuitable for television relays because of the narrow bandwidth. It was also decided that funds needed for launching the satellite in question would be shared by NHK. Syncom III was thus launched in August 1964, just in time for relaying the Tokyo Olympic events. NHK thereupon concluded an agreement with the Communications Satellite Corporation (COMSAT) of the United States, and so the Olympic Games relaying plans could be implemented, with the United States, Canada and Europe as the receiving areas.

On the basis of the relaying plans, the Japanese organizations connected with the project expedited manufacture and maintenance of equipment and

facilities. Then after September of the same year, domestic loop tests were conducted using Syncom III. Experiments on various systems were also conducted at the NHK Broadcasting Centre via the satellite. NHK followed these up with dispatch of nine engineers to Point Magu receiving base in California to take charge of the operation of equipment. By such means, NHK ultimately succeeded in transmitting excellent pictures. In parallel with these efforts, NHK requested EBU and CBC to test the picture quality and results proved that this was satisfactory.

The scenes of the Opening Ceremony were presented either as live or video taped programmes in the United States over NBC, CBS and ABC networks, in Canada through CBC and in Europe over networks of EBU members. Incidentally, the Olympic programmes relayed via the satellite during the Games totalled approximately thirty-two hours. EBU distributed these programmes in the form of video tape recordings to twenty-one member organizations in sixteen countries. Also, five OIRT members in five countries presented these programmes supplied by EBU. In Japan, programmes originated at the NHK Broadcasting Centre but were beamed from the Kashima Earth Station (Ibaraki Prefecture) of the Radio Research Institute of the Ministry of Posts and Telecommunications. Video signals transmitted to the Broadcasting Centre from the grounds were relayed through the Syncom channels, while sound was transmitted through the underwater cable spanning the Pacific.

12. Broadcast Engineering

1. Studio Facilities and Equipment

Ever since the commencement of the television service in February 1953, NHK has been increasing or renovating studio facilities of its stations to meet the increasing items of programmes and improving various broadcasting equipment in line with advancement of technology. The NHK Hall in the annex of the Tokyo NHK building completed in March 1955 formed a studio of music hall style with a total floor space of 882 square metres and a capacity for 700 seats. In this studio the results of acoustic researches for buildings achieved over many years were crystallized. The hall not only indicated the direction of music hall designs in general but established a method of designing studios for all the stations of NHK.

The interior materials that occupy an important portion of studio design in general have been changed as a result of NHK's new attempt. Formerly, tex materials of plant derivative and cloth-lined asbestos board heat insulation have been used. However, these were replaced with sound absorbent construction for middle and treble ranges using asbestos blankets covered with perforated boards and sound absorbent structure for the bass range using hard boards. These new materials now became standard interior decorations for the studios. Also, as a result of researches in sound insulation and vibration suppression, it became possible to undertake systematic designs of noise tolerance levels and sound insulation structures

of the studios. In particular, the floating inner walls with light sound insulating layers supported by vibration-proof rubber bases became the standard construction pattern of the studios, thus perfecting measures for preventing noise likely to be transmitted from adjoining studios.

On the basis of this new studio design pattern, studios in the various NHK stations were remodelled or increased. At the same time, stations located in major cities were rebuilt, after 1955, as new broadcasting halls with scales adequate for handling the increasing volume of business in a rational and efficient manner. The studios in these new buildings were designed and built in accordance with the establishment standards adopted in advance, which took into consideration the production of increasing television programmes and specified the sizes and numbers of such studios in line with the order of importance the stations occupied in various areas.

In Tokyo, only four exclusive television studios and one used for both radio and television were available until the aforementioned NHK Hall was completed. Since then, both the broadcasting hours and programme items increased annually. Efforts were also made towards domestic production of video transmitters and incidental equipment, which had been depending on imported products. Then from about 1958, construction of additional local stations became active, and with the commencement of the educational television service, expansion and increase of studio facilities made notable progress. As a result of these measures and projects, the number of television studios in Tokyo had increased to nineteen by April 1961. Also, radio stations in the major cities were provided with at least one television studio. These studios were equipped with fixed horizont and other incidental devices, and new techniques were applied to the lighting system. Colour television studios were also provided from September 1960, and equipment needed for colourcasting was also installed in the NHK Hall.

When researches on image orthicon television cameras at the Technical Research Laboratories bore fruit, the manufacturing techniques were almost perfected, and after 1956 production of these cameras was put on regular routine at all leading manufacturers, thus eliminating the need of dependency on imports. As a result, television cameras required by NHK and the commercial stations could now be filled with domestic products. With technical development achieved in the effect devices and video recording equipment and consequent expansion of their applications, television programme production techniques also became more complex. Control devices were also made compact and lightweight through transistorization and development of unit systems. Their stability improved and operation became easier. Lighting control also shifted from the former mechanical to the electric system through the application of silicon rectifiers (SCR) developed in 1962, and the use of the lighting adjustment device for television for the first time in the world. The shift made possible multiple purpose as well as remote operation of lighting. An idophor was installed in the news studio in 1963.

The establishment of remotely controlled studios and the adoption of 4.5-inch image orthicon cameras introduced new features into the studio equipment. The former was provided for the Tokyo NHK building in 1962 for simplifying mechanical operations and introducing remote control of equipment. This equipment included two transistorized remotely controlled

cameras and various other devices facilitating studio operation. The latter was larger and higher in performance than the existing 3-inch type. Three 4.5-inch cameras made by Marconi were imported and assigned to the studio. As transistorized cameras made in Japan became available later, these were used in parallel with the larger ones.

After the age of parallel operation of the radio and television was ushered in, unidirectional microphones became predominant and as various ideas and designs of this type of microphones developed, their performance improved and dimensions and weight were reduced. The rod type moving coil microphones now used widely for pickup purposes began to be produced domestically in 1953. It was around this time that the interest of the audience in the treble range became intensified, stimulated by stereo and LP record broadcasting. And in order to meet the demand, unidirectional condenser microphones and variable directional microphones made by Neumann of West Germany began to be used. From about 1955, when the NHK Hall was completed, unidirectional ribbon microphones made in Japan began to be used for programmes opened to the general public. As these were small in size, they were also used widely for television.

The RCA ribbon microphones, imported in large numbers, have been predominantly used since about 1958. Later, however, smaller types developed at the Technical Research Laboratories of NHK, which were smaller and higher in performance, were used. The close-talk microphone, which was first used in 1932 was of special construction made up of a microphone and a sound tube long enough to bring the microphone close to the mouth of an announcer when it was mounted on the hat. This had the effect of suppressing surrounding noise, as only the announcer's voice was picked up. Many of these were used during the Tokyo Olympic Games, and attracted the attention of the foreign reporters.

One of the important items in the Second-stage Six-year Programme of NHK, which was a series in the long-term plan beginning in 1962, was to promote enrichment and renovation of studio equipment. Under this programme, remodelling of the studios in various stations was actively undertaken. In Tokyo, the Broadcasting Centre, one of the largest in the world, started construction in 1963, and the first-stage construction work was completed in 1965 (see Chapter 11 "Tokyo Olympic Broadcasting", Section 1). The Broadcasting Centre contains eight television studios, including a large one with a floor space of 1,150 square metres, and three radio studios, one of which has a floor space of 580 square metres. It also has sound and video recording, dubbing, sound effect, echo rooms and many other incidental facilities. The camera control devices, which had been installed in the subcontrol rooms, were all concentrated in the technical operations centre, thus adopting the video room system designed to improve operations and to economize on the facilities.

One of the important factors that helped rapid development of broadcast engineering in Japan was the early transistorization of broadcasting equipment. Transistors, which were invented in the United States in 1948, spread in application from radio receivers and amplifiers to video devices of television equipment, transmitters and receivers. In Japan domestically produced transistors appeared around 1954 and researches in their application were expedited. Taking advantage of the character-

istics of transistors, such as feasibility to miniaturization, reduction in weight and power consumption and improvement in stability, television cameras, receivers, recorders, remote pickup units and very low-power transmitters were manufactured, thus broadening the applicable fields of transistors.

2. Sound and Video Recording Techniques

Domestic production of tape recorders became possible around 1951, and these were gradually distributed to all the stations in the country. The advent of this new recording device was a godsend to all the stations, which had been obliged to undertake editing and production of programmes using unwieldy disc recording devices. Later, all types of recorders, such as the stationary, mobile and portable, were improved through advances made in the manufacturing methods as well as suggestions made by the technical field workers. As a result, most of the radio programmes came to be presented as playbacks of recorded tapes.

For a year and a half after the commencement of the television service, all the programmes were either live or filmed. However, when kinescope recording became possible from around October 1954, notable changes were introduced into editing and production of programmes as in the case of the radio. The first kinescope recorder used was imported from GPL of the United States and with this, video recordings of popular radio programmes and sporting events were taken in large numbers for presentation on television. However, considerable inconveniences were unavoidable as this method of recording required time and trouble for developing the films. NHK, however, soon conceived the idea of frame-by-frame video recording by which the decisive moments of action, such as in "sumo" or Japanese wrestling requiring quick action, could be analyzed and reproduced. This system of recording was put to practical application from 1956. This system opened up a new epoch in the recording and broadcasting of sports. The slow-motion video recording system, which was a further development of the aforementioned frame-by-frame recording, widened its utility still more. In 1958 an electronic recording device using a storage tube was invented to make possible immediate reproduction of the decisive instant. The use of storage tube for producing special effects in television for the first time in the world is credited to NHK.

Researches in recording television signals on magnetic tapes commenced at the Technical Research Laboratories of NHK in 1955. Soon a magnetic video recorder of a system unique to NHK was made on a trial basis, but its practical application was delayed for various reasons. When video tape recorders were announced by Ampex of the United States in 1956, their superior performance was immediately recognized, and these were adopted by the broadcasting organs not only in America but also by most countries in the world. This resulted in the monopoly of video recording by the Ampex product. In Japan, some commercial stations imported the Ampex video tape recorders soon after their announcement and began presenting programmes recorded on magnetic tapes. NHK also imported a unit for the purpose of investigating its mechanism as well as using it for televising purposes.

The import price of Ampex video tape recorder was about ¥25 million or approximately \$70,000, which was quite high. In the circumstances, there was a wide-spread demand for reducing the price through domestic production. NHK, therefore, provided data obtained from its investigations for the leading manufacturers, while at the same time offering technical guidance. The Japanese Government also granted subsidies to these manufacturers to encourage them in their research and developmental work. As a result, a trially made video tape recorder was announced by the Sony Corporation in the autumn of 1958. This was followed by the products of other manufacturers, and the domestic production of the Ampex type video tape recorders made a start. The production process of recorded programmes was shortened considerably and the quality of pictures improved through the introduction of video tape recorders. Additional video tape recorders were installed at NHK and by the use of other auxiliary devices, the range of their application was widened. For example, when colour television commenced in 1960, a colour production attachment was imported to make possible colour video recording and playback. Also, an intersync unit was imported to make mixing or mutual insertions of video tape recording and live pictures possible.

Video tape recorders were distributed gradually among local stations after 1961, resulting in the increase of the importance of video recordings in programme editing and production. In 1963 domestically manufactured video tapes, which had been under development for some time, were put to practical use. Transistorization of video tape recorders was also expedited, resulting in the production of compact devices with very low power consumption at radically reduced costs. Remote pickup video tape recorder vehicles were soon constructed, and these were followed by the development of slow-motion video tape recorders (see Chapter 11 "Tokyo Olympic Broadcasting", Section 2), which were used for special effects. Application and engineering related to video tape recorders thus achieved remarkable development.

3. Remote Pickup Techniques

After the age arrived of parallel operation of the radio and television, remote pickup broadcasts on unprecedented scales became possible because of the transistorization of wireless and sound equipment, promotion of the production of high-fidelity devices and the increased use of remote pickup vehicles. In particular, with perfected technical operations of wide-band FM wireless remote pickup systems, high-quality broadcasts have been made possible. Also, in the remote pickup stereo broadcasts, technical operations had advanced to a stage where, in 1959, the performance of the *Lirica Italiana* could be presented in stereo using the television sound and the first and second networks of the radio. Insofar as pickup broadcasts on the radio were concerned, it appeared that every possible means had been exhausted, and the experience and achievements were amply demonstrated during the Tokyo Olympic Games. For this project, NHK had prepared some 600 microphones and 500 tape recorders.

Remote pickup television broadcasts also widened the applicable range through improvement of field pickup cameras, zoom lenses, television remote pickup vehicles and the development of devices for special effects.

As a result, remote pickup broadcasts have grown to occupy an important position in overall broadcasting, including the radio. At the outset of the television service, remote pickup cameras available comprised only four image orthicons made by GPL of the United States. This naturally limited the range of programme contents. Then RCA's zoom lens was used for the first time in the autumn of 1953 to improve the pickup effect. The same year, a 7,000 Mc microwave remote pickup unit (FPU) was developed at the Technical Research Laboratories. Towards the end of the following year, television pickup cars were constructed and assigned to the Tokyo and other stations. Remote pickup equipment was thus put in order. In 1955, a four-dimensional drama titled "The Pursuit", which was the crystallization of the possibilities of remote pickup broadcasting, was presented. In this programme, eleven cameras and wipers were set up at four pickup spots, and nearly 300 staff members took part in its production. This was the first television programme to win the grand prize at the Art Festival sponsored by the Ministry of Education. Later, many other multi-dimensional programmes set on land, sea, in the sky and under the water were presented on the basis of this first experience and mobilizing newly developed equipment and newly conceived production techniques.

The compact television camera "walkie-lookie", which was developed at the Technical Research Laboratories of NHK in 1955 was provided with 1-inch vidicon tubes, and its transmitter was of an AM system using 2,000 Mc pencil tubes. This equipment permitted mobile pickup of boat races, etc., and laid the foundation for later construction of fully equipped mobile remote pickup cars. Efforts were made at the Laboratories to improve the performance of this device. It was fully transistorized in 1958 and the FM system was adopted to perfect a new type with greater mobility. This equipment was mounted on a helicopter to pickup the Antarctic observation ship which returned to its base in April of the same year and the first attempt of its kind in Japan.

Of particular note in the improvement and development of field pickup devices were miniaturization and increased mobility of such equipment through transistorization. Because of these, the scope of pickup broadcasts was broadened and the number of large-scale programmes exploiting the special characteristics of television markedly increased. At the same time, for pickup broadcasts worthy of special recording, such as the wedding of the Crown Prince, etc., sharing of NHK's materials in toto or in parts by the key commercial stations became more frequent.

A mobile field pickup car was developed at NHK in 1959. This unit was provided with a transistorized image orthicon camera developed at the Technical Research Laboratories ahead of others and a revolving deck for freely manipulating the microwave antenna. As power source for the equipment, a 3 kVA motor power generator was mounted on a trailer as an attached unit. Since then mobile pickup cars mounting three transistorized cameras have been developed and started operations from 1961. Transistorization of the complete field pickup set was an epoch-making event, because the car itself could be reduced in size and power consumption could be radically saved. The transistorized cameras were also very high in stability and easy in operation and maintenance. As a result, in addition to being used widely in the studios, they opened up the way to-

wards development of various special effect producing cameras of compact size and lightweight.

Transistorization of video equipment and field pickup devices was further promoted, and in 1963, video tape recording car equipment was also transistorized. As a camera improved both in performance and mobility, a transistorized type using 2-inch image orthicon tubes was developed for the first time in the world. Also, cameras for mounting on helicopters as well as underwater cameras were produced. Furthermore, miniature cameras using 1/2-inch vidicon tubes were developed and used for sports pickup and interviews. In this way, broadcasting equipment dependent on imported products during the early stages of the television service were replaced almost entirely by domestic products. And the majority of such equipment was developed and manufactured under the joint efforts of the Technical Research Laboratories of NHK and the leading manufacturers. New equipment resulting from crystallization of technical achievements made in the development of these devices amply demonstrated their capacities during the Tokyo Olympic broadcasting.

Colour pickup equipment was also placed under study and development since the commencement of the colour service in September 1959. In 1960, a colour pickup car provided with two colour camera units of GE (General Electric Company) manufacture was completed. Since then active domestic production of field pickup equipment for colour television was promoted. For the aforementioned Olympic broadcasting, two field pickup cars for colour television provided with transistorized pickup equipment, including three separate luminance system colour cameras, were used.

13. Surveys and Researches

1. Radio and Television Culture Research Institute

The NHK Radio and Television Culture Research Institute was established in 1946 as an organ for surveying public opinions on broadcast programmes and to undertake various studies contributory to the elevation of broadcast culture in the transition period brought about by defeat in the war. Since then, its organization has been expanded and consolidated and its scope of researches was expanded, meanwhile recording notable achievements. Together with the Technical Research Laboratories (see Section 2), established in the early years of the broadcasting service, the Institute came to occupy a unique position among various organs of NHK. Some of its principal achievements were as follows:

Public Opinion Surveys on Programmes: Surveys on programmes have been conducted exclusively on the NHK radio. However, when commercial radio broadcasting commenced in 1951 and NHK and commercial television services were established in 1953, the broadcasting organizations and media became more complex. It was natural, therefore, that such surveys should have been undertaken in consideration of mutual relations among the broadcasting entities and media. In particular, the inauguration of the television services inevitably brought about changes in the radio listening

habits of the people. In other words, as the audience rating for the radio in the homes operating both radio and television receivers declined, investigations into the rôles played respectively by these two media and their inter-relationship became one of the essential tasks of the Institute.

The trend in the decline of radio audience rating was at first conspicuous, in the early period of the television service, during the evening golden hours. For instance, the evening audience rating of 23.7 per cent for NHK's first network in 1954 declined to 11.9 per cent in 1957, a drop of 50 per cent in three years. Later, as telecasting hours were extended to daytime, the audience rating of the radio was encroached upon by television irrespective of time, thus following a steady road to decline. Consequently, emphasis in radio audience surveys came to be placed on programmes expected to have steady and specific audiences like the school programmes on the second network and on local programmes facing little competition from television.

Meanwhile, with the appearance of low-level dramas, quiz programmes inciting interest in gambling and vulgar popular songs originating at the commercial broadcasting stations, concern with regard to the influence of such programmes on young people began to be expressed. As a result, surveys on programmes intended for the younger generation were frequently undertaken. In particular, as opinions and criticisms concerning the influence of television began to be expressed by newspapers and magazines, considerable importance was attached to this point in surveys on programmes. In the surveys conducted in 1957 and 1959 on the influence of television on the young children⁽¹⁾ in Shizuoka, a medium-sized local city, the before-and-after comparison method was adopted and an epoch-making result was achieved. In this method, the same children were surveyed before and after their contact with television, and changes in their behaviour, habits and mental attitude were analyzed and compared with those of pretelevision days taken as the standards. These Shizuoka surveys were far superior to any former surveys in their planning and accuracy of statistical processing. These were also evaluated as the four greatest surveys in the world on television and children, along with those undertaken by H.T. Himmelweit of Great Britain, W. Schrumm of the United States and G. Malezke of West Germany. As a result of these surveys, it was found that children were leading a highly adaptable life, and the concern with regard to the possible undesirable influence of television on their mental growth was rejected on many points.

NHK also undertook "how-do-people-spend-their-time" surveys in 1960 and 1961 in order to obtain basic data useful for programming. In these surveys, some 3,500 interviewers were mobilized to conduct personal surveys of 170,000 people under the random sampling method, which were unprecedented in their scale. The results revealed seasonal changes as well as those according to social strata, such as classified by age, sex and occupation. Incidentally, behaviour of the samples during a twenty-four-hour day were classified into twenty-two items including sleep, meals, personal

(1) In 1957 a survey was made on the third and fifth year children of primary schools and second year students of junior high schools. In the 1959 survey, the same primary school children were used as samples, though the then third graders had advanced to fifth grade and the fifth graders had advanced to the first year junior high schools.

errands, etc. Data compiled as a result of these surveys proved useful not only to the programming staff but also to planners of social welfare and livelihood improvement work, sociologists and others either directly or indirectly. In these surveys, it was found that a greater portion of people's leisure hours was spent in listening or viewing broadcasts. For instance, in the households operating both radio and television receivers, a day's average viewing time was found to be two hours and twenty minutes and listening time forty-two minutes on weekdays, and three hours and nine minutes and thirty-nine minutes respectively on Sunday.

Analytical Study of Programmes: Analytical studies of programmes were undertaken using a large-scale programme analyzer installed in 1953 and a smaller one which had been in use for some time. As the respective characteristics of the two analyzers were effectively utilized, studies in this field became active. The range of studies was not limited to post-broadcast analyses but extended to unedited pre-broadcast versions and even to the audition versions of programmes to be newly established. Efforts were also made for searching for what may be considered the fundamental principles of programming on the basis of data accumulated from such analytical studies. Large numbers of programmes were used as subjects of study. Results of these included "Study of Documentary Programmes", "Study of Film-inserted Programmes", "Contents and Reactions Related to Dramatic Programmes", "Women's Listening Trends", "Study of the Introductory Phase of Programmes", and "Experimental Studies Related to Ease of Letter Telop Reading". Thus, analyses of the appealing factors in the educational, children's and women's programmes deserve special notice. In 1959, experimental studies on the fatigue of eyes arising from viewing of television programmes were undertaken. Also, in anticipation of the inauguration of a full colour television service, basic experimental studies were undertaken in the field of colour psychology. Thus studies in this field covered a wide range of subjects.

Study of Broadcast Terms: In the past, study of language terms used in broadcasting was entrusted to the Broadcast Language Investigation Committee composed of outside specialists. With the commencement of the television service, however, visual presentation of the languages and terms was added to the subjects of study. Results achieved by this Committee have been used as data not only by NHK programming staff but also by the commercial broadcasters and the general public. Large numbers of publications, in fact, have been issued by the Committee since 1953. Some of these were "How to Write Letters and Languages for Television", "Pronunciation Dictionary of Foreign Geographical Names", "Pronunciation Dictionary of Japanese Geographical Names", "Visual Presentation of Foreign Languages", "Pronunciation of the Names of Foreign Musicians and Titles of Foreign Musical Works" and "Sports Dictionary".

Broadcast Cultural Property Library: The Sound Library of NHK established in 1951 (see Part II Chapter 4 "Broadcast Programmes", Section 8) has been operated for the purpose of collecting and preserving valuable intangible cultural properties arising from Japanese culture. The collections contain recorded discs of programmes already broadcast preserved at NHK, reproductions from old records and recordings collected by the Library. Cultural properties collected by such means were all recorded on hard

discs and preserved. After the commencement of the television service, collection of filmed records and their preservation were added to the work of the Library. Materials collected by the Library itself consist of recitations of noted works by the authors themselves, dialects, traditional music of Japan and folksongs. The trilogy titled "The World of Yukara", a colour film produced in 1964 was a significant cultural material collected by the Library. As of March 1966, the library contained 5,406 recorded discs and 763 reels of films.

Initiation of the Study of Broadcast Science: The Broadcast Science Research Room was established in the Radio and Television Culture Research Institute in 1959 for the purpose of developing broadcasting to the level of an independent science by clarifying its essence and principles. While investigating the studies of broadcasting conducted abroad and collecting and compiling research data, the Research Room at the same time promoted consolidation of the research setup through the aid of scholars in social science and psychology, who were entrusted with the work. In their respective fields these scholars conducted individual researches on the themes assigned to them. They also carried out joint researches on themes such as "Special Features of Television Diffusion in Japan", "Social Responsibilities of Broadcasting", and "Systematic Study of Social Effects of Broadcast Communications". Also, in view of the active study of broadcasting undertaken at various universities, the Research Room has been sponsoring study meetings in various areas with a view to providing opportunities for information exchanges among the university researchers.

2. Technical Research Laboratories

Since its establishment in 1930, Technical Research Laboratories of NHK have achieved valuable results in accordance with the developmental process of broadcasting and contributed notably to the progress of broadcast engineering in Japan. The services rendered by the Laboratories have already been described here and there in connection with broadcast programmes and engineering. The work undertaken at the Laboratories is extremely wide in scope with technical problems related both to transmission and reception as the subjects of interest. As a matter of fact, the Laboratories have played a pioneering rôle in the development and improvement of the broadcasting systems, equipment and facilities, electron tubes and components, through which contributions have been made towards the elevation of the quality of broadcasts, development of applied techniques and the establishment of equipment manufacturing techniques. In the postwar years, in particular, notable achievements in the improvements of the quality of sound in radio broadcasting, introduction of new technologies from abroad and rapid development of a series of techniques in anticipation of television broadcasting were registered.

After 1953, when the television service was initiated, researches at the Laboratories under implementation of the radio and television network expansion programmes made notable achievements in the progress of facility improvement and technical operations techniques. Some of these included acoustic designs for the NHK Hall and studios of local stations, transistorization of equipment, automatic systems introduced into the broad-

casting facilities, studies related to VHF-FM radio broadcasting, UHF television broadcasting and colour television, and inventions and designs of equipment and facilities. Emphasis was also placed, in addition to the study of domestic production of equipment, to researches in fields necessary for speeding up progress in broadcasting engineering of the future. For these purposes, studies in solid state physics and counters were intensified and special studies on the art of viewing and recording techniques were considered.

The Technical Research Laboratories, in addition to contributing to the growth of NHK's broadcasting, widely publicized its achievements for the benefit of those interested in the matters related to broadcasting. Technical aids were also provided for outside organizations upon request. Principal aids provided by the Laboratories comprised designing of public halls, designing and measurements of acoustics in the studios of the commercial broadcasting stations, guidance in the manufacturing techniques of transmitters, receivers, electron tubes and components for the manufacturers, and supply of data related to radio engineering to the research institutes of the Radio Technology Council of the Ministry of Posts and Telecommunications and other institutions.

The chief results attained at the Technical Research Laboratories of NHK are as follows.

Study of Radio Engineering: As stated before (Chapter 12 "Broadcast Engineering", Section 1), the NHK Hall completed in 1955 was a representative structure in those days with respect to architectural acoustic design. Its construction was executed after detailed investigations into the vibration-proof effect of various materials, application test of the Helmholtz resonator, study of the sound absorbent structure design, etc. Since then, overall studies of inter-relationship between the physical acoustic characteristics and subjective evaluation of acoustic effects in studios were expedited and data on studio designs compiled. Further data were obtained on the lightweight sound proof doors using lightweight sound insulating structures and the suppression of noise from the ventilation ducts.

Researches in microphone characteristics placed emphasis on their miniaturization and achievement of higher fidelity. In the process of these studies, variable directional, wide reproduction band unidirectional ribbon and close-talk microphones were newly designed. In the field of recording techniques, magnetic disc recording having repeated recording and playback characteristics, which were the features of magnetic tape recording, was placed under study, and by 1960, this system was developed to a practical stage. Researches in the magnetic tape performance tests, investigations into the testing methods and the study of magnetic powder materials were also undertaken with a view to realizing domestic production of magnetic tapes.

Studies related to broadcasting of electronic music, a new genre, was begun in 1954. The Technical Research Laboratories bore their share in the production of musical instruments for the new music and succeeded in developing a monochord. The first broadcasting of electronic music was undertaken the following year using this device. Improvements were introduced later, and it served to firmly establish electronic music broadcasting. On the other hand, anticipating that stereo broadcasting would

become a form of future VHF-FM broadcasting, the scope of researches at the Laboratories was extended to the transmitting and receiving systems, instead of being limited to subjects related to acoustics. As a result, the target of studies was set at the pursuit of the most suitable system for a single-frequency circuit compatible stereo broadcasting using VHF. For this purpose, a device for multiplex FM transmission and reception was trially made to conduct comparative experiments, while at the same time announcing data on the test made FM-stereo receiver. In the general research on FM broadcasting, special stress was put on the study of receivers. In 1955, data on the trial manufacture of an FM tuner combining several kinds of FM receivers and common radio receivers was announced publicly. When the first FM experimental broadcast was beamed in 1957, investigations into the radio wave propagation and behaviours of the receiver were continued. At the same time, data for establishing the technical standards for FM broadcasting were collected.

From about this time research efforts on the application of transistors became active, and the development of compact and high-fidelity equipment was rapidly accomplished (see Chapter 12 "Broadcast Engineering").

Researches in Television engineering: The important question at the time of the commencement of television broadcasting was domestic production of image orthicon pickup tubes and video recording devices, which were essential to programme production. Investigations and researches on the construction and materials of the imported image orthicon tubes were, therefore, begun at the Technical Research Laboratories, and after going through several stages of trials, a manufacturing technique adequate to produce usable tubes was established in 1955. Since then manufacture of television cameras using these tubes became possible. In the field of recording devices, a 16 mm film recorder was made on a trial basis in 1955. This contributed notably to the improvement of the quality of pictures in recorded programmes. In connection with this device, the slow-motion video recording system, in which one field of television is picked up as one frame and sixty frames were continuously picked up every second, was developed. Recording of television signals on magnetic tapes was also placed under study on the basis of the video tape recorder developed by Ampex of the United States imported in 1958. Data thus obtained were supplied to the Japanese manufacturers in an effort to bring about domestic production of video tape recorders. Simultaneously, researches were expedited on the magnetic heads, recording tapes, colour video tape recording and special recording systems and considerable results obtained in these efforts.

Special effects devices of various types were also developed since the initiation of the television service. Those developed were highly diversified, including the montage amplifier capable of wiping and insertion, an electronic recorder using storage tubes, and the walkie-lookie which formed the main part of the television pickup unit mounted on a helicopter. For reporting the events of the Tokyo Olympics, close-talk microphones, miniature television cameras, slow-motion video tape recorders, automatic tracking units for remote pickup from the helicopter, intersync and a vibration-proof device for a mobile pickup car were developed at the Technical Research Laboratories, all of which contributed notably to the mobility of remote pickup broadcasts (see Chapter 11 "Tokyo Olympic Broadcasting", Section 2).

Automation was the keynote of research work on studio equipment. As a result, trial manufacture of automated television cameras, film projectors and video tape editors was attempted.

As the transmitting tubes and transmitters had formed important subjects of study since the commencement of the service, efforts were concentrated in these fields for developing equipment in anticipation of future increased output power. One of the achievements was the 50 kW tube developed in 1959 as the first of its kind in Japan. The transmitter using this tube was installed on the Tokyo Tower. Since then, design methods for ultra-high-power equipment have been established. In the field of television receivers, emphasis was placed on the simplification of circuits and cost reduction. This arose from the fact that because of the inadequacy of the manufacturing capacity of the Japanese makers, high-priced sets with complicated circuits had to be imported in the early stages of the service. In the process of researches at the Laboratories, various types of popular models were designed and made on a trial basis, and the data obtained supplied to the manufacturers where they contributed to the development of high-performance but low-cost receivers. Domestic production of colour receivers was also one of the most important questions connected with the colour television service initiated in 1960. Work in this field began with the study of receiving tubes, followed by improvement of the circuitry. In 1958 a colour receiver using a 17-inch receiving tube was successfully assembled on a trial basis. Researches in the improvement of performance and means of bringing costs down were continued. In particular, the development of the separate luminance camera by improving the customary pickup system notably improved the quality not only of colour pictures but also those of monochrome.

14. Listeners

1. Increase of Listeners and Its Causes

When changes in the number of receiving contracts concluded with NHK are studied, these show a steady growth until 1958, but thereafter there is a tendency towards gradual decrease. This was due to the influence of television which had become active from this year. According to the Broadcast Law, the regulation for listening specifies: "Those who have set up a reception facility with which NHK broadcast can be received will have to conclude an agreement with NHK regarding reception". Therefore, even though NHK broadcasts are not received, as long as one possesses a receiving set, there is obligation to conclude a receiving contract with NHK. However, television receiving contractors—the majority also possessing radio receiving sets—cite their listening habit of "mainly receiving television and almost never radio broadcasts" as the reason and on this basis there was a trend to request cancellation of radio receiving contracts.

Therefore, NHK, in order to make the best of such a situation where income from receivers' fees which constituted the basis of their financial source would be greatly affected revised the receiving contract system from

April 1962, and established two systems, namely, Contract A (involving both television and radio reception) and Contract B (involving only radio). This revision greatly contributed towards preventing a decrease in receiving contractors.

The actual situation with regard to the number of radio and TV receiving contracts in the years after broadcasting of television was initiated is shown in a separate table which shows that the number of radio receiving contracts reached 11,710,000 (as of the end of financial year 1953), twenty-eight years after the commencement of broadcasts, retaining a high level of popularity. Therefore it is not appropriate to make a comparison with the number of TV receiving contracts because television broadcasts were started in that year. However, the fact that only in the twelve years the number of television receiving contracts reached 17,130,000, and at the same time, during this period the number of radio receiving contracts increased by about eight million attests that broadcasting in Japan made great strides in development. Especially, with respect to television, Japan became second to the United States in its diffusion in a very short time.

When the dissemination process of television is considered, in its early years the public was educated through telecasts demonstrated on the streets, followed by a period when it became popular among the high-income bracket people or those who would use it for business purpose. Then, sets were installed in the living rooms of the general public from the latter part of

Number of Radio & TV Receiving Contracts

Year	Radio		TV	
	Number as of end of financial year	(%)	Number as of end of financial year	(%)
1953	1,171	70.4	2	0.1
1954	1,251	73.8	5	0.3
1955	1,325	75.2	17	0.9
1956	1,397	77.8	42	2.3
1957	1,459	81.2	91	5.1
1958	1,461	81.3	198	11.0
1959	1,341	74.7	415	23.1
1960	1,180	57.2	686	33.2
1961	945	45.8	1,022	49.4
1962	1,848	89.6	1,338	64.8
1963	1,936	93.8	1,566	75.9
1964	1,988	96.3	1,713	83.0
1965	2,058	85.4	1,822	75.6

Note: After 1962 the number of radio receiving contracts includes those for radio and television combined.

Penetration percentage for 1953-1954 is based on the number of households of the 1950 census.

1955-1959: number of households from 1955 census.

1960-1964: number of households from 1960 census.

1965: calculated from number of households of 1965 census.

1955. Thereafter, up to 1957, television sets became popular in the homes mainly in the great urban centres. The factors regarding its popularity can be cited as having been the craving of the public for something new, the attractiveness of programmes and the expansion of coverage. However, the basic factor was that with this period as the border line, reflecting the realities of the Japanese economy which had entered the stage of extraordinary growth and development, electronic industrial circles were modernized with the induction of new techniques. Thus this expedited massproduction of television receiving sets and price reductions could not be ignored. On the other hand in 1957, the Ministry of Posts and Telecommunications decided on the first stage frequency allocation plan with the aim to popularize television throughout the country. Based on this, the expansion of NHK's and commercial broadcasting facilities was launched which further served towards its popularization.

In the districts where television became popular, the yearly decline in the percentage of listening to radio could not be prevented. However, as is shown in the separate table, increase in the number of receiving contractors, needless to say, was due to the aforementioned revision of the receiving contract system. Still, on the other hand, this was due to consideration given to production of programmes which fully utilized the functions of the radio in order to cope with the changed situation of radio reception resulting from households which also possessed television sets, (see Chapter 7, "Broadcast Programmes", Section 1) and aggressive promotion of activities to popularize radio aimed at localities where television waves could not reach. Furthermore, as will be explained in the next section, due to the appearance of transistor type portable radios, the habit of listening to the radio alone was formed which was a great factor in preventing further decrease of receiving contractors.

2. Production and Sales of Receiving Sets

In this period the radio receiving set manufacturing circles, reflecting the rapid growth of Japan's economy which had improved with the Korean War as the impetus, recorded rapid progress with the years. In other words, in 1953, the output showed a postwar record of 1,530,000 sets, but, with the height of prosperity in 1958, showed a four-fold increase to 6.2 million sets. Furthermore, two years later, in 1960, it recorded a two-fold increase to 13,410,000 sets. In this period, income per capita greatly increased and there was a great change in the consumer pattern. Irrespective of urban or rural areas, the demand for electrical appliances for home use increased, creating a tendency where radio receiving sets as well as television, electric washing machines, refrigerators, etc., were purchased in a competitive spirit.

With respect to the types of radio receiving sets, heretofore, transformerless, the five tube, superheterodyne type was the standard home set, but during this period the production of all-wave receiving sets was fairly underway and most of the home sets were of this type. Furthermore, from about 1955, "hi-fi" radio sets and from about 1960, stereo receiving sets started to appear on the market, which became popular among music lovers who demanded good quality broadcasts. After the FM experimental broadcast

was initiated in Tokyo from the end of 1957, the percentage of producing FM receiving sets became quite high due to the promotion of the construction of a nation-wide network for such broadcasts.

When the manufacture of transistor radios began in Japan, the first product (portable, 5 tube superheterodyne) appeared on the market in 1955. At first, there were some defects with respect to the quality of the tone and the degree of stability. Subsequently, however, as the production set-up of the huge makers was expanded and adjusted, the capacities of the sets were considerably improved and their market value increased. Furthermore, with advancements made in the miniaturized parts and progress in the print wiring techniques, the "pocket" type also started to appear. In 1958, the output of transistor radios was a scant 10,000, but with the rapid realization of mass-production, in 1960, the total output of receiving sets reached 13,410,000, of which 80 per cent was transistor type, and the majority portables. Some 70 per cent of the portable types produced was exported, which contributed greatly towards obtaining foreign exchange. The domestic demand for this type was also high, and many families started to have two or more receiving sets including the transistor type. Subsequently, the transistors were adopted in place of vacuum tubes for home sets. In addition, the drift-type transistor was designed which greatly improved the high frequency characteristics, and it was also applied to the VHF band. This led to the 3-band receiving sets which could receive medium, short-wave and FM broadcasts (VHF).

In 1953, when the television broadcasts were started, most of the television sets were of the 17-inch type, foreign made products or sets made by amateurs, since the production set-up of the makers was not yet fully launched. Then the cost of imported receiving sets was ¥12,000 per inch or about \$33.00, and therefore, from the consumer standard index, this was too expensive. As for home made products, many were simple 17-tube types, using 7-inch round-type picture tubes. The Ministry of International Trade and Industry (MITI), in order to promote domestic manufacture of television sets, announced in November of 1953 a counter measure to cope with this situation. As a result the problem of using large numbers of foreign patented parts, which was one of the reasons for retarded manufacture of television sets, was solved, thus, bringing about conclusion of agreements between patent owners and various manufacturing companies. This resulted in the launching of domestic manufacture of television sets and the production set-up within the industry was coordinated from about 1955. The subsequent boom in television was brought about with the increase in demand and decrease in prices of television sets.

