Radio Regulatory Council—931st Meeting Summary of Minutes

1. Date and Time

Wednesday, May 21, 2008; 15:00-

2. Location

Conference Room 1002, 10th Floor, Ministry of Internal Affairs and Communications

3. Attendees (honorifics omitted)

(1) Council Members

Mitsutoshi Hatori (chair), Takeo Inokuchi (vice chair), Junichi Hamada, Kashiko Kodate

(2) Hearing Examiner of the Radio Regulatory Council Shuichi Nishimoto

(3) Secretary

Shuji Ishida (Deputy Director, General Affairs Division, Telecommunications Bureau)

(4) MIC Representatives (including Secretariat representative)

Tanaka (Director-General, Radio Department), Kawauchi (Deputy Director-General, Information and Communications Policy Bureau) and others

4. Meeting Proceedings

(1) Draft MIC Ordinances to Partially Amend the Regulations for Enforcement of the Radio Law, the Rules for Regulating Radio Equipment, and the Ordinance Concerning Technical Regulations Conformity Certification etc. for Specified Radio Equipment, and Draft Partial Changes to the Frequency Assignment Plan

(Consultations No. 13 and No. 14 of March 12, 2008)

The council deliberated on the subject Draft MIC Ordinances pertaining to matters such as the abolition of the system for the RFID system using the 19 GHz band and for radio stations for subscriber radio access communication using the 1,900 MHz band, with reference to the written statements and written opinions (see the Written Opinions from the 447th Radio Regulatory Council Hearing) submitted by the hearing examiner who presided over the inquiry procedure, with the result that the council submitted a report stating that the subject Draft MIC Ordinances etc. are acceptable.

(2) Formal objection to type designation carried out on broadband power line carrier communication equipment

The Minister of Internal Affairs and Communications carried out type designation on broadband power line carrier communication equipment, as publicly announced in MIC Notice No. 126 of 2008. Subsequently, a formal objection was filed against this type designation and then was mooted on May 21, 2008. MIC gave an explanation as follows on this formal objection.

Since a hearing on this matter is obligatory under the Radio Law, the council appointed Toshiji Sato to preside over the hearing as chief examiner and named Shuichi Nishimoto as assistant examiner.

a. MIC's Explanation

This formal objection is similar to the formal objections that were filed against type designation performed on broadband power line carrier communication equipment and subsequently mooted at the Radio Regulatory Council on March 23, 2007, May 16, 2007, July 11, 2007, September 12, 2007, November 14, 2007, December 12, 2007 and March 12, 2008, respectively. In this case, a formal objection was newly filed for the purpose of seeking the nullification of the designation of broadband power line carrier communication equipment which was publicly announced in the Official Gazette of March 17, 2008.

In the first place, the formal objection discussed under Proposition No. 4 was filed on April 8, 2008. The number of petitioners is 115, which is the same as under Propositions No. 1 to No. 4, No. 22, and No. 23 of 2007, as well as Proposition No. 3 of 2008.

The formal objection concerns three cases related to the type designation publicly announced in the Official Gazette of March 17, 2008.

MIC assessed the filing criteria for the formal objection and found that, except for those regarding the petitioners' qualifications to file an objection, and the certification of the qualifications of the representative and so on, the criteria had been met. MIC decided to suspend its assessment of the petitioners' qualifications to file an objection, since MIC intends to demand clarification of that matter during deliberations at the Radio Regulatory Council. As for the certification of the qualification of the representative and so on, MIC is suspending its assessment process, since it is necessary to call for the deficiency to be corrected. However, since the matters awaiting correction are unlikely to affect deliberations, MIC proposes that the objection be deliberated upon by the Radio Regulatory Council, pursuant to Article 85 of the

Radio Law.

b. Key questions and answers

- A question was asked as to whether the technologies regarding broadband power line carrier communication equipment have been improved compared to what they were at the time this system was introduced. MIC answered that such technologies have been significantly improved compared to what they were at the time the technical criteria were studied at study group meetings held several years ago on the occasion of the introduction of this system, and that the technical requirements specified the year before last for the purpose of introducing the system are used as the criteria.
- (3) Draft MIC Ordinances to Partially Amend the Regulations for Enforcement of the Radio Law, the Rules for Regulating Radio Equipment, the Ordinance Concerning Technical Regulations Conformity Certification etc. for Specified Radio Equipment, and the MIC Ordinances to Partially Amend the Rules for Regulating Radio Equipment

(Consultation No. 24)

MIC explained this matter together with Consultation No. 25, since the two consultations were related.

(4) Draft Partial Changes to the Frequency Assignment Plan

(Consultation No. 25)

MIC explained this matter as follows together with Consultation No. 24, since the two consultations were related.

A hearing on Consultation No. 24 is obligatory under Article 99-12, Paragraph 1 of the Radio Law. Furthermore, it was judged appropriate to hear opinions on Consultation No. 25 together with opinions on Consultation No. 24. Therefore, it was decided that opinions on Consultations No. 24 and No. 25 be heard on the same occasion. The council appointed Shuichi Nishimoto to preside over the hearing as examiner.

MIC's Explanation

In this case, relevant regulations pertaining to the following items will be developed: digitization of convenience radios (two-way radios) and introduction of a registration system for such radios; introduction of an animal detection and tracking system; addition of the

technical requirements for model airplane radio controls using the 2.4 GHz band; and the extension of the interim measures for the ultra wideband (UWB) radio system.

With regard to the first three items mentioned above, technical requirements were studied by the Telecommunications Council. Reports were received on all three items in March this year. Relevant MIC ordinances will be amended on the basis of these reports.

The first point concerns the digitization of convenience radios and the introduction of a registration system for such radios. At present, about 650,000 convenience radios are in use, primarily at construction sites or by transportation companies and so on. These systems are used mainly for analog voice communication. From this point on, demands for various uses of convenience radios are expected to increase, including those related to recreation, electronic data-based system applications and rental purposes. Taking this into account, the Telecommunications Council has undertaken studies on technical requirements and produced a report stating that digital modulation will be introduced to operate alongside the analog method. This will increase the available channels to about 100 with equivalent frequency ranges from the current 55 analog channels. Furthermore, relevant regulations will be developed in order that 35 of such channels can be used for recreation purposes by registered stations with carrier sense functions.

The second point pertains to the introduction of an animal detection and tracking system. There have recently been frequent occurrences of groups of monkeys, for example, damaging food crops. The Telecommunications Council has undertaken studies in relation to this issue, examining possible countermeasures employing the use of radio waves. The council's report of such studies was received in March this year. In specific terms, a program will be launched whereby monkeys and other animals suspected of damaging food crops will be fitted with transmitters and then released back into the wild. The movements of such animals will be tracked, allowing for measures to prevent them from causing damage to food crops to be taken. Since this system uses radio waves in the 150 MHz band, it will be possible to track the animals from a distance as far as 1 kilometer.

Furthermore, there are demands that an animal tracking system be introduced for animal research purposes, namely, that the behavior of animals such as bears be observed for use in research and the like. In response to such demands, regulations will be developed to ensure that transmitters using the 150 MHz band can be attached to animals such as bears and that information about each such animal's position can be obtained by means of receivers. The information will then be available for ecology research purposes and the like.

The third point has to do with radio controls. At present, about 5 million radio controls are used. Thanks to technological advancement, radio controls using 2.4 GHz band low-power data communication functions are about to be introduced. The 2.4GHz band is also used on so-called wireless LANs and so on, leaving open the possibility that interference may cause radio-controlled model airplanes to fall from the sky. Therefore, with due consideration of the safety aspect, technical requirements that specify frequency hopping and so on will be developed to prevent this happening.

The fourth point relates to the extension of the interim measures for the UWB radio system. This is an ultra wideband radio system used for short distances, such as in indoor areas. When this system was brought under regulation in 2006, interim measures were specified whereby up to December 31, 2008, the system would be usable in the frequency range of 4.2 GHz to 4.8 GHz and would not be equipped with technologies to reduce interference. These interim measures were set to expire on December 31, 2008, as mentioned above, because it was presumed that studies of the fourth-generation mobile communication system including IMT-Advanced would be realized by that time. However, at the World Radiocommunication Conference held last year (WRC-07), the range of 3.4 GHz to 3.6 GHz was designated as the frequency range for IMT-Advanced, and standardization was scheduled to be completed by 2011. Thus in Europe, the deadline for the period in which the UWB radio system need not be fitted with interference reduction functions is the end of 2010. Taking this into account, the MIC Ordinances to partially amend the Rules for Regulating Radio Equipment will be partially amended to extend the expiration date from December 31, 2008, to December 31, 2010.

Furthermore, in keeping with the development of the related MIC Ordinances, the Frequency Assignment Plan will be partially changed with regard to the following: The frequencies to be used for 400 MHz band digital convenience radio communication will be set; the expiration date for the use of the frequencies by analog convenience radio communication will be set; and the frequencies relating to the animal detection and tracking system will be set.

The first point concerns the introduction of digital convenience radio communication. So far, a total of 55 channels have been used for analog convenience radio communication. Taking demand forecasting into account, 100 channels will be secured for digital convenience radio communication. This will mean roughly double the number of channels, but it will be possible to reduce the required frequency bands by about 10 percent, thereby increasing the frequency use efficiency. However, if no progress is made in the transition from analog communication to digital communication, then efficient use of radio waves will have little effect. Such being the case, taking account of factors such as the service lives of analog convenience radio facilities, it was decided that the expiration date for the use of analog convenience radio frequencies be set

for November 30, 2022, when the allowable values of spurious emission strength will be changed, with the result that many of the existing radio facilities will become unusable.

The second point pertains to the animal detection and tracking system. It is stipulated that specified low-power radio stations that are not required to be licensed be used for this system. So far, specified low-power radio stations intended to be used for purposes such as telemetry, tele-control and data transmission have secured frequencies in the 400 MHz band. However, in order to track the behavior of wild animals, it is necessary to consider factors such as the propagation of waves to coves in mountainous areas. Therefore, it was decided that five frequency channels be secured in the 150 MHz band, where radio waves can be emitted more easily than in the 400 MHz band.

(5) Draft Partial Changes to the Plan for the Available Frequencies Allocated to Broadcasting (Consultation No. 26)

The Plan for the Available Frequencies Allocated to Broadcasting is intended to be partially changed as a consequence of changes in channels pertaining to relay stations for terrestrial digital broadcasting in Hamatonbetsu, Nakashibetsu and Kushiro in Hokkaido, and therefore Draft Partial Changes were prepared. MIC gave an explanation as follows on this matter. Subsequently the council deliberated on the subject Draft Partial Changes and submitted a report stating that these changes are acceptable.

MIC's Explanation

It is so arranged that as regards those broadcasting stations which are parent stations or large-scale relay stations where the antenna power exceeds 3 W, channels should be specified in advance in the Plan for the Available Frequencies Allocated to Broadcasting. In this case, changes will be made to frequencies used at the three stations in Hamatonbetsu, Nakashibetsu and Kushiro.

It is so arranged that seven channels will be used by Hamatonbetsu Digital Station, which is scheduled to be established in the future. Of these seven allocated channels, four channels are the same as those allocated to Sapporo Digital Station. Normally, the same channels can be used repeatedly, since the distance between Sapporo and Hamatonbetsu is more than 200 kilometers. However, when the atmospheric temperature rises it causes abnormalities in radio wave propagation over the sea. It was found that on one occasion, radio waves emitted by Sapporo Station were strongly received in the broadcasting area covered by Hamatonbetsu Digital Station. Because of this and in order to avoid seasonal interference, changes will be

made in the channels that are used by both Hamatonbetsu Digital Station and Sapporo Digital Station.

Channel 53 is used for NHK General Broadcasting and Channel 56 for NHK Educational Broadcasting at Nakashibetsu and Kushiro Digital Stations. At present, Channels 1 to 62 are used in television broadcasting. It is so arranged that the VHF band for Channels 1 to 12 and the UHF band for Channels 53 to 62 will be used for purposes other than terrestrial digital television broadcasting after analog television broadcasting ends. Therefore, it is necessary that Channels 53 and above should be given over to other channels after the termination of analog broadcasting in July 2011. Such being the case, from the point of view of avoiding future frequency changