

# **Radio Regulatory Council**

## **Draft Summary of Minutes (914th Meeting)**

### **1. Date and Time**

Wednesday, February 7, 2007, 13:00 to 14:48

### **2. Location**

Conference Room 1002, 10<sup>th</sup> floor, Ministry of Internal Affairs and Communications

### **3. Attendees (honorifics omitted)**

(1) Members of the Radio Regulatory Council

Mitsutoshi Hatori (Chair), Takeo Inokuchi (Vice-Chair), Junichi Hamada, Kashiko Kodate, Hatsuko Ukigawa

(2) Hearing Examiner of the Radio Regulatory Council

Shuichi Nishimoto

(3) Secretary

Ikko Mitsui (Deputy Director, General Affairs Division, Telecommunications Bureau)

(4) MIC representatives

Mori (Director-General of the Telecommunications Bureau), Kawauchi (Director-General of the Radio Department), Suzuki (Director-General of the Information and Communications Policy Bureau), and others

### **4. Minutes of the Meeting**

(1) Draft MIC Ordinance to Partially Amend Each of the Ordinance Regulating Radio Equipment and the Ordinance concerning Technical Regulations Conformity Certification of Specified Radio Equipment, and Draft Plan to Partially Amend the Frequency Assignment Plan

(Consultations No. 35 and No. 36 of December 13, 2006)

The council submitted a report that the draft ministerial ordinance and the draft plan to partially amend the Frequency Assignment Plan, both of which pertain to the introduction of the tire air pressure monitoring and the keyless entry system, are acceptable, after deliberating on the matter based on written statements and written opinions (see Written Opinions from the 420<sup>th</sup> Radio Regulatory Council Hearing) submitted by the Hearing Examiner, who presided over the

opinion-hearing procedure.

- (2) Draft MIC Ordinance to Partially Amend Each of the Regulations for Enforcement of the Radio Law, the Regulations for Procedure for Obtaining a Radio Station License, and the Rules for Radio Operators

(Consultation No. 3)

MIC gave an explanation as follows on the draft ministerial ordinance to partially amend each of the Regulations for Enforcement of the Radio Law, the Regulations for Procedure for Obtaining a Radio Station License, and the Rules for Radio Operators, which pertains to the review of the provisions on examination of radio station license applications and operation or supervision of radio stations (excluding the provisions that are essential to the examination and operation or supervision), and the review of the forms of licenses and certification for ship station radio operators. Subsequently, questions and answers were made as follows.

Since a hearing on Consultation No. 3 is obligatory under Article 99-12 paragraph 1 of the Radio Law, the council named Shuichi Nishimoto as the hearing examiner presiding over the hearing procedure.

#### a. MIC's Explanation

In response to the "Program for Building e-Government" adopted at the CIO Council in July 2003, MIC has developed the Optimization Plan for services/systems in radio administration and telecommunications administration. This optimization plan sets out that both the services and the systems should be deliberately reviewed in order to simplify and accelerate the speed of the application procedures, improve convenience for applicants and reduce their burden. The draft ordinance intends to review the related provisions based on the optimization plan.

Firstly, the Regulations for Enforcement of the Radio Law should be amended as follows: The first amendment is on the validity period of amateur radio stations established by foreigners. It should be extended to a maximum of five years, depending on their stay in Japan. This change is based on the thinking that the period during which they can actually operate the stations in Japan should be the validity period.

The second amendment is on the expiration date of the new licenses of ship communication stations and radio navigation mobile stations. The license renewal process is currently conducted across the board once every five years so that the validity period of some stations become considerably short.

Therefore, it should be amended to conduct the renewal process on a certain date every year so that the validity period of four years or longer can be secured regardless of the timing of establishment of a radio station.

The third amendment is on exceptional person(s) with whom radio communication is conducted for portable stations established by local governmental bodies for disaster prevention. Article 52 of the Radio Law specifies that no radio station shall be operated beyond the scope of purposes or persons with whom to communicate which are entered on the certificate of radio station license, except for communications specified in the applicable MIC ordinance as well as distress traffic or emergency traffic. Portable stations can be operated not only on land but also at sea or in air, and managed separately from land mobile stations or base stations, operating area of which is land only. As it is necessary to secure mobile communication means in times of disaster, the regulations should be changed to allow communications with stations operated for the land mobile service as well as the currently permitted communications between portable stations and portable mobile stations.

The fourth amendment is on the radio stations for which periodical inspection is not required. Periodical inspection is conducted to maintain the status under which a license is granted to the radio equipment, and to confirm if necessary communication can be performed to fulfill the licensee's service. However, regarding ship radars that only use radio equipment that have antenna power of below 5 kW and the mark of technical regulations conformity certification affixed, few inspection items for the periodical inspection are actually stipulated, because the radio stations of ship radars do not require qualifications of radio operators and may substantially omit provision of service documents, such as a radio service log and statute book. In recent years, there have been many cases where periodical inspection is not conducted for small radio stations that use radio equipment affixed with the mark of technical regulations conformity certification. Since this amendment is made for radars that are voluntarily installed on ships, no particular problem is likely to occur even when periodical inspection is not conducted. Additionally, periodical inspection will not be conducted for relay stations for terrestrial digital broadcasting if their antenna power is 0.05 W or less, considering that periodical inspection is not required for relay stations for terrestrial analog broadcasting with antenna power of 0.1 W or less.

The fifth amendment is change of construction type that does not require permission. Radio equipment affixed with the mark of technical regulations conformity certification has been certified to conform to the technical regulations in Chapter 3 of the Radio Law. Therefore, regardless of whether the currently used radio equipment is the radio equipment affixed with the mark of technical regulations conformity certification, there is no problem in not requiring permission when changing

the radio equipment to radio equipment affixed with the mark of technical regulations conformity certification, from the radio regulatory perspective.

Secondly, the Regulations for Procedure for Obtaining a Radio Station License should be amended as follows: One amendment is on entry of construction type in radio station matters forms and construction type forms. Since entry of construction type can be omitted in these forms to be attached to an application for license renewal for land mobile stations or portable stations, applicants enter their license numbers and identification signals only in the radio station matters form. As there is no problem in the examination process for license renewal even if the matters that should be entered in the radio station matters form are entered in an application for license renewal, the format of the application for license renewal should be changed to allow entry of these matters while attachment of a radio station matter form and a construction type form should no longer be required.

The other amendment is on omission of matters to be entered in an application for license renewal. Currently, it is required to enter the date of first license granted to the radio station in a radio station matter form, which needs to be attached to an application for license renewal. Since there is no particular problem in the examination process for license renewal even if the date is omitted, entry of the date should no longer be required.

Lastly, the Rules for Radio Operators should be amended as follows: The first amendment is changing the format of application for radio operator from the special landscape size to the general A4 size, and making it available to applicants by download via the website for greater convenience. Changing the format to the A4 size will also improve the efficiency of the licensing services.

The second is review of the format of the licenses for qualifications, such as maritime radio communication operator, prescribed in ITU Radio Regulations (RR). Since licenses granted to qualifications specified in the RR should be written both in Japanese and English, the license format should be changed to allow mechanical processing of descriptions in English to improve efficiency of licensing services.

The third is review of the format of certification for ship station radio operator. Provisions on conduction of re-training should be improved.

#### b. Key Questions and Answers

- In response to a question that asked for specific radio stations subject to exclusion of foreign entities, MIC answered: Foreign entities are excluded for special radio stations, with the definition of foreign entities as radio stations that have foreign capital of one-third or greater, or broadcast stations that have foreign capital of one-fifth or greater, in Japan. Foreign entities are not excluded for radio

stations for telecommunication service, amateur radio stations and for radio stations of foreign diplomatic missions in Japan.

- (3) Draft MIC Ordinance to Partially Amend Each of the Regulations for Enforcement of the Radio Law, the Ordinance Regulating Radio Equipment, and the Ordinance Concerning Technical Regulations Conformity Certification of Specified Radio Equipment

(Consultation No. 4)

MIC explained this matter together with the Consultation No. 5 since the two consultations were related.

- (4) Draft Partial Amendment to the Frequency Assignment Plan

(Consultation No. 5)

MIC explained this matter together with Consultation No. 4 since the two consultations were related.

Since a hearing on Consultation No. 4 is obligatory under Article 99-12 paragraph 1 of the Radio Law and it was deemed appropriate to conduct a hearing on Consultation No. 5 together with Consultation No.4. Pursuant to Article 99-12 paragraph 1 of the Radio Law, it was decided to subject them to the public hearing process as one set. The council named Shuichi Nishimoto as the hearing examiner presiding over the hearing procedure.

○ MIC's Explanation

In conjunction with introduction of high-speed wireless LAN systems and the Medical Implant Telemetry System, this draft amendment intends to develop related provisions.

Although wireless LAN systems originally started when the indoor environment to use the Internet was made wireless, the use of wireless LAN systems outdoors at public wireless spots has become widespread. A recent trend is an increase in initiatives to use wireless LAN systems for developing local broadband environments as a countermeasure against digital divide. The use of the systems for networking intelligent home appliances is also expected.

In response to expanding occasions to use wireless LAN systems and the need for higher-speed, relevant provisions should be developed to introduce high-speed wireless LAN systems with transmission speed of 100 Mbps or faster.

The draft amendment has two key points: one is designating the channel assignment in order to introduce 40 MHz wide channels, which double the bandwidth of current channels; and the other is

allowing the use of high-speed wireless LAN systems in all frequency bands, except for the frequency bands that are currently used for wireless LAN systems on a temporary basis.

As for specific technical requirements, new tolerances should be defined on such matters as modulation methods, maximum antenna power, and maximum e.i.r.p., in conjunction with the introduction of 40 MHz-wide channels. Firstly, the Regulations for Enforcement of the Radio Law should be amended to define the center frequency for the newly introduced 40 MHz-wide channel assignment.

Secondly, the Ordinance Regulating Radio Equipment should be amended to define the technical requirements for wireless LAN systems that use 40 MHz-wide channels, in conjunction with the introduction of 40 MHz-wide channels.

Thirdly, the Ordinance concerning Technical Regulations Conformity Certification of Specified Radio Equipment should be amended to add the wireless LAN systems conforming to the technical regulations for the high-speed wireless LAN systems in the targets of the technical regulations conformity certification.

Lastly, changes are to be made to the Frequency Assignment Plan, in conjunction with the introduction of high-speed wireless LAN systems, as follows: Additions should be made to the frequency table so that the 40 MHz-wide systems can be introduced in each of the frequency bands of 4,900-5,000 MHz, 5,150-5,350 MHz, and 5,470-5,725 MHz. And the requirements for the radio spectrum use should be changed to allow the use of 5.3 GHz band, which used to be available indoors only, and 5.2 GHz band, which used to be available indoors or on airplanes only, so that wireless LAN systems can be used on ships and cars as well as on airplanes.

As for the introduction of the Medical Implant Telemetry System, the Ordinance Regulating Radio Equipment should be amended in order to respond to the new need for using the Medical Implant Communications System, which was institutionalized as specified low-power radio stations that do not require a license in August 2005.

The Medical Implant Communications System that has already been introduced consists of in-vitro radio control facilities, which are to be operated by doctors, and in-vivo wireless facilities, which are being implanted in the patients' bodies. When doctors need to check the operation of such devices as cardiac pacemaker, they can operate the system to transmit signals from the in-vitro radio control facilities, which will prompt the in-vivo wireless facilities to transmit necessary data by radio emission.

On the other hand, the medical need to regularly transmit patient condition data via telecommunication circuits has been increasing, and institutionalization is ongoing in Europe and

North America. In order to realize such systems, in-vivo wireless facilities must be enabled to autonomously emit radio waves. Therefore, Article 49-14 of the Ordinance Regulating Radio Equipment, which stipulates the technical requirements for specified low-power radio stations, should be amended to add a new provision that that the control of radio wave emission with in-vitro radio facilities is not required.

Meanwhile, the amendment to the Frequency Assignment Plan is to add the Medical Implant Telemetry System as a new purpose of radio stations that use 402-405 MHz band, which has been available for two-way data transmission, so that part of the frequency band can be used for the telemetry system to transmit signals from in-vivo wireless facilities without control from in-vitro wireless control facilities.

Realization of this system is expected to allow telemetry of patients, and greatly contribute to offering patient relief and advances in medical treatment.

(5) Draft MIC Ordinance to Partially Amend the Ordinance Regulating Radio Equipment

(Consultation No. 6)

MIC gave an explanation as follows on the draft ministerial ordinance to partially amend the Ordinance Regulating Radio Equipment, in relation to the development of the technical requirements for relay stations for terrestrial digital broadcasting. Subsequently, questions and answers were made as follows.

A hearing on Consultation No. 6 is obligatory under Article 99-12 paragraph 1 of the Radio Law. In light of this, the council named Shuichi Nishimoto as the hearing examiner presiding over the hearing procedure.

a. MIC's Explanation

The background that led to this amendment to the ordinance is: For broadcasting stations for terrestrial digital television broadcasting, there has been only one technical requirement for parent stations, and the same requirement is applied to relay stations as well. However, full-fledged construction of relay stations for terrestrial digital television broadcasting will start in 2007, based on the relay station roadmap released. Since technical requirements in accordance with the scale of relay stations must be developed to facilitate construction of relay stations, the technical requirements for relay stations should be developed as follows.

In terms of classification of stations, relay stations are stations under the higher-level stations. Among relay stations, stations that serve for closed and small areas and transmit radio waves with

very low antenna power of 0.05 W are defined as very low-power stations. The draft ordinance specifies the most appropriate technical requirements for each type of very low-power stations.

While the draft ministerial ordinance does not change provisions on radio equipment for parent stations, i.e. frequency deviation tolerance of 500 MHz and antenna power of +10%/-20%, it changes frequency deviation tolerance for relay stations, i.e. 3 kHz for relay stations with antenna power exceeding 0.5 W, or 10 kHz for those with antenna power exceeding 0.05 W but 0.5 W or lower. Frequency deviation tolerance should become greater as the number of relay stations increases depending on the number of levels of relay stations. This concept is the same as that for analog broadcasting.

As for relay stations that transmit the same programs by using the same frequency (SFN: Single Frequency Network), the draft ordinance specifies that relative deviation among the stations should be within 10 Hz.

The deviation tolerance of antenna power is specified as +20%/-20% since adjacent channels can be used for digital broadcasting and multiple frequencies can be amplified simultaneously. In order to cope with such a situation, +20%/-20% should be added to the conventional tolerance of +10%/-20%.

Regarding the provision on spectrum mask, which refers to how much out-of-band emission can be suppressed, it should be between 40 dB and 30 dB for stations with antenna power exceeding 0.025 W but below 0.25 W, or 30dB for very low-power stations with antenna power of 0.025 or lower. This is based on the concept that these stations originally use very low power and therefore the emissions to be suppressed can be low in accordance with their power.

#### b. Key Questions and Answers

In response to a question asking why the powers of the benchmark stations are different between the deviation tolerance and the spectrum mask, MIC answered: Since no scale has been defined for frequency deviation tolerance and antenna power for digital broadcasting, we defined the scales of 0.5 W and 10 dB, respectively, by estimating the power level based on analog broadcasting. Meanwhile, the detailed scale for the spectrum mask was defined following the scale of 2.5 W that has already been used when the requirements for digital broadcasting were developed.

#### (6) MIC Minister's Opinion to Be Attached to NHK's FY2007 Budget, Etc.

(Consultation No. 7)

With regard to the opinion of the Minister for Internal Affairs and Communications to be attached to

the budget of revenues and expenditures, business project and financial program of Nippon Hoso Kyokai (NHK; or Japan Broadcasting Corp.) for FY2007, MIC provided explanation and the questions and answers made as follows. After deliberation, the council submitted a report to MIC, stating that it is appropriate to attach the opinion.

a. MIC's Explanation

Regarding the issue of nonpayment of NHK receiving fee, refusal to pay the fee have increased month by month for two years following the program-related scandal that happened two and half years ago, while new cases of payment refusal has recently dropped almost to zero. However, the number of viewers who re-start to pay the fee has recovered only slightly. The figure plunged again due to the additional scandal in April 2006, but the number of viewers who resume payment have increased by approximately 90,000 viewers per two months since October 2006.

The number of viewers who maintain their contracts but suspend payment has recently decreased to below 1 million, after it peaked at 1.3 million. However, 10 million viewers have not yet signed a contract, and therefore the entire situation remains severe.

The key point of the draft FY2007 budget is an increase in the receiving fee revenue for the first year in three years, as the revenue has gradually recovered. On a revenue basis, the receiving fee revenue is increased by 19 billion yen, compared with the last year's budget. Assuming that the cost reduction effort will be continued, the final operating balance is the positive figure of 4.1 billion yen. However, the entire amount is applied to debt redemption, and consequently the budget balance the revenue and the expenditure.

The receiving fee is deferred for the consecutive 17 years in the budget. NHK has reviewed the receiving fee system and is now considering a plan to change the conventional contract structure, which separates contracts for black and white TVs from color TV contracts, to a unified structure.

As for the allocation priorities and cost reduction items in the NHK budget, the policy to focus especially on enhancement of domestic programs is stated so that the austere budget will not lead to degradation in program quality. Meanwhile, full budget is provided, as planned, for the construction of relay stations for terrestrial digital broadcasting since fully-fledged construction will start.

Regarding cost reduction, the budget expects reduction of approximately 400 jobs in FY2007, based on the original policy to reduce personnel by 10% in three years, while assuming to make other cost reduction efforts as well. However, the cost of 76 million yen will be spent to earn the revenue of 600 billion yen. The expense rate of 12.4% is apparently high.

In light of these factors, the MIC Minister's opinion to be attached to the budget is concluded, in the

same way as the past two years, that: The budget is compelling, considering that revenue is well below the level before discovery of the scandals, although it should be recognized that the budget maintains the balance due to NHK's efforts and is not loss-incurring.

The Minister thinks the situation where nearly 30% viewers still do not pay the fee should be improved in light of fair burden sharing of the receiving fee.

The Minister also suggests that NHK should basically try to regain trust of the people and viewers in its reform efforts.

The Minister's opinion identifies eight matters to be considered. Although the number is the same as last year, they have been partially reviewed.

1. The Board of Governors should continue to play the leadership role.
2. NHK should establish a fair and reasonable receiving fee system for businesses, in consideration of the reception reality, and should also drastically review the receiving fee system. If the revenue is likely to increase as NHK regains trust of the people and viewers or because of NHK's management efforts, NHK should consider future reduction of the receiving fee through assessing the truly essential costs.
3. Regarding the fact that the cost related to receiving fee collection remains at the high level of 76 billion yen, NHK should set up specific cost reduction targets by considering streamlining services and drastic reviews, including maximum possible outsourcing, in accordance with the government's market testing. At the same time, NHK should promptly develop and release a plan to restructure or integrate subsidiaries.
4. Since there is a plan to review the international radio broadcasting in today's world of international broadcasting, NHK should pay due consideration to the viewership reality in its operation. NHK should also study the framework of the new international video broadcasting for foreigners from NHK's standpoint.
5. NHK should proactively use its video assets of past excellent programs, including the so-called NHK Archives.
6. NHK should proactively promote information disclosure further.
7. NHK should soundly continue to play the leadership role in digitization of broadcasting, including terrestrial digital broadcasting.
8. NHK should sincerely listen to opinions and requests on broadcast programs from the people and viewers, and continue its effort to establish a scheme to reflect such requests.

#### b. Key Questions and Answers

- In response to a question asking whether NHK has created its balance sheet, as the composition of finances plays an important role in formulating a yearly plan for a business entity, MIC answered: The information NHK provides for approval at the time of book-closing is disclosed with a balance sheet attached. But such documents are not created at the time of budgeting.
  
- In response to a question asking the background of the drastic review of the receiving fee system for businesses, MIC answered: In the NHK receiving fee system, there are two contract types, i.e., contracts per household and contracts per room of business entity. In the case of contracts per household, there is no big problem since a household makes only one contract even if it owns multiple TV sets. In the case of business entities, however, the viewership reality differs between business categories. Since the provision on the current NHK receiving fee system only stipulates that one contract should be made per room, there are disparities in the reality of payment. Reportedly, some countries have introduced reasonable discount systems for business entities that make multiple contracts. NHK is aware that it should consider a real fair and reasonable fee system for large business entities that make multiple contracts, and needs to establish a system that can satisfy everyone.
  
- In relation to the previous question, an attendee asked to what extent the revenue would increase through drastic review of the receiving fee system. MIC answered: NHK wants to develop a basic concept on specific revenue increase effects. Depending on the specific discount scheme, NHK should simulate the scheme in an overall picture, considering the parts where revenue can be increased while securing the parts where revenue decrease is likely or where fair burden sharing is required.
  
- In response to a question asking for the expenses spent on outsourcing services in relation to the cost of receiving fee collection, MIC answered: Nearly 76 billion yen is spent to collect the receiving fee of about 600 billion yen. While the cost includes the costs of NHK's sales division, the outsourcing cost of local staff, which totals approximately 5,600 persons across Japan, accounts for a large percentage. Other cost elements are the administration cost of the database system for 40 million contracts, and the cost of contract agencies other than the local staff, such as post offices and CATV companies. These costs are accumulated to the extremely high-cost structure.

- In relation to the previous question, there was a question asking whether outsourcing would reduce expenditure, MIC answered: In Britain, for example, all fee collection-related services are outsourced to a specific company called BBC Capital. NHK signs outsourcing agreements individually, but conducts training and management by itself. If a private company is willing to conduct such services while achieving the same results for a cost lower than the total cost, the services should be outsourced to the private company after trial. Under the current circumstances, an increase of outsourcing contractors may boost the cost, but never reduce it.
  
- In relation to the previous question, an attendee asked why NHK had not outsourced the services although outsourcing seems to be a relatively possible option for cost reduction. MIC answered: Although NHK has made various individual outsourcing agreements, it has regarded staff training as its responsibility and therefore been reluctant to outsource staff training. Accumulation of such practices may have led to the 76 billion yen cost. NHK might have had difficulty changing its thinking to do drastic outsourcing, including the issue of responsibility.
  
- An attendee questioned: The fee collection issue needs to be considered in conjunction with to what extent the contract should be imposed as an obligation on the Japanese people. If people think it is an obligation, they will pay the fee, possibly through bank transfer or automatic withdrawal. Such factor should be considered more carefully before spending money on outsourcing. Otherwise, it can create vested interests. MIC answered: NHK should review the current collection system. It may be hard to reach a meaningful conclusion unless the entire system is reviewed by considering guiding people to use automatic withdrawal as much as possible, or improving the inefficient collection method where fee is collected door-to-door.

(7) Other

MIC reported on the two points: the first report from the Study Group on Integral Legal System for Communications and Broadcasting, and MIC Minister's opinion to be attached to NHK's FY2005 business report.