With reference to types, the majority consisted of comparatively cheap 14-inch models with simply designed circuits. For several years this type remained the standard model. When the changes in output and prices are studied, the output in 1955 was a mere 180 thousand and the price per set was ¥97,000 or about \$270. However, subsequently, the output increased rapidly, and five years later in 1960, it had increased twenty times, totalling 3,670,000. The price was also gradually reduced to about ¥59,000 or about \$164. During this time the designs and manufacturing techniques of receiving sets rapidly advanced. Furthermore, the deflection angle of the receiving tube was greatly increased (the depth was lessened) and the

efficiency, such as sensitivity, brightness and tone quality, was improved. As a result, from about 1962, 16-inch models started to appear on the market, and furthermore, 19-inch models were also manufactured. In contrast, in 1960, 8-inch transistorized television sets were put on sale for the first time. Subsequently, the makers started to manufacture various types of small or portable models and, in 1962, 5 to 6-inch micro-television appeared.

In the case of colour, when experimental colour television broadcasting was initiated towards the end of 1957, many of the sets were foreign-made products as had been the case with black-and-white television. Although test-manufactured products by domestic makers started to appear here and there, the colour picture tubes still could not be domestically produced. However, because of successful researches jointly undertaken by the NHK Technical Research Laboratories and associated organizations, the world's first 17-inch, square colour receiving tube was designed as early as 1958, and put into practical use, which resulted in the full launching of domestically manufactured receiving sets. Subsequently, the efficiency of receiving sets improved considerably, operation became simple and the production of 16-inch and 19-inch models became standard types. As of the end of 1965, colour television makers numbered thirteen companies with their total output a scant 100 thousand sets annually. Moreover, 60 per cent was exported to the U.S. where colour television was enjoying a boom. The price was three times that of black-and-white sets, and therefore, still very expensive. Hence, in order to popularize colour television domestically, the primary problem was to set up mass-production system which would lead to reductions in prices.

3. Repairs on Television Sets and Prevention of Reception Interference

NHK, since its founding, has carried out consultation work with regard to difficulties affecting radio reception and set up radio repair facilities jointly with dealers as a service to listeners. However, the Broadcast Law promulgated in 1950 prohibited NHK from controlling the business of radio dealers or intervening in any way. At the same time, the Law stipulated that NHK might conduct repair services only in areas where listeners did not have access to dealers. These areas were, in general, far from urban centres, towns and villages situated in the out-of-way places where reputable repair dealers could not be found. The Ministry of Posts and Telecommunications annually designated these towns and villages where NHK might conduct repair services and NHK acted accordingly. However, since television sets became gradually popular in these areas, the repair dealers were encouraged to set up business and naturally the service areas where NHK was requested to provide repair services tended to decrease. For example, in the financial year 1953, the repair service area designated by the Ministry of Posts and Telecommunications numbered 4,305 towns and villages throughout the country, but in financial 1960 this had decreased to a half, totalling 2,138. This trend was due to the appearance of dealers and the decrease in the number of towns and villages as a result of town-village amalgamations.

The consolidation of repair service establishment was of great concern to NHK from the point of maintaining receiving contractors. NHK anticipated much from the activities of repair shops conducted by the dealers, especially in urban areas where the popularity percentage of receiving sets was high. The movement to repair all damaged sets was conducted once every year under the auspices of dealers' organizations. And it was the general practice of NHK to assist this movement from the side by granting subsidies to the sponsors and making as well as distributing posters for publicity purposes to assist making the movement a success.

In comparison with the execution of radio repairs centring around the dealers, repairs of television sets in the early years when the service was initiated was conducted by NHK and service stations belonging to makers because repair dealers were not yet ready to take over the work. There was no restriction in areas where NHK could conduct repair services as in the case of the radio and the entire country was designated as such. The makers themselves conducted repair services as a means to expand sales of their products. In other words, the various makers, established a warranty period of six months to one year and the repair services were provided free with respect to troubles reported during this period. This warranty system gave purchasers confidence in the product while on the other hand, this brought about a lack in the desire of dealers to learn repair techniques. The dealers concentrated on the sales of television sets which brought big profits and, hence, it was customary for them to send repair work to the maker's service stations. Furthermore, as the popularity of television sets greatly increased, the various broadcasting stations belonging to NHK became busy day by day with repair and consultation work.

Such condition continued until 1958. By then, the number of television receiving contractors had surpassed one million which paved the way for expediting the plan to expand broadcasting facilities of NHK as well as commercial broadcasting stations in order to popularize television throughout the country. Thus, in view of the anticipated increase in demand for receiving sets, it was sorely felt that the repair service set-up should be rapidly put in proper order. For this reason, NHK held classes in various parts of the country for the purpose of having dealers learn repair techniques. Furthermore, the MITI established the system of "National Examination on Television Set Repairs" to promote training of repair technicians. Thus, the repair work was gradually handed over to the dealers.

With the increase in radio and television broadcasting facilities, the problem of eliminating reception difficulties became a major concern from the viewpoint of retaining receivers. With respect to reception difficulties resulting from jamming by foreign broadcasts at this time and that resulting from the newly established broadcasting facilities, the Ministry of Posts and Telecommunications, on the basis of radio wave administrative policy, took measures to change the wavelengths of the already established facilities and to increase the electric power in an effort to alleviate such a condition (see Chapter 2, "Radio Wave Regulations", Sections 2 and 3). On the other hand, reception difficulties increased annually with the popular use of electrical appliances and various measures with emphasis on prevention were adopted with respect to these difficulties. In order to obtain better results, the "Central Council for Measures Against Reception Difficulties" was es-

tablished in 1954, which annually campaigned for one month throughout Japan to ease such difficulties, contributing greatly to their eradication. Moreover, the Council exerted efforts towards promoting designs for noise-proof sets, establishing industrial standards for electrical appliances and legal measures to abolish difficulties, etc.

It was discovered that up until around 1958 radio reception difficulties were mainly caused by fluorescent lamps. Subsequently, as television became popular, trends showed that television sets causing reception difficulties for radio sets increased annually. However, the situation in recent years is that in spite of not having found any simple measures for prevention, NHK has continued with researches on noise-proof television sets together with associated organizations (as of 1965). In addition to the increase in television sets, the popularity of industrial and home electrical appliances has become the major problem with reception difficulties. In this regard a voluntary movement started to appear in regional small cities, where the autonomous bodies in cooperation with the citizens, declared themselves as "noise-free cities" in order to combat and prevent reception difficulties.

4. Audience Ratings

In the early years of television broadcasts, there were two trends regarding the type of programmes most popular among viewers. One was the re-filming of movies which had already been shown at the cinemas and stage dramas relayed from the theatres, and the other was the relay of sports events when actually in progress. In short, it can be said that the major role of television was to visit the cinemas, theatres and sports arenas as a proxy for viewers. Those in the television broadcasting business, because of personnel shortage and poor facilities for producing their own programme, since this service was still not yet in its prime, concentrated on the aforementioned types of relay programmes. To them this was a better measure for the purpose of popularizing television while satisfying the demands of the public.

About 1957 when television broadcasts entered the period of expansion, the percentage of interest and attention regarding such re-filming of old movies and relayed stage dramas showed a gradual decrease and in their place, films and dramas produced especially for television, though still immature in the production techniques, started to arouse the interest of audiences, while in sports relay programmes, three sports, namely, baseball, wrestling and 'sumo' (Japanese wrestling) became very popular. In the early years when television had not yet made much headway, many of the people tended to gather in public places to watch and enjoy outdoor screenings arranged by those in the broadcasting business. At this time, the popularity of such outdoor viewing was markedly enhanced by the relayed sports programmes. Subsequently, as the demand for home television sets started to increase, relayed sports programmes, further increased the viewing population. Together with these, another popular programme was the quiz-game type, which continued to maintain high ratings on television and radio. On the radio were such programmes as "Three songs", "Amateur Talent Contest", which have continued to this day, and on the television

quiz-game types like "Gesture Game" and "My Secret" retained high popularity. Each of these programmes was televised once a week in 1966, and continued to be regular favourites with the public.

After 1958, the viewers started to take a great fancy towards television films and dramas. Both NHK and commercial stations strengthened the production set-up of these programmes and at the same time imports, especially from the United States, increased. In the beginning the public was especially attracted to the imported, thriller-type, suspense dramas. The programme entitled "Highway Patrol" which NHK televised once a week for four years after 1956 led to further import or production of similar types and created a boom especially in commercial broadcasting. Among the many thriller-type suspense dramas, the serial drama "Jiken Kisha (City Reporter)" which NHK started producing from 1958 retained the highest audience percentage for a long time. As for the commercial television stations, the import of American Western films was accelerated from around 1961 and the audience percentage of these programmes showed a tendency to increase, especially among youths. Meanwhile, stimulated by the high rating of NHK-produced home dramas like the "Basu-dori Ura" (Back Streets of the Bus Route) and the light comedy "Owarai San-nin Gumi (Three Comedians)", imports or domestic productions of such dramas became popular. The heretofore revival films or stage dramas were televised as a one-time special event, but many of the abovementioned films and dramas were serials. For this reason, people naturally became regular viewers.

The popularization of television after 1960 was further expedited and in March 1962 the number of receiving contractors surpassed 10 million households (percentage per 100 household: 49.4 per cent). By this time the popularity of television among the lower income bracket, the farmers in the rural areas, and the fishermen class further heightened, and differences in the dissemination ratio by areas and social strata were notably reduced. Thus, it was felt that both in name and reality the television era had arrived. By this time, the viewers discovered anew the efficiency of television in offering information and disseminating knowledge. Up until 1957, when television broadcasts entered the expansion period, radio newscasts together with other amusement-type programmes had occupied high ratings. However, in its early years, television news did not show high audience rating. In 1960 for the first time it was listed among the twenty highest rated programmes and since then not only newscasts but also information programmes related with news items for furthering knowledge greatly attracted the attention of audiences. The two greatest factors for such a trend were as follows: (1) The political situation had become extremely confused within the Diet with the struggle going on between the party in power and the opposition, and outside of the Diet the revision of the Security Treaty between the U.S. and Japan was a hot issue. Thus, information programmes related with these or other trends were produced which greatly stirred the interest of audiences in television. (2) The serial programmes of reportage-educational type prepared by NHK's overseas special correspondents on the spot were produced one after the other to stir the interest of viewers.

According to the survey conducted in 1960 on how people spent their time

(Chapter 13, "Surveys and Researches", Section 1) showed that the time zone when the television audience percentage was at its highest was between 7 to 8 in the morning, from 12 to 1 at midday and 8 to 9 o'clock at night. With respect to audience percentage, it was high at 50 per cent at night in comparison to 10 per cent in the morning and at noon. In addition, according to this survey, most people watching television in the morning hours until 7 were farmers; the 7 o'clock newscast was watched by white collar workers and from 8 to 4 in the afternoon, mostly housewives; in the evening, until 6 o'clock, children watched, while during the golden-hour a comparatively low-level educated group belonging to all classes, while from 10 p.m. and thereafter, it was mostly the so-called intelligentsia. The foregoing was a general tendency. It has been made evident that some 90 per cent of children between the ages of ten and fifteen watched entertainment programmes televised at night. Thus, as will be stated in the next chapter, the discussion in general regarding the influence of television exerted on children became quite active.

In contrast to this, the use of radio clearly showed a decline as television became more popular. If the 1954 audience rating for the radio is taken as 100, in 1962 some eight years later, it had dropped to 32 in the morning, 19 in the afternoon, and 16 in the evening. Around 1955, when the radio was at the height of its popularity, some 40 per cent of the listeners tuned in to entertainment programmes during the golden-hour at night, but in 1962, it was a scant 10 per cent. The majority of the popular programmes were no longer the entertainment type at night, but rather newscasts and educational programmes broadcast in the morning. However, this high percentage applies only when comparison is made with other radio programmes and in both cases it was not more than 10 per cent.

In the households where there were both television and radio sets, the former was generally watched with the family as a unit but the latter was utilized almost always by individuals. Such a listening-in pattern with respect to radio fostered the growth of portable radios and programmes adapted to individual listeners. The age group which most utilized the radio individually comprised young men in their twenties. The majority favoured listening to music and relayed sports programmes, followed by newscasts and weather forecasts. Especially, with FM broadcasts becoming popular, music programmes gave impetus to their desire to listen even more.

5. Criticisms Regarding Broadcasts

Under the co-existence of two broadcasting organs, NHK and the commercial broadcasting companies, the role broadcasting plays as mass-communication medium came to be considered more and more important while expansion of the broadcasting facilities of the two was promoted throughout the country. As the influence it exerted on the life of the people became stronger year by year, it was most natural that criticism from the general public should have become stronger.

After 1951, with the launching of commercial radio broadcasting, it was criticized for giving priority to entertainment programmes, and pointed to their vulgarity. Public opinion was especially severe and critical of popular

songs which were considered liable to corrupt public morals, or quiz programmes which offered huge sums of money or prizes, as they would incite a gambling spirit to the detriment of youth. The Government, in view of such public opinion, announced in 1955 the "White paper on Radio Waves" and emphasized the necessity to control these programmes. Such a concept maintained by the Government led to the movement for a revision of the related laws (Chapter 5, "Revision of the Broadcast Law", Section 1). Simultaneously, this led to the control of inciting scenes and articles which appeared in films and periodicals, respectively, which led to stronger public opinion towards prevention of juvenile delinquency. In order to cope with the situation where there was a demand from various sources to control mass-communications media, the mass media themselves voluntarily formed in 1954 the "Mass-communications Ethics Forum" comprising members related with this work for the purpose of promoting self-control.

On the other hand, criticisms against NHK broadcasts were chiefly in the form of requests to "draw a clear line against commercial broadcasts and try to substantiate programmes which will contribute towards enhancing the cultural level, programmes which can be enjoyed by the whole family and to demonstrate that NHK conducted broadcasting for the benefit of the public." Such requests arose because in NHK broadcasts also, there was a tendency to produce vulgar programmes for high audience percentage, though this was a temporary phenomenon. One reason for this was that a sort of competitive spirit was fostered between NHK and the commercial stations to improve programme audience percentage, because the former wanted to collect receiving fees without much difficulty, while the latter had to secure as many sponsors as possible.

Since the beginning of television broadcasts, the public interest had been aroused through newspapers and magazines regarding the strong social influence possessed by this medium. For example, articles concerning television totalled some 1,575 cases throughout the year (daily newspaper 570, weekly magazines 1005). Among these articles, of specially note were those concerning the influence television exerted on children. Furthermore, centring around the discussion on such influence, the movement among housewives to watch television collectively became active, and it was evident that television had become a part of housewife's life. On the basis of letters written to NHK, the request "for programmes which would contribute to actual life" increased from about 1957. The relay programme "Operation on the Stomach" which NHK broadcast in 1957 was evaluated highly in newspapers and magazines as "an epoch-making experiment, and one which would increase interest in medical knowledge". With this programme as the turning point, NHK subsequently produced various types utilizing this new technique, and in general attracted the interest of the public.

With the advent of 1958, construction of television facilities of NHK and commercial stations was promoted in the major cities throughout Japan. Aligned with this, discussions on the influence of television on society and on education became active day by day, and the anticipations of the general public towards NHK, which is a public organ, gradually increased. Under such circumstances was born the NHK Tokyo Educational TV Service and thereafter its network spread throughout Japan. As a result, opinions and requests concerning educational television programmes increased. Scientific

programmes, in view of the nuclear age, and special programmes aimed at education of mute children especially aroused the interest of the student group and those concerned with education, resulting in numerous letters addressed to NHK.

On the other hand, since the influence television exerted on children became a major problem, NHK in 1957 and 1959 conducted a large-scale survey on this subject. It was concluded on the basis of the results that television did not exert a bad influence on children's minds or their manners and conduct (see Chapter 13, "Surveys and Researches", Section 1). In spite of this, a section of public opinion claimed definitely that "the cause of juvenile delinquency was vulgar and also action-thriller type programmes". For this reason, a movement to abolish this type of programmes in certain parts of the country arose. For example, representatives of the "Women's Organization Liaison Council of the Five Major Cities" in Osaka Metropolis, visited television stations and submitted requests that such programmes be controlled.

Mr. Newton N. Minnow, Chairman of the FCC of the U.S. (Federal Communications Commission) in 1961 strongly criticized the vulgar nature of American commercial television programmes. It was further reported that he stated that those broadcasting stations which would not be responsible to society regarding their broadcasts would not be granted the privilege to reapply for licences. At the time, this statement caused a great stir in Japanese broadcasting circles. The Japanese Government had, since 1962, in preparation for the future growth of the broadcasting enterprise, undertaken to study the overall revision of the existing broadcasting system. The main goal of this revision consisted of the establishment of basic policy for the use of broadcasting frequencies, fundamental broadcasting system and licensing system. On the other hand, with deep concern regarding the responsibility of broadcasts towards society, it considered the necessity to resort to legal measures for the purpose of improving the quality of programmes and this was taken up as one facet of study. It can be stated that one of the motives for the movement towards revision of the law was the reaction caused by the Minnow statement, in addition to the policy for respecting public opinion.

Appendix

Development of Commercial Broadcasting

1. Expansion Plan of Radio Broadcasting Facilities

Prior to the inauguration of commercial radio broadcasting in Japan, the degree to which their facilities should be recognized in relation to those of NHK was included in the statement made by the then Chairman of the Radio Regulatory Agency in December 1950 with regard to the administrative policy. He said, "It would be difficult to grant licences to more than two stations in Tokyo and more than one in other cities in general". The main reason why this Agency adopted such a policy was to execute as smoothly as possible the allocation plan of the limited radio waves, while hoping to ensure solid financial foundations of the commercial broadcast-

ing stations. However, as already mentioned (see Part II, Appendix "Commencement of Commercial Broadcasting", Chapter 3), the business record of commercial broadcasting stations has shown quite normal growth since their inauguration. Stimulated by this, many applications for licences from those in the same business in the outlying regions were submitted and in large cities there were many applicants submitting requests all at once. In addition, prior to and after initiation of television broadcasting in 1953, there arose the tendency where applicants planned to operate commercial television and radio broadcasts together or to conduct one or the other independently and many applied for such a licence.

The "Reorganization policy pertaining to allocation of frequencies for radio broadcast use" decided by the Ministry of Posts and Telecommunications in May 1953, was the result of giving due consideration to the foregoing condition. It also aimed to establish the radio broadcast policy in Japan under the system where NHK and commercial broadcasting could co-exist (see Chapter 2 "Radio Wave Regulations", Section 1). Based on this policy, it became possible for commercial stations not only to establish new broadcasting stations in cities where it was considered financially profitable, but also special consideration was given to constructing rebroadcasting stations with the output of less than 100W where deemed necessary. This policy made possible the nation-wide establishment of commercial radio stations. At subsequent intervals, with the expiration of the licences, there was a gradual increase in the number of commercial stations, increase in the power output of those already established, and changes in the allocation of frequencies. In short, the basic concept of the Ministry of Posts and Telecommunications which had anticipated the growth and development of commercial radio broadcasting had been solid at this time when the aforementioned policy was drawn up. Furthermore, many of the radio broadcasting companies created under this policy started combined operation of television and radio broadcasting. Hence, it can be said that the foundation of the distribution of commercial television broadcasting stations was actually laid at this time.

The policy of the Ministry of Posts and Telecommunications as aforementioned and the decision regarding the frequency allocation plan, based on this policy, helped to promote general understanding that commercial broadcasting was a profitable enterprise which simultaneously and rapidly brought about a commercial broadcasting boom. The number of commercial radio broadcasting companies at the end of 1953 totalled thirty-two with forty-one stations. In the following year there was an increase of 7 more companies and 16 stations. It appeared that the first stage of the work was completed with respect to the number of companies but the number of rebroadcasting stations subsequently showed increases (see the following table).

The two commercial radio broadcasting stations which were considered distinctive were the Nippon Broadcasting Co., Ltd., which started business in 1954, and the Nippon Short Wave Broadcasting Co., Ltd. (both located in Tokyo). The majority of the commercial broadcasting companies which started operations in the early years of the trade had been founded under the leadership of newspaper publishing companies, but the Nippon Broadcasting Co., Ltd. was established with the backing of metropolitan financial circles. These circles, which had maintained a rather cautious attitude to-

wards investment of capital on grounds that broadcasting was a cultural enterprise, became aggressive in establishing this business because its soundness was amply proved. The Nippon Broadcasting Company, as soon as it started business, gave absolute priority to entertainment programmes and surpassed two others already-established in Tokyo with respect to listeners' percentage. The Nippon Short Wave Broadcasting Co., on the other hand, started out as the only enterprise using short wave for commercial broadcasting in contrast to all the other domestic broadcasting companies which utilized the medium-wave band. Short-wave broadcasting excels with its long-distance propagation due to the special technical characteristics but on the other hand is defective in that there is fading and the reception adjustment is very complicated. In addition, at about the time when this company opened business, all-wave receiving sets were not yet popular in Japan, and at the start its business was not good. However, from 1958, business turned for the better because the company exerted efforts towards perfecting programmes aimed at a special group of people and designed and put into practical use simple short-wave receiving sets.

NHK and commercial broadcasting stations met with difficulties in the use of the medium-wave frequency as a result of increased broadcasting facilities caused by the appearance of these two systems of broadcasting. As a measure to settle this situation, NHK, towards the end of 1957, established Japan's first FM Experimental Broadcasting Station using the VHF band to conduct FM broadcasting. However, as has already been mentioned (see Chapter 4 "FM Experimental Broadcasting and Colour Television" Section 1) commercial broadcasting stations were not granted a licence to operate FM experimental broadcasting (as of 1966) as only NHK and the experimental station of Tokai University (located in Tokyo) had been granted one to conduct such broadcasting. In the case of Tokai University's Ex-

Number of Commercial Broadcasting Stations

Year	Number of companies	Number of stations
1951	6	6
1952	18	19
1953	32	41
1954	39	57
1955	40	61
1956	41	78
1957	41	86
1958	43	99
1959	44	106
1960	44	111
1961	44	123
1962	46	128
1963	46	131
1964	46	140
1965	46	144

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perimental Broadcasting, as is the case with NHK, the aim was to cooperate in compiling necessary data as stipulated in the policy related to granting of licences for FM broadcasts by the Ministry of Posts and Telecommunications.

2. Television Facility Expansion Plans

Commercial broadcasting was conducted for the first time in Japan in August 1953 through the network of the Nippon Television Network Co., Ltd. (NTV). This was only six months after NHK had started its television broadcast in Tokyo, and two years after commercial radio broadcasting was initiated. During this period, when the radio broadcasting business was developing smoothly, the fact that commercial television broadcasting was initiated could not help but come as a shock to the already established commercial radio broadcasters. NTV, founded with the backing of one of the most powerful newspapers, "Yomiuri Shimbun", located in Tokyo, started out with the aim to cover the Tokyo area. However, their future plan in respect to the expansion of the company's broadcasting facilities was not restricted to merely covering Tokyo area alone but to monopolize television coverage of the entire country. For this purpose, their plan was to establish broadcasting stations directly under their control in various parts of the country, and further to construct and operate themselves the microwave relay circuit which would tie up these stations.

Such a plan would curb the plans of other enterprises to conduct television broadcasting in the outlying areas and, should one company monopolize the microwave channels, this would mean that it would not only control all the television stations in the country but would also have the upper hand over various types of telecommunications utilizing these channels. Hence, the Nippon Telegraph and Telephone Public Corporation which had a monopoly on the public telecommunications industry could not let this go unnoticed from the point of view of their policy. Furthermore, for the materialization of this plan a huge sum of foreign capital was to be inducted, and hence, it was anticipated that the trunk communications channels would then be under the control of foreign interests. Such a plan of NTV caused much discussion in various circles. Finally, it was rejected at the Telecommunications Committee in the Diet and the issue was closed after having caused a big sensation. However, it is beyond doubt that because of this case the channel construction plan of the Nippon Telegraph and Telephone Public Corporation was rapidly promoted, which in turn helped promote the popularity of television throughout the country.

In February 1956, the Ministry of Posts and Telecommunications, for the purpose of promoting popularization of television in Japan, fixed the "basic policy with respect to allocation of frequencies". However, there was already seen a necessity to revise the 6-channel system to be adopted on the basis of this policy. Thereafter, about a year and six months later, in June 1957, the decision to revise the basic policy by setting up an 11-channel system and the allocation plan based on this was made final. As a result, for the first time television broadcasts started to cover the entire country (see Chapter 2, "Radio Wave Regulations", Section 3). Needless to say, revision of the basic policy was necessitated due to the increase in the number

of channels, but, with respect to other matters, the 1956 regulation remained unchanged.

This policy in its wording, unlike that dealing with the reorganization of radio broadcasting frequencies, treats NHK and the commercial broadcasting stations alike. This was in a way due to the fact that in television broadcasts there was no established evidence that NHK had monopolized the use of all the available frequencies as in the case of radio, and therefore, a completely new allocation plan was drawn up. However, this was also because commercial broadcasting, co-existing with NHK, had attained a position in society which could not be trifled with.

Applications for licences to open commercial television broadcasting gradually increased after the aforementioned 6-channel system basic policy had been decided. At the time when the channel allocation plan was announced on the basis of the basic revision policy of 1957, applications submitted to the Ministry of Posts and Telecommunications from various enterprises numbered as many as 86 with 153 projected stations. Among these applicants were included radio broadcasting companies already in business. Concerned with the fact that radio would be invaded by television, they maintained that priority should be given to those already conducting radio broadcasts on the basis of their records so that they might rationalize their businesses and save expenses. Thus, they worked aggressively on the government to obtain such licences. The Ministry of Posts and Telecommunications started investigation of these applicants and at the same time assisted in unifying those from big urban areas where competition was keen. Then, as an immediate measure, it granted preliminary licences to thirty-four companies planning to establish thirty-six stations. The basic policy of the Ministry was to draw up measures so that both NHK and the commercial broadcasting companies could co-exist in various districts throughout Japan. The abovementioned large number of preliminary licences granted to commercial broadcasting companies was the first measure which underwrote this policy and which had an important significance on the sub-

Number of Commercial Broadcasting Stations

Year	Number of companies	Number of stations
1953	1	1
1954	1	1
1955	2	2
1956	4	4
1957	5	5
1958	17	19
1959	38	44
1960	43	61
1961	43	78
1962	45	98
1963	45	151
1964	46	254
1965	46	360

sequent development of commercial stations. Further, all those granted licences, except for three, were companies which had already been conducting radio broadcasting which meant that their opinion that parallel operation of radio and television should be allowed (as abovementioned) had been accepted.

Until 1956, there were only two commercial television stations in Tokyo and one each in Osaka and Nagoya. However, as a result of the above measure, television stations were established one after another in the major cities of the country after 1958. In addition, with the aim to bring about a finer television coverage of the entire country, the frequency allocation plan was frequently revised, resulting in the increase of new applicants and new establishment of rebroadcasting stations by the already existing companies. This resulted in the secure co-existence of commercial and NHK stations in various parts of the land. The increase of these broadcasting facilities is shown in a separate table.

The formal initiation of colour television broadcasts in Japan took place in September of 1960. The stations which conducted colour broadcasts were the two stations of NHK in Tokyo and Osaka, respectively, and four commercial broadcasting companies in these two cities (NTV, Radio Tokyo TV, Asahi Broadcasting, Yomiuri TV Broadcasting). How colour broadcasting was initiated and its present condition have already been mentioned, (see Chapter 4, "FM Experimental Broadcasting and Colour Television", Section 2). Researches and experiments in colour television had already been launched in 1950 by the NHK Technical Research Laboratories but NTV was the first to insist that broadcasts of colour television should be initiated. The company's aggressive attitude towards commercialization of television contributed greatly towards execution and promotion in Japan, in the case of colour as in the case of black-and-white television.

3. The Realities of Management

Many of the commercial broadcasting enterprises, in the early years, received considerable cooperation from the local newspaper companies and news agencies. However, in view of the capital involved and the composition of the officials, their participation in management did not necessarily show a big percentage although there were a few exceptions. Moreover, as business improved and management became stable, and the number of companies increased, a tendency towards achieving independence arose among them by more or less cutting off ties with newspaper companies and news agencies. With respect to some forty-three broadcasting companies, as of March 1958, when their capital and composition of the officials are taken into consideration, the percentage occupied in general by finance organizations was extremely high. In comparison, the officials associated with newspaper companies or news agencies constituted 20 per cent (average per company) while the invested amount was only 7 per cent.

As for the number of commercial broadcasting stations at the end of 1957, there were thirty-seven companies which conducted only radio broadcasts while those conducting both radio and television broadcasting numbered four companies with one broadcasting only television. As is evident from these figures, up until this period, commercial radio broadcasting was,

as in the case of NHK, in its prime. However, four years later, in 1961, there were nine companies conducting only radio broadcasting, thirty-three companies, both television and radio and eleven companies television only. In general, there was an increase of eleven companies but the decrease in the number of companies conducting radio broadcast only was considerable, while on the other hand there was an increase in companies conducting television broadcasts only or both television and radio broadcasts. Originally, commercial broadcasting companies did not have several stations throughout Japan to form networks like those of NHK but rather they conducted business independently for those in various localities. Moreover, expenses for operations were covered by advertising fees (radio wave fee) and were not dependent on other income. In spite of this, it was generally recognized that this business was profitable, which was the reason for increases in the number of broadcasting facilities along with those of broadcasting companies in various parts of the country. In reality commercial broadcasting in general developed to such a scale that it could coexist with NHK.

The greatest factor which promoted the development of commercial broadcasting was the phenomenal growth of the Japanese economy after 1955, which helped to expedite stabilization of management. The Japanese economy showed considerable growth both in production and consumption. The manufacturers established the mass-production system for new products through technical renovations and the resultant increase in the purchasing power of consumers stimulated their expenditures. Needless to say, publicity and advertising of new products were conducted aggressively by the manufacturers through mass-communications media to further increase their sales. Among the advertising activities of the manufacturers, the most utilized were in newspapers, the percentage against the total advertisement expenses having been and remain still very high.

With respect to the goal maintained by commercial broadcasting regarding contributions towards the promotion of public welfare, there is no difference from that of NHK which is a public enterprise. However, on the other hand, from the viewpoint of the profit motive, the programmes are mostly produced as sponsored ones and hence, it maintains the role of an advertising medium. With the expansion of the economic scale of Japan, the percentage of the various industries utilizing broadcasting media for publicity and advertising their products has become higher year by year. In 1956, advertising expenses surpassed 20 per cent and in 1962 reached 36 per cent. The degree to which advertising is dependent on broadcasting is the highest in Japan in comparison with other major countries.⁽¹⁾ Especially after 1958, this gave impetus to the establish-

(1) When advertising expenses in 1962 were considered according to media, the percentage was as shown in the following table.

Country	Media	Newspapers & Magazines	Radio	TV	Others	Total
USA		32.7%	5.7%	15.0%	46.6%	100%
Great Britain		45.9%	—	17.2%	36.9%	100%
West Germany		84.9%	1.9%	9.6%	3.6%	100%
Japan		44.7%	7.3%	28.9%	19.1%	100%
Canada		43.9%	8.3%	10.4%	37.4%	100%
France		50.5%	9.1%	—	40.4%	100%

ment of television stations throughout the country which, together with the consumer boom among the general public, further expedited the popularity of television sets. Hence, the market condition of broadcasting as an advertising medium became all the more improved.

Since the beginning of this business, radio advertising gradually became a superior medium next to the newspapers. However, the radio was driven into the corner by television advertising with respect to income with the rapid development of broadcasts. The situation became reversed in 1959 when the business condition of television and radio companies entered an extremely favourable period. However, in contrast to the overall rapid progress in the former, there had been a decrease in income from radio broadcasts since 1961, and hence, this deficit had to be covered with income from television by expanding management. Thus, those companies conducting only radio broadcasts were forced to a situation where their business became stagnant, as compared with the television companies. The income of the respective companies from television and radio was as shown in the separate table.

In addition to the abovementioned general financial condition which supported the development in general of commercial broadcasting, there was the problem of the network pattern which influenced the business of the broadcasting companies, especially those in small cities and towns in the outlying areas. Originally, commercial broadcasting stations were not allowed a national network as there were regional restrictions concerning business management and also because they had been founded on the basic condition

Transition in the Income from Advertisement
of All Commercial Broadcasting Stations

Year	Radio	TV	Total
1951	3	—	3
1952	22	—	22
1953	45	1	46
1954	74	4	78
1955	98	9	107
1956	130	20	150
1957	150	60	210
1958	157	105	262
1959	162	238	400
1960	178	388	566
1961	178	539	717
1962	173	690	863
1963	171	899	1070
1964	170	1081	1251
1965	161	1110	1271

NOTE: 1. Unit: ¥100 million (about \$300,000)
2. Refer to Sections 1 and 2 for number of broadcasting stations by year.

as stipulated by the Ministry of Posts and Telecommunications in "Basic Standard for Establishing Broadcasting Station". Still, differing from the commercial broadcasting companies in Tokyo and Osaka which were in the midst of the advertising market and with large enterprises called "national sponsors" located in these two cities, the business scale of those in other cities was extremely small and the percentage of time sales was also low. As a result, a network-like relationship between the key stations in large cities and local stations was consummated in addition to promoting exchange of recorded tapes or borrowing temporarily relay circuits possessed by the Nippon Telegraph and Telephone Public Corporation. This was favourable from the viewpoint of the business policy of the sponsors whose market was the entire country or from that of stabilizing the management of local broadcasting companies as an advertising medium. Moreover, it was better business-wise for the key stations to have affiliations with as many local stations as possible for the purpose of securing big sponsors. Hence, this resulted in competition among key stations.

The network of the commercial broadcasting companies in Japan differed from the system adopted in the United States where a network company concluded a fixed agreement with the local stations throughout the country and produced programs as well as distributed them and organized the set-up of their managements. This is the so-called sponsor network where it is so established that the region which becomes the object of advertising broadcasts would be selected on the basis of the budget appropriated by the sponsor. Hence, to the key stations, the furtherance of affiliations with local stations meant the rise and fall of business. Thus, the tying up of broadcasting programs was promoted widely through networks with the increase in the utilization value of broadcasts as advertising media. Hence, the localization of commercial broadcasting programmes as intended by the Ministry of Posts and Telecommunications was not successful. As of 1965, those stations which were active as key stations in radio broadcasts were three, namely, TBS Radio (name changed from Radio Tokyo), Bunka Hoso and Nippon Hoso while in television there were NTV, TBS TV (changed from Radio Tokyo TV), Fuji TV, and NET (Nippon Educational Broadcasting TV), all located in Tokyo. These key stations, in competition with the four network outlets of NHK (2 each in radio and TV), transmit nationally as network broadcasts the majority of their programmes.

The financial condition of the commercial radio broadcasting companies was extremely favourable in general. The total net profit of these various companies, in comparison with financial year 1958 (44 companies), reached 4.4-fold in financial 1962 (52 companies). The average profit ratio as against total capital of each company started to decrease from the second half of 1952 when television broadcasting got fairly underway. And, with the establishment of one television station after another, this fell to 8.7 per cent in the first half of 1959 when investments in various facilities constituted a huge amount. However, with this as the lowest peak, the recovery was favourable thereafter and three years later, in the first half of 1962, profits increased to 15.2 per cent. It should be noted that in view of the characteristics of the capital composition of these commercial broadcasting companies, as compared with other industries, the ratio of own capital was extremely high, which endorsed the fact that the business of this enter-

prise was favoured with high stability.⁽²⁾

As above-mentioned, in contrast to the rapid development of television broadcasts, radio started to decline. Still, this was the receding tide within the broadcasting industry, which was a growing one, and hence, from the viewpoint of industries in general this trend was not charged with any disappointing factors. Even the low profit ratio of small and medium-size local radio stations was still better than the average of other industries in general although the percentage was somewhat near. Furthermore, the high profit ratio of key stations operating only radio broadcasts was three times the average of other industries. As for the percentage of television stations, it has been extremely high since 1959. However, as the popularity of television reached its saturation point, profits gradually started to hit the ceiling.

The number of employees in the commercial broadcasting business as of December 1953, totalled 2,600 belonging to thirty-two radio broadcasting companies and one television company. But in March, 1957, when radio broadcasting reached its prime, this totalled 7,900 (41 radio companies and 4 TV companies), having increased three-fold. And, as of the 31st March 1966, when television broadcasting entered a stable development period, there were fifty-five companies including radio and television broadcasting with a total of 18,200 employees.

The Federation of Commercial Broadcasters in Japan was founded in July, 1951, for the purpose of liaison work and to conduct researches and surveys as well as to handle matters related with problems common among the various commercial broadcasting companies. As the years passed, its members included all the commercial broadcasting companies and with the growth of business the scope of its duties was widened. The Federation, as the representative to protect the interests of all members, contributed towards the development of commercial broadcasting and at the same time tried to solve problems which hindered such growth. Special note should be made here with respect to the attitude maintained by the Federation for many years concerning the basic revision of the present Broadcast Law and to strengthen development and protection of commercial broadcasting (see Chapter 5, "Revision of the Broadcast Law", Section 3). In contrast, the Japan Broadcasting Federation was founded in June 1955, for the purpose of maintaining closer liaison among the organizations related with broadcast-

(2) The percentage of owned capital composition of the commercial broadcasting enterprises as compared to other industries was as shown in the following table.

Period	Commercial Broadcast	Newspapers	All Industries
Second half 1956	45.6%	20.5%	33.8%
Second half 1957	43.3%	24.7%	30.5%
Second half 1958	45.3%	23.2%	32.5%
Second half 1959	42.5%	23.7%	30.9%
Second half 1960	42.7%		28.8%

ing in view of the expected further growth of broadcasting in general. This organization is composed of NHK, the Federation of Commercial Broadcasters in Japan, the Nippon Telephone and Telegraph Public Corporation and other associated organizations.

4. Sponsors and Advertising Agencies

The commercial broadcasting companies have planned the expansion of their management on the basis of income from advertising fees (program production, radio wave, spot fees), paid by the sponsors of the advertisements. Thus, they could not ignore the presence of the sponsors in order to finalize their management scale. The sponsors started to lay emphasis on broadcasting as an advertising medium after 1952 when there was a boom with the opening up of radio broadcasting stations in the major cities of the country. This was due basically to the fact that NHK, when it monopolized the market, had already established the prestige of radio broadcasting in the field of mass media and also because by August of this year, the number of receiving contractors with NHK had exceeded 10 million households, which meant that the radio was equipped with advantageous social conditions as a new advertising medium. In addition, the fact that the remarkable economic recovery of Japan resulting from the Korean War had strongly influenced the growth of this new advertising medium cannot be overlooked.

The amount of advertising expenses the sponsors allocated for radio broadcasting up until 1956, with respect to the increase rate of the previous year, exceeded the advertising expenses appropriated for other media including newspapers, magazines and others, though its absolute amount was less than one-third that for the newspapers. However, it was more than three fold that for advertisements in the magazines. But, such an increase in radio advertising expenses has remained stagnant since 1959, and showed a gradual decline. This was due to the rapid nation-wide coverage of television and because sponsors of large enterprises started to give priority to television advertising due to their recognition of its value as an advertising medium. The ratio of radio and television advertising expense in 1959 was 40 to 60, but in 1962 it became 20 against 80. Needless to say, the cost of television programme productions for advertising required unusually huge amounts, and therefore, the abovementioned ratio does not represent the actual earnings.

The percentage of sponsor composition and distribution of advertising expenses to the media according to industries in 1962 is shown in the following Tables 1 and 2. In Table 1, the distribution to the various media is shown with amounts of advertising expenditure in general covering four media, radio, television, newspapers and magazines. In Table 2, the percentage occupied by the sponsors is shown according to industries.

In the following-table, the aggregate percentage of radio and television of all industries is 9 per cent for radio and 35.8 per cent for television. Those industries which appropriate advertising expense surpassing this average percentage are, in the case of radio, transportation, pharmaceuticals and foodstuffs/condiments, while in the case of television, they are foodstuffs/condiments, clothing/textiles, cosmetics and seven others.

There is no need to mention that in broadcast advertising there are two types, namely, sponsored and spot programmes. In the case of the former where demand is strong, the percentage increases as compared with the latter. With the advent of the television era, as it became more favoured than radio as an advertising medium, it could not be denied that the former took over the major role in television advertising, but on the other hand, the use of the latter in radio advertising increased. The fact that the number of radio advertising sponsors increased in the lower table is due to increases in spot programmes because of inexpensive costs.

Negotiations regarding broadcast advertising in certain cases are con-

Distribution Percentage of Advertising Expenses

Business	Media	Radio %	TV %	Newspapers %	Magazines %	Total %
Medicines		12.3	36.0	43.2	8.5	100
Cosmetics		4.3	47.0	40.6	8.1	100
Publishing		6.0	11.4	80.9	1.7	100
Foodstuffs, Condiments		9.8	51.9	32.7	5.6	100
Finance, Insurance		4.8	36.0	46.6	12.6	100
Machine tools		8.5	45.6	37.3	8.6	100
Clothing, Textiles		6.5	51.5	23.4	18.6	100
Daily consumer goods		7.3	45.4	32.5	14.8	100
Dept. Stores		6.7	15.3	76.8	1.2	100
Amusements		0.6	0.6	97.9	0.9	100
Transportation		12.6	34.1	46.9	6.4	100
Others		13.2	16.8	67.1	2.9	100
Total		9.0	35.8	47.8	7.4	100

Percentage of Sponsor Composition According to Media

Business	Media	Radio %	TV %	Newspapers %	Magazines %	Total %
Medicines		16.0	11.7	10.5	13.3	11.6
Cosmetics		3.3	9.1	5.9	7.5	6.9
Publishing		2.8	1.3	7.1	1.0	4.2
Foodstuffs, Condiments		14.3	18.9	8.9	9.9	13.1
Finance Insurance		3.4	6.4	6.2	10.7	6.4
Machine tools		18.5	25.0	15.3	22.7	19.6
Clothing, Textiles		3.2	6.4	2.2	11.0	4.4
Daily consumer goods		6.0	9.4	5.0	14.0	7.4
Dept. Stores		2.9	1.6	6.2	0.6	3.9
Amusements		0.1	0.1	4.9	0.3	2.4
Transportation		1.6	1.1	1.1	0.9	1.1
Others		27.9	9.0	26.7	7.4	19.0
Total		100.0	100.0	100.0	100.0	100.0

ducted directly between the broadcasting company and the sponsor but as a rule the common practice is through advertising agencies. Advertisements handled through these agencies in 1962, in the case of radio numbered 80 per cent while in the case of television, it was 95 per cent. The work of these agencies is firstly to cultivate the demand for broadcast advertising, and then to act as the intermediary with respect to the make-up of the programme, broadcasting time, length of broadcast, production cost, wave fee as well as the contract and, at the same time, on the basis of the contract, they take over the responsibility for settlement of the account, thus playing very important role. Heretofore, an advertising agency was considered a sort of a brokerage firm handling advertising space in the newspapers and magazines. However, since the birth of commercial broadcasting, it became a professional enterprise where it was responsible for the sponsor's marketing in general, from planning to production. Therefore, the agencies were forced to learn the techniques and acquire knowledge regarding production of programmes, and only those which had tried to improve the situation were able to advance hand in hand with the broadcasting business.

As of 1965, the number of advertising agencies totalled 88, and these were registered as members of the Japan Broadcasting Agency Federation and Japan Newspaper Broadcasting Advertisers Society, while with other small agencies the total number was about 250. However, the large agencies appear to monopolize the market. There were only three huge agencies handling accounts amounting to some ¥10,000 million or about \$30 million, which is about 50 per cent of the total advertising fees. Among these three, the Dentsu Co., Ltd., which had continued to maintain close relationship with commercial broadcasting companies since their founding is pre-eminent. This company has contributed greatly towards the development of commercial broadcasting by maintaining close relationships financially and personnel-wise with many of the broadcasting companies established in major cities of the outlying regions as well as with TBS (Tokyo Broadcasting System), the largest key station among the commercial broadcasting stations. This was the biggest factor which made the position of the company secure in this field. The amount handled by this company in 1962 reached ¥74,000 million or about \$2,000 million and fifth in the world in respect of amount involved.

5. Radio Broadcast Programmes

The foundation of the commercial broadcasting business was firmly established, for the radio in 1953 and for television in 1959. In writing the history of the transition and growth of commercial broadcasting programmes, these two years are considered significant milestones. As of the end of 1953, commercial radio broadcasting developed so that radio waves were transmitted from forty-one places in the major cities and towns of Japan. However, in the aspect of programme compilation, they were forced to follow the long established experience of NHK concerning planning of programmes and compilation policy. When radio programmes of those days are studied, it is quite evident that there were many with ideas similar to those of NHK. However, as more than one station was established in the same region, the competition with respect to programmes naturally arose whether

the parties concerned were aware of it or not. Differing from NHK, the programmes of commercial broadcasting were chiefly compiled as sponsored or spot programmes, and hence, for the purpose of improving the effect of advertising it was necessary to attract as many receivers as possible to their own dial. Thus, they were forced to study how to encroach upon NHK's programmes, which heretofore had monopolized the market, in order to anticipate development of their own company.

Commercial radio broadcasting until 1957 continued rapid development annually and eventually brought about prosperous times in radio broadcasting. However, there were two basic trends in the compilation of their programmes. One was that they tried aggressively to penetrate into the lives of the general public, and the other was to grasp the weak points of NHK programmes and to pit themselves against this weakness.

With respect to point one, the quiz contests and light music entertainment programmes especially were given priority which brought about a boom in this type of programmes. Moreover, large amounts of money or other prizes were handed out at these contests which, all the more, stirred the interest of the people towards commercial radio programmes. During this period at least one such contest or quiz programme was conducted daily to incite the gambling spirit of the public. Furthermore, aligned with the boom in light music new bands were born one after another and such music was broadcast not only during the golden hour at night but also in the morning as well as in the afternoon or even late into the night. The basic programmes produced by NHK have been greatly changed since the war, adopting the overall pattern of American commercial broadcasting and emerging as a broadcaster with the interest of the listeners as its major concern. In view of its nature as an enterprise, educational and cultural programmes were given priority and entertainment programmes considered vulgar were controlled. In contrast to this the commercial broadcasting stations created an emancipated mood with the feeling that they were not the party in power, and hence, exerted efforts towards increasing the desire of the public for popular entertainment programmes, as abovementioned. This was one method to capture as many sponsors as possible and to establish the position of radio broadcasting as the new medium for advertising. In fact, when radio broadcasting was at its peak, the record of the various commercial broadcasting stations in the country showed that the times were so good that there was almost no sustaining programme.

As for the second point, the appearance of advertising in the programmes characterizes commercial broadcasting. Heretofore, the receivers who had become used to NHK which was forbidden to conduct advertising broadcasts, the commercials were an absolutely new attraction. All the commercial stations conducted researches on how to make commercials effective and were able to originate various methods in a short time. Their appeal to receivers was unexpectedly great, which became one of the big factors in the development of commercial broadcasting. Moreover, in competing face to face with NHK over programmes TBS was one of the key commercial stations which openly took a rival attitude. This company concluded agreements with some of the famous artists (actors and actresses as well as singers) who would appear only on TBS as a means to prevent them from appearing on NHK. Furthermore, it produced programmes similar to

popular NHK ones and tried to lower the latter's ratings. It also beamed programmes at midnight in order to cultivate a new time band.

After 1958 when television broadcasting was well on its way, the development of radio broadcasts rapidly began to decline. In 1959, the position of radio and television was reversed with respect to advertising. Thus the superiority of television was established. Television broadcasts became the center of attraction and stimulated by this, big enterprises appropriated budgets only for television advertising, considering radio as already an old-fashioned medium. Under such conditions, radio broadcasting had to find some means to save this deteriorating situation. This was also applicable to NHK broadcasts. As abovementioned (see Part III, Chapter 7, "Broadcast Programmes", Section 1) commercial broadcasting stations as well as NHK were forced to study measures for the compilation of programmes and to put these into effect. At this time, a new style programme titled "Tokyo Dial" which was an imitation of 'NBC's monitor' type was broadcast. This programme completely did away with the heretofore programme concept and attracted the attention of the public as something which utilized the special characteristics of the radio itself. This was the so-called "wide programme" where news, interviews, on-the-spot relays and music as well as all kinds of subjects were freely interwoven. The fact that its production cost was cheap, that spot commercials could be inserted, that the audience rate started to show a gradual increase attracted many sponsors who started to utilize this programme. This made various stations compile many similar types. Simultaneously, as a general trend, the broadcast time band was chopped up into 5-minute, 10-minute and 15-minute programmes, which became the core of sales. These compilation measures, among the various ones conceived to break down the wall in order to tackle the invasion of television were considered to be the most effective and appropriate. This put a stop to the decrease in the listening rate and from the point of advertising income, it more or less stabilized the situation, even though such income was small.

6. Television Programmes

In August 1953 when NTV started out as Japan's first commercial television broadcaster, the production set-up for receiving sets was not yet regulated. Hence, the company, for the purpose of increasing the efficiency of television as an advertising medium, drew up the following measures: (1) to set up television sets on the streets for the general public; (2) priority to be given to sports relay programmes, especially baseball, professional wrestling and 'sumo' wrestling which were the most favoured. These measures were very effective in creating a clear image upon the public that television is vastly entertaining and forceful. This was one of the big factors in promoting the increase of television sets.

Television sets started to become popular among households from the latter part of 1957. At this time, programmes broadcast at regular hours started to increase and the trend to compile standard programmes was born. Naturally the tendency to televise relayed programmes as special events was curbed. In the early years, the ratio of American movie films and television dramas occupied among the television programmes was ra-

ther high, because television films were inexpensive compared to dramas, were popular, and were in great demand. When annual audience rate according to programmes in 1957 was viewed, among the ten with the highest rate, five were American films. For example, the "Superman" was rated second following field pickup professional wrestling programmes. The audience rate was as high as 73 percent. In April 1955, Radio Tokyo Television which started out as the second commercial television station started to broadcast a television film "Mr. Himana Jumps Out" as soon as it started business. This programme in serials became the station's most popular one and remained so for seven years. Still, the audience rate was not as high as "Superman".⁽¹⁾

American-made television films were very powerful in increasing the audience rate, while there was a prominent trend towards rendering well-known literary works into television dramas. The dramas had a low percentage compared to the former with respect to audience rate, but in a way contributed towards increasing the credit of the sponsors presenting this type of programme. There was a boom in this type which improved drama production techniques. "I Want To Be a Sea Shell" which captured the Grand Prize in the Ministry of Education sponsored festival (drama produced by Radio Tokyo TV) clearly showed this trend. This year should also be remembered as when new broadcasting techniques had been adopted in commercial television programmes. NTV used the 1,000 millimeter lens for the relay of sports programme and succeeded in showing close-up expressions of the athletes, while Radio Tokyo TV imported a video tape recorder from the Ampex Company and started to use it in televising programmes.

Commercial television stations were opened up in major cities one after the other from 1958 to 1959, and their foundation to co-exist with NHK was firmly established. Indeed, the arrival of the television era was accelerated. Some four key commercial stations were now established in Tokyo and these placed the local stations under their control which contributed towards the competition for setting up networks. The sponsors had to take care of the huge television budgets in which were included in the expenses of such affiliated network stations and this became a factor for the remarkable development of commercial television programmes. On the occasion of the Crown Prince's wedding, the procession was televised, for which two great networks under Radio Tokyo TV affiliations (17 companies) and NTV affiliations (13 companies) were temporarily organized. The fact that this was very successful, though in competition with NHK's nation-wide network, should be especially recorded in the history of commercial television broadcasting. Prior to and after this broadcast the increase in receivers became notable and, with this, in accordance with the expansion of business, broadcasting time was extended, and the various commercial stations established their system so that broadcast hours were comparable to those of NHK.

As for those programmes televised at fixed hours, the quiz, contests and

(1) American and foreign films were popular among the television audiences in Japan because all dialogue was dubbed in Japanese. This dubbing technique has so advanced that the characters in the films talk like Japanese. Hence, the audience in general have become the victims of an illusion in thinking these "foreigners speak excellent Japanese".

light music programmes which were popular during the heyday of radio increased, while imported American home dramas and suspense thrillers were popular. As all of these had a high audience rating, and stimulated by this trend, similar types of dramas were produced in large numbers. It can be stated that the efficiency of television as an entertainment medium became widespread as competition in the aspect of programmes intensified among the various companies. But such a tendency brought about vulgar programmes and, as above-mentioned (Part III, Chapter 7, "Broadcast Programmes", Section 2) resulted in the rise of problems concerning the social responsibility of television broadcasting.

The broadcasting enterprise, irrespective of whether it was NHK or the commercial broadcasting companies, on the basis of the programmes offered, was obliged to serve for the benefit of the public. In order to fulfill this duty, commercial broadcasting companies as well as NHK established standards for programme planning and further in order to reflect public opinion as much as possible in programmes, founded a programme deliberating organ (see Part III, Chapter 5, "Revision of Broadcast Law", Section 2). However, commercial broadcasting companies existed for profit motives, and could not plan programmes without giving due consideration to the desire of the sponsors. They were chiefly concerned with the vicissitudes of business, and hence, they could only work gradually towards improving the quality of their programmes. This, after all, may be unavoidable with commercial broadcasting. But today, when broadcasting, especially television, has come to occupy a secure position in the life of the people, commercial television business has become stable and this has enabled it to produce more programmes of a conscientious nature.

Conclusion

In concluding the history of broadcasting in Japan, in which its flow has been traced over the forty years from 1925, the year of its commencement, it now seems appropriate to take up problems of deepest interest and attempt an evaluation of the existing state and prediction for the future. The problems include colour television, satellite broadcasting and the revision of the Broadcast Law. These are expected to play a very important part in the future development of the broadcasting world in Japan.

Colour telecasting has been in operation for seven years since it was inaugurated in September 1960. In March 1966, the microwave channels for colour television had been extended over the whole country, and the colour television coverage has now reached 93% of the total households in the country. Both NHK and the commercial broadcasters are strengthening their colour television facilities by improving and increasing studios and securing more colour cameras and other equipment. However, NHK is the only broadcaster operating a nation-wide network of colour television. Though local commercial broadcasters have just about completed their respective facilities for forming a network with key stations, establishment of a commercial network system is somewhat delayed. This arose from the slow tempo of the dissemination of colour receivers, which has resulted in the dubious value of colour television as an advertising medium. The number of colour sets in operation was estimated at about 300,000 as of the end of 1966.

As will be stated later, recent activity of the colour receiver manufacturers is indicative of a rapid dissemination of sets in the near future. This in turn is expected to hasten the network formation among the commercial stations, thus resulting in a nation-wide colour television network comparable to that of NHK in the not far off future.

The 1965 output of colour receivers was merely 100,000 sets, but because the production facilities of various manufacturers were rapidly expanded, the output increased to five times in the following year, and the 1967 output is estimated to reach a million sets. Of course, nearly fifty per cent of the total has been intended for the American market, where a colour boom has been in full swing. This situation, moreover, is expected to continue for some time. Nevertheless, with consolidation of the production facilities at the manufacturers, expansion of the domestic market and reduction in prices are inevitable, and, as a matter of fact, this tendency is gradually becoming evident.

Generally speaking, increase in the colour telecasting hours and wider dissemination of colour sets are interrelated. In Japan, NHK, which is not dependent on sponsored programmes, is charged with the pioneering rôle in the dissemination of colour sets by increasing the broadcasting hours regardless of expenditure. NHK was presenting colour programmes for an average of 4 hours a day as of March 1967, but the Corporation has revealed that it has already made plans for increasing the time to 7 hours or more a day by the end of 1967. So the time is already ripe for

further increasing colour receivers while maintaining a close relationship between the increase of broadcasting hours and reduction in costs. It may, in fact, be said that a quiet colour boom has already set in.

Another problem faced by Japanese broadcasting circles, which, by the way, is common to all broadcasters the world over, is the development of broadcasting satellites. As a result of the success achieved in the space relay of the Tokyo Olympic Games using the Syncom type communications satellites (October 1964), the trend towards utilization of satellites for broadcasting purposes has become conspicuous in Japan. However, existing satellites usable for broadcasting are attended with various restrictions, which make it impossible to obtain full utilization. This is because such satellites have diversified purposes, such as for public communications using telephone and telegraph, weather observations and collection of data on scientific researches. NHK has announced its plans for launching its own broadcasting satellite in August 1965. The principal purpose of this satellite, according to the NHK announcement, would be to eliminate areas of difficult reception within Japan. It is also to be used for relaying NHK's educational programmes to ABU member nations. The materialization of this idea is considered as being not too far in the future. In preparation for materializing this plan, NHK has established an investigation and research organ to conduct study of the problems involving management, legislation, programmes and technical aspects in case of satellite utilization for the above purposes. On New Year's day 1967, the Tokyo Broadcasting System (TBS) attempted a 2-stage, 4-dimensional relay broadcasting under the title of "Dawn Comes to the World", linking Tokyo, New York, London and Paris via Intelsat II. This attempt attracted wide attention of the interested parties. It is predictable that through systematic utilization of satellite broadcasting, which has already entered the stage of practical application, mutual understanding and cultural interchange among nations of the world will be markedly promoted.

In view of a remarkable development achieved in the past ten years by Japan's broadcasting services, administration of radio waves and broadcasting is expected to become more complex and diversified when the future growth of the services is considered. The government has made an attempt at revising the existing legislation from the basic concept of securing systematic utilization of radio waves and furtherance of the social functions of broadcasting. The Government's related bills were presented at the Diet in session in March 1966, but these were rejected before deliberations on them were completed. The Government is now making preparations with a view to presenting the bills again at the next session of the Diet. Even today, however, there are some who advocate fundamental revisions and others who consider it sufficient to limit the revisions to provisional measures. The former are of the opinion that processing of licences on FM broadcasting and UHF television now on the reserved list should wait until fundamental legislative revisions involving the establishment of the channel plans and basis of licensing are completed. The latter are of opinion that provisional revisions would be sufficient until the materialization of satellite broadcasting. In any case, interest is focused on the future developments related to this problem since it is considered as one of the basic questions of great importance faced by Japanese broadcasting

circles.

Through forty years of growth and development, broadcasting in Japan, by taking full advantage of the nature of radio waves, has played an important part in providing information and entertainment for the people, transmitting knowledge and experience to them, as well as broadening their field of vision and formulating their opinions and attitudes. Television, in particular, now occupies a leading position among mass media and has created a world peculiar to itself in individual homes. And so it is to be hoped that the results achieved by radio engineering, developed by the wisdom and capabilities of scientists and handed down to our generation, will be utilized fully for the promotion of public welfare and culture, which is the object of broadcasting, not only in Japan but also in the whole world, thus helping to promote the happiness of mankind.

Annals

Up to the Beginning of Actual Broadcasting Services in Japan (before 1923)

abroad

- 1876 Telephone invented by Alexander Graham Bell of the United States
- 1895 Guglielmo Marconi of Italy succeeds in wireless telegraphy experiment
- 1905 Reginald A. Fessenden broadcasts vocal and violin solos using the dynamo system wireless telephone from the Brantrock Station in the United States (the first experiment in broadcasting conducted on 24 Dec.)
- 1907 Lee de Forest of the United States develops three-element audion tube
- 1920 Station KDKA (Pittsburgh, US) commences the world's first regular radio broadcasting service (2 Nov., using a transmitter with an output of 100W)
- 1922 28 Aug Station WEAF in the United States begins advertisement broadcasting (suspended between 28 Sep. and 7 Dec., resumed on 8 Dec.)
- 1 Sep A broadcasting station in Moscow begins regular broadcasting (called the Comintern Broadcasting Station)
- 14 Nov The British Broadcasting Company begins, daily broadcasting from the London station
- ..Nov "Radiola", the commercial station of French Radio Electric Corporation, begins broadcasting (renamed "Radio Paris" in 1922)
- 1923 29 Oct The Radio-Stunde Company of Berlin begins broadcasting

Japan

- 1885 The Ministry of Communications established
- 1907 Electro-Technical Laboratory of the Ministry of Communications begins researches in radiotelephony
- 1912 Dr. Uichi Torigata invents TYK system radiotelephone
- 1915 The Radiotelegraphy Law promulgated
- 1923 20 Dec The Ministry of Communications establishes the "Regulations for Private Radiotelephony Facility for Broadcasting" (establishment of administrative system for radio broadcasting)

General Events

- 1922 6 Feb Washington Conference ends. Various treaties, including the Disarmament Treaty, signed
- 30 Dec The Union of the Soviet Socialist Republics established
- 1923 1 Sep Great earthquake disaster in the Kanto area (Tokyo-Yokohama), Japan

1924**Japan**

- 26 Feb The Ministry of Communications adopts policies for the supervision of the broadcasting service and pre-broadcast censorship ("Bylaws for Supervising Business Disposal Related to Private Radiotelephone Facilities for Broadcasting" established)
- 2 Aug The Ministry of Communications approves establishment of one station each in Tokyo, Osaka and Nagoya as public utility juridical person only
- 29 Nov Corporate Juridical Person, the Tokyo Broadcasting Station established

Abroad

- 4 Apr The British Broadcasting Company initiates school broadcasting
- 6 Sep Unione Radiofonica Italiana (URI), Italy, starts broadcasting with output power of 1.5kW
- 2 Nov Germany uses Reiss microphone for the first time

1925**Japan**

- 10 Jan Corporate Juridical Person, the Nagoya Broadcasting Station established
- 28 Feb Corporate Juridical Person, the Osaka Broadcasting Station established
- 22 Mar The Tokyo Broadcasting Station begins Japan's first regular radio broadcasting service (Radio Day established on 12 Nov., 1943)...3,500 authorized receiving sets in operation and 5 hours per day broadcasting time..
- 1 Jun The Osaka Broadcasting Station begins regular radio broadcasts
- 15 Jul The Nagoya Broadcasting Station begins regular radio broadcasts
- 31 Oct The first outdoor spot relay broadcasting undertaken by the Nagoya Broadcasting Station
- 8 Dec The Ministry of Communications issues bulletin to the local communications bureaus in the country regarding prohibition of broadcasting speeches and discussions on politics

Abroad

- 31 Jan First short-wave broadcast relayed from the United States to Germany
- 4 Apr Union International de Radiodiffusion (UIR) established, headquarters opened in Geneva
- .. Jul The First International Broadcast Engineering Conference for Europe held in Geneva
- 2 Oct Baird succeeds in mechanical television experiment in Britain (first announced

on 27 Jan., 1926)

General Events

- 6 Jan Fascist Cabinet formed in Italy
- 22 Apr Public Peace Maintenance Law promulgated in Japan
- 5 May Universal Suffrage Law promulgated in Japan. First general election takes place on 20 Feb., 1928
- 1 Dec Locarno Treaty signed

1926**Japan**

- 22 Feb The Ministry of Communications decides on the basic policies for unified nation-wide management of the broadcasting service and plans for the construction of a national network
- 6 Aug Corporate Juridical Person, Nippon Hoso Kyokai established, and with merger of the existing Tokyo, Osaka and Nagoya Stations, the unified monopolistic operation period (1926—1950) begins
- 27 Oct NHK adopts the first-stage national network programme (completed on 5 Nov., 1928 and network broadcasting linking the seven key stations commenced)
- 30 Nov Corporate Juridical Person, Keijo (Seoul) Broadcasting Station, Chosen (Korea), established as the first station in the external territories of Japan Yagi antenna invented jointly by Hidesugu Yagi and Shintaro Uda

Abroad

- 3 Sep The National Broadcasting Company established in the United States

General Events

- 15 May The Norwegian Roald Amundsen's airship "Norge" succeeds in flying over the North Pole
- 6 Oct Talking films developed in the United States
- 25 Dec Japan's Emperor Taisho passes away and the era changes to that of Showa

1927**Japan**

- 13 Aug NHK begins first field pickup broadcasting of baseball games, after which field pickup broadcasting of various sports events gains popularity
- .. Nov NHK joins the International Broadcasting Union as an associate member

Abroad

- 1 Jan The British Broadcasting Corporation constituted under Royal Charter
- 5 Apr Columbia Phonograph Broadcasting System, US, established (renamed Columbia Broadcasting System on 19 Nov.)

7 Apr Bell Telephone Laboratories, US, makes public wired television experiment between Washington, D.C. and New York

General Events

20 Apr Kuomintang Government established in Nanking, China

21 May Captain Lindburgh of the US succeeds in nonstop flight across the Atlantic Ocean from West to East

1928

Japan

.. May Kenjiro Takayanagi succeeds in experiment with a television system with 40 scanning lines

5 Jun NHK Sapporo Station begins regular radio broadcasts (Kumamoto and Sendai Stations on 16 Jun. and Hiroshima Station on 6 Jul.)

1 Nov NHK begins broadcasting radio gymnastics

5 Nov NHK commences national network broadcasting

Abroad

.. Jul Baird, Britain, experiments with 30 scanning-line television by means of discs

General Events

29 Jul The 9th Olympic Games held in Amsterdam, the Netherlands

10 Nov Coronation of the Japanese Emperor Hirohito

.. Dec China unified under the Kuomintang Government

1929

Japan

2 Jun NHK starts nation-wide relay broadcasting

.. Jul NHK Sendai Station succeeds in trial manufacture of the Reiss type microphone

28 Aug Administrative policy of Prime Minister Osachi Hamaguchi broadcast for the first time (the first policy broadcast)

27 Sep The second-stage national network plan adopted

Abroad

27 Jun Bell Laboratories experiments with wired colour television

18 Sep The First General Assembly of CCIR held at The Hague

.. Oct Moscow Broadcasting Station inaugurates overseas service in foreign languages

General Events

4 Mar Inauguration of President Herbert Hoover in the US

7 Aug The German airship "Zeppelin" suc-

ceeds in around-the-world flight
24 Oct New York stock market crashes to start world-wide depression

1930

Japan

9 Feb The first international relay undertaken by NHK involving the statement made by Minister Plenipotentiary Reijiro Wakatsuki at the London Disarmament Conference (from the Dorchester Station in London)

1 Jun NHK Technical Research Laboratories established and investigations and researches in television begun

27 Oct NHK undertakes first international exchange broadcasting among Japan, Great Britain and the United States in commemoration of the ratification of the Disarmament Treaty

Abroad

12 Nov BBC initiates broadcasting with steel-belt recording machines

General Events

22 Apr London Disarmament Treaty signed (Japan ratifies it on 2 Oct.)

1931

Japan

.. Jan NHK Technical Research Laboratories commence production of MH type Reiss microphones

1 Feb Corporate Juridical Person, Taiwan (Formosan) Broadcasting Corporation established in Taihoku (Taipeh)

6 Apr NHK Tokyo Station begins second radio network broadcasts

1 Aug The Copyright Law and the Berne Treaty applied to broadcasting

Abroad

1 May Radio Colonial, France, begins broadcasts addressed to its colonies (renamed Radio Mondiale on 1 May, 1938)

15 Jun Radio Nations, broadcasting station of the League of Nations, established in Geneva

19 Nov NBC, US, begins exchange programmes with RAVAG, Austria

13 Dec International exchange broadcasting made among 15 nations on Marconi Day celebrating the 30th anniversary of the success in transmitting wireless telephone messages across the Atlantic

General Events

18 Sep The Manchurian Incident breaks out

1932

Japan

16 Feb NHK's receiving contracts exceed 1 million (1,000,260)

- 7 Apr Corporate Juridical Person, Korean Broadcasting Corporation established (Keijo Broadcasting Station reorganized)
- 1 May The first national radio (public opinion) survey conducted. (The first audience rating survey 1 May—31 Aug.)
- 15 Jun The Taiwan (Formosan) Broadcasting Corporation begins advertisement broadcasts (until 2 Dec.)
- 31 Jul NHK relays events of the 10th Olympic Games held in Los Angeles (31 Jul—15 Aug.). Announcers sent overseas for the first time
- 21 Nov NHK relays messages, etc. of the Plenipotentiary Yosuke Matsuoka attending the League of Nations Assembly in Geneva, as the first direct relay from the European Continent. Also the speech of Plenipotentiary Naotake Sato broadcast in film recording for the first time (22 Nov.)

Abroad

- 13 Nov Central Broadcasting Station (75kW) in Nanking, China, starts broadcasting
- 19 Dec BBC begins the Empire Service, broadcasting to the Dominions and Colonies (five directions, ten hours a day)

General Events

- 1 May Manchuria established as a nation
- 15 May Coup d'etat attempted by certain army officers and men in Japan (the so-called 15 May Incident)

1933

Japan

- 26 Jun NHK Osaka and Nagoya Stations begin second radio network broadcasts
- 1 Sep The Manchurian Telegraph and Telephone Company founded (including Talien, Mukden and Chungchun Broadcasting Stations)
- 29 Sep The Ministry of Communications issues bulletin regarding careful selection of broadcast performers by considering their ideological tendencies

Abroad

- 1 May The Moscow Broadcasting Station increases its output power to 500kW
 - 1 Jun Dual broadcasting made between BBC and NBC
- During the year in US
Vladimir Zworin
invents iconoscope

General Events

- 30 Jan Adolph Hitler's government established in Germany
- 4 Mar Franklin Roosevelt becomes President of the US

- 27 Mar Japan withdraws from the League of Nations

1934

Japan

- 1 Jan NHK establishes committees for surveying broadcast terms and improving pronunciation
- 12 Jan NHK conducts nation-wide announcer employment examination
- 16 May NHK revises business organization and abolishes the branch system (7 key stations established under the headquarters): NHK establishes the Programming Association (an organ for deliberating and deciding on the national network programmes)

Abroad

- .. Mar CBS broadcasts from Little America, the American base in the Antarctic, to the United States and from New York to Little America
- 1 Apr In Germany, all broadcasting stations centralized under the management of Reichssender
- 1 Jul Federal Communications Commission (FCC) established in the United States
- 2 Oct Mutual Broadcasting System, US, starts broadcasting

General Events

- 2 Aug Hitler assumes the position of Fuehrer
- 29 Dec Japan notifies the US of abrogation of the Washington Naval Disarmament Treaty (loses effect after a year)

1935

Japan

- 15 Apr NHK begins national network broadcasts for schools
- 1 Jun Radio Tokyo, an overseas short-wave service commenced (in Japanese and English for one hour a day directed to North America, using a 20kW transmitter located at the Nazaki Transmitting Station of Kokusai Denshin Denwa Company)
- 7 Nov NHK begins to receive news materials from the newly-founded Corporate Juridical Person, the Domei News Agency

Abroad

- 22 Mar Television broadcasting begun regularly in Berlin for the first time in the world with the 180-line system
- 6 Nov Armstrong, US, announces the completion of FM system at the Radio Engineering Conference

General Events

- 3 Oct Italy invades Ethiopia

1936

Japan

- 26 Feb NHK makes an appeal to the insurgents during the so-called 26 Feb. Incident, thus contributing to the suppression of the insurgent army faction led by young officers
- 27 Mar The Ministry of Communications tightens control of all-wave radio receivers
- 1 Jun NHK begins broadcasting "National Songs" it has produced
- 19 Jun NHK relays the total solar eclipse linking 27 stations throughout the country from Nyomabetsu in Hokkaido
- 2 Aug NHK relays the events of the 11th Olympic Games held in Berlin (2-16 Aug.)
- 29 Oct NHK uses disc recording for the first time
- 21 Nov NHK Osaka Station Building completed

Abroad

- 1 Aug Berlin Olympic Games broadcast live by television (1-16, Aug.)
- 2 Nov High-definition television service officially inaugurated in London by BBC

General Events

- 20 Jan Edward VIII ascends the throne of England
- 26 Feb 26 February Incident breaks out in Japan (revolt of an army sector)
- 6 Apr Yoshihiko Koga invents indirect X-ray photographic method
- 1 Jul The Cabinet Information Committee established; becomes the Information Division on 25 Sep., 1937 and the Information Bureau on 26 Dec., 1940
- 1 Aug The 11th Olympic Games held in Berlin, Germany

1937

Japan

- 14 Jul With the outbreak of hostilities with China, early morning news and news commentaries reinforced
- 25 Sep The Cabinet Information Division established and policy broadcasts reinforced
- 11 Nov First air defence alarm issued in Kyushu area
- 28 Dec Power output of transmitters for the first and second networks at the NHK Tokyo Headquarters increased to 150kW

Abroad

- 12 May Coronation of King George VI broadcast live by television
- 7 Jul Japan-China hostilities begin

General Events

- 6 Apr The Japanese Asahi Newspaper Company's aircraft "Kamikaze" visits Europe. Arrives in London on 9 Apr.
- .. Apr A cyclotron completed at the Science and Technology Research Institute, Japan
- 12 May Coronation of George VI of England
- 7 Jul The Lukowkiao Incident starts Japan-China hostilities
- 6 Nov Mutual Defence Treaty signed by Germany, Italy and Japan

1938

Japan

- 10 Jan NHK newly establishes air time for announcing important policies of the Government (10 minutes every evening)
- 14 Mar Kenzo Nagai invents AC bias magnetic recording system
- 21 Aug NHK's overseas service arranges a special programme on the Independence Day of Hungary, similar programmes being continued for similar anniversaries of other nations
- .. Dec Nation-wide radio diffusion campaigning begun under joint sponsorship of the Ministries of Communications, War, Navy and Home Affairs
- 20 Dec NHK Tokyo Headquarters Building completed (put in use on 13 May, 1939)

Abroad

- 1 Jan Magnetic recording tapes used for the first time for broadcasting in Germany
- .. Jun In Italy, listening to foreign broadcasts banned; in Germany also banned from 1 Sep., 1939

General Events

- 13 Mar Germany declares annexation of Austria
- 1 Apr Total Mobilization Law promulgated and enforced on 5 May in Japan
- 29 Sep Munich talks take place (29th to 30th)

1939

Japan

- 14 Feb "National Radio Gymnastics Society" organized
- 10 Apr The East Asia Broadcasting Council organized by broadcasters in Japan, Korea, Formosa and Manchuria
- 13 May NHK Technical Research Laboratories undertake experimental telecasting (45Mc video frequency, peak output of 2kW) and reception at the NHK Building from the Laboratories demonstrated
- 26 Jul A Current Affairs Broadcast Planning Council established. Intervention of the Cabinet Information Division with programming intensified

Abroad

1 Sep BBC closes down television service for reasons of national defence (resumed on 7 Jun., 1946)

General Events

28 Mar General Franco achieves victory in Spanish Civil War

11 May Japanese-Soviet armies engage in hostilities at Nomonhan (cease-fire in Sep.)

23 Aug Germany-Soviet Non-Aggression Pact signed

3 Sep World War II breaks out

1940

Japan

29 May Receiving contracts pass the 5-million mark

1 Jun The overseas service (Radio Tokyo) consolidated (7 directions, 11 languages and 10 hours a day)

2 Jul The North China Broadcasting Corporation opens for service (joins East Asia Broadcasting Council in Aug.)

11 Nov On the occasion of the 2600th year of the founding of Japan, NHK arranges special celebration programmes (broadcasts celebration musical works supplied by Germany, Italy, France and Hungary)

5 Dec The Information Bureau established, and control and guidance of broadcasting transferred from the Ministry of Communications to the newly established Information Bureau

Abroad

28 Sep CBS, US, explores mechanical system colour television and starts experimental broadcasting at WZXA Station from this day

During the year in US miniature vacuum tubes put on the market

General Events

30 Mar Wang Chao-ming's Nanking Nationalist Government established

10 May Fighting begins along the Western front in Europe

27 Sep Military alliance among Japan, Germany and Italy signed in Berlin

10 Nov The 2600th anniversary of Japan's founding observed

1941

Japan

29 Jan Italo-Japanese Broadcast Agreement concluded

15 Mar The Broadcasting Business Establishment Corporation of China (The Broadcasting Corporation of China) founded. Joins the East Asia Broadcasting Council on 16 May

2 Sep NHK's school broadcasts officially approved as teaching materials

19 Sep NHK begins spot campaign broadcasts
17 Nov NHK broadcasts Prime Minister Hideki Tojo's general administrative policy speech at the Diet in recording (the first Diet broadcast)

7 Dec NHK's stations total 46 (42 on first network, 3 on second network, 1 short-wave) with total output power of 407.9kW

8 Dec The second network suspended through outbreak of the Pacific War. The first network limited to national network programmes originating in Tokyo. Weather forecasts suspended

9 Dec Radio wave control ordered

20 Dec NHK expands its overseas service (17 languages, 24 hours and 40 minutes a day)

Abroad

29 May FCC authorizes commercial FM station (WSM-FM, Nashville, Tennessee)

17 Jun FCC authorizes WNBT Station (New York) to operate commercial telecasting (the Station opens on 1 Jul.)

General Events

11 Mar Arms Lend-Lease Law enacted in the United States

13 Apr Japan-Soviet Neutrality Pact concluded

22 Jun Germany declares war on the Soviet Union

Jul The US succeeds in assembling the world's first nuclear reactor at Columbia University

8 Dec Japan declares war on the United States; the Pacific War begins

11 Dec Germany and Italy declare war on the United States

1942

Japan

1 Jan NHK composes 30 pieces of "Greater East Asia March"

15 Feb The Information Bureau adopts basic policy for programming under wartime situation

18 Apr Tokyo experiences the first air raid
Air raid alarm broadcast

23 Apr NHK engages 39 writers, producers, writers of music and lyrics, singers and actors to enrich the contents of programmes

29 Apr Corporate Juridical Person, Nippon Philharmonic Orchestra founded under the chairmanship of NHK President Shichiro Komori

3 Dec NHK consolidates the overseas service and reinforces broadcasts directed to occupied areas and enemy listeners (13 transmissions, 21 languages, 30 hours and 30 minutes a day)

- 4 Dec Important items related to the operation of NHK placed under the control of the Prime Minister (Information Bureau)
- 7 Dec Wired broadcasting using telephone lines undertaken in Tokyo for the first time (spread gradually to the entire country)

Abroad

- 24 Feb Manufacture of radio and television sets for civil use prohibited by the U.S. government
- 24 Feb Office of War Information (OWI) starts VOA in US

General Events

- 15 Jun Sea battle off Midway Islands
- .. Jun Dr. Shoichi Sakata et al. propose the dual meson theory
- 17 Jul Germany-Soviet fighting around Stalingrad begins (German Army surrenders on 21 Feb., 1943)
- 12 Dec The US successfully demonstrates chain reaction of nuclear fission at the University of Chicago

1943

Japan

- 7 Jan NHK inaugurates the programme "The Battle Front Evening Hour"
- 20 Jan NHK publishes the first Japanese language pronunciation dictionary
- 1 May NHK Tokyo Broadcast Dramatic Group (exclusively engaged by NHK) founded
- 1 Aug NHK expands its overseas service (14 transmissions, 24 languages, 30 hours and 55 minutes a day)
- 1 Nov The Ministry of Communications abolished, and Transportation and Communications Ministry established

Abroad

- 4 Jul BBC begins broadcasting in Japanese

General Events

- 8 Sep Italy surrenders unconditionally to the Allied Forces
- 27 Nov Heads of the United States, Great Britain and China jointly announce the Cairo Declaration

1944

Japan

- 12 Jan The Information Bureau decides on public opinion guidance policy through broadcasting. Under this decision, NHK adopts a policy for increasing programmes for the promotion of greater industrial output
- 1 May NHK decides a policy for presenting wholesome and cheerful programmes under the war-time situation
- 6 Oct NHK inaugurates commentaries and

other programmes based on the Essentials of Public Opinion Guidance for Decisive War adopted by the Cabinet

- 5 Nov The overseas service expanded (15 transmissions, 24 languages, 32 hours and 35 minutes a day) to the largest scale achieved during the war

Abroad

- 26 Oct Radio Audizioni Italia (RAI) established
- 30 Dec The American Broadcasting Company starts radio broadcasting

General Events

- 6 Jun The Allied Invasion Forces land in Normandy
- 25 Aug The German Forces in Paris surrender: Paris liberated
- 24 Nov US B-29 bombers begin attacks on Tokyo

1945

Japan

- 5 Apr NHK begins to reduce the overseas service
- 19 May The Communications Bureau renamed Posts and Communications Bureau and placed under the control of the Cabinet instead of the Ministry of Transportation and Communications
- 15 Aug The Emperor broadcasts the Imperial Rescript to end hostilities
- 1 Sep Radio wave control released. The second network broadcasts resumed
- 1 Sep Greater East Asia broadcasts suspended
- 4 Sep Foreign language broadcasts in the overseas service suspended by order of the Occupation Forces: Japanese language overseas broadcasts also stopped on 10 Sep.
- 10 Sep The Occupation Forces notify the government of the Memorandum Related to News Distribution and issue directive on the editing standards of newspapers and radio programmes
- 22 Sep The Occupation Forces issue a directive on the radio code to be observed by the Japanese Government
- 23 Sep Armed Forces Radio Service (AFRS, US) inaugurates broadcasting for the Armed Forces in Japan. NHK provides facilities and services
- 27 Sep By the Memorandum issued by the Occupation Forces Japanese Government's censorship of programmes banned, and guidance in programming transferred to the Civil Information and Education and censorship, to the Civil Censorship Detachment, GHQ
- 29 Sep NHK begins "Man on the Street" programme (new programmes for al-

lowing the people to express their opinions for radio broadcasting inaugurated one after another)

- 1 Nov NHK establishes the blanket coverage system for the first network
- 1 Dec NHK adopts the quarter-system for programmes
- 11 Dec The Occupation Forces indicate to the Posts and Communications Bureau a memorandum related to reorganization of NHK
- 31 Dec The Information Bureau dissolved

Abroad

- 7 May Moscow Station resumes regular television service with 441-line system
 - .. Sep Hsinhua Station, Yencheng, Communist China, begins radio broadcasting
 - .. Oct CBS commences colour telecasting (UHF) experimentally
- During the year in the US image-orthicon cameras exploited by RCA

General Events

- 4 Feb Yalta Talks among the heads of the US, Great Britain and the Soviet Union
- 12 Apr President Roosevelt passes away and Vice-President Truman becomes the President of the US
- 7 May Germany surrenders to the Allied Forces unconditionally
- 26 Jun The draft of United Nations Charter adopted at the San Francisco Conference
- 17 Jul Heads of the United States, Great Britain and the Soviet hold talks at Potsdam and issue a declaration against Japan
- 6 Aug Atomic bomb dropped on Hiroshima (on Nagasaki on 9 Aug.)
- 8 Aug The Soviet Union declares war on Japan
- 15 Aug The Pacific War ends
- 2 Sep Japanese representative signs the Instrument of Surrender aboard USN Missouri
- 24 Oct The United Nations officially established
- 17 Dec New Election Law promulgated: Women given suffrage
First election under this Law takes place on 10 Apr., 1946

1946

Japan

- 4 Mar The term "NHK" used for the station breaks
- 14 Mar NHK inaugurates election broadcasts
- .. Apr NHK publicly recruits radio reporters for the first time
- 15 Jun NHK Radio and Television Culture

research Institute established for investigating and studying broadcast culture

- 1 Jul Television researches resumed at the NHK Technical Research Laboratories
- The Posts and Communications Bureau promoted to the Ministry of Communications
- 5 Oct NIIK labour union goes on strike (5-25 Oct.) during which broadcasts placed under government control
- 3 Dec NHK begins presenting a quiz programme, the Fountain of Topics, which starts a new vogue in programmes

Abroad

- 7 Jun BBC resumes television service
- 28 Jun Organization Internationale de Radiodiffusion (OIR) established in Brussels (renamed OIRT from Jul., 1959)
- 29 Sep BBC introduces the Third Programme
- 4 Oct Association Interamericana de Radiodiffusion (AIR) established with members of associations of commercial stations from 19 countries
- 23 Oct United Nations Radio starts broadcasting

General Events

- 5 Apr The first meeting of the Allied Council for Japan
- 1 Jul The US begins atomic experiments at Bikini
- 1 Oct The final judgement given at the Nuremberg Trial
- 3 Nov Japanese Constitution promulgated (goes into effect on 5 May, 1947)

1947

Japan

- 8 Jan The Allied Council for Japan supports NHK's unified monopolistic broadcasting system and rejects establishment of commercial stations
- 13 Jan NHK begins station break announcements
- 3 May NHK presents special programmes on the promulgation of the new Constitution (3-9 May)
- 16 Oct The policy of the Occupation Forces changes and suggests making NHK a public service broadcasting service, adoption of a committee system for broadcast administration and establishment of commercial broadcasting

Abroad

During the year RCA makes public all-electronic colour television system, compatible

General Events

- 12 Mar The Truman Doctrine (measures for containment of communism) announced in the US
- 5 Jun The US announces the Marshal Plan

- for aiding Western Europe
- 15 Aug India wins independence
- 30 Oct GATT signed at the International Trade Conference

1948

Japan

- .. Jan NHK inaugurates "Radio Meeting" for group listening to social education programmes
 - 13 Aug NHK adopts a five-year programme aimed principally at expansion and consolidation of the second network
 - 15 Sep Receiving contracts increase to the pre-war level (more than 7 million)
 - 13 Nov The first programme rating survey conducted (sample survey under the random sampling method)
- During the year, NHK uses tape-recorders for the first time

Abroad

- .. Jul Bell Telephone Laboratories researchers (Bardeen, Brattain and Schokley) invent transistor radio
 - 14 Sep International cooperative conference held in Italy attended by representatives of broadcasters in Europe (Italian Prize set up as proposed by RAI)
- During the year Korea establishes KBS in Seoul succeeding to the facilities used by Japan.

1949

Japan

- 4 Jan NHK undertakes the first election broadcast on a legal basis (The Public Office Election Law promulgated on 15 Apr., 1950)
- 1 Apr NHK establishes the monitor system for programmes
- 1 Jun The Ministry of Communications dissolved and the Ministry of Postal Services and Ministry of Telecommunications created
- 15 Jul The Occupation Forces notify a memorandum authorizing resumption of the international service
- 18 Aug NHK broadcasts scenes of the National Swimming Championship Meet relayed from Los Angeles (18-20 Aug. The first post-war incoming relay from

abroad)

Abroad

- .. Sep The First Italian Prize Contest held (21 works from 11 countries entered)

General Events

- 4 Apr The North Atlantic Treaty Organization established
- 10 Jul The Soviet Union undertakes the first atomic bomb experiment
- 9 Sep The Federal Republic of Germany (West Germany) established: Establishment of the Democratic Republic of Germany (East Germany) declared on 7 Oct.
- 1 Oct The People's Republic of China established under Mao Tse-tung as President
- 3 Nov Dr. Hideki Yukawa awarded the Nobel Prize for Physics

1950

Japan

- 1 Jan "NHK Radio Weekly" published
 - 20 Feb NHK establishes the Broadcast Culture Prize for outsiders who have made meritorious contributions to the development of the broadcasting service. The first prizes were presented to four persons (22 Mar.)
 - 25 Feb NHK establishes the Tokyo Experimental Television Station at the Technical Research Laboratories (from 10 Nov. regular experimental telecast commenced)
 - 2 May The Radio Law, the Broadcast Law and the Radio Regulatory Agency Establishment Law promulgated (New system related to radio waves and broadcasting founded)
 - 1 Jun Corporate Juridical Person, NHK dissolved and a special corporation NHK founded under the Broadcast Law. The Board of Governors as the highest policy-making body formed
- Radio stations reach 120 (83 on the first network and 37 on the second). Radio receiving contracts reach 8.7 million and the NHK staff increases to 7,700
- 8 Jul NHK begins relaying professional baseball games played at night
 - 4 Oct NHK Broadcast Programme Council established (similar councils later established at the regional key and local stations)
 - 25 Oct National Federation of Broadcast Education Study Societies formed (subsequently national convention held annually with NHK's school programmes as the centre of interest)
 - 5 Dec The Radio Regulatory Agency publicly announces the Fundamental Standards

for the Establishment of Broadcasting Stations

Abroad

- 4 Jan The first UHF TV Station in US opened in Stratford
- 12 Feb The European Broadcasting Union (EBU) established (UIR dissolved)
- 25 Mar RCA develops tri-colour receiving tube
- 9 Jun Paris Station tries solid broadcasting
- 27 Aug First television outside broadcast from France (Calais) to England (Dover-London)

General Events

- 14 Feb Communist China—Soviet Amity Alliance and Mutual Aid Treaty concluded
- 25 Jun The Korean War breaks out
- 8 Jul The Supreme Commander of the Allied Forces, General MacArthur orders Japanese Government to establish police reserve units, 75,000 men)

1951

Japan

- .. Jan NHK Technical Research Laboratories commence researches on colour television
- 3 Mar First programme analysis study undertaken using a programme analyzer made in Japan
- 21 Apr The Radio Regulatory Agency issues first preliminary licences to 16 commercial radio stations
- 30 May NHK joins EBU (European Broadcasting Union) as an associate member
- 11 Jul NHK sends reporters to Korea to start overseas news coverage
- 20 Jul The Federation of Commercial Broadcasters in Japan established. All commercial broadcasting companies included as members
- 5 Aug NHK opens the first automatic radio rebroadcasting station
- 11 Aug Corporate Juridical Person, the NHK Symphony Orchestra founded (Nippon Philharmonic Orchestra dissolved)
- 27 Aug NHK organizes special programmes on the Peace Conference (San Francisco) up to 9 Sep.
- 1 Sep The first commercial broadcasting commenced by Shin Nippon Hoso (Osaka) and Chubu Nippon Hoso (Nagoya)
- 12 Oct The Federation of Commercial Broadcasters in Japan establishes radio code for commercial broadcasts (broadcasting standards for programmes)
- 18 Oct NHK announces the first-stage five year programme for the television service
- 20 Nov. NHK establishes the Sound Library at the Radio and Television Culture

Research Institute (renamed the Broadcast Cultural Property Library on 1 Jul., 1963)

- 15 Dec The first NHK Year-end Mutual Aid Campaign commenced, and subsequently becomes an annual function
- 20 Dec NHK commences exchange of recorded programmes with foreign broadcasting organizations

Abroad

- .. Mar RCA develops walkie-lookie (and uses it for the first time on 7 Jul., 1952)
- 25 Jul CBS starts transmitting colour television
- 4 Sep US opens micro-wave circuit across the continent (Los Angeles-New York)
- 15 Oct BBC telecasts first election address

General Events

- 8 Sep Peace Treaty with Japan and Japan-US Security Treaty signed in San Francisco
- "Rashomon" awarded the first Grand Prize at the Venice International Film Festival

1952

Japan

- 23 Jan NHK undertakes first relay of scenes of Diet session
- 1 Feb International service, ("Radio Japan") resumed (5 directions, 50kW output, 1 hour a day for each direction)
- 28 Feb The Radio Regulatory Agency establishes a standard system for monochrome television
- 10 Mar NHK dispatches first staff to be stationed abroad to Paris (subsequently establishes bureaus in various parts of the world)
- 15 Mar AFRS (Armed Forces Radio Service) renamed FEN (Far East Network). Requisition of services stopped after 9 Aug., 1954
- 28 Apr The Occupation Forces' broadcast administration comes to an end through effectuation of the Peace Treaty with Japan
- 19 Jul NHK relays events of the 15th Olympic Games held in Helsinki (19 Jul.—3 Aug.)
- 31 Jul The Radio Regulatory Agency adopts the policy and measures for licensing television broadcasters
- 1 Aug The Radio Regulatory Agency dissolved and radio administration transferred to the Ministry of Posts and Telecommunications
- 8 Aug Radio receiving contracts exceed the 10 million line
- 10 Oct NHK's membership in CCIR approved (The Commercial Broadcasters' As-

sociation in Japan becomes a member on 15 Nov.)

15 Dec NHK undertakes the first stereophonic music broadcast, using Tokyo First and Second networks

Abroad

8 Jul 'International Television Week' opened and exchange broadcasting made between BBC and RTF (Paris-Lille-Cassel-Dover-London)

General Events

28 Feb Japan-US Administrative Agreement signed

28 Apr Peace Treaty with Japan and Security Treaty take effect (GHQ abolished)

19 Jul The 15th Olympic Games held in Helsinki (Japan's first post-war participation)

16 Nov The US conducts successful experiments with a hydrogen bomb

1953

Japan

11 Jan NHK's own micro-wave relay channel opened between Tokyo, Nagoya and Osaka

1 Feb NHK Tokyo Television Station opened and Japan's first television regular broadcast commenced

20 Mar Kokusai Denshin Denwa Company, Limited (KDD), established

1 May The Ministry of Posts and Telecommunications adopts the "Frequency Allocation Reorganization Policy for Standard Broadcasting"

2 Jun NHK undertakes radio relay of the coronation ceremony of Queen Elizabeth through the BBC

1 Aug The Ministry of Posts and Telecommunications issues numbers of preliminary licences to commercial radio broadcasters

23 Aug NHK undertakes the first live television broadcasts of night baseball games

28 Aug The first commercial television station, the Nippon Television Network Company (NTV) opens

5 Nov The Technical Research Laboratories develop a large projector type television receiver

Abroad

25 May KUFT, educational television station at Houston, Texas, starts broadcasting

2 Jun BBC television makes live relay of Queen Elizabeth's coronation ceremony to foreign countries

17 Dec FCC decides to adopt the colour television system proposed by the National Television Systems Committee (NTSC)

General Events

20 Jan President Eisenhower assumes office in the United States

2 Jun Coronation of Queen Elizabeth II

27 Jul Cease-fire Agreement in Korea signed

20 Aug The Soviet Union succeeds in hydrogen bomb experiment

1954

Japan

1 Mar NHK's Osaka and Nagoya television stations open for service

→ 1 Apr International service, "Radio Japan", beamed to 12 directions, using 12 languages and for 12 hours a day

15 Apr The Nippon Telegraph and Telephone Public Corporation (NTT) commences the Tokyo-Osaka micro-wave channel service (NHK's own facilities suspended on 27 May)

16 Apr NHK begins broadcasting "Beauty Calisthenics"

19 Jun Nagoya Television Tower completed (used in common by NHK and the Chubu Nippon Hoso)

.. Jun NHK radio transcription service started

• 9 Aug NHK's services to FEN (Far East Network) completely released

27 Aug Nippon Shortwave Broadcasting Station opens for service

20 Oct NHK undertakes the first television broadcast using kinescope recording

Abroad

.. Jan NBC and CBS start colour television broadcasting

6 Jun Eurovision starts and the first international television relay through Western Europe operated (with 8 participating nations, 6 Jun.-4 Jul.)

During this year transistor radio receivers put on sale in the United States

General Events

21 Jan The US first atomic submarine Nautilus launched

1 Mar The US conducts hydrogen bomb experiment around Bikini and the crew of No. 5 Fukuryu-maru, the Japanese fishing boat, suffer from deadly fallout

8 Sep SEATO established: Eight member nations sign the Pacific Charter

1955

Japan

27 Feb NHK makes its first quick report of the general election returns on television

22 Mar NHK Hall completed and used for radio and television audience participation programmes and others

- 14 Apr NHK begins presenting the television quiz programme "My Secret"
- 1 May NHK invites the American Symphony of the Air and broadcasts its performances from Tokyo and eight other cities
- 1 Jun 20th anniversary of the international radio service, "Radio Japan" (13 directions, 15 languages, 13 hours a day; output power increased to 100kW on 16 Jul.)
- 7 Jul The image orthicon made at the NHK Technical Research Laboratories used for the first time
- 31 Jul The walkie-lookie made at the NHK Technical Research Laboratories used for the first time
- .. Aug The Tokyo Tsushin Kogyo (later Sony Corporation) markets the first transistorized radio receivers
- 3 Oct Television Receiving contracts pass the 100,000 line
- 26 Nov Four-way television drama, jointly planned by the Tokyo and Osaka stations of NHK, broadcast (first Art Festival Prize winning work)
- 27 Nov NHK broadcasts electronic music for the first time
- 20 Dec NHK invites the Vienna Boys' Choir. Performances in Tokyo and 28 other cities broadcast
- Abroad**
- 22 Sep Independent Television Authority (ITA) starts commercial television broadcast in London
- General Events**
- 18 Apr The First Afro-Asian Conference held in Bandung. Joint Communique stipulating the ten principles of peace announced
- 6 Aug The First World Conference for Prohibition of Atomic and Hydrogen Bombs held in Hiroshima
- 20 May NHK develops a frame-by-frame video recording system
- 1 Jul NHK begins presenting foreign television films
- 9 Jul NHK invites Dr. Edgar Dale, an authority on audio-visual education
- 3 Sep NHK participates in the "Italian Prize" contest for the first time
- 29 Sep NHK invites the Italian Opera for the first time (30 performances in Tokyo and Osaka). NHK subsequently invites the same opera in 1959, 1961, 1963 and 1967
- 1 Oct NTT's micro-wave channel linking Sapporo and Fukuoka opened for service
- 19 Nov Live radio and television broadcast by NHK of the 16th Olympic Games in Melbourne
- Abroad**
- .. Jan Eurovision relays the 16th Winter Olympic Games from Cortina d'Ampezzo, Italy
- 27 Aug CIM and Osterreichischer Rundfunk establish Salzburg Television Opera Prize
- General Events**
- 14 Feb The 20th Presidium of the Soviet Communist Party held: Criticism of Stalinism begins
- 17 Oct Great Britain's Calder-Hall Atomic Power Plant starts operations
- 19 Oct Japan-Soviet negotiations reach an agreement and joint declaration and protocol related to normalization of diplomatic relations signed
- 29 Oct Suez Incident occurs
- 22 Nov The 16th Olympic Games held in Melbourne, Australia
- 18 Dec The General Assembly of the United Nations unanimously approves Japan's membership

1956

Japan

- 15 Jan NHK commences automation of radio transmitting stations
- 17 Feb The Ministry of Posts and Telecommunications adopts the "Basic Policy for Television Frequency Allocation" (6-channel system)
- 3 Mar NHK Broadcast Museum established
- 22 Mar The first colour television reception under the NTSC system publicly demonstrated (between NHK Technical Research Laboratories and the NHK Headquarters Building)
- 6 Apr NHK invites Prof. Norbert Wiener, an authority on cybernetics
- .. May NHK international service starts Rus-

1957

Japan

- 17 Jan NHK, by request of the UNESCO, undertakes experiment and survey of group viewing of farm programmes at 64 places in various parts of Japan
- 1 Feb NHK begins test transmissions to Ongur Island, the base for the Japan's Antarctic Observation Team
- 20 Apr Commercial stations begin broadcasting "Government's Hour" sponsored by the government
- 23 May NHK Technical Research Laboratories manufacture Japan's first trial colour receiving tube (19-inch shadow-mask system)
- 30 May NHK establishes the first satellite

- television station in Nagano
- 1 Jun The international service, "Radio Japan", expanded (15 directions in 16 languages for 15 hours a day)
 - 15 Jun Television receiving contracts pass the 500,000 line
 - 19 Jun The Ministry of Posts and Telecommunications decides on "Television Frequency Allocation Plan", and, through this, the 6-channel system changed to an 11-channel system
 - 22 Jun The Japan Broadcasting Federation established (a coordinating organ for NHK, commercial broadcasters and allied organizations)
 - .. Jun Reona Esaki invents the Esaki diode
 - 1 Jul The First Asian Broadcasters' Conference held (in Tokyo with participation of 11 broadcasting organizations in Asia. 1-8 Jul.)
 - 1 Oct The first survey on "broadcasting and children" conducted by NHK (second survey conducted as the Shizuoka Survey on 1 Oct., 1959)
 - 31 Oct NHK invites the Berlin Philharmonic Orchestra (conductor Herbert von Karajan). Fifteen performances given in Tokyo and 7 other cities
 - .. Oct NHK begins television programme exchange with foreign broadcasting organizations
 - 24 Dec NHK's VHF-FM Tokyo Experimental Station begins operation (Osaka begins on 20 Feb., 1958)
 - 28 Dec NHK and NTV start operating VHF colour experimental stations
- Abroad**
- 27 Jan The US-USSR Cultural Agreement stipulates exchange of television programmes
 - 13 May ITA starts television service for schools in London
- General Events**
- 25 Mar EEC Treaty signed, takes effect on 1 Jan., 1959
 - 28 Aug The Soviet Union succeeds in an intercontinental ballistic missile experiment (17 Dec. for the United States)
 - 4 Oct The Soviet Union successfully launches world's first earth's satellite "Sputnik"
-
- 1958
- Japan**
- 21 Jan The Federation of Commercial Broadcasters in Japan establishes television broadcasting standards
 - 1 Apr NHK's First Five-Year Programme (long-term overall business plan) commences
 - 27 Apr NHK begins "General Campaign"
- 28 Apr broadcasts on radio and television
 - 28 Apr The all transistorized walkie-lookie developed at the NHK Technical Research Laboratories used for the first time
 - 16 May Television receiving contracts pass the one-million line
 - 26 May NHK Technical Research Laboratories develop a 3-image—orthicon camera (No.1 colour television camera developed in Japan) and makes a trial 17-inch square colour receiving tube (world's first)
 - 11 Jun A "Television Influence Survey Committee" established in the Ministry of Education
 - 17 Jul NHK begins using Ampex video tape recorders
 - 25 Sep NHK collaborates with the nation-wide scholastic achievement tests conducted by the Ministry of Education
 - 6 Oct NHK with its radio musical programme "Three Images in Words and Music" wins the Italian Prize for the first time
 - 30 Nov Radio receiving contracts reach 14-813,101 (82.5% of the total families in Japan), the highest since commencement of broadcasting (subsequently decreases with increase in television receiving contracts)
 - 30 Nov NHK Technical Research Laboratories and Sony Corporation succeed in making trial video tape recorders
 - 23 Dec The Tokyo Tower completed on which NHK and three commercial broadcasters' transmitting equipment are concent-rated
 - 31 Dec The Tokai University in Tokyo begins FM-multiplex experimental broadcasting (the only FM experimental station in Japan other than NHK's)
- Abroad**
- .. May Eurovision holds television film contest
 - 25 Oct RAI, Italy, starts educational television broadcasting, "Telescuola"
 - .. Dec US operates space relay of president's message on tape via satellite Score
- General Events**
- 31 Jan The US succeeds in launching its first earth's satellite, Explorer
-
- 1959
- Japan**
- 5 Jan NHK Technical Research Laboratories develop magnetic disc recorders
 - 10 Jan NHK opens the Tokyo Educational Television Station for service with output power of 10kW
 - 23 Mar Partial revision of the Broadcast Law (provisions for improving programmes, observance of propriety, etc.)

- 1 Apr NHK Osaka Educational Television Station begins operations with output power of 10kW
- 1 Apr NHK's international service "Radio Japan" expanded (16 directions, 16 languages 19 hours and 30 minutes a day)
- 10 Apr NHK relays the wedding ceremony of the Crown Prince from the Imperial Palace for the first time on radio and television, and both pictures and sound branched out to commercial stations
- 17 Apr NHK begins production of dramatic films for television
- 22 May NHK establishes the Central Broadcast Programme Council, Local Broadcast Programme Council by stipulation of the revised Broadcast Law. Commercial broadcasters also establish broadcasting programme councils
- 28 Jun Transistorized cameras made by NHK Technical Research Laboratories used for the first time
- 21 Jul NHK establishes the "Domestic Programme Standards" and the "International Programme Standards" by stipulation of the Broadcast Law. Similar standards also established by commercial broadcasters
- 1 Aug The news network (JNN) agreement concluded among 16 commercial broadcasters
- 10 Oct Nippon Hoso begins 24-hour radio broadcasting
- 15 Oct "Network NHK", a monthly pamphlet, published
- 10 Dec NHK begins broadcasting on radio and television the first programme covering foreign countries, "Across the African Continent". Subsequently, coverage of various other countries presented in serials
- 25 Dec Sony Corporation begins marketing the first transistorized television receivers
- Abroad**
- 1 Oct Nordvision formed; Denmark-Norway-Sweden relay circuit completed
- During the year RCA develops Nuvistor, ultra-miniature tube
- General Events**
- 2 Jan The Soviet Union successfully launches a space rocket (the first man-made planet). The United States succeeds in the same on 3 Mar.
- 10 Apr Wedding of Crown Prince Akihito of Japan
- 21 Aug Hawaii becomes the 50th state of the United States
- 18 Oct The Soviet Union's space rocket No. 3 succeeds in photographing the reverse side of the moon
-
- 1960
- Japan**
- 4 Jan NHK, in collaboration with the Ministry of Education and UNESCO, undertakes experiments and surveys on the influence of television on young working people
- 12 Jan Nippon Electric Company succeeds in domestic production of colour television cameras
- 17 Jan The NHK Tokyo Television Station increases its output power to 50kW
- 20 Mar NHK invites UN Assistant Secretary-General Ralph Bunche to hold discussion meetings and broadcast his talks
- 4 Apr NHK's international service, "Radio Japan", expanded (17 directions, 18 languages, 19 hours a day)
- 3 Jun Fuji Television Company concludes official network agreement with NBC of the United States
- 18 Jun The Ministry of Posts and Telecommunications adopts the standard system for colour television (NTSC)
- 1 Jul Tokyo Shibaura Electric Company and two other firms begin marketing colour television receivers
- 4 Jul NHK rejects subjects depicting violence or containing scenes of violence in its entertainment television programmes
- 11 Aug Television receiving contracts pass the 5-million line
- 25 Aug NHK undertakes special broadcasting of the 17th Olympic Games held in Rome on its radio and television networks (from 25 Aug. to 14 Sep.) (Undertakes transmission of frame-by-frame video recordings by short-wave and aerial transportation of such recordings between Rome and Tokyo)
- 29 Aug NHK Symphony Orchestra leaves for its first overseas performance tour (119 members, performances in 23 cities in 12 American and European nations)
- 4 Sep NHK's international service, "Radio Japan", begins beaming the "General Service" programmes to all parts of the world (6 hours a day and 12 transmissions in English and Japanese)
- 10 Sep NHK officially begins colour television service in Tokyo and Osaka. Four commercial stations simultaneously begin colour service
- 27 Sep NHK's radio poetic drama "Ondine" awarded the Italian Prize

- 1 Oct NHK undertakes "How-Do-People-Spend-Their-Time Survey" (undertakes similar survey every five years thereafter)
- 5 Dec NHK undertakes broadcasting of the first "Asian Ethnic Music Festival" on its radio and television networks. Thirteen nations take part and music broadcast also over Radio Japan from 8 through 29 Dec.

Abroad

- .. Feb Trans-Canada Telemeter (Tronto) starts toll-television
- .. Feb Intervention of East Europe inaugurated and exchange of programmes with Eurovision begins
- 29 Mar The Republic of China sets up educational radio station
- .. Apr FM stereo experimental broadcasting begins in Moscow, Leningrad and other cities; regular one starts in Moscow in 1961
- .. Apr "Television University" correspondence education broadcasting opened in Peking
- 12 Aug US succeeds in launching Echo I, first communications satellite

General Events

- 19 Jan Renewal of Japan-US Security Treaty and Administrative Agreement signed: Anti-Security Pact movement intensifies in Japan
 - 15 May The Soviet Union successfully launches its first space ship
 - 19 May The new Security Treaty pushed through the Japanese Diet: Anti-Security Pact movement intensifies
 - 25 Aug The 17th Olympic Games held in Rome
- This year is called the "African Year" as 17 new independent countries created

1961

Japan

- 12 Jan NHK completes the Tokyo Heliport on the roof of the NHK Tokyo Headquarters Building
- 29 Jan The Mainichi Broadcasting Company establishes the Brazil Mainichi Broadcasting Station in São Paulo
- 26 Mar NHK's General Managing Director, Yoshinori Maeda, interviews President Kennedy and presents a special programme
- 3 Apr NHK undertakes a "Polio Extermination Campaign" till Sep. (Inventor of polio vaccine, Dr. Albert Sabin, invited on 15 Aug. to hold talk meetings and to speak on radio and television)
- 13 Apr The international service, "Radio Japan", expanded (18 directions, 20

- 15 Apr NHK holds its first audience meeting (subsequently held in various parts of the country. Commercial broadcasters hold similar meeting on 4 Dec., 1964)
- 22 Apr The Ministry of Posts and Telecommunications adopts the second television channel plan
- .. May "Radio Japan Club" established in 13 areas, including West Germany
- 10 Jun Through staff reorganization, NHK promotes firm establishment of its top management, clarification of the line and staff organization and unification of the programme operations department
- 15 Aug Nippon Educational Television Company and Mainichi Broadcasting Company conclude business agreement with ABC of the United States
- 25 Nov NHK begins operation of the fully transistorized television field pickup car
- 1 Dec NHK establishes Japan's first UHF television satellite station at Hitachi
- 12 Dec NHK holds its first conference of managers of the general bureaus abroad in Paris
- 15 Dec NHK collaborates with surveys related to the establishment of television stations in Pakistan under the Colombo Plan

Abroad

- .. Jan Monte Carlo International Television Festival held
- 14 Apr First live television broadcast from Russia seen by BBC viewers of welcome in Moscow of first 'space man', Major Gagarin
- 3 Dec The First World Conference of Broadcasting Organizations on Sound and Television School Broadcasting held in Rome (sponsored by RAI and EBU)
- 31 Dec HLCK-TV station in Seoul, Korea, starts television broadcast

General Events

- 20 Jan John F. Kennedy assumes presidency of the United States
- 5 Apr The US successfully launches a manned rocket
- 12 Apr The Soviet Union successfully launches manned space ship Vostok I
- 13 Aug East German Government blockades East-West Berlin boundary line

1962

Japan

- 9 Jan "Radio Japan" ranked 7th in the popularity polls conducted by an international short-wave club in London (ranked 1st in the popularity polls conducted in 1962 by the short-wave

- clubs in Denmark and South Africa)
- 23 Jan NHK collaborates with technical guidance for the El Salvadore Broadcasting under the Central and South American Plan (collaboration provided also in 1964)
 - 26 Feb NHK begins using Japan's first remote controlled television studio in Tokyo
 - 1 Mar Television receiving contracts pass the 10-million line (48.5% of the total households)
 - 1 Apr NHK begins the second-stage 6-year programme as a long-term overall business plan
 - 1 Apr NHK undertakes overall revision of the receiving contract system and enforces a new one
 - 9 Apr NHK, in cooperation with the RAI (Italy), begins presentation of the "Two Bridges", the first television drama produced using a foreign country as location
 - 29 May The Ministry of Posts and Telecommunications undertakes overall amendment of the "Standard Broadcasting Frequency Allocation Plan" and enforces the new plan on 1 Oct. (aimed at prevention of interference by foreign radio waves and elimination of areas of difficult reception)
 - 31 Jul NHK undertakes "Children's World Travel" and sends 4 junior high school students to Europe (undertaken annually thereafter)
 - 1 Aug NHK collaborates, under the Colombo Plan, with technical facility construction for Singapore Television
 - 23 Aug Establishment of the Asian Broadcasting Union (ABU) resolved at the 4th Asian Broadcasters' Conference held in Kuala Lumpur, with 15 nations participating
 - 24 Aug NHK sends the first television cameras, field pickup and video tape-recorder cars abroad for covering the 4th Asian Games held in Jakarta
 - 27 Aug NHK undertakes the first group training of broadcasting staff entrusted by foreign broadcasting organizations (27 Aug.—22 Sep.)
 - 1 Sep The National Association of Commercial Broadcasters in Japan establishes a Research Institute
 - 11 Sep NHK invites Dr. Carl Orff, the noted German expert on education and music
 - 29 Sep NHK Symphony Orchestra dispatched to Southeast Asian nations for performances and to the 1st Asian Music Festival in Hong Kong
 - 6 Nov The Ministry of Posts and Telecommunications exchanges memorandum related to Japan-US joint experiment on communications satellites with NASA
 - 1 Dec NHK invites Dr. Noel Baker, the British Nobel Peace Prize recipient
 - 1 Dec NIIK inducts IBM 1401 electronic computer for rationalizing business operation
- Abroad**
- 29 Jun Toll-television over the air starts for the first time in Hartford, Connecticut
 - .. Jun The First Berlin International Television Film Festival held
 - .. Jun In Britain the Pilkington Committee makes public its report
 - 10 Jul All-Channel Television Receiver Law enacted (put in force from 30 Apr., 1964)
 - 23 Jul First live television broadcast via Telstar I from US to Europe
 - .. Jul The first Venice International Documentary Film Exhibit held
 - 25 Sep URTNA, Union des Radiodiffusion et Television Nationales Africaines, established in Dakar, Senegal
 - 10 Oct Taiwan Television Enterprise Company (TTE), starts television broadcasts
- General Events**
- 10 Jul The United States launches the communications satellite Telstar I
-
- 1963**
- Japan**
- 16 Jan NHK starts operating automatic packaged programme sender for radio
 - 11 Mar NHK provides technical cooperation in the survey of television network for the Malaysian Federation
 - 1 Apr NHK Gakuen High School (4-year system) established under the Correspondence Education System
 - 7 May The Ministry of Posts and Telecommunications undertakes a broad revision of the "Second Television Frequency Allocation Plan" (additional allocation of frequencies for satellite stations and adoption of the UHF channels)
 - .. Jun NHK begins the television transcription service
 - 16 Jul NHK provides cooperation for television programmes and technical operations for the National Broadcasting Organization of Indonesia
 - 17 Jul The Tokyo Olympic Broadcast Committee established jointly by NHK and commercial broadcasters
 - 21 Jul Solar eclipse relayed from an aircraft using a subminiature television camera (0.5-inch vidicon tubes) and an automatic directional antenna

- 1 Aug A round-table conference related to mass-communications and young people established at the Prime Minister's Office
- 20 Sep NIK monopolizes the television rights for the Tokyo Olympics by agreement with the Olympic Organizing Committee
- 11 Oct NHK relays the entire course of the marathon at the International Sports Meet, using an automatic antenna tracking unit for helicopter mount
- 4 Nov NHK's link channel used exclusively for FM experimental service opened for service (linking the 7 key stations and the Fukuoka Station)
- 16 Nov NHK uses the first video tape made in Japan
- 22 Nov NHK sends broadcasting materials to the Skopje Station, Yugoslavia, which was destroyed by a severe earthquake
- 23 Nov NHK succeeds in the first space relay experiment (reception) from the United States via Relay I satellite
- 18 Dec Television receiving contracts pass the 15-million line
- 24 Dec NHK increases the antenna power of the Tokyo second radio network station to 300kW
- Abroad**
- 24 Feb Live television broadcasts by ABC International Television Inc. links Canada, United States and Mexico for the first time
- 26 May The First International Emmy Awards Contest held in New York
- 17 Jun Pictures caught by television camera loaded in Vostok VI relayed from Soviet to Intersion and Eurovision networks and further to US via Telstar II
- 4 Oct The First World Radio Week held (sponsored by EBU)
- 23 Nov The first live television broadcast via Telstar from Washington to Moscow
- 26 Nov The First World Television Festival held in London (26 Nov.-4 Dec.)
- General Events**
- 7 Jan The Soviet newspaper Pravda in its editorial renounces Communist China as sectionalist: The China-Soviet dispute comes to the surface
- 20 Jun The United States and the Soviet Union sign Washington-Moscow Direct Communications Line Construction Agreement for the purpose of preventing accidental outbreak of war
- 22 Nov United States President John F. Kennedy assassinated and Vice President Lyndon B. Johnson becomes the President of the US
- 1964
- Japan**
- 15 Jan NHK operates a transistorized video tape-recorder car for the first time
- 10 Feb NHK provides technical cooperation in radio and television for Thailand
- 11 Mar NHK provides cooperation in radio and television reception techniques for the Malaysian Federation
- 25 Mar NHK succeeds in space relay experiment (transmission) between Japan and the United States via Relay II satellite
- 1 Apr Nippon Educational Television (NET) pioneers the news programme with Norio Kijima's "Morning Show"
- 9 Apr NHK sponsors, jointly with EBU, the Second World Conference of Broadcasting Organizations on Sound and Television School Broadcasts held in Tokyo (participants totalling 77 broadcasting organizations from 58 countries). Scenes of the conference experimentally relayed to Europe on 17 Apr.
- 15 Apr NHK completes an electronic music room in the Tokyo Headquarters Building
- 27 May The Radio Research Institute of the Ministry of Posts and Telecommunications succeeds in the transmission and reception of colour television via Relay II satellite
- 1 Jul The Asian Broadcasting Union officially established, with a membership of 11 organizations
- 23 Jul NHK concludes an agreement with COMSAT of the United States with regard to television relaying of the Tokyo Olympic Games via communications satellites
- 25 Aug NHK undertakes television relay of the full route of the New Tokaido Railway Trunk-line
- 1 Sep Micro-wave channel between Japan Proper and Okinawa opened for service
- 8 Sep The Provisional Broadcast Legislation Investigation Committee advises the Minister of Posts and Telecommunications with regard to the revision of the existing legislations
- 1 Oct Part of the NHK Broadcasting Centre completed and used as the Olympic broadcasting base
- 10 Oct NHK undertakes relaying of all the events of the 18th Olympic Games held in Tokyo (10-24 Oct.). NHK collaborates with foreign and domestic broadcasting organizations in covering the Olympics. Olympic events space-relayed to America and Europe.

- 13 Nov The Establishment General Assembly of ABU held in Sydney, Australia. NHK President Yoshinori Maeda elected the first president of ABU
- 21 Dec The Japan Broadcasting Federation establishes the "Broadcasting Programme Improvement Committee"
- Abroad**
- 28 Jan Live television broadcast via satellite Relay II of the Winter Olympic Games at Innsbruck, Austria, on 28 Jan.
- 20 Apr First BBC-2 programmes on 625 lines transmitted from Crystal Palace, London
- 19 Aug International Agreement signed officially on world organization of telecommunications satellites for commercial use in Washington with 11 participating nations
- .. Nov ITA, supervisory organ of commercial television in Great Britain, notifies all programme companies of the regulations to control violence based on the Television Act of 1963
- General Events**
- 30 Jul The United States' lunar rocket reaches "The Sea of Clouds", succeeding in photographing the moon's surface at a close range
- 1 Oct Japan's new Tokaido Railway Trunk-line opens for service
- 10 Oct The 18th Olympic Games held in Tokyo
- 16 Oct The US launches Martian rocket "Mariner IV" (succeeds in close-up photographing of Mars in Jul. 1965)
-
- 1965
- Japan**
- 22 Mar The 40th anniversary of broadcasting observed
- 1 Apr NHK sets up the NHK Consultant Room
- 2 May Nation-wide networks of commercial broadcasters, the Japan Radio Network (JNR) and the National Radio Network (NRN) established
- 9 Jun NHK's "White Herons and Children", an entry in the documentary division of the International Television Festival held in Prague, awarded the Best Work Prize
- 4 Jul Electronic computer used for the first time for quick report on ballot counting after the Upper House election
- 6 Jul Six programmes produced by NHK supplied to UNICEF
- 8 Jul NHK sends staff members to Pakistan to provide guidance and another to Thailand's Telecommunications Centre as an instructor, under the Colombo Plan
- 9 Aug NHK establishes a Broadcasting Satellite Investigation Committee to promote utilization of satellites for broadcasting, thus starting the study and investigation of the subject
- 31 Aug The Government announces the 1964 White Paper on Young People (existing state of and counter-measures for youth problems) to stress voluntary regulation of mass-communications
- 4 Sep On the occasion of the 40th anniversary of broadcasting, NHK invites the Slav Opera. Performances given in Tokyo and Osaka
- 8 Sep The first-stage construction work on the NHK Broadcasting Centre completed
- 27 Sep NHK sends staff members to Singapore under the Colombo Plan
- 27 Sep A TBS production "Between Saturday and Monday" awarded the Italian Prize in the Television division
- 11 Oct The first Japan Prize International Educational Programme Contest sponsored by NHK held (11-21 Oct. in Tokyo). Prizes awarded to a West-deutscher Rundfunk entry in the Radio Division and to a Finland Broadcasting Corporation entry in the Television Division
- 18 Oct The first ABU Prize International Contest held (18-19 Oct. in Tokyo). The second ABU General Assembly held (21 Oct.)
- 21 Oct Japan elected one of the director nations at the International Telecommunications Union
- 31 Oct NHK invites Dr. Samuel A. Kirk, an authority on special education
- 31 Oct NHK sends an engineer to Cambodia under the Colombo Plan
- 10 Dec Operation of automatic video tape recording editing machine started at NHK
- Abroad**
- 4 Jan The third television network opened in West Germany under collaboration of Norddeutscher Rundfunk, Sender Freies Berlin and Radio Bremen
- 7 Feb The US Air Forces resume bombings of North Vietnam: Vietnam War intensifies.
- 24 Mar Live television pictures of the moon relayed via Ranger IX
- 17 May First live colour television broadcast from London to United States via Communications satellite Early Bird
- 28 Jun Communications Satellite Corporation (COMSAT) of United States starts telegraph, telephone and television

- relay business between United States and Europe via Early Bird
- 29 Nov First live colour television broadcast between Moscow and London via Mornia I, Soviet communications satellite

During this year the United States and the Soviet Union launch space satellites one after another. Space swimming, automatic space station launching and space rendezvous successful.

General Events

- 7 Feb The US Air Forces resume bombings of North Vietnam: Vietnam War intensifies
- 18 Mar The Soviet Union's Lieutenant-Colonel Leonov in Voskhod II succeeds in swimming in space
- 3 Jun The US successfully launches two-man space ship Gemini IV: Major White succeeds in swimming in space
- 16 Jul The Soviet Union launches the world's largest new type space station "Proton I": Also automatic space station "Zond III" put into orbit on 18 July and the reverse side of the moon successfully photographed
- 21 Aug The US two-man space ship Gemini II makes the longest record (190 hours 55 minutes) in space (8-day orbiting)
- 15 Dec Gemini VI and VII of the US succeed in space rendezvous

During this year the United States and the Soviet Union launch space satellite one after another

1966

Japan

- 26 Jan NHK signs a programme exchange agreement with the UAR Broadcasting Corporation of Cairo
- 29 Jan The Ministry of Posts and Telecommunications successfully relays colour television programme between Japan and Sweden, utilizing the communications satellite, Relay II
- 11 Mar NHK signs programme exchange and technical cooperation agreements with the National Broadcasting Organization of Argentina
- 12 Mar NHK invites Dr. Alexander Haddow of Britain, an authority on cancer pathology
- 12 Apr NHK invites the Berlin Philharmonic Orchestra (conductor—H. von Karajan)
- 27 Apr NHK signs an agreement with NBC of the US on the joint development of a new type television camera
- 15 May A bill proposing revision of the Broadcasting Law presented at the Diet (shelved on 26 June.)
- 16 May The UNESCO-sponsored Conference on the Utilization of Broadcasting for the Education and Development of the

- Asian Region held in Bangkok
- 31 May Mexico requests technical assistance of NHK for Olympic broadcasting
- .. May NHK Technical Research Laboratories develop the world's smallest video tape-recorder for colour television
- 16 Jun For studying and developing broadcasting satellites, NHK Technical Research Laboratories set up a "Space Environment Room" on 21 June
- 21 Aug NHK Technical Research Laboratories develop and use a 16mm EE movie hand-camera with a simultaneous recording for news coverage in colour
- 12 Oct The Liaison Council for Study and Development of Communications and Broadcasting Satellite established among the Ministry of Posts and Telecommunications, Nippon Telegraph and Telephone Public Corporation, KDD and NHK
- 25 Oct NHK begins presentation of news in colour (31 Oct. by NTV)
- 5 Nov The second Japan Prize Educational Programme Contest held in Osaka
- 11 Nov The first meeting of the Satellite Communications Study Group of the Federation of Commercial Broadcasters in Japan held
- 28 Nov Japan-US experimental space television relay via the Lanibird satellite of COMSAT successful
- 7 Dec President Maeda of NHK tells the press that it is his desire to launch an experimental broadcasting satellite in 1969
- 31 Dec NHK succeeds in colour telecasting from New York via successful four-way space relay of television linking TBS-Tokyo, New York, London and Paris

Abroad

- 3 Mar Great Britain announces adoption of PAL colour television system of West Germany
- 1 Sep CBC, Canada, starts colour television broadcasting following United States and Japan

General Events

- 3 Feb Luna IX of the Soviet Union succeeds in a soft-landing on the moon and sends back to earth pictures of the lunar surface: (The US launches Surveyor 1 on 2 June)
- 1 Mar The Soviet Union's Venus III reaches the surface of the planet Venus
- 16 Mar Gemini VIII of the US succeeds in the first docking with the Agena rocket
- 20 Aug In Communist China the so-called Red Guards rampage begins under the name of "Great Cultural Revolution"

Historical Materials

Wireless Telegraph Law

Art. 1. The wireless telegraph and wireless telephone service shall be under the control of the Government.

Art. 2. Subject to other regulations and to the authorization of the Minister for Communications, a wireless telegraph or wireless telephone station may be established for a private service in the following cases:

1. On vessels for purposes of the safety of navigation;

2. On vessels employed for a particular service of one and the same person, for purposes of using wireless installations for such service between the said vessels;

3. On land or vessel which is without the means of public communication by telegraphs, telephones, wireless telegraphs, or wireless telephones, for purposes of transmitting to or receiving from Japanese Government stations messages on the exclusive service of a person who equips wireless installations;

4. On land or a vessel for purposes of using wireless installations for a particular service of one and the same person between a point and another point on land or between land and a vessel, which is without the means of public communication by telegraphs, telephones, wireless telegraphs or wireless telephones, and which is considered unsuitable to conform to the provision of the preceding clause;

5. For purposes of exclusively conducting experiments relating to wireless telegraphy or wireless telephony;

6. In cases other than those mentioned above, wireless installations the establishment of which has been considered necessary by the said Minister.

Art. 3. The apparatus to be used at the private wireless telegraph or wireless telephone station, the restrictions under which such apparatus may be installed and worked, and the requirements which persons must meet for securing the appointment as wireless operators in such station shall be determined in other regulations.

Art. 4. No private wireless telegraph or wireless telephone stations may be used for other purposes than those for which they have been established. Provided, however, that, subject to other regulations, they may be used for communications concerning the distress of ships, weather forecast, time signals, or any other communications which the said Minister may think necessary for the public interest.

Art. 5. No wireless telegraph or wireless telephone stations on foreign vessels, with the exception of those established subject to the

provision of Art. 2, may be used in the territorial waters of the Empire. Provided, however, that they may be used for communications concerning the distress of ships or communications with Japanese Government stations while the vessels are in the course of navigation.

Art. 6. Subject to other regulations, the said Minister may cause private wireless telegraph or wireless telephone stations to be placed at the service of general public, and also the service necessary for naval or military purposes.

In the preceding case, he may, if he think necessary, dispatch Government operators to handle such service.

Art. 7. The said Minister may, if he think necessary for the service of general public or of naval or military purposes revoke a license for a private wireless telegraph or wireless telephone station, or order change, wholly or partially, of the installation of such station.

Art. 8. For the maintenance of public order, the said Minister may, if he think necessary, restrict or suspend the service of a private wireless telegraph or wireless telephone station or of a wireless telegraph or wireless telephone station on a foreign vessel, or he may order a removal of the apparatus or any part thereof used in such station.

In the preceding case, he may, if he think necessary, direct Government radio officers to seal up or remove such apparatus or any part thereof.

Art. 9. When a person who has installed under license private wireless telegraph or wireless telephone station fails to conform to the provisions of the present Law, or to any order issued in accordance with the provisions of the present Law, or to any procedure taken subject to the provisions of the present Law, the said Minister may revoke the license or suspend the service of such station.

Art. 10. When the license for a private wireless telegraph or wireless telephone station is revoked, the person who has such license shall, subject to the order of the said Minister, remove the working equipments. The same rule shall be applicable to a case in which a private wireless telegraph or wireless telephone station has been closed.

Art. 11. Private wireless telegraph or wireless telephone stations or wireless telegraph or wireless telephone stations on foreign vessels shall not, if requested, refuse the reception or transmission of telegrams of the distress of ships.

Art. 12. When a wireless telegraph or

wireless telephone station hears the signal of distress, it shall answer immediately to the call and communicate it to other stations located most convenient to send help.

In the preceding case, if the station answered be asked to give a particular information, it shall be bound, notwithstanding the provision of the preceding paragraph, to give such information as may be available.

Art. 13. When the said Minister discovers that a wireless telegraph or wireless telephone has been illegally installed, he may direct Government radio officers to enter upon the place where the apparatus is installed and to inspect the working equipments and to remove the apparatus or any part thereof, and to take other suitable measures therefor.

Art. 14. For the service of general public, the Government may use a space of a vessel for the establishment of a wireless telegraph or wireless telephone station on board the vessel, and may order to provide particular requirements.

In the preceding case, reasonable charges for the use of a space of the vessel, and also the actual cost incurred for the requirements shall, on demand, be paid by the Government.

Art. 15. Subject to other regulations, any correspondence to be transmitted by means of public wireless telegraphs or wireless telephones and concerning the service of wireless telegraphs, wireless telephones, telegraphs, telephones, posts, postal money orders and postal savings banks, or concerning the distress of ships, time signals or meteorological reports may be exempted from charges.

Art. 16. Any person who has established a wireless telegraph or wireless telephone station without a license in that behalf, or who has used such station not licensed, or who has used it after the license in that behalf has been revoked shall be punishable by imprisonment for not to exceed one year or a fine of not to exceed one thousand yen.

In the preceding case, a sum of money or other valuable considerations received by placing such station at the service of another person shall be confiscated. If the said money has been spent or the said considerations have been assigned to some other person, the sum of the said money or a sum of money equal to the price or value of the said considerations shall be collected from the receiver.

Art. 17. Any person who has made use of a private wireless telegraph or wireless telephone station for any other purpose than that for which it has been established shall be punishable by a fine of not to exceed one thousand yen.

In the preceding case, a sum of money or other valuable considerations received by

placing such station at the service of another person shall be confiscated. If the said money has been spent or the said valuable considerations have been assigned to some other person, the sum of the said money or a sum of money equal to the price or value of the said considerations shall be collected from the receiver.

Any person who has got his correspondence transmitted through a private wireless telegraph or wireless telephone station established for the service of another person shall be punishable by a fine of not to exceed one hundred yen.

Art. 18. For breach of the provision of Article 5, or for nonobservance of the restrictions or suspension of the service of a wireless telegraph or wireless telephone station, or for non-fulfilment of the order for a change or removal of installation as provided for in other Articles of the present Law, any person shall be punishable by a fine of not to exceed one thousand yen. The same penalty shall be imposed upon a person engaging in the service of the wireless telegraphs or wireless telephones who has used wireless installations not observing the restrictions or suspension of the service of his station.

Art. 19. Any person who has refused without a reasonable cause the use of his wireless telegraph or wireless telephone station in the case provided for in Article 6, or who without a reasonable cause has refused the use of his vessel or failed to comply with a demand for the requirements in the case of Article 14 shall be punishable by a fine of not to exceed one thousand yen.

Art. 20. Any person who has violated the secrecy of wireless telegraph or wireless telephone messages in the hands of a Japanese Government station shall be punishable by imprisonment for not to exceed one year or by a fine of not to exceed two hundred yen.

Any person engaging in the service of the wireless telegraphs or wireless telephones who has divulged the secrecy of messages referred to in the preceding paragraph shall be punishable by imprisonment for not to exceed two years or by a fine of not to exceed five hundred yen.

The punishment provided for in the present Article shall not be dealt with otherwise than on accusation.

Art. 21. Any person who has illegally evaded payment of any charges regarding wireless telegraphs or wireless telephones or who has caused others to be evaded from such payment shall be punishable by a fine of not to exceed two hundred yen.

Any person engaging in the service of the wireless telegraphs or wireless telephones who has acted as aforesaid shall be punishable by

imprisonment for not to exceed one year or by a fine not to exceed five hundred yen.

Art. 22. Any person who has dispatched by means of wireless telegraphs or wireless telephones a false message with the object of giving loss or damage to others shall be punishable by imprisonment for not to exceed two years or by a fine of not to exceed five hundred yen.

Any person who has dispatched by means of wireless telegraphs or wireless telephones a false message with the object of injuring the public interest shall be punishable by imprisonment for not to exceed five years or by a fine of not to exceed one thousand yen.

Any person who has dispatched by means of wireless telegraphs or wireless telephones a message of the distress of a ship notwithstanding the absence of such a fact shall be punishable by imprisonment for not less than three months but not exceeding ten years.

Any person engaging in the service of the wireless telegraphs or wireless telephones has acted as in the case of the first paragraph of the present Article shall be punishable by imprisonment for not to exceed five years or by a fine of not to exceed one thousand yen. If he has acted as in the case of the second paragraph, he shall be punishable by imprisonment for not to exceed ten years, or in the case of the third paragraph by imprisonment for a term of not less than one year.

Art. 23. Any person engaging in the service of the wireless telegraphs, who without a reasonable cause has opened, destroyed, concealed, or thrown away a wireless telegram which is in the course of handling at a Japanese Government station, or delivered it to a person other than the receiver shall be punishable by imprisonment for not to exceed three years or by a fine of not to exceed five hundred yen. Provided, however, that in the case falling under Article 258 or Article 259 of the Penal Law, he shall be dealt with in accordance with the provision of the said Law.

Art. 24. Any person engaging in the

service of the wireless telegraphs or wireless telephones who has failed to handle or delayed the transmission of public messages or of messages necessary for naval or military purposes without a reasonable cause shall be punishable by imprisonment for not to exceed one year or by a fine of not to exceed two hundred yen.

Any person engaging in the service of the wireless telegraphs or wireless telephones who has without a reasonable cause failed to handle or delayed the transmission of messages of the distress of ships provided for in Articles 11 and 12 shall be punishable by imprisonment for a term of not less than one year.

The punishment provided for in the preceding paragraph shall be imposed on a person who has interfered with the handling or transmission of messages of the distress of ships.

Art. 25. Any person who has interrupted or attempted to interrupt public messages or messages necessary for naval or military purposes transmitted through wireless telegraphs or wireless telephones shall be punishable by imprisonment for not to exceed seven years or a fine of not to exceed five hundred yen.

Art. 26. For each attempted crime as in the cases referred to in the preceding ten Articles, the punishment provided for in the same shall be imposed on a person on conviction.

Art. 27. Any person who has refused, prevented or evaded from the execution under the present Law of duty of Government radio officers, or who has not answer to or made a false statement in answer to an enquiry at the time of inspection made in accordance with Article 13 shall be punishable by a fine of not to exceed one hundred yen or a petty fine.

Art. 28. The provisions of Articles 4, 5, 11-12, 23, 24 and 45 of the Telegraph Law shall by analogy be applicable to wireless telegraphs and wireless telephones placed at the service of general public or the service necessary for naval or military purposes.

THE BROADCAST LAW

LAW NO. 132 of MAY 2, 1950

as amended by:

LAW NO. 63 of 1951
LAW NO. 220 of 1951
LAW NO. 200 of 1952
LAW NO. 280 of 1952
LAW NO. 30 of 1959
LAW NO. 129 of 1959

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Chapter I General Provisions

(Purpose)

Article 1. The purpose of this Law is to regulate the broadcasting so as to meet the public welfare, and to strive for the sound development thereof, in accordance with the principles as stated below:

- (1) To secure the maximum availability and benefits of broadcasting to the people;
- (2) To assure the freedom of expression through broadcasting by guaranteeing the impartiality, integrity and autonomy of broadcasting;
- (3) To make the broadcasting contribute to the development of healthy democracy by clarifying responsibility of those persons engaged in broadcasting.

(Definitions)

Article 2. The interpretation of this Law and the orders issued thereunder shall be in accordance with the following definitions:

- (1) "Broadcasting" means the transmission of radiocommunication intended to be directly received by the general public;
- (1)-2 "Domestic Broadcasting" means the broadcasting intended to be received in the country;
- (2) "International Broadcasting" means the broadcasting intended to be received in foreign countries;
- (3) "Broadcast Station" means a radio station established for the purpose of broadcasting;
- (4) "Broadcast Programme" means the kind, contents, volume and arrangement

of matters to be broadcast.

- (5) "Educational Programme" means the broadcast programme of the broadcasting for the school education or social education;
- (6) "Cultural Programme" means the broadcast programme other than the educational programme, which directly aims at the improvement of general culture of the nation.

(Freedom of Broadcast Programme Compiling)

Article 3. Broadcast programme shall never be interfered with or regulated by any person, excepting the case where he does so upon the powers provided for by law.

(Correction Broadcasting, etc.)

Article 4. In case where, within two weeks from the day when the broadcasting was made, there is a demand from the person whose rights have been infringed upon by the broadcasting or any person directly concerned in the case with the reason that the broadcast enterpriser (the person who has been granted a license for his broadcast station in accordance with the provisions of the Radio Law (Law No. 131 of 1950); hereinafter the same) broadcast any untrue matter, the broadcast enterpriser must investigate without delay whether such broadcast matter was untrue or not, and if the untruthfulness is clarified, must, within two days from the day when such untruthfulness was clarified, broadcast the correction or cancellation in an appropriate manner through a broadcast equipment tantamount to the equipment through which the broadcasting was made.

2. The same shall apply when the broadcast enterpriser has found any untrue matter in his broadcasting.
3. The provisions of the preceding two paragraphs shall not preclude the claim for damages in accordance with the provisions of the Civil Code (Law No. 89 of 1896)

Article 5. Deleted.

Article 6. Broadcast enterprisiers must not receive and re-broadcast the broadcastings of any other broadcast enterpriser, unless their consent is obtained.

Chapter II The Broadcasting Corporation of Japan

(Purpose)

Article 7. The purpose of the Broadcasting

Corporation of Japan (hereinafter to be simply referred to as "The Corporation") is to conduct its broadcasting for the public welfare in such a manner that its broadcasting may be received all over Japan.

(Legal Personality)

Article 8. The Corporation shall be a juridical person established under the provisions of this Law for the accomplishment of the purpose mentioned in the preceding Article.

(Business)

Article 9. For the accomplishment of the purpose mentioned in Article 7, the Corporation shall conduct the following businesses:

- (1) To conduct the domestic broadcasting by means of the following broadcastings:
 - (a) Standard broadcasting (the broadcasting on the frequencies in the band from 535 to 1605 kc/s for the transmission of voices and other sounds; the same hereinafter);
 - (b) Ultra short wave broadcasting (the broadcasting which does not correspond to the broadcasting mentioned in (c) using frequencies exceeding 30 Mc/s for the transmission of voices and other sounds; the same hereinafter);
 - (c) Television broadcasting (the broadcasting for the transmission of transient images of fixed or moving objects and voices and other sounds accompanying them; the same hereinafter).
- (2) To conduct researches and investigations necessary for the improvement and development of broadcasting and the reception thereof.
2. The Corporation may, in addition to those businesses mentioned in the preceding paragraph, conduct the following businesses for the accomplishment of the purpose mentioned in Article 7:
 - (1) To maintain, train or subsidize theatrical, and other bodies necessary for programming;
 - (2) To provide or support public concerts or other public entertainments primarily intended to be broadcast by the Corporation;
 - (3) To conduct publicity and publication necessary for the popularization and development of broadcasting, and, on request, to give advice to the public relating to the reception of broadcasting;
 - (4) To acquire and use, or to permit the use of, any literary, musical, artistic and scientific copyrights, necessary for compiling broadcast programmes;
 - (5) To acquire patent rights and utility model rights necessary for the broadcasting and application and non-application rights thereof;
 - (6) To collect, and exchange with others, news and information for compiling broadcast programmes;
 - (7) To offer for the use of the private broadcast enterprisers mentioned in Article 51 the materials necessary for broadcast programmes and for compiling them, or to offer such materials for use by foreign broadcast stations;
 - (8) To conduct researches and investigations contributory to the improvement and development of broadcasting and the reception thereof, or to make design of broadcast equipment or offer other technical assistance, or to train the personnel to be engaged in the broadcasting, on request;
 - (9) To repair broadcast radio receivers on request;
 - (10) In addition to the above, to conduct services deemed to be specially necessary for the improvement and development of broadcasting and the reception thereof, which have been approved by the Minister of Posts and Telecommunications.
3. In conducting the businesses mentioned in the preceding two paragraphs, the Corporation shall not aim at profits.
4. The Corporation shall so arrange as to make either of the standard broadcasting or the ultra short wave broadcasting, and the television broadcasting be received all over the country;
5. The Corporation shall, if any opinion is offered from any person having any relation with the broadcasting or from persons of learning and experience, pay regard to such opinion in conducting the businesses mentioned in paragraph 1 item (2), provided that such opinion is contributory to the improvement and development of broadcasting and the reception thereof, and that it will not hinder the conduct of other businesses of the Corporation; the fruits derived from the businesses mentioned in the same item must be offered for the use of general public as far as possible;
6. The Corporation shall not take any action, whatever the pretext may be, to regulate or interfere with the business of the manufacturers of, dealers in, or repairers of, radio devices, such as to certify broadcast radio receiving devices or vacuum tubes or component parts thereof, or to designate authorized repairers of broadcast

radio receivers.

7. The repairing service of broadcast radio receiving devices mentioned in paragraph 2 item (9) may be conducted only at such places as deemed extremely inconvenient to persons who receive radio broadcast in utilizing the repairer of broadcast radio receivers or deemed necessary for the promotion of the interest of those who receive the radio broadcast and designated by the Minister of Posts and Telecommunications.

Article 9-2. The Corporation shall, in addition to the businesses mentioned in paragraphs 1 and 2 of the preceding Article, conduct the international broadcasting.

Article 10. The head office of the Corporation shall be located in Tokyo-to.

2. The Corporation may have its branch offices at necessary places.

(Articles of Corporation)

Article 11. The Corporation shall prescribe the following matters by the Articles of Corporation:

- (1) Purpose;
 - (2) Title;
 - (3) Locations of offices;
 - (4) Matters pertaining to the assets and accounting;
 - (5) Matters pertaining to the Board of Governors, Board of Directors and officers of the Corporation;
 - (6) Matters pertaining to the business and to the execution thereof;
 - (7) Matters pertaining to the issue of the broadcast bond;
 - (8) Method of public notification.
2. The Articles of Corporation may be amended with the prior approval of the Minister of Posts and Telecommunications.

(Registration)

Article 12. The Corporation shall, in accordance with the procedures as to be provided for by Cabinet Order, register such matters as the change of location of head office, establishment of branch office, and other matters prescribed by Cabinet Order.

2. Matters requiring registration in accordance with the provision of the preceding paragraph cannot stand against a third party until they are registered.

(Establishment of Board of Governors and its Powers)

Article 13. The Board of Governors shall be established in the Corporation.

2. The Board of Governors shall have powers

and responsibilities to decide the management policy and other important matters relative to the operation of the businesses of the Corporation.

Article 14. The following matters shall require the decision of Board of Governors; provided that this shall not necessarily apply to such matters as deemed minor by it:

- (1) Budget of revenues and expenditures, business project and financial programme;
- (2) Settlement of accounts;
- (3) Establishment plan of broadcast stations and the establishment, suspension and abolition of broadcast stations;
- (4) The Standards of Domestic Broadcast Programme set forth in Article 44-2 paragraph 1 and the Standards of International Broadcast Programme set forth in Article 44-5 paragraph 2 as well as the basic plan for the compilation of broadcast programmes;
- (5) Alteration of the Articles;
- (6) Terms of the receiver's contract mentioned in Article 32. and standards for the exemption of the receiver's fee;
- (7) Issuance of broadcast bond and borrowing of loan;
- (8) Rules relating to the administration of the enterprise and the performance of the service;
- (9) Remuneration, separation allowance and social expenses of officers (including all other similar items regardless of their names);
- (10) Such other matters deemed of special necessity by the Board of Governors.

(Organization of Board of Governors)

Article 15. The Board of Governors shall be composed of twelve governors.

2. The Board of Governors shall have one chairman who shall be decided by the election among governors.
3. The chairman shall preside over the business of the Board of Governors.
4. The Board of Governors shall appoint in advance a person from among the governors to act for the chairman in the case where he is prevented from discharging his duties.

(Appointment of Governors)

Article 16. The governors shall be appointed by the Prime Minister with the consent of both Houses of the Diet from among persons capable of making fair judgment concerning the public welfare and having wide experience and knowledge. In this case, consideration shall be given to their appointment so as to get fair representation in

the fields of education, culture, science, industry and others.

2. In the appointment mentioned in the preceding paragraph, as for eight of the governors, one person each shall be appointed from among the persons respectively having the dwelling place in the districts set forth in the Annexed Table; and as for the remaining governors, four persons must be appointed throughout these districts.
3. In case the consent of both Houses of the Diet can not be obtained for the appointment of the governor, in the case where the term of office of a governor expired or where there occurred a vacancy, because the Diet is not in session or the House of Representatives is dissolved, the Prime Minister may, notwithstanding the provision of paragraph 1, appoint the governor without the consent of both Houses. In such a case the ex post facto approval of both Houses shall be obtained at the first session convened after such appointment.
4. A person coming under any one of the following items shall not be appointed as governor:
 - (1) A person who has been sentenced to imprisonment or heavier penalty;
 - (2) A person who has been subjected to the disciplinary dismissal as a national public service personnel member and with respect to whom two years have not elapsed from the date of his dismissal;
 - (3) National public service personnel (excluding member of committees, councils, etc. or a person in a position corresponding thereto and who is of part time service);
 - (4) Staff member of political party (including one who was as such within one year before the date of appointment);
 - (5) Manufacturer of, or dealer in, broadcast transmitter or broadcast radio receiver or, in case such a person is a juridical person, officer thereof (including any person, whatever his title may be, having official or governing power equivalent to or more than that of officer; the same hereinafter in this Article) or a person possessing not less than one tenth of the rights of voting of such juridical person (including any person who was as such within one year before the date of appointment);
 - (6) Broadcast enterpriser, press agency, news agency or commercial distributor of news or information, or in case such an enterpriser is a juridical person, officer or employee thereof, or a person possessing not less than one tenth of the

rights of voting of such juridical person;

- (7) Officer of an organization of the enterprisers mentioned in the preceding two items.
5. In appointing governors, it shall be avoided that five or more governors become to belong to one and the same political party.

(Term of Office)

Article 17. The term of office of a governor shall be three years. However, the governor to fill a vacancy shall hold his office for the remainder of the term of office of his predecessor.

2. The governors may be re-appointed.
3. Notwithstanding the provision of paragraph 1, the governors shall, even after their term of office expired, remain in office until new governors are appointed.

(Retirement)

Article 18. A governor shall, ipso facto, lose his office in case the consent of both Houses of the Diet under the second clause of Article 16 paragraph 3 is not obtained.

(Dismissal)

Article 19. The Prime Minister shall dismiss a governor when he comes to fall under one of the items of Article 16 paragraph 4.

Article 20. The Prime Minister may, with the consent of both Houses of the Diet, dismiss a governor in case the latter is deemed unable to perform his duties owing to his mental or physical deficiencies or to have acted contrary to his official obligations or is guilty of such malfeasances as to render himself unfit to be a governor. In this case, the governor to be dismissed shall be given by each House of the Diet a chance for vindication of his case in accordance with what are provided by the respective Houses.

2. In case five or more of the governors have become to belong to one and the same political party, the Prime Minister shall, with the consent of both Houses of the Diet, dismiss a governor or governors so as to make the number of persons belonging to one and the same political party four.

Article 21. Excepting the cases mentioned in the preceding two Articles, governors shall not be dismissed against their will.

(Compensation of Governor)

Article 22. Besides receiving travelling expenses and actual expenses incurred by them for the execution of their duties, governors may receive appropriate com-

pensation according to the number of days of duty.

(Procedures for Decision, etc.)

Article 23. The Board of Governors shall not open its meeting nor take decision unless the chairman or the person to act for him mentioned in Article 15 paragraph 4 and six or more governors are present.

2. Except as prescribed otherwise elsewhere, the issues of the meeting of the Board of Governors shall be decided by the majority of votes of governors present; in case of a tie, the chairman shall decide.
3. The president may be present at the meeting mentioned in paragraph 1 to state his opinion.

(Officers)

Article 24. The Corporation shall, in addition to the governors of the Board of Governors, have one president, one vice-president, seven to ten directors and not more than three auditors as officers.

(Board of Directors)

Article 25. The Board of Directors shall be composed of the president, vice-president and directors.

2. The Board of Directors shall, in accordance with the provisions of the Articles of Corporation, deliberate on matters related to the execution of important business of the Corporation.

(President, etc.)

Article 26. The president shall represent the Corporation and preside over the business thereof as to be determined by the Board of Governors.

2. The vice-president shall, as to be determined by the president, represent the Corporation and assist the president in administering the business of the Corporation, act for the president when he is prevented from discharging his duties, and discharge the duties of the president when the post of the president is vacant.
3. Directors shall, as to be determined by the president, represent the Corporation and assist the president and vice-president in administering the business of the Corporation, act for the president and vice-president when both of them are prevented from discharging their duties, and discharge their duties when the posts of both the president and vice-president are vacant.
4. Auditors shall audit the business conducted by the president, vice-president and directors and report the result of the

audit to the Board of Governors.

Article 27. The president shall be appointed by the Board of Governors.

2. The appointment under the preceding paragraph shall require the decision of the Board of Governors by the majority of votes of not less than nine governors.
3. The vice-president and directors shall be appointed by the president with the consent of the Board of Governors.
4. Auditors shall be appointed by the Board of Governors.
5. The provision of Article 16 paragraph 4 shall apply mutatis mutandis to the appointment of the president, vice-president, directors and auditors. In this case, in item (6) of the same paragraph, "broadcast enterpriser, press agency" shall read "press agency"; "a person possessing not less than one tenth of the rights of voting of such juridical person" shall read "a person possessing not less than one tenth of the rights of voting of such juridical person (including any person who was as such within one year before the date of appointment)"; in item (7) of the same paragraph, "officer of an organization of the enterprisers mentioned in the preceding two items" shall read "officer of an organization of the enterprisers mentioned in the preceding two items (including any person who was as such within one year before the date of appointment)".

Article 28. The term of office of the president vice-president, directors and auditors shall be three years.

2. The president, vice-president, directors and auditors may be reappointed.
3. Notwithstanding the provision of paragraph 1, the president shall, even his term of office is expired, continue to hold his office until the new president is appointed.

Article 28-2. The Board of Governors or the president shall, in case the officers who were respectively appointed in accordance with the provisions of paragraphs 1 to 4 inclusive of Article 27 have come under one of the items of paragraph 4 of Article 16 which are applied mutatis mutandis in paragraph 5 of Article 27, dismiss them, excepting the case where such officers have come under item (6) or (7) of the same paragraph because they have become the officers of the enterprisers mentioned in item (6) of the same paragraph or organizations thereof of which the Corporation is a member.

Article 29. The Board of Governors may dismiss the president or auditor, in case the latter is deemed unable to perform his

duties or to have acted contrary to his official duties or is guilty of such malfeasances as to render himself unfit to be the president or auditor.

2. The president may, with the consent of the Board of Governors, dismiss the vice-president or director, in case the latter is deemed unable to perform his duties or to have acted contrary to his official duties or is guilty of such malfeasances as to render himself unfit to be the vice-president or director.

(Prohibition of Concurrent Occupation of President, etc.)

Article 30. The president, vice-president and directors shall not become an officer of any body aimed at pecuniary interests nor engage himself in any profit making enterprise.

2. The president, vice-president and directors shall not make any investment in any broadcast enterprise.

(Mutatis Mutandis Application of Civil Code)

Article 31. The provisions of Articles 44 (Faculty of Juridical Person of Illegal Acts), 50 (Address of Juridical Person), 54 (Limitation of Representing Right), 56 (Temporary Director) and 57 (Special Proxy) of the Civil Code and Article 35 paragraph 1 (Jurisdiction of Appointment of Temporary Director, etc.) of the Law of Procedures in Non-Contentious Matters (Law No. 14 of 1898) shall apply mutatis mutandis to the Corporation.

(Receiver's Contract and Receiver's Fee)

Article 32. Any person who is equipped with a receiving equipment capable of receiving the broadcasting provided by the Corporation shall conclude a contract with the Corporation with regard to the reception of its broadcasting. However, this shall not necessarily apply to those equipped with receiving equipment not intended for the reception of broadcasting.

2. The Corporation shall, unless in accordance with the standard approved by the Minister of Posts and Telecommunications in advance, not exempt the collection of receiver's fee from a person of the main clause of the preceding paragraph.
3. The Corporation shall obtain the prior approval of the Minister of Posts and Telecommunications for the terms of the contract mentioned in paragraph 1. The same shall apply to the intended change thereof.

(Order for Conduct of International Broad-

casting)

Article 33. The Minister of Posts and Telecommunications may order the Corporation to conduct international broadcastings, designating such necessary matters as the service areas and matters to be broadcast.

(Research Activities)

Article 34. The Minister of Posts and Telecommunications may, when it is deemed necessary for the improvement and development of broadcasting and the reception thereof, order the Corporation to make research in such matters as to be designated by him.

2. The result of any research performed according to the provision of the preceding paragraph shall be utilized so as to contribute to the interests of the public such as the development of broadcasting enterprise.

(Expenses for International Broadcasting, etc.)

Article 35. Expenses required for the services performed by the Corporation in accordance with the provisions of the preceding two Articles shall be borne by the State.

2. The orders mentioned in the preceding two Articles shall be given within the limits that the amount borne by the State in accordance with the provision of the preceding paragraph shall not exceed the budgetary appropriations approved by the Diet.

(Business Year)

Article 36. The business year of the Corporation shall begin in April every year and end in March of the following year.

(Budget of Revenues and Expenditures, Business Project and Financial Programme)

Article 37. The Corporation shall prepare the budget of revenues and expenditures, business project and financial programme for every business year and present them to the Minister of Posts and Telecommunications. The same procedures shall be followed for the alteration thereof.

2. Upon receipt of the budget of revenues and expenditures, business project and financial programme mentioned in the preceding paragraph, the Minister of Posts and Telecommunications shall review them and transmit them with his comments through the Cabinet to the Diet for approval.
3. In case any recommendation to make any change in the items of the budget of revenues and expenditures, business pro-

ject and financial programme mentioned in the preceding paragraph is made in accordance with the provision of the same paragraph, the appropriate committee of the Diet will obtain the view of the Corporation.

4. The monthly amount of receiver's fee to be collected from a person who concluded the receiver's contract in accordance with the main clause of Article 32 paragraph 1 shall be determined by the Diet by approving the budget of revenues and expenditures mentioned in paragraph 1.

Article 37-2. The Corporation may, in case the approval of the Diet for the budget of revenues and expenditures, business project and financial programme for every business year cannot be obtained before the first day of the business year concerned because the Diet is not in session or for other unavoidable reasons, prepare the budget of revenues and expenditures, business project and financial programme for a period not exceeding three months in the limits necessary for the routine operation of its businesses and for the work of installation or repairing of facilities (shall be limited to the continued work of installation and repairing related to the works being carried out in accordance with the business project of the previous business year approved by the Diet) and carry them out with the approval of the Minister of Posts and Telecommunications. In this case, the monthly amount of the receiver's fee prescribed in paragraph 4 of the preceding Article shall, notwithstanding the provision of the same paragraph, be the monthly amount of the receiver's fee of the month to which the last day of the previous business year belongs.

2. The budget of revenues and expenditures, business project and financial programme under the provision of the preceding paragraph shall be null and void when the budget of revenues and expenditures, business project and financial programme of the proper business year were approved by the Diet; the revenue, expenditure, implementation of businesses, and accommodation and repayment of funds made in accordance with the budget of revenues and expenditures, business project and financial programme under the provisions of the same paragraph shall be deemed as having been made in accordance with the budget of revenues and expenditures, business project and financial programme of the proper business year.
3. The Minister of Posts and Telecommunications shall, in case he has made the approval mentioned in paragraph 1, make

the ex post facto report to the Diet.

Article 38. The Corporation shall prepare its business report for every business year and present it to the Minister of Posts and Telecommunications within two months from the end of every business year.

2. On receipt of the business report mentioned in the preceding paragraph, the Minister of Postal Services shall present it to the Diet through the Cabinet with his views attached thereto.

(Limitation on Expenses)

Article 39. The income of the Corporation shall not be expended for other purposes than the performance of businesses listed in Article 9 paragraphs 1 and 2 and Article 9-2.

(Presentation of Balance Sheet, etc.)

Article 40. The Corporation shall prepare the inventory, balance sheet and profit and loss statement of every business year together with the written explanation thereof and present them to the Minister of Posts and Telecommunications within two months from the end of the business year.

2. The Minister of Posts and Telecommunications shall, upon receipt of the documents mentioned in the preceding paragraph, present them to the Cabinet.
3. The Cabinet shall submit the documents mentioned in the preceding paragraph to the Diet after the audit of the Board of Audit.

(Audit of the Board of Audit)

Article 41. The Board of Audit shall audit the Corporation

(Broadcast Bond)

Article 42. The Corporation may, with the prior approval of the Minister of Finance, issue the broadcast bond to raise the fund for the construction or improvement of broadcast equipment.

2. The total amount of the broadcast bond to be issued mentioned in the preceding paragraph shall not exceed the amount three times of the cost of the net property of the Corporation mentioned in the balance sheet of the latest business year which has undergone the audit of the Board of Audit.
2. In case the Corporation has issued the broadcast bond in accordance with the provision of paragraph 1, it shall, as the reserve fund for redemption, lay aside the sum equivalent to one tenth of unredeemed amount of the bond issued as of the end of every business year.
4. The Corporation may appropriate the

fund prescribed in the preceding paragraph only for the redemption of the broadcast bond.

5. Creditors of the broadcast bond of the Corporation shall be entitled to be paid for their credits prior to any other creditors on the properties of the Corporation.
6. The order of priority mentioned in the preceding paragraph shall be next to the ordinary preferential right mentioned in the Civil Code.
7. As regards necessary matters relating to the broadcast bond, in addition to those prescribed in the preceding six paragraphs, provisions relating to the debenture in the Commercial Code (Law No. 48 of 1899) and the Law of Procedures in Non-Contentious Matters shall apply mutatis mutandis in accordance with the provisions of Cabinet Order.

(Suspension and Abolition of Broadcast Station)

Article 43. The Corporation shall not abolish any of its broadcast stations or suspend the broadcasting thereof for more than twelve hours without the prior approval of the Minister of Posts and Telecommunications. However, this shall not apply to the cases caused by force majeure.

2. In case the Corporation has suspended its broadcasting, it shall, excepting the case where the prior approval mentioned in the preceding paragraph is given, report to that effect to the Minister of Posts and Telecommunications without delay.

(Compiling of the Broadcast Programme of the Domestic Broadcasting, etc.)

Article 44. The Corporation shall, in compiling and broadcasting the broadcast programmes of the domestic broadcasting, follow what are laid down in the following items:

- (1) Shall exert its possible efforts to satisfy the wishes of the people as well as to contribute to the elevation of the level of civilization by broadcasting rich and good broadcast programmes;
- (2) Shall keep local programmes in addition to national programmes;
- (3) Shall strive to be conducive to the upbringing and popularization of new civilization as well as to the preservation of past excellent civilization of our country.
2. The Corporation shall, in order to know the wishes of the people, conduct scientific listening polls at regular intervals and make the result thereof public.
3. The Corporation shall, in compiling the

broadcast programmes of the domestic broadcasting, follow what are laid down in the following items:

- (1) Shall not disturb the public security and good morals and manners;
- (2) Shall be politically impartial;
- (3) Shall broadcast news without distorting the facts;
- (4) As regards the controversial issue, shall clarify the point of issue from all the angles possible.
4. The Corporation shall, in compiling the broadcast programmes of the domestic broadcasting, provide, except those provided in accordance with a special business project, cultural programmes or educational programmes as well as news programmes and entertainment programmes, maintaining harmony between broadcast programmes.
5. The Corporation shall, in compiling and broadcasting the educational programmes, clearly indicate the persons to whom the broadcasting is aimed at and make the contents of the broadcasting being systematic and continuative, as well as instructive and appropriate to such persons; at the same time, means shall be so provided as to allow the general public to learn the plans and the contents of the broadcasting in advance. In this case, if the programme is intended for schools, the contents thereof shall conform to the standards of the curricula provided for by the laws and regulations relative to the school education.

(Standards of Domestic Broadcast Programme)

Article 44-2. The Corporation shall establish the standards for the compilation of the broadcast programme of the domestic broadcasting (to be simply referred to as the "Standards of Domestic Broadcast Program," hereinafter) according to the kind of the broadcast programme of the domestic broadcasting and to the kind of persons to whom the broadcasting is aimed at, and shall compile the broadcast programme of the domestic broadcasting in accordance with such standards.

2. The Corporation shall, when it has established the Standards of Domestic Broadcast Programme in accordance with the provisions of the preceding paragraph, make it public. It shall be the same when the standards were amended.

(Broadcast Programme Consultative Committees of Domestic Broadcasting)

Article 44-3. The Corporation shall, for the

purpose of maintaining the appropriateness of the broadcast programme of the domestic broadcasting, have the Central Broadcast Programme Consultative Committee (to be referred to as the "Central Consultative Committee", hereinafter) and District Broadcast Programme Consultative Committees (to be referred to as the "District Consultative Committees", hereinafter.)

2. The District Consultative Committee shall be established in each of the districts prescribed by the Cabinet Order.
3. The Central Consultative Committee or the District Consultative Committee shall reply to the inquiry of the president under the provisions of paragraph 1 or 2 of the succeeding Article.
4. The Central Consultative Committee and the District Consultative Committee may, if it is deemed necessary for the maintenance of the appropriateness of the broadcast programme of the domestic broadcasting, state their views to the president.
5. The Central Consultative Committee and the District Consultative Committee shall consist of not more than fifteen and not less than seven members, respectively.
6. The members of the Central Consultative Committee shall be nominated by the president from among the persons of learning and experience with the consent of the Board of Governors.
7. The members of the District Consultative Committee shall be nominated by the president from among the persons of learning and experience who have the dwelling place in the appropriate district of the District Consultative Committee concerned as mentioned in paragraph 2.

Article 44-4. When the Corporation intends to establish, or change the Standards of Domestic Broadcast Programme and the basic plan for the compilation of the broadcast programme of the domestic broadcasting, the president must consult the Central Consultative Committee.

2. When the Corporation intends to establish or change, the plan relating to the compilation and broadcasting of the broadcast programme intended for the districts prescribed in paragraph 2 of the preceding Article, the president must consult the District Consultative Committee.
3. The president shall, in case the Central Consultative Committee or District Consultative Committee replied or stated its views in accordance with the provision of paragraph 3 or 4 of the preceding Article, take necessary action in deference to such reply or statement.

(Compiling of the Broadcast Programme of

the International Broadcasting, etc.)

Article 44-5. The Corporation shall, in compiling and broadcasting the broadcast programmes of the international broadcasting or in compiling the broadcast programmes to be offered to foreign broadcast stations, exert its effort in contributing to the promotion of international friendship and to the development of economical interchange with foreign countries, by cultivating and popularizing the correct recognition for our country by introducing our civilization, industry and other state of things; at the same time, it shall endeavour to give appropriate entertainments to our nationals in foreign countries.

2. The provisions of Article 44-4 paragraph 1 shall apply mutatis mutandis to the compilation of the broadcast programme of the international broadcasting of the Corporation. In this case, the "Standards of Domestic Broadcast Programme" in the same paragraph shall read the "Standards of International Broadcast Programme".

(International Broadcast Programme Consultative Committee)

Article 44-6. The Corporation shall, for the purpose of maintaining the appropriateness of the broadcast programme of the international broadcasting, have the International Broadcast Programme Consultative Committee (to be referred to as the "International Consultative Committee", hereinafter).

2. The provisions of 44-3 paragraphs 3 to 6 inclusive and Article 44-4 paragraphs 1 and 3 shall apply mutatis mutandis to the International Consultative Committee. In this case, in Article 44-3 paragraph 3, "paragraph 1 or 2 of the succeeding Article" shall read "paragraph 1 of the succeeding Article"; in paragraph 4 of the same Article, "domestic broadcasting" shall read "international broadcasting"; in paragraph 5 of the same Article, "Central Consultative Committee and the District Consultative Committee" and "fifteen and not less than seven members, respectively" shall read "International Consultative Committee" and "ten members"; in Article 44-4 paragraph 1, "Standards of Domestic Broadcast Programme" and "domestic broadcasting" shall read "Standards of International Broadcast Programme" and "international broadcasting".

(Ex post facto Disposition Concerning Contents of Broadcasting)

Article 44-7. The Corporation shall, in ac-

cordance with the provisions of the Cabinet Order and only within three weeks after the broadcasting of the broadcast programme, take actions necessary for allowing the Central Consultative Committee, District Consultative Committee or International Consultative Committee or those concerned with the broadcasting of correction or cancellation under the provisions of Article 4 to be able to confirm, after the broadcasting, the contents of the broadcast programme.

Article 45. In case the Corporation allowed any candidate for an elective office to broadcast his political views or make a campaign speech, it must, on application, let other candidates for the same office in the same election broadcast under the same conditions.

(Prohibition of Commercial Advertising Broadcasting)

Article 46. The Corporation shall not broadcast any advertisement related to any other person's commercial business.

2. The provision of the preceding paragraph shall, in case where necessary in the compiling of broadcast programmes and where regarded as not for advertisement related to any other person's commercial business, not preclude the broadcasting of the name or title of the author or operator.

(Limitation on Transfer of Broadcast Equipment, etc.)

Article 47. The Corporation shall not, without the prior approval of the Minister of Posts and Telecommunications transfer, lease offer as a security, nor entrust the operation of, nor, whatever the method may be, subject to the control of any other person, the whole or part of its broadcast equipment.

2. In case the Minister of Posts and Telecommunications intends to give the approval in accordance with the provision of the preceding paragraph, the consent of both Houses of the Diet shall be obtained.

(Reference to Radio Regulatory Council)

Article 48. In any of the following cases, the Minister of Posts and Telecommunications shall refer the issue to the Radio Regulatory Council and take action in deference to the decision of the Council:

- (1) Where the dispositions based upon the provisions of Article 9 paragraph 2 item (10) (Approval of voluntary services) Article 9 paragraph 7 (Designation of place to conduct repairing service), Article 11 paragraph 2 (Approval of alteration

of Articles), Article 32 paragraphs 2 and 3 (Approval of standards of exemption of receiver's fee and terms of receiver's contract), Article 33 (Order for conduct of international broadcasting), Article 37-2 paragraph 1 (Order for conduct of research activities relating to broadcasting), Article 37-2 paragraph 1 (Approval of budget of revenues and expenditures, etc.), Article 43 paragraph 1 (Approval of abolition or suspension of broadcasting) or Article 47 (Approval of transfer of broadcast equipment, etc.) are to be taken:

- (2) Where the comments on the budget of revenues and expenditures, business project and financial programme of the Corporation are to be presented in accordance with the provision of Article 37 paragraph 2;
2. Of the matters mentioned in any of the items of the preceding paragraph, those deemed by the Radio Regulatory Council to be of minor importance may be disposed of by the Minister of Posts and Telecommunications without being referred to the Radio Regulatory Council.

(Recommendation)

Article 49. The Radio Regulatory Council may give the Minister of Posts and Telecommunications necessary recommendations concerning the matters mentioned in each item of paragraph 1 of the preceding Article or other matters related to the regulation of broadcasting.

2. On receipt of the recommendation mentioned in the preceding paragraph, the Minister of Posts and Telecommunications shall make public the contents thereof and take necessary action in deference thereto.

(Presentation of Materials)

Article 49-2. The Minister of Posts and Telecommunications may, in the limits necessary for the enforcement of this law, require the Corporation to present the materials relative to its businesses, in accordance with the provisions of the Cabinet Order.

Article 50. Matters related to the dissolution of the Corporation shall be prescribed by law separately.

2. When the Corporation is dissolved, the remaining properties of the Corporation shall be reverted to the State.

Chapter III Private Broadcast Enterpriser

(Compilation of Broadcast Programme, etc.)

Article 51. The provisions of Article 44 paragraphs 3 to 5 inclusive and those of Article 44-2 shall apply mutatis mutandis to the compilation or broadcasting of the broadcast programmes of a private broadcast enterpriser (broadcast enterpriser other than the Corporation; the same hereinafter).

(Broadcast Programme Consultative Organization)

- Article 51-2.** A private broadcast enterpriser shall, for the purpose of maintaining the appropriateness of the broadcast programme, have a broadcast programme consultative organization (to be referred to as the "Consultative Organization", hereinafter). However, in case the service area of the broadcast station (which means the service area mentioned in Article 14 paragraph 3 item (3) of the Radio Law; to be simply referred to as the "service area" in this paragraph) of a private broadcast enterpriser overlaps with the service area of another private broadcast enterpriser and such overlapped portion is equal to not less than two thirds of the service area of either of the private broadcast enterprisers, or the population of the overlapped portion of the service area is equal to not less than two thirds of the population of the service area either of the private broadcast enterprisers, these private broadcast enterprisers may jointly establish a consultative organization.
2. The provisions of Article 44-3 paragraphs 3 to 6 inclusive and those of Article 44-4 paragraphs 1 and 3 shall apply mutatis mutandis to the Consultative Organization. In this case, in Article 44-3 paragraph 3, "paragraph 1 or 2 of the succeeding Article" shall read "paragraph 1 of the succeeding Article", "the president" shall read "the private broadcast enterpriser"; in paragraph 4 of the same Article, "the President" shall read "the private broadcast enterpriser"; paragraph 5 of the same Article shall be amended as "A consultative organization shall consist of not less than seven members"; paragraph 6 of the same Article shall be amended as "The members of a consultative organization shall be nominated (in the case of the consultative organization to be established in accordance with the provisions of proviso to paragraph 1 of Article 51-2, jointly nominated) by the private broadcast enterpriser (or enterprisers) from among the persons of learning and experience. In this case, one third or less thereof may be filled by the officers or employees of the broadcast enterpriser concerned"; in Article 44-4 paragraphs 1 and 3, "the

president" shall read "the private broadcast enterpriser".

(Announcement concerning Advertisement Broadcasting)

Article 51-3. In case a private broadcast enterpriser broadcasts with charge an advertisement broadcasting, it shall announce in the broadcasting that the broadcasting is an advertisement broadcasting.

(Campaign Broadcasting)

Article 52. In case a private broadcast enterpriser has allowed any candidate for an elective office to broadcast his political views or make a campaign speech over the former's broadcast equipment or through other broadcast enterpriser's, it shall, on application, let other candidates for the same office in the same election broadcast under the same conditions whether with or without charge.

(Limitation on Advertisement in Broadcasting for School)

Article 52-2. In case a private broadcast enterpriser conducts the broadcasting of the educational programmes intended for schools, that broadcast programme must not include an advertisement deemed to be obstructive to the school education.

(Limitation on Arrangements Relating to Supply of Broadcast Programme)

Article 52-3. Private broadcast enterprisers must not conclude any arrangement relating to supply of broadcast programmes which includes any term by which broadcast programmes are supplied by a particular person only.

(Ex Post Fact Disposition Concerning Contents of Broadcasting and Presentation of Materials)

Article 53. The provisions of Articles 44-7 and 49-2 shall apply mutatis mutandis to private broadcast enterprisers. In this case, in Article 44-7, the "Central Consultative Committee, District Consultative Committee or International Consultative Committee" shall read the "consultative organization".

Chapter IV Penal Provisions

Article 54. In case an officer of the Corporation has, in connection with his duties, received, demanded, or obtained promise for, any bribe, he shall be sentenced to a penal servitude for a period not exceeding three

years.

2. In case a person who is going to be the officer of the Corporation has received, demanded, or obtained promise for, any bribe upon solicitation concerning the official business which he is going to take charge of, the person shall be punished with the same penalty as mentioned in the preceding paragraph when he becomes the officer of the Corporation.
3. In case a person who was the officer of the Corporation has received, demanded, or obtained promise for, any bribe for conducting unjust acts or for not conducting just acts, in the performance of his official duties upon solicitation during his term of office, he shall be punished with the same penalty as mentioned in paragraph 1.
4. A person who has given, offered or promised any bribe provided for in the preceding three paragraphs shall be sentenced to a penal servitude for a period not exceeding three years or to a fine not exceeding two hundred fifty thousand yen.
5. In the case of paragraphs 1 to 3 inclusive, the bribe received by the officer of the Corporation shall be confiscated. In case the whole or part of the bribe cannot be confiscated, the amount worth the same shall be collected.

Article 55. The officer of the Corporation who has committed the violation shall be sentenced to a fine not exceeding one hundred thousand yen when he comes under one of the following items:

- (1) Where the Corporation has conducted the businesses other than those prescribed in Article 9 paragraphs 1 and 2 Article 9-2;
- (2) Where he has not obtained the approval which he should have obtained in accordance with the provisions of Article 11 paragraph 2, Article 32 paragraph 2 or 3, Article 37-2 paragraph 1, Article 42 paragraph 1, Article 43 paragraph 1 or Article 47 paragraph 1;
- (3) Where he has violated the provisions of Article 30 paragraph 1, Article 37 paragraph 1, Article 38 paragraph 1, Article 39 or Article 40 paragraph 1.

Article 56. A person who has violated the provision of Article 4 paragraph 1 shall be sentenced to a fine not exceeding fifty thousand yen.

2. The prosecution of the offense mentioned in the preceding paragraph, if it concerns private affairs, shall only take place upon complaint.

Article 57. In case the representative of a juridical person, or the proxy, employee or other worker of a juridical person or natural

person has, in connection with the business of the juridical person or natural person, committed the offenses mentioned in the preceding Article, besides the offender, the juridical person or natural person shall also be punished with the fine mentioned in the same Article.

2. In the case of the preceding paragraph, the prosecution mentioned in paragraph 2 of the preceding Article brought against the offender shall be effective to the juridical person or natural person; the prosecution brought against the juridical person or natural person shall be effective to the offender.

Article 58. In case the officers of the Corporation have, in contravention of this law or the orders issued thereunder, neglected to register or have not, in contravention of the provision of Article 43 paragraph 2, made report, they shall be subjected to an administrative fine not exceeding ten thousand yen.

Article 59. A person who has neglected the presentation of materials under the provision of Article 49-2 (including the case where Article 49-2 is applied mutatis mutandis in Article 53) or who has presented false materials shall be subjected to an administrative fine not exceeding ten thousand yen.

Supplementary Provisions

(Date of Enforcement)

1. This Law shall come into force as from the date of enforcement of the Radio Law; provided, however, that the provisions of paragraphs 2 to 10 inclusive of the Supplementary Provisions shall come into force as from the day of its promulgation.

(Establishment of the Corporation)

2. The Prime Minister shall, before the establishment of the Corporation, nominate persons to become the governors of the Board of Governors of the Corporation in accordance with the same procedures as prescribed in Article 16.
3. Persons nominated to become the governors in accordance with the provision of the preceding paragraph shall, before the establishment of the Corporation, nominate a person to become the president of the Corporation, in accordance with the same procedures as prescribed in Article 27 paragraphs 1 and 2, from among the officers or personnel of Corporate Juridical Person, the Broadcasting Corporation of Japan.

4. In case of nomination in accordance with the same procedures as prescribed in Article 16 under the provision of paragraph 2, "broadcast enterpriser" in paragraph 4 item (6) of the same Article shall read "Corporate Juridical Person, the Broadcasting Corporation of Japan".
 5. Persons nominated to become the governors in accordance with the provision of paragraph 2 and the person nominated to become the president in accordance with the provision of paragraph 3 shall, respectively, be deemed as having been, in accordance with the provisions of this Law, appointed the initial governors of the Board of Governors and the initial president of the Corporation at the time of establishment of the Corporation. However, the term of office of such governors shall, notwithstanding the provision of Article 17 paragraph 1, be one year for three of them, two years for three, and three years for two, according to the designation of the Prime Minister.
 6. The Minister of Telecommunications shall set up a Formation Committee to take charge of the business related to the establishment of the Corporation.
 7. When the Minister of Telecommunications has appointed the members of the Formation Committee in accordance with the provision of the preceding paragraph, he shall order Corporate Juridical Person, the Broadcasting Corporation of Japan to refund the amount of subscriptions made by its members to such members.
 8. Corporate Juridical Person, the Broadcasting Corporation of Japan shall, on receipt of the order mentioned in the preceding paragraph, refund the subscriptions of its members to such members by the date of establishment of the Corporation.
 9. The Formation Committee shall prepare the Articles of Corporation for the Corporation and the initial budget of revenues and expenditures, initial business project and initial financial programme of the Corporation and obtain the approval of the Minister of Telecommunications.
 10. The Formation Committee shall, without delay, hand over its business to the person nominated, in accordance with the provision of paragraph 3, to become the president of the Corporation, when the approval mentioned in the preceding paragraph is obtained.
 11. When the person to be nominated to become the president of the Corporation in accordance with the provision of paragraph 3 has taken over the business mentioned in the preceding paragraph, he shall register the establishment of the Corporation, in accordance with the procedures to be determined by Cabinet Order.
 12. The Corporation shall come into existence by the registration of its establishment.
 13. At the moment when the Corporation is established, Corporate Juridical Person, the Broadcasting Corporation of Japan is dissolved and all the rights and duties thereof shall be transferred to the Corporation. In this case, the provisions in other laws and orders related to the dissolution and liquidation of juridical person shall not apply.
 14. Necessary matters concerning the registration of the dissolution of Corporate Juridical Person, the Broadcasting Corporation of Japan shall be provided for by Cabinet Order.
 15. Persons in the employment of Corporate Juridical Person, the Broadcasting Corporation of Japan at the time of establishment of the Corporation shall become employees of the Corporation at that time.
 16. The provisions of Articles 14 and 37 shall not apply to the initial budget of revenues and expenditures, initial business project and initial financial programme.
 17. The receiver's fee to be collected by the Corporation shall be thirty five yen per month until determined by the Diet in accordance with the provision of Article 37 paragraph 4.
- (Amendment to Registration Tax Law)
18. The Registration Tax Law (Law No. 27 of 1896) shall be partially amended as follows:
 - Next to Article 6-3 shall be added the following one Article: "Article 6-3-2. The Broadcasting Corporation of Japan shall, when it registers broadcast bond, pay the registration tax as classified below:
 - (1) Payment for broadcast bonds or their second and following payments...three thousandths (3/1000) of the amount of each payment;
 - (2) Alteration, lapse or abolition of registered matter...1,200 yen per case.
 In case matters of each item mentioned in the preceding paragraph are registered at the seats of branch offices, the registration tax of 300 yen per case shall be paid".
 - In Article 19 item 7, next to "the Public

Corporation established by virtue of laws", shall be added "the Broadcasting Corporation of Japan", and next to "Laws and regulations related to the Public Corporation", shall be added "Broadcast Law".

(Amendment to Local Tax Law)

19. The Local Tax Law (Law No. 110 of 1948) shall be partially amended as follows:

To Article 13 shall be added the following one item: "11-(2) Receiving equipment for use in receiving broadcasting"; and in item 13 of the same Article, next to "Dai Nihon Ikueikai (Education Aid Association of Japan)" shall be added "and the Broadcasting Corporation of Japan".

In Article 113, next to "books" shall be added "and broadcasting".

(Amendment to Ministry of Posts and Telecommunications Establishment Law)

20. The Ministry of Posts and Telecommunications Establishment Law

(Law No. 244 of 1948) shall be partially amended as follows:

In Article 3 paragraph 2, next to "services entrusted by the Ministry of Telecommunications", shall be added "business entrusted by the Broadcasting Corporation of Japan".

To Article 8 shall be added the following one item: "13-(2) To dispose of businesses entrusted by the Broadcasting Corporation of Japan".

(Amendment to Postal Services Special Account Law)

21. The Postal Services Special Account Law (Law No. 109 of 1949) shall be partially amended as follows:

In Article 2, next to "services entrusted by the Ministry of Telecommunications"; shall be added "businesses entrusted by the Broadcasting Corporation of Japan".

Supplementary Provisions

Supplementary Provision
(Law No. 63 of March 30, 1951)
(abridged)

1. This Law shall come into force as from April 1, 1951.

Supplementary Provision
(Law No. 220 of June 9, 1951)
This Law shall come into force as from the day of coming into force of the new Law.

Supplementary Provision

(Law No. 200 of June 17, 1952)

This Law shall come into force as from the day of promulgation.

Supplementary Provision
(Law No. 280 of July 31, 1952)

1. This Law shall come into force as from the day of coming into force of the Law Partial Amendments to the Ministry of Posts and Telecommunications Establishment Law (Law No. 279 of 1952)

Supplementary Provision
(Law No. 30 of March 23, 1969)

1. This Law shall come into force as from the day after the lapse of thirty days counted from the day of its promulgation. However, in the amending provision to add six Articles next to Article 44, those parts concerned with Articles 44-3, 44-4 and 44-6, and in the amending provision to add two articles in Chapter III, the part concerned with Article 51-2 shall come into force as from the day after the lapse of sixty days counted from the day of promulgation; in the amending provision to add six Articles next to Article 44, the part concerned with Article 44-7 and the provision amending Article 53 (only the part concerned with Article 44-7) shall come into force as from the day after the lapse of ninety days counted from the day of promulgation; in the amending provision to add six Articles next to Article 44, those parts concerned with Article 44-2 and Article 44-5 paragraph 2, and in the amending provision to add two Articles in Chapter III, the part concerned with Article 51 (only the part concerned with Article 44-2) shall come into force as from the day after the lapse of one hundred and twenty days counted from the day of promulgation.
2. The provision of Article 16 paragraph 3 of the Broadcast Law shall apply mutatis mutandis to the governors of the Board of Governors of the Broadcasting Corporation of Japan (to be referred to as the "governors" hereinafter) to be newly appointed with the enforcement of this Law.
3. The terms of office of governors to be newly appointed with the enforcement of this Law shall, notwithstanding the provision of Article 17 paragraph 1 of the Broadcast Law, be in accordance with the decision of the Prime Minister, until June 13, 1960 for one governor, until July 7, 1961 for another one and until the last days of the terms of office of the governors (including the governors to fill their vacancies) to fill

the vacancies of the governors retiring on
June 4, 1959.

Supplementary Provision
(Law No. 129 of April 13, 1959)
This Law shall come into force as from April
1, 1960

Annexed Table

1.	Tokyo-to, Kanagawa ken, Saitama-ken, Gumma-ken, Chiba-ken, Ibaraki-ken, Tochigi-ken, Yamanashi-ken, Nagano-ken and Niigata-ken.
2.	Aichi-ken, Mie-ken, Shizuoka-ken, Gifu-ken, Ishikawa-ken, Fukui-ken and Toyama-ken.
3.	Osaka-fu, Kyoto-fu, Hyogo-ken, Nara-ken, Shiga-ken, and Wakayama-ken.
4.	Hiroshima-ken, Tottori-ken, Shimane-ken, Okayama-ken and Yamaguchi-ken.
5.	Ehime-ken, Tokushima-ken, Kagawa-ken and Kochi-ken.
6.	Kumamoto-ken, Nagasaki-ken, Fukuoka-ken, Oita-ken, Saga-ken, Miyazaki-ken and Kagoshima-ken.
7.	Miyagi-ken, Fukushima-ken, Iwate-ken, Aomori-ken, Yamagata-ken and Akita-ken.
8.	Hokkaido.

Standards of NHK's Domestic Broadcast Programmes

PREFACE

NHK was founded on the basic policy of serving the nation as its public service broadcasting medium without intervention from any other sources, zealously safe-guarding its stand of being a nonpartisan and independent organization, maintaining its code of upholding the freedom of speech and expression, and to exert its utmost toward the presentation of affluent and well-knit broadcasts, thus promoting the welfare of the public and exerting the best possible efforts toward the elevation of the nation's cultural standards.

On the basis of this realization, the Japan Broadcasting Corporation hereby defines the scope and the purpose of all domestic radio broadcasts under these set standards:

1 Broadcasts shall be conducted in such a manner as to contribute to the realization of the ideals of world peace as well as the welfare of mankind.

2 Basic human rights shall be respected and the spirit of democracy definitely instilled.

3 To be of service in improving the character building of the people through the promotion of cultural and moral levels and the fostering of rational attitudes.

4 The preservation of the outstanding national cultures of the past and the upbringing of the newer phases in culture and its diffusion to the general public shall be effected.

5 With the aim of sustaining the dignity of a public broadcast facility and in order to meet the requirements of the public at large as a basic principle, the following standards for the compilation of domestic broadcast programmes are provided hereunder.

Article I. General Radio Programme Standards

Section 1. Human Rights, Character, Honor

a. Human rights shall be safeguarded and personal character respected.

b. No broadcast shall be detrimental or injurious to the honor and dignity of an individual or organization, nor shall it bring discredit and loss of reputation in society.

c. No broadcast shall cause professional prejudice.

Section 2. Race, People, International Relations

a. No broadcast shall be such as to create racial or national prejudice.

b. No broadcast shall be made to obstruct international amity.

Section 3. Religion

Broadcasts pertaining to religion shall respect the freedom of worship and be treated

with unprejudiced fairness.

Section 4. Politics, Economics

a. Broadcasts shall maintain impartiality in politics.

b. All political candidates appearing on radio in accordance with the Public Office Election Act to broadcast their campaign speech and their respective biographic sketches shall each be given an equal opportunity to voice their views on the air.

c. Broadcasts on various economic issues having a possible vital repercussion on the public shall be given special caution and discretion.

Section 5. Disputes, Litigations

a. Where there is a wide difference in the opinions of the public over an issue, as many angles of arguments should be clearly set forth and shall be given utmost unbiased treatment.

b. In any legal case which is currently on court trial, no broadcast shall be made that would interfere with proper legal adjustment.

Section 6. Community Life

a. Broadcasts are aimed at easing the national livelihood and espouse the spirit of mutual assistance.

b. No broadcast, either directly or indirectly, shall be detrimental to public safety and public interests.

c. Under no circumstances shall acts of violence be permitted to be approved.

Section 7. Home

Marriages shall be treated with solemn seriousness while home and family life be duly respected.

Section 8. Customs and Manners

a. Human life shall not be treated with contempt nor the act of suicide glorified.

b. Problems relating to sex shall be treated with seriousness and shall maintain dignity at all times.

c. The unwholesome relationship between the male and female shall not be treated with glamor, nor its expressions treated approvingly.

Section 9. Crime

a. In reference to crime, the law shall be upheld and the criminal shall not be given the impression of an attractive character nor shall the acts of crime be treated approvingly.

b. In portraying the methods and the actual processes of the acts of crime, such portrayal shall not be given to details any more than is necessary.

c. The acts of gambling and its related subjects shall not be treated approvingly nor shall it be portrayed to give it an impression of glamor.

d. The use of opiates other than for medical purposes shall not be referred to except as a detrimental factor.

Section 10. Expression

a. Expression should be understandable and the correct and proper use of words should be encouraged.

b. Broadcasting words shall be spoken basically on the standard dialect, but when using a provincial dialect, precaution and care should be exercised.

c. Avoid or minimize as much as possible the use of coarse languages and indecent words and actions.

d. Avoid expressions that tend to arouse fear, uneasiness or unpleasantness.

e. The detailed descriptions of physical torture and savage treatment or the suggestions of elaborating such acts shall not be broadcast.

f. Every consideration shall be made for the convenience of the listeners' time best suited for in compiling the contents of the broadcast and the expressions used.

g. In the use of news, flash news, official items, weather reports in dramatic programmes as effects, every caution should be given to differentiate such items from the actual and the fiction.

Section 11. Advertisement

a. Commercial advertising or broadcasts designed to publicize the mention of names for the purpose of propaganda is not used in any form.

b. In mentioning the names of a specific individual or organization or its professional status, or the mention of trade marks or the name of merchandise, an impartial decision shall be made to determine whether these are required on the programme.

Section 12. Prizes

a. Any programme designed to attract the listeners merely for the object of the prizes and remunerations, or those that stimulate unnecessary speculative issues shall be avoided.

b. In all prize-awarding programmes, every step shall be taken to give the contestants a fair judgment and that the prizes be based in accordance with the merit of the skill displayed.

c. In any solicitation for radio manuscripts, the full details of the basis of the competition and the prize shall be made known distinctly.

Section 13. Corrections

In the event a broadcast is found to be counter to the facts, an immediate retraction or an amendment shall be made as quickly as possible.

Article II. Specific Radio Programme Stand-

ards

Section 1. Cultural Programme

a. The objective is to elevate the cultural aspect in general and to bring about an uplift in the cultural level.

b. The requirements of not only the majority should be met, but every effort to satisfy the demands of the various class levels should be made.

c. Efforts shall be made to promote social and community interest and to further the knowledge on the cultural phases of general livelihood.

d. In making public an academic study and in all broadcasts pertaining to expert matters, the integrity and importance of such a subject shall be duly respected and shall be based on logical and professional standards.

Section 2. Educational Programmes

a. The specified listener audience shall be made clear and the contents of the programme shall be appropriate and beneficial.

b. In order to obtain the best educational results, it shall be well organized and continuous.

c. Equal opportunity in education shall be publicized through the radio.

Section 3. School Broadcast Programmes

a. Every effort shall be expended toward the basic plan of compiling a school educational programme that can be done only through the radio.

b. Grade school children's study attitude shall be given consideration along with the development of their mind and body.

c. Seek means of improving the teaching methods for the teachers.

Section 4. Children's Programmes

a. Considerations shall be given for the reaction on the minds of the children. Strive to infuse wholesome spirit and cultivate abundant sentiments.

b. Avoid programmes that would be imitated by the children to their detriment or those that would be easily misinterpreted by them.

c. Avoid expressions that would cause abnormal fear in the children.

d. Superstitions that may bring harm to the children shall not be referred to.

Section 5. News Programmes

a. Uphold the freedom of speech and report the facts.

b. In the news, the facts shall be treated objectively and shall not be twisted, concealed nor used for purposes of agitation.

c. In inserting a certain opinion inside a news item, the facts and the opinions shall be distinctly set apart.

d. In the event of disaster and other major emergencies, the news shall be disclosed at

once and the lives of the people in the disaster area be given every protection and thus contribute to the prevention of further casualties and property damage.

e. All news commentaries and general comments shall be distinctly separated from the news itself.

Section 6. Sports Programmes

a. The infusion of a spirit of clean sports and the advancement of physical culture shall be promoted.

b. In handling amateur sporting events the spirit and the objective shall be duly respected. Special precaution and care shall be exercised in handling events involving the younger people.

Section 7. Entertainment Programmes

a. Strive for the better class of entertainments and thus nurture the noble sentiments of life.

b. Efforts to preserve the classic entertainment and the nurture of various types of programmes shall continue unabated.

c. Pioneer a new artistic field that would be available only through the medium of radio.

d. In the presentation of an artistic subject, respect and common sense shall prevail at all times.

Section 8. Recreation Programmes

a. Brighten the homes and strive for a wholesome, full and happy life.

b. If references must be made to physical deformities, particular care shall be exercised.

c. When using provincial dialects and colloquialism consideration shall be given for the feelings of the people of that area and avoid antipathy and unpleasant reactions.

In accordance with the provisions of the Broadcast Law, and fully realizing that NHK represents this country as the one and only overseas broadcasting system, through the medium of its overseas programmes do hereby adhere to the following avowed mission: to promote understanding of the foreign nations toward Japan; to contribute to the development of international interchange of culture and economy; and thus enhance amity among the nations of the world and the happiness of mankind. In order to realize this the followings standards have been set forth as a basis for compiling overseas broadcast programmes:

Article I. General Standards

1. The keynote of freedom and justice shall be based on the spirit of the United Nations Charter.

2. That all domestic and foreign news items shall be disseminated objectively and rapidly. At the same time, an honest report shall be made of the nation's vital policies and official opinions as well as the trend of the

nation's public opinion.

3. That the true conditions of our nation's cultural activities and industrial actualities shall be made known at all times.

4. That appropriate information and comfort be directed to the Japanese nationals abroad.

Article II. Standards for Transmission in Accordance with the Regional Areas

1. For transmissions to regions of a special nature—due considerations must be made of their political and governmental setup, racial peculiarities, religious beliefs and their habits and customs.

In the broadcast, the use of the languages spoken in the directed area or the normal daily spoken dialect should be adhered to as much as possible.

2. For transmissions to all the general directions—every effort shall be made to compile and edit the correct news for rapid transmission and to produce a fair and just commentary programme.

The broadcasts shall use the Japanese and the English languages.

Article III. Basic Regulations for the Various Broadcasting Programmes

All radio programmes shall be so compiled as to maintain a constant balance and symmetry, but the following criteria should be applied in the different broadcast programmes;

Section 1. News Programmes

a. All news should treat the facts objectively and only the known truth shall be transmitted.

b. The tone of the news commentaries shall bear unbiased criticisms and viewpoints and shall at all times make clear our country's stand on any and all issues.

c. Every effort shall be made to give an honest report on the trend of public opinion of our country.

Section 2. Information Programmes

That a correct understanding of the nation's political, economical, cultural, scientific and tourism phases be made known and thus cultivate due recognition along these lines.

Section 3. Performing Arts Programmes

That our traditional entertainment and music, along with representative modern production shall be introduced and thus deepen the interest and understanding of our nation's cultural aspects.

Section 4. Recreational Programmes

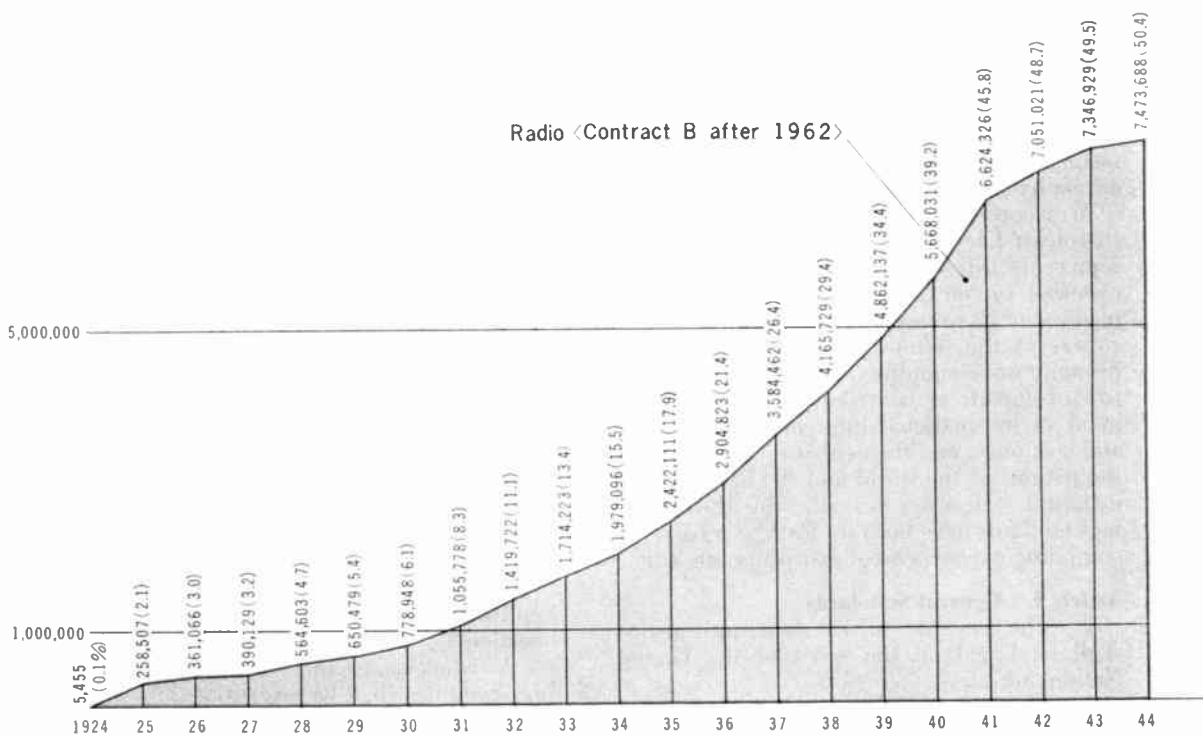
A wholesome and dignified recreational programmes shall be presented.

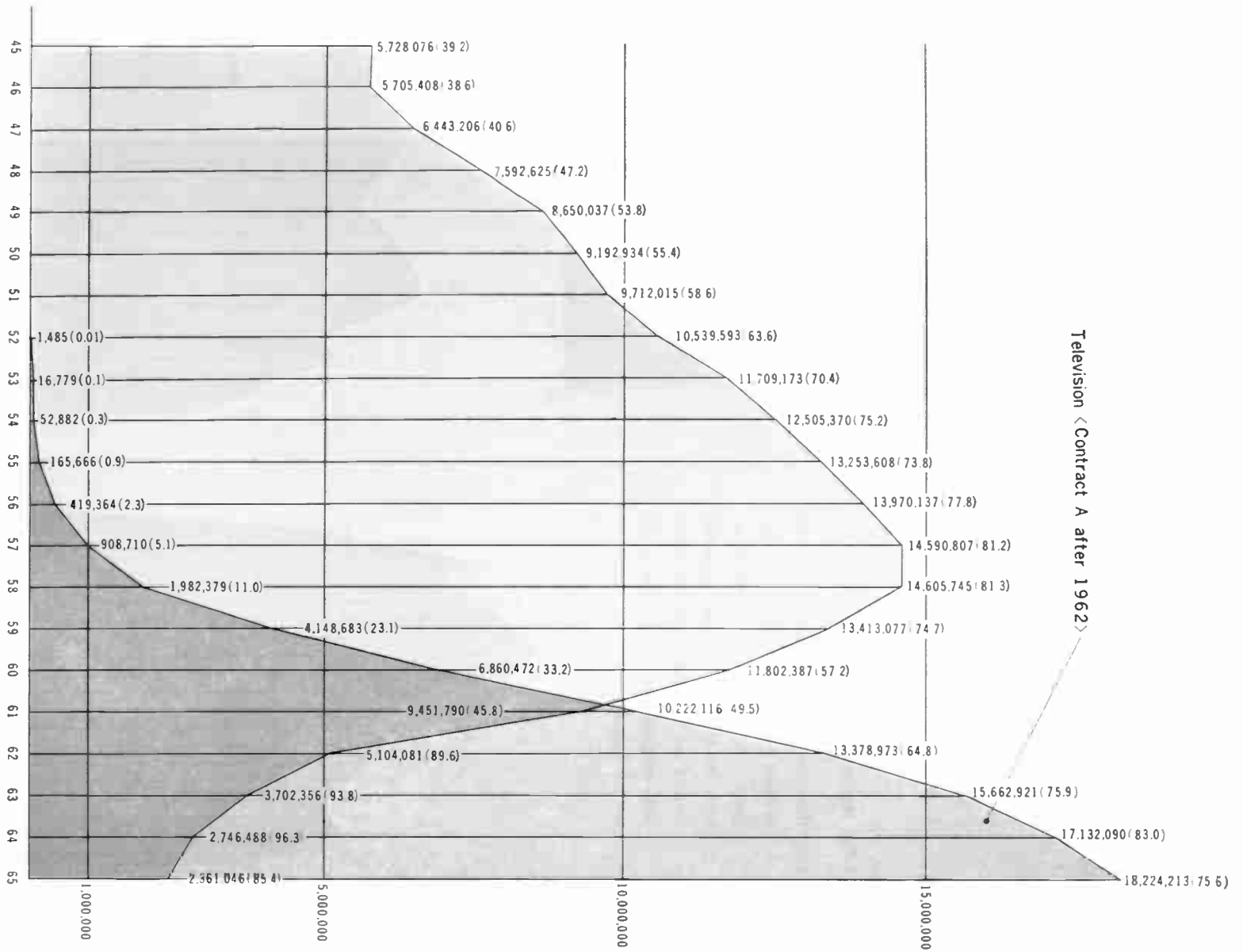
Article IV. Corrections

Should a broadcast be found to be counter to the facts, a retraction or an amendment shall be made as quickly as possible.

Radio and Television Receiving Contractors and the Rate of Dissemination

- Note : 1. NHK established new receiving contract system in April 1962.
 2. The rate of radio diffusion after 1962 was calculated from the total of contracts A and B.
 3. Surveys were undertaken at the end of each financial year.

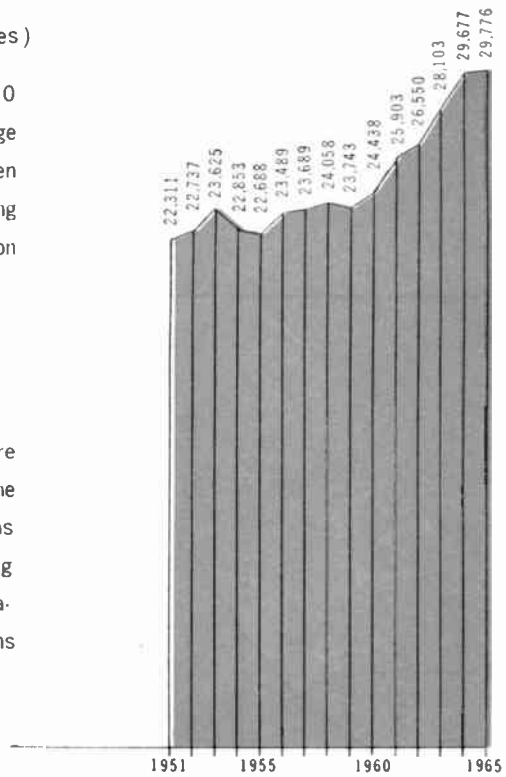




Dissemination of Various Mass-media in Japan

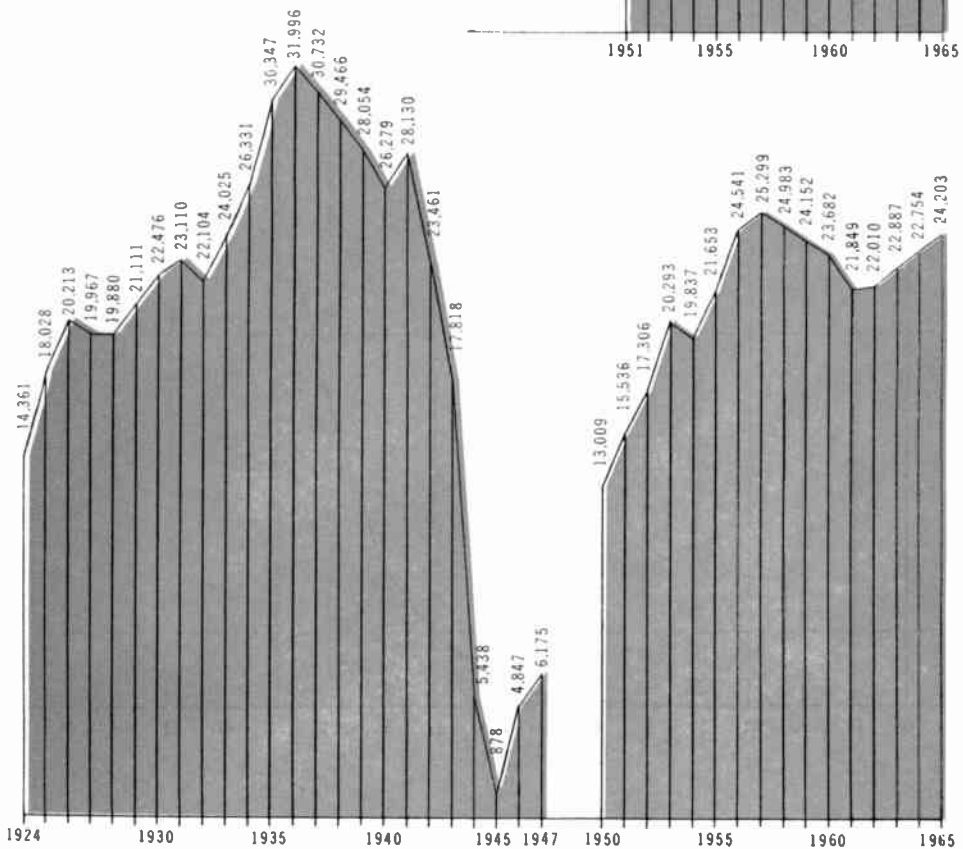
Newspaper circulation (unit:1,000 copies)

Note: Figures on newspapers before 1950 are omitted because of the shortage of data. Subscriptions have been calculated on the basis of counting a set of morning and evening edition as one.

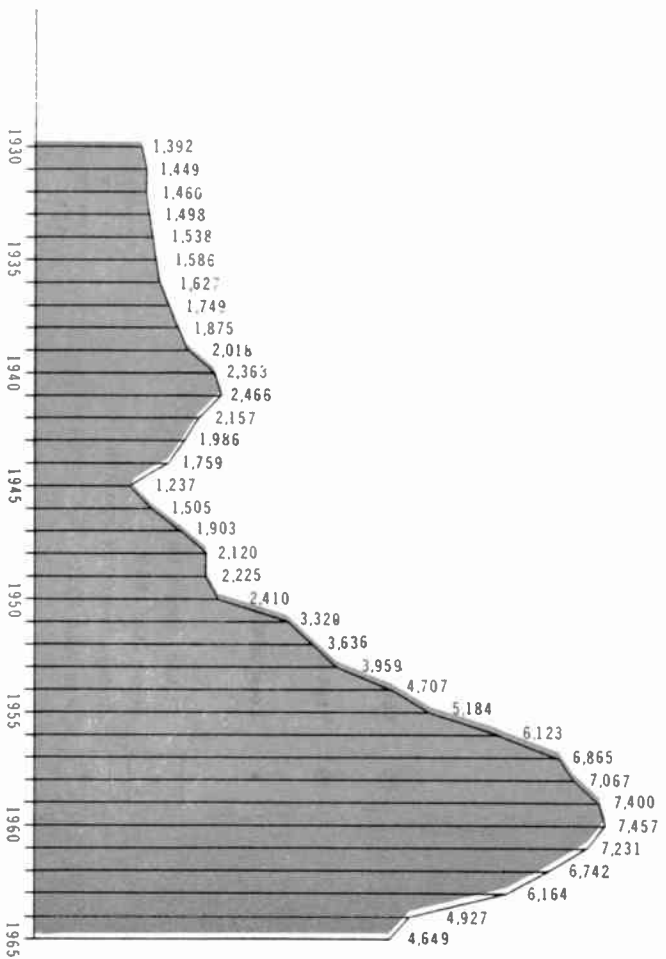


Total items of publications

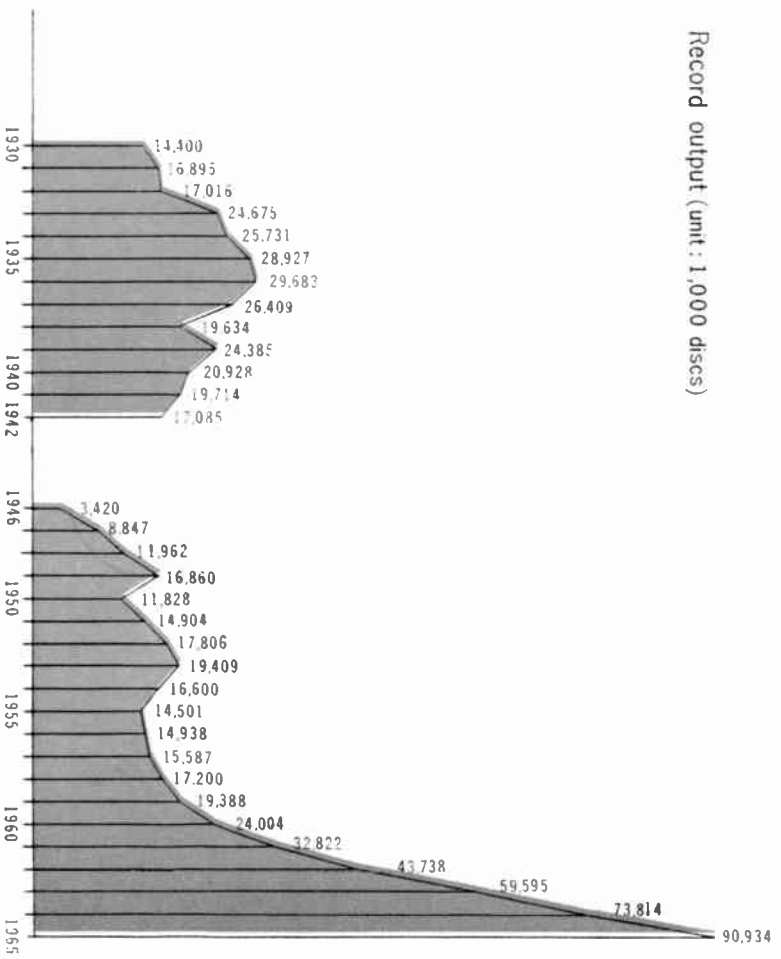
Note: Both the new and republications are included in the total number of the items of publications. Publications here mean normal books including original and translated editions; magazines and government office publications are not included.



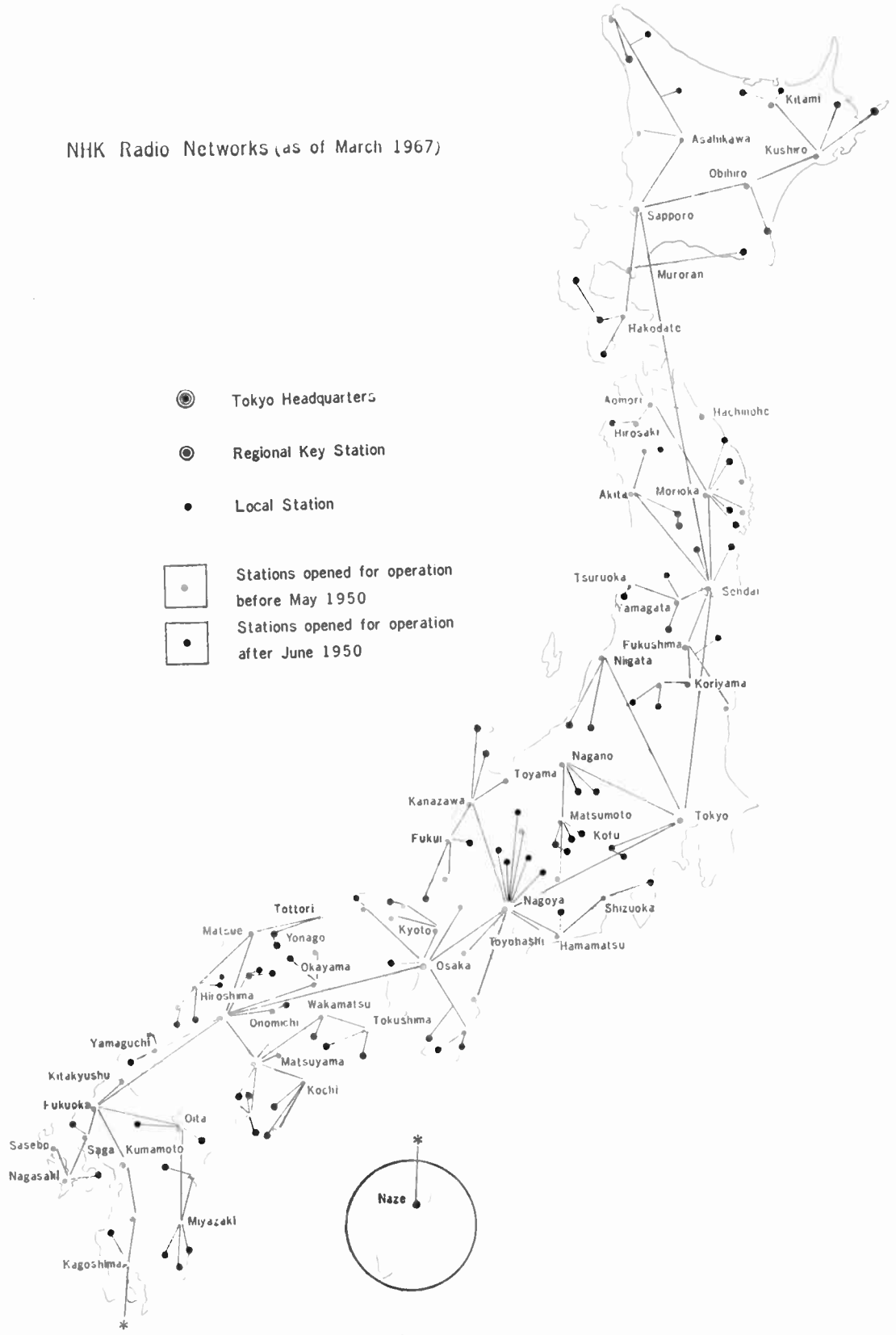
Motion picture theatres



Record output (unit: 1,000 discs)





NHK Radio Networks (as of March 1967)

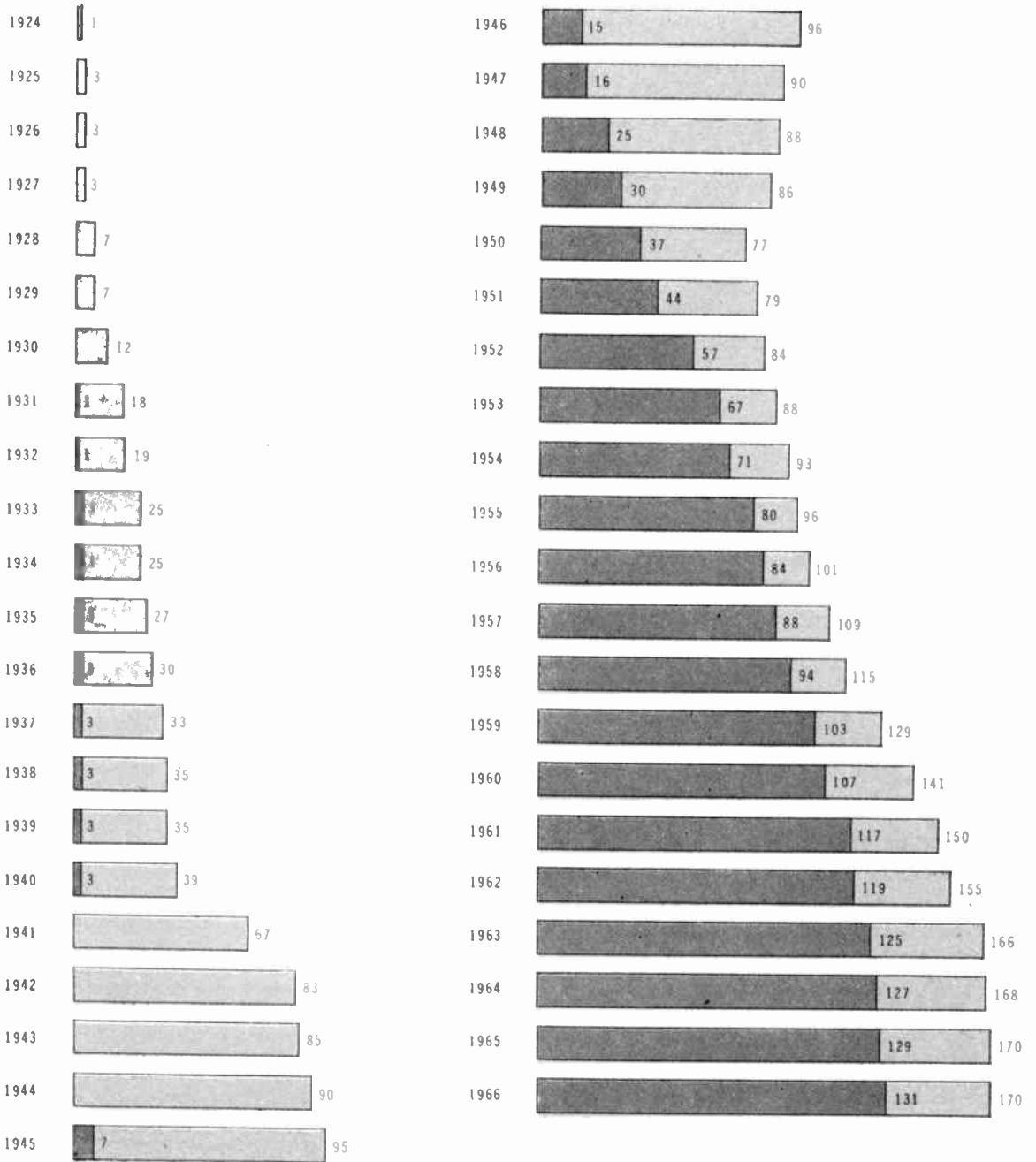


- Tokyo Headquarters
- Regional Key Station
- Local Station

- ◻ Stations opened for operation before May 1950
- ◼ Stations opened for operation after June 1950

Increase of NHK Radio Broadcasting Stations (by financial year)

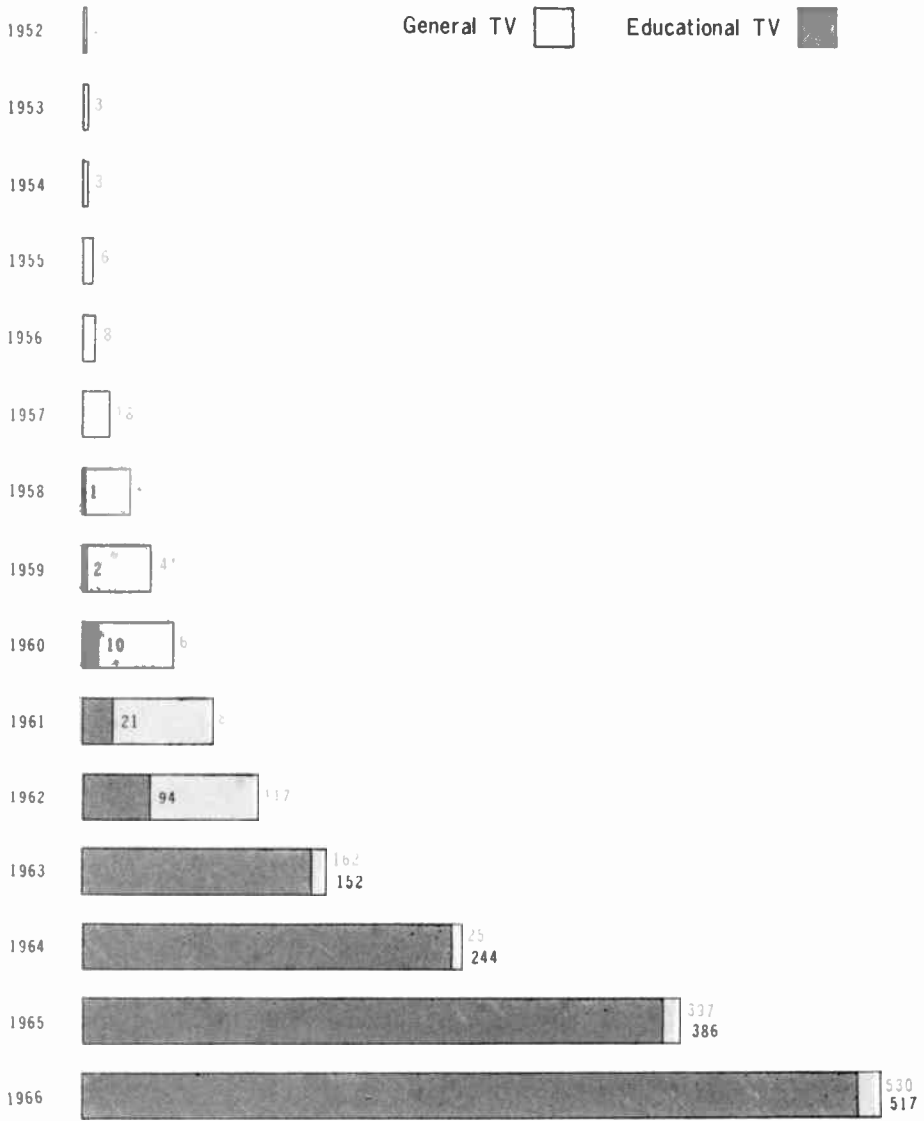
First Radio  Second Radio 



NIHK TV Networks (as of March 1967)



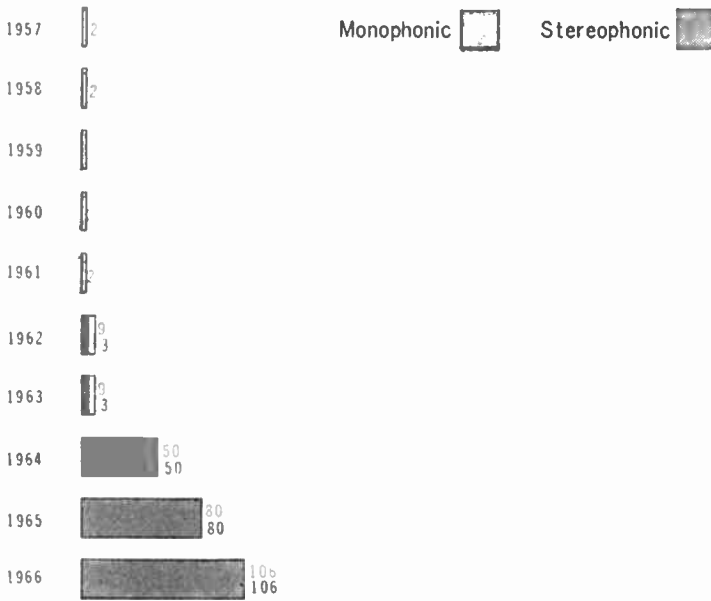
Increase of NHK TV Broadcasting Stations(by financial year)



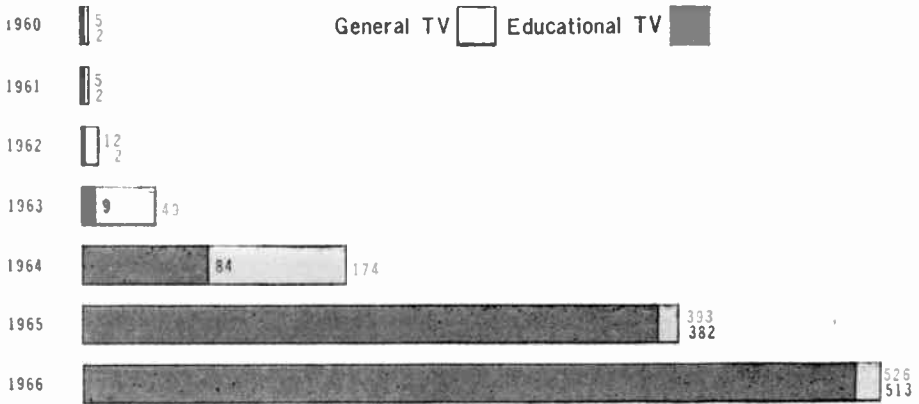
NHK FM Networks (as of March 1967)



Increase of NHK FM Broadcasting Stations (by financial year)

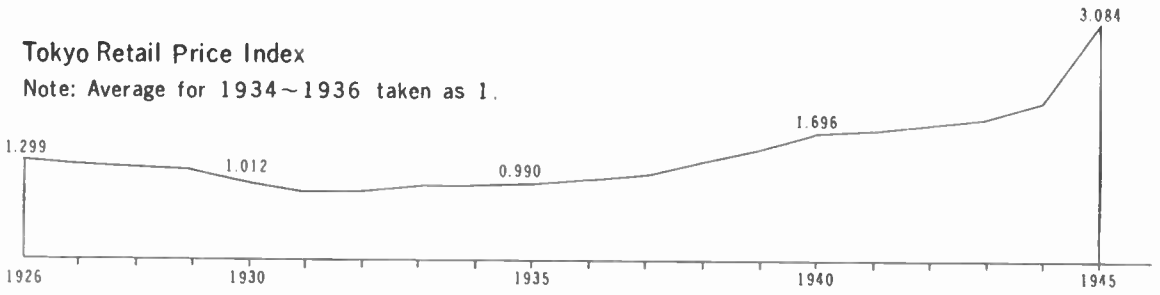


Increase of NHK Colour TV Broadcasting Stations (by financial year)



Tokyo Retail Price Index

Note: Average for 1934~1936 taken as 1.

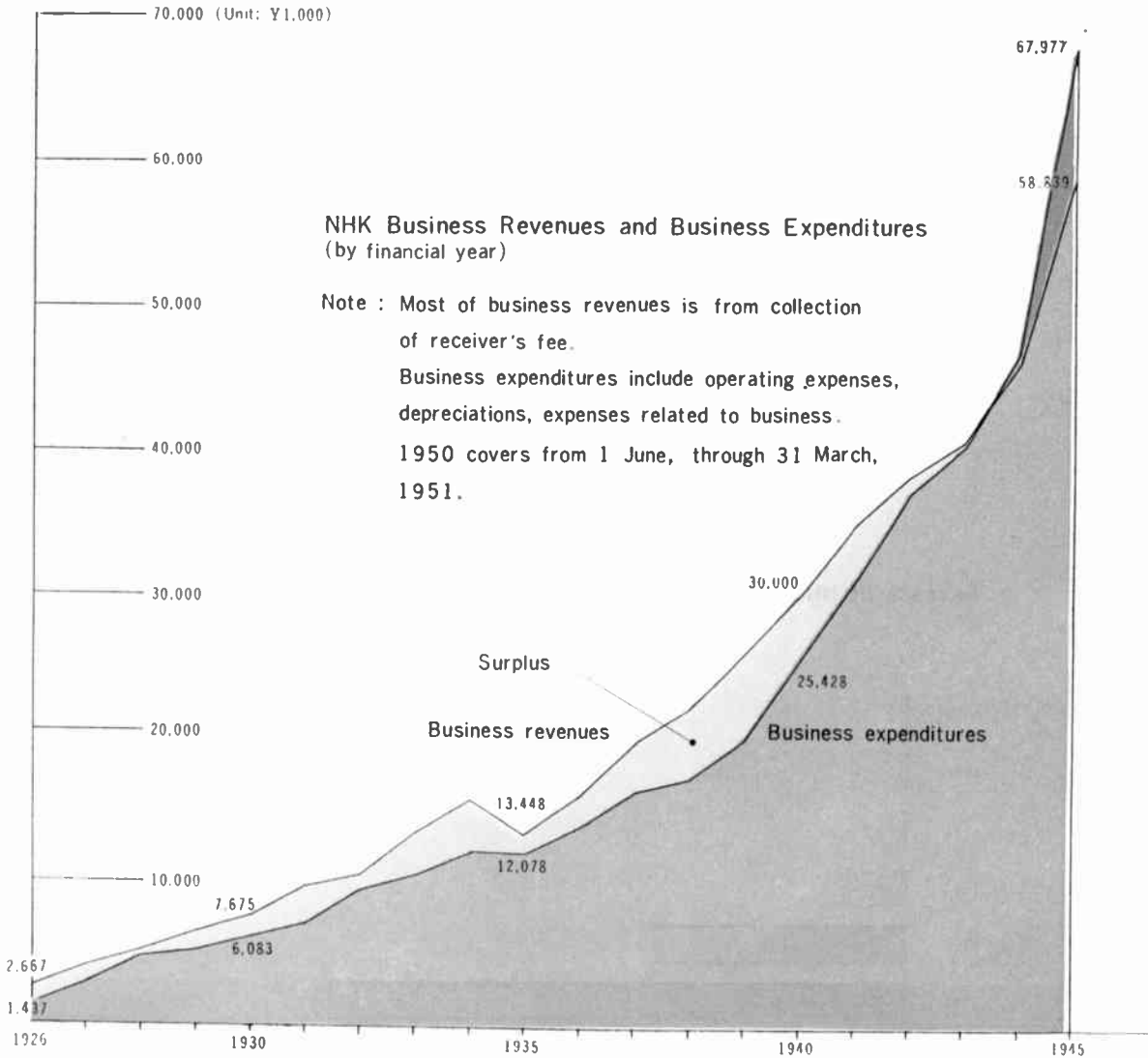


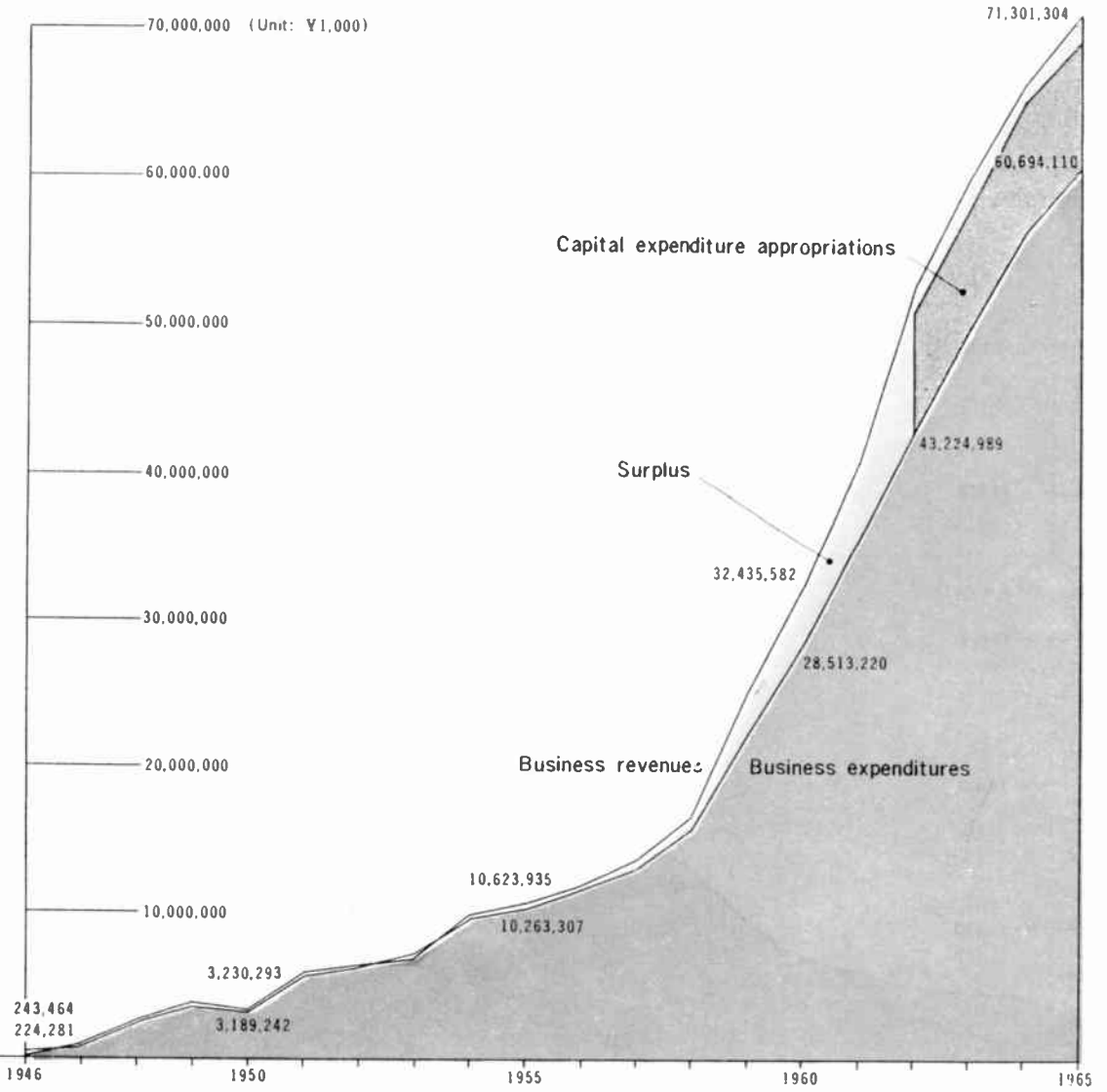
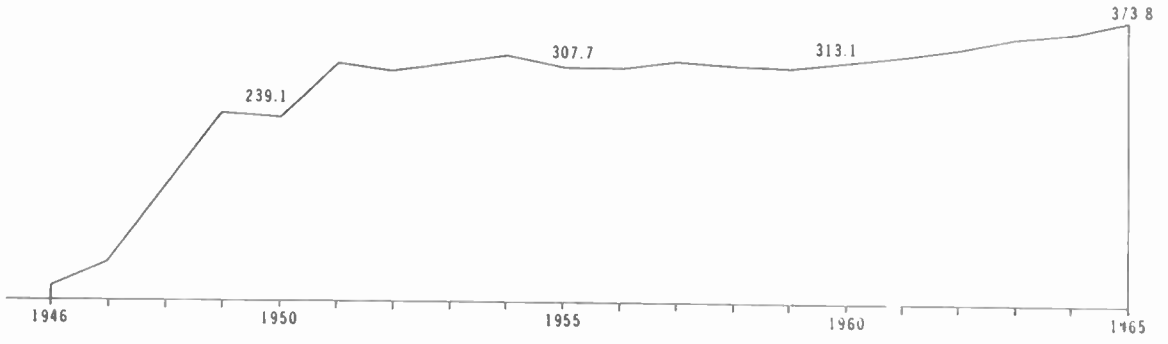
NHK Business Revenues and Business Expenditures (by financial year)

Note : Most of business revenues is from collection of receiver's fee.

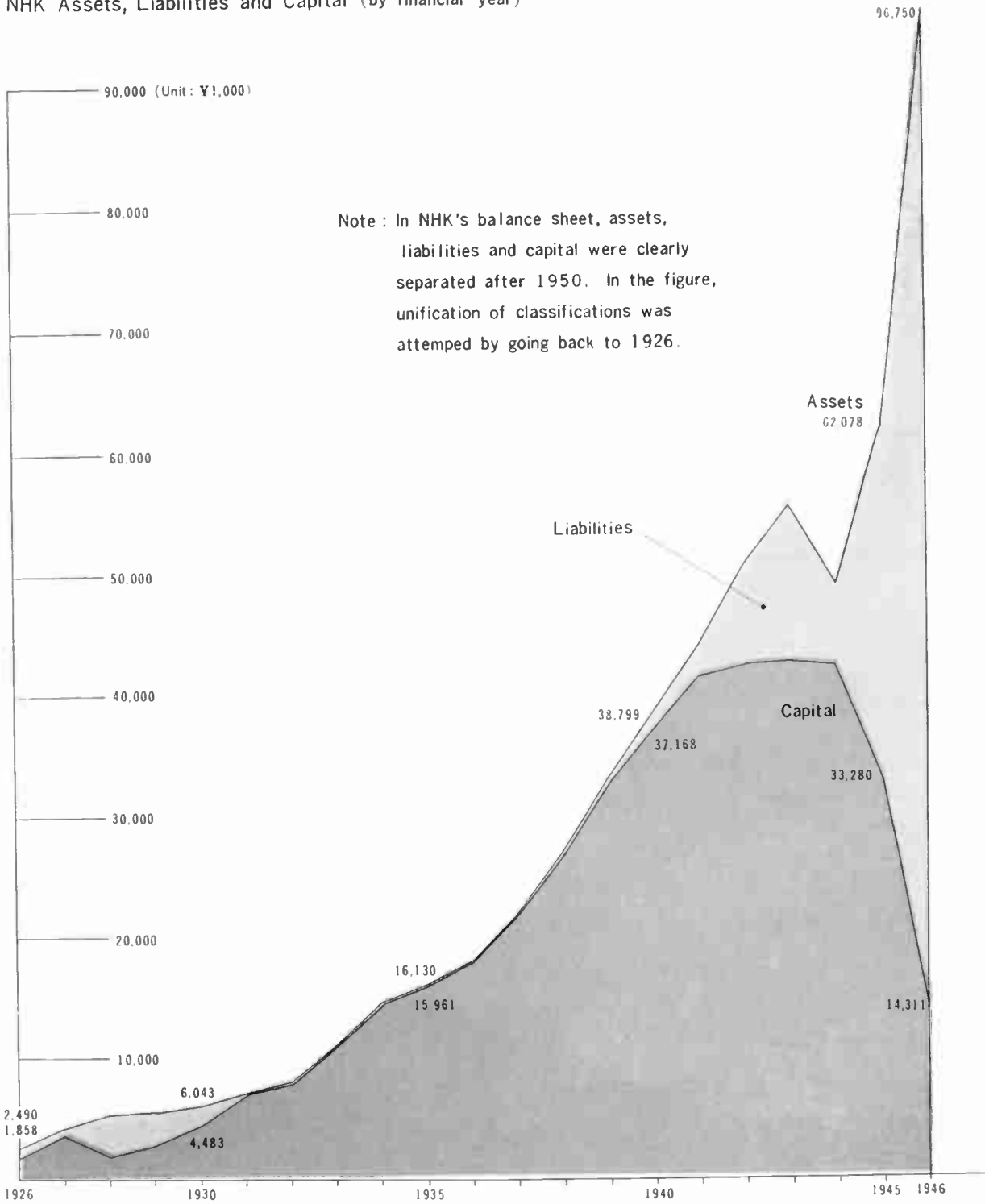
Business expenditures include operating expenses, depreciations, expenses related to business.

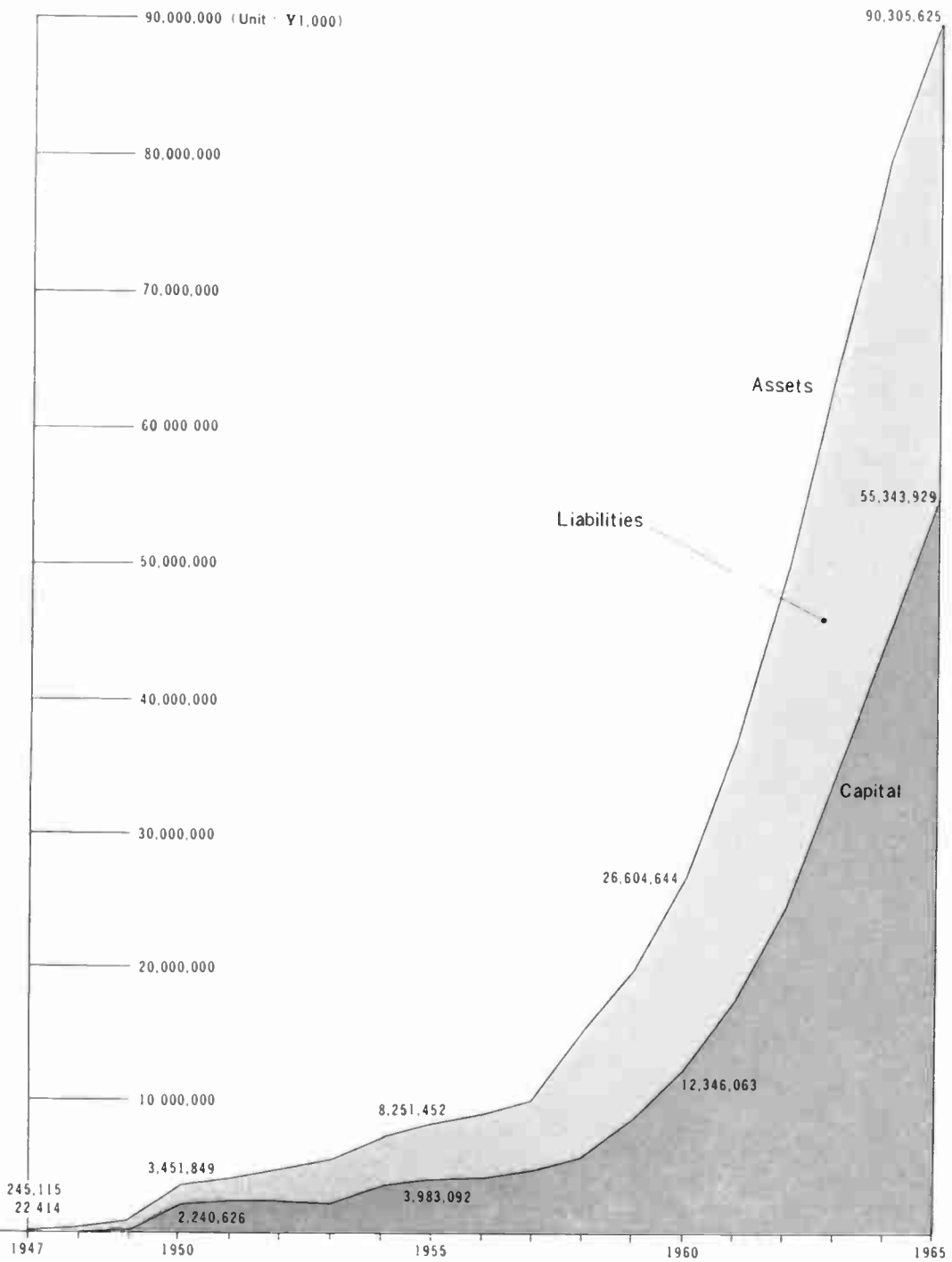
1950 covers from 1 June, through 31 March, 1951.





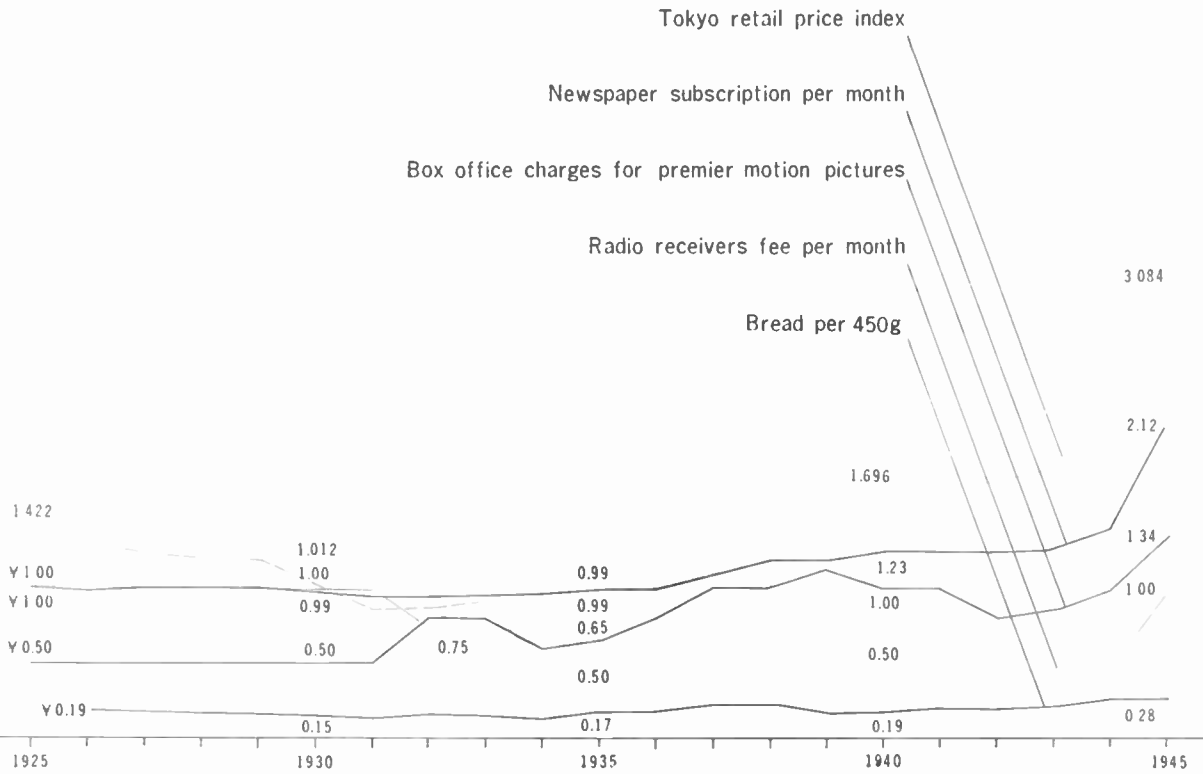
NHK Assets, Liabilities and Capital (by financial year)

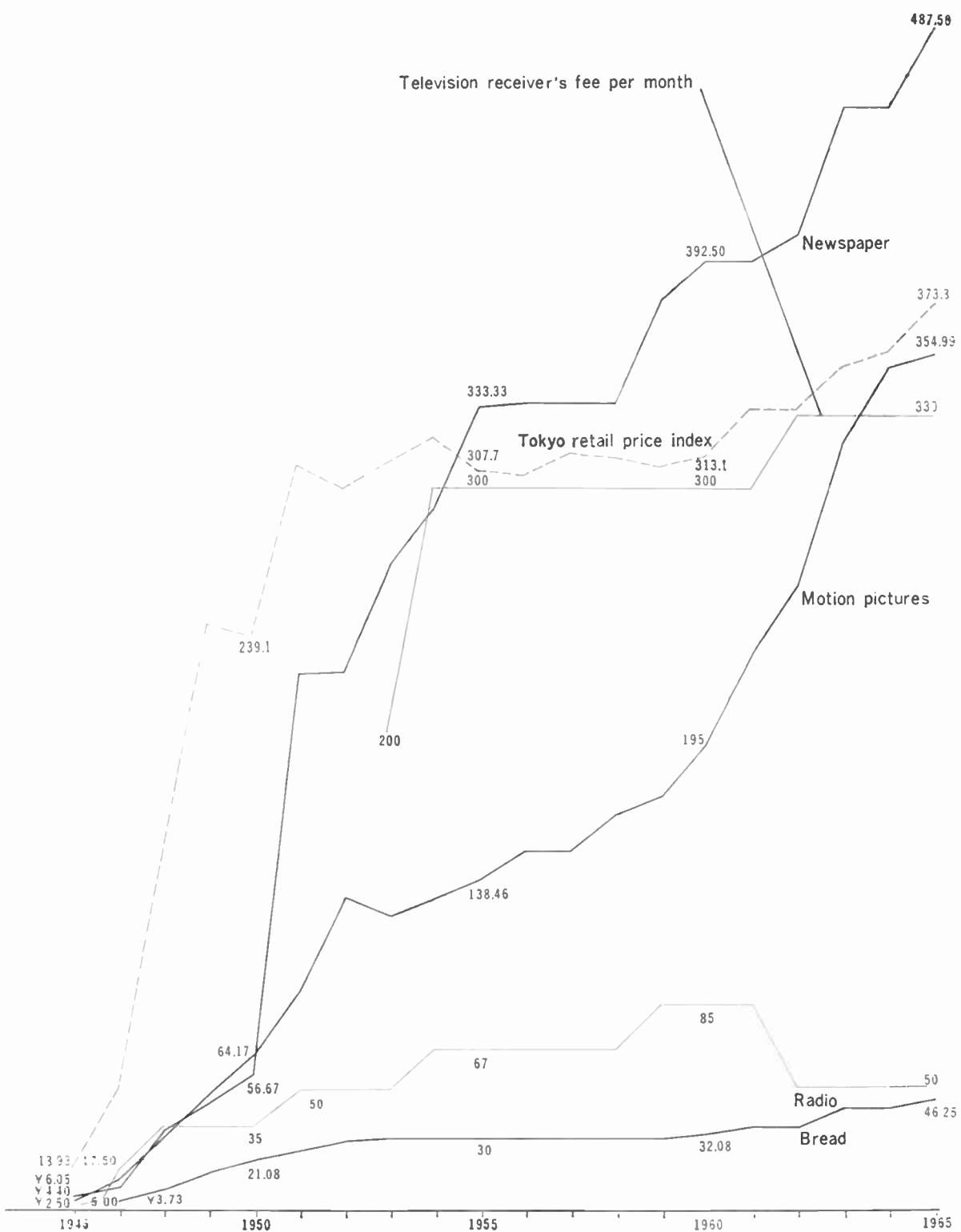




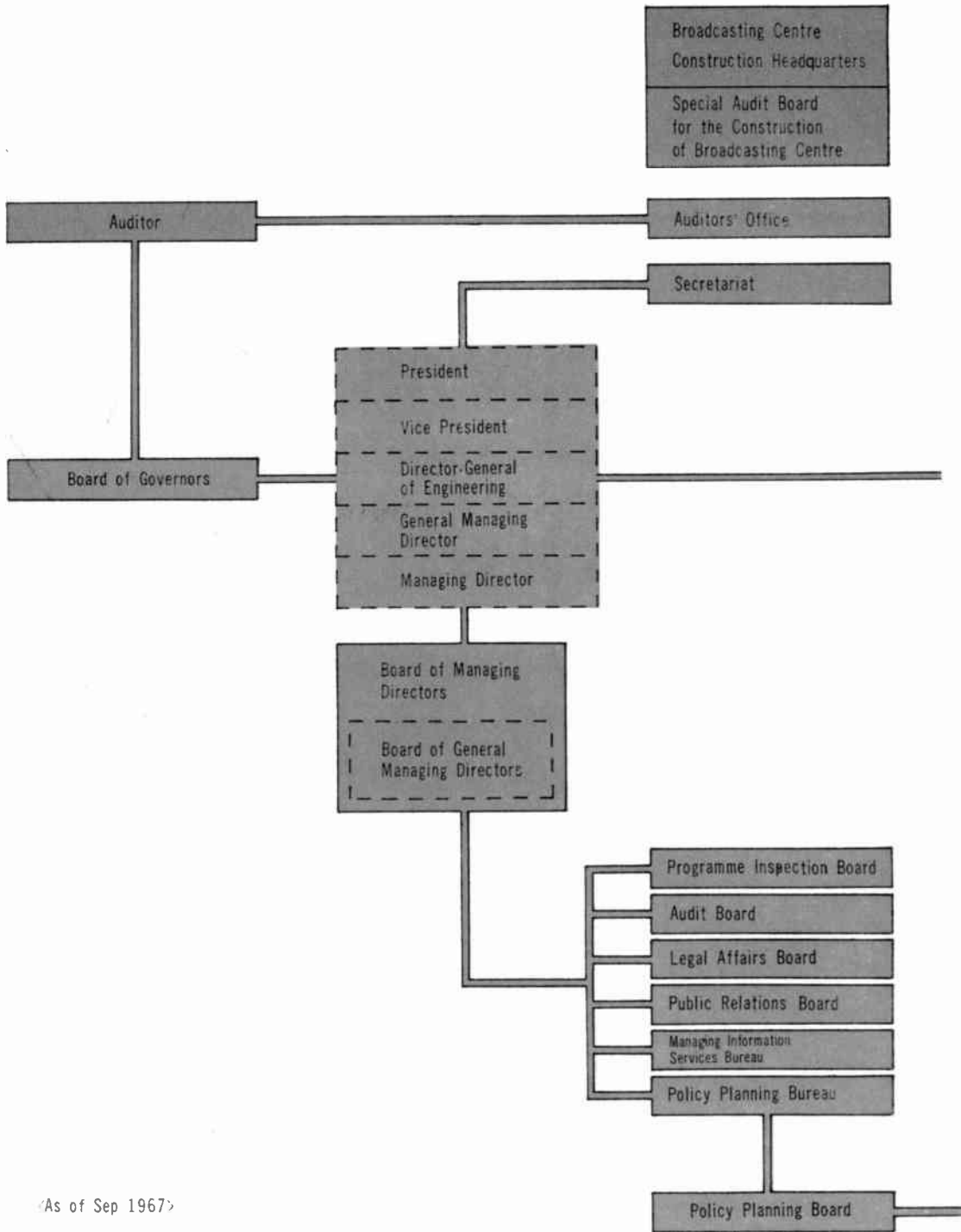
Radio and Television Receiver's Fee, Various Charges
and Tokyo Retail Price Index

Note: NHK established new receiving contract system in April 1962.

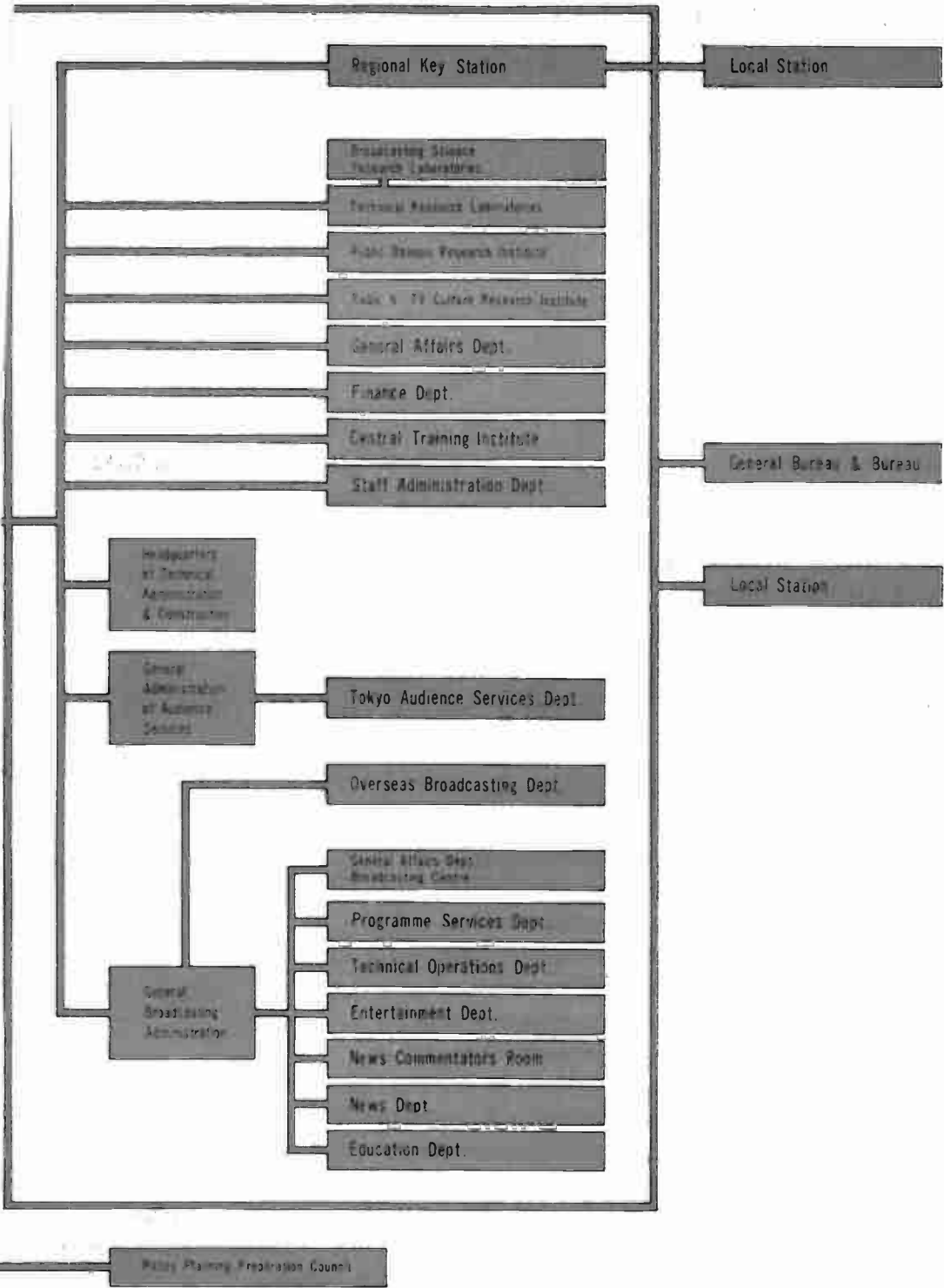




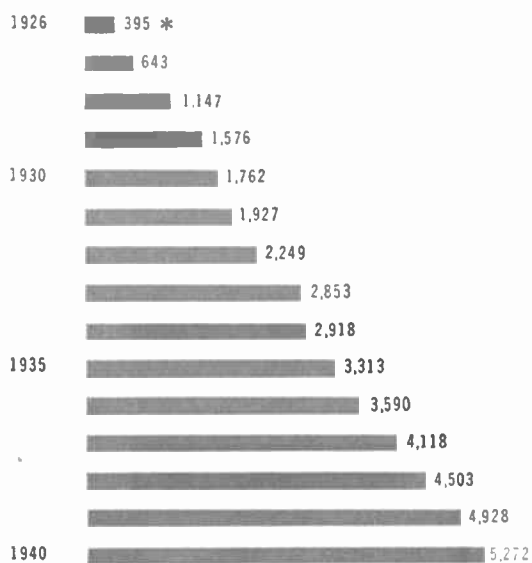
Organization Chart of NHK



<As of Sep 1967>

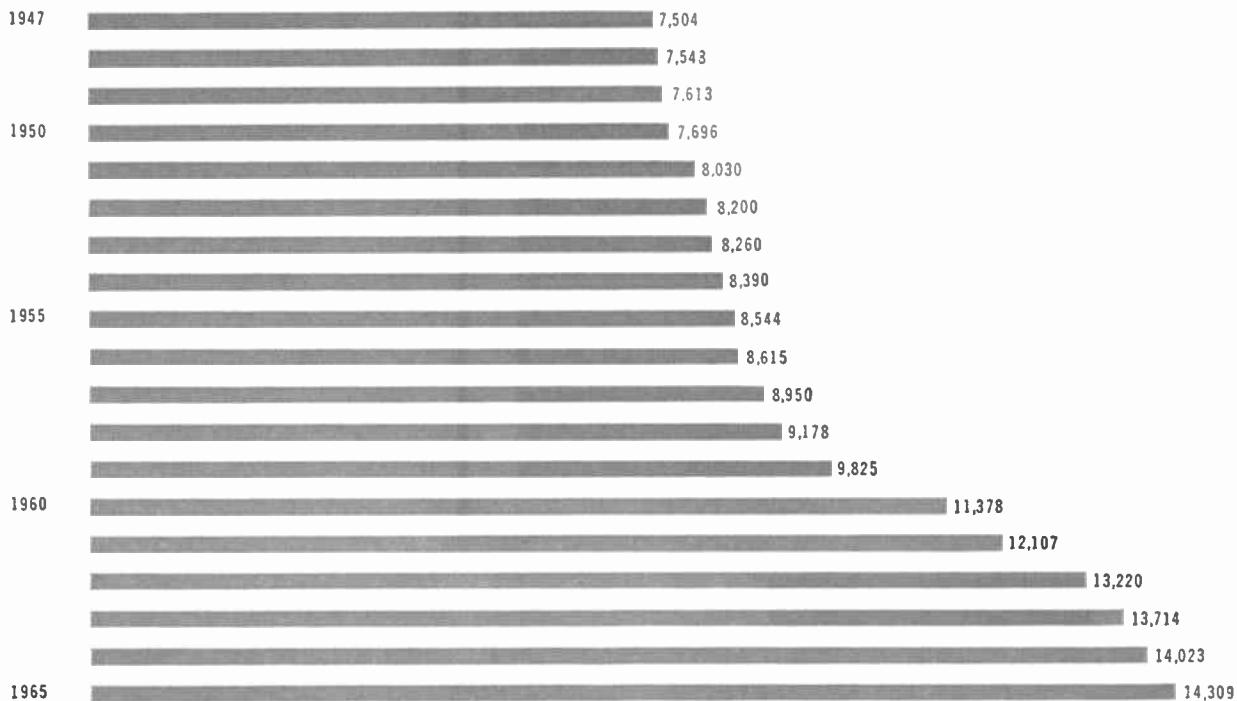


NHK Employees (by financial year)

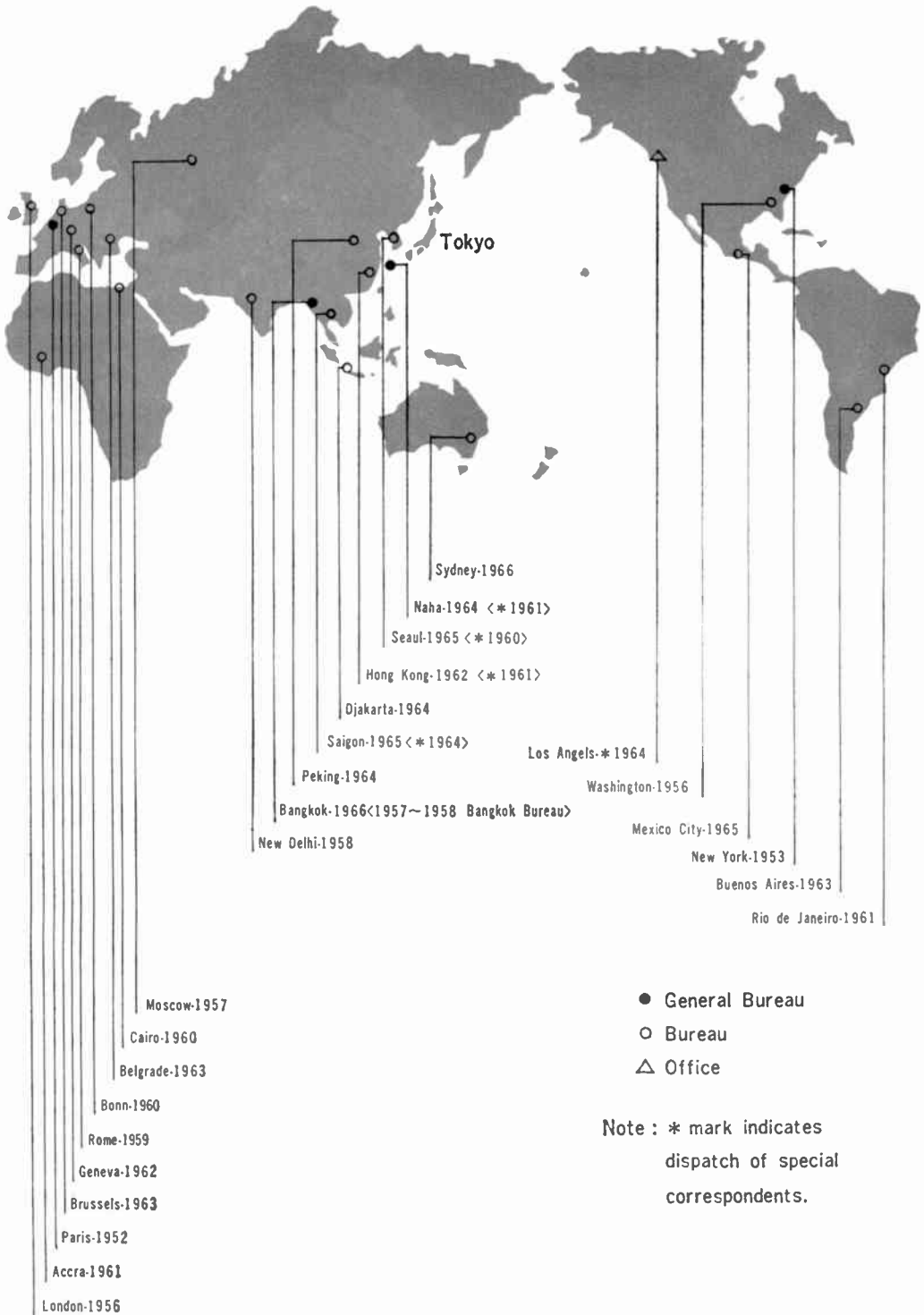


* Total employees at the Tokyo, Osaka and Nagoya studios in 1926.

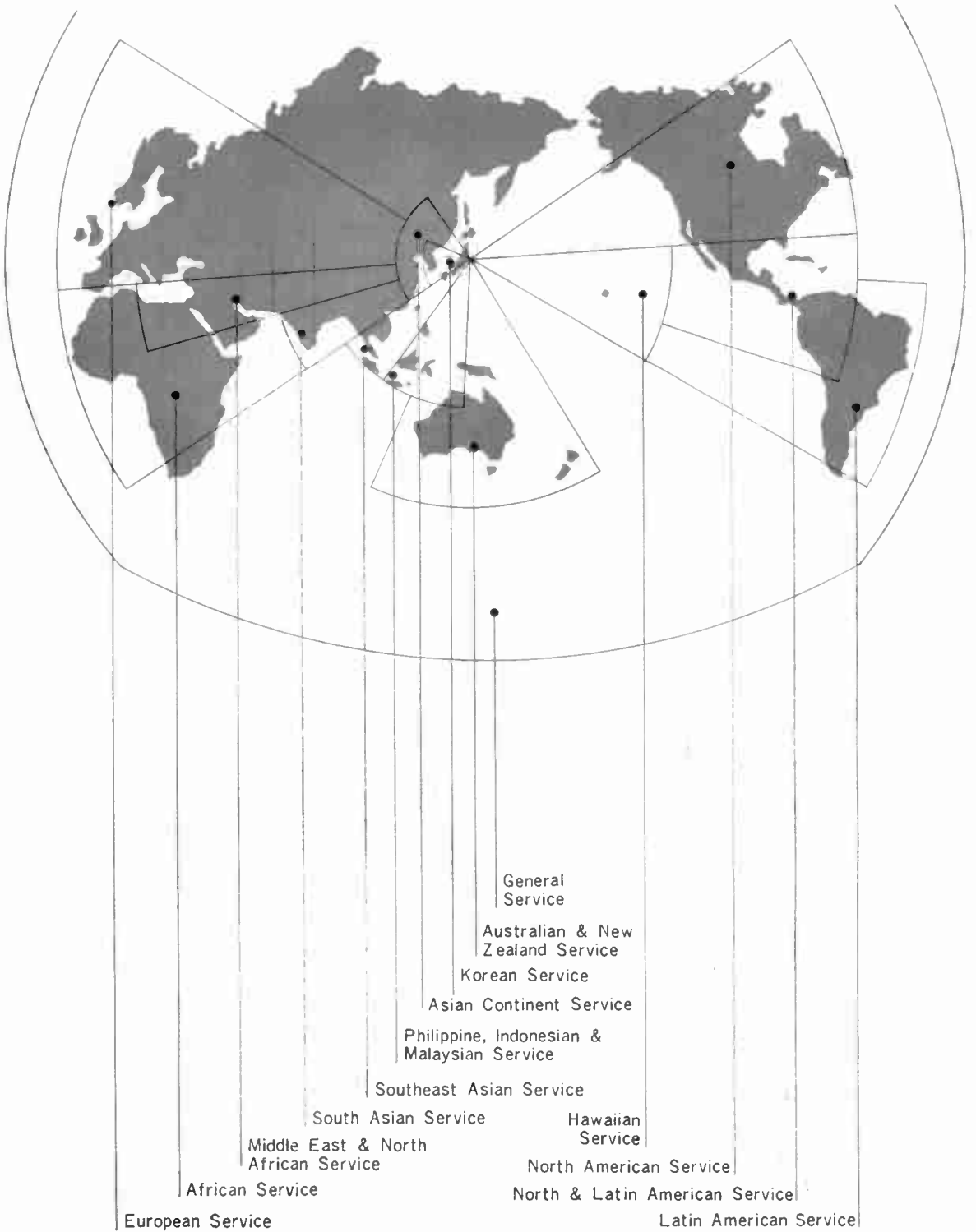
Period between 1941 and 1946 omitted because of the lack of data.



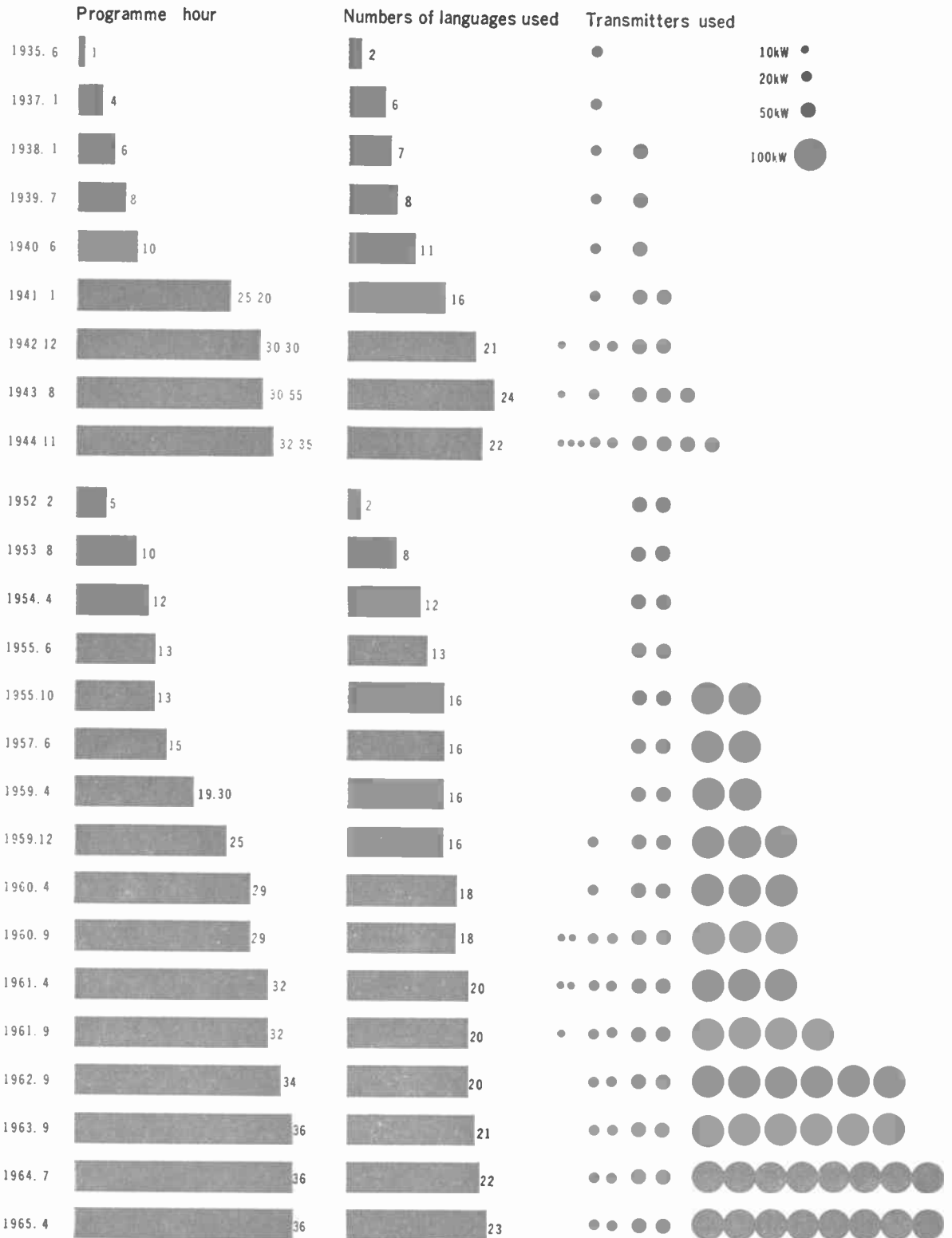
NHK's Overseas Material Gathering Network



Radio Japan Coverage (as of March 1967)



Progress of Overseas Broadcasting



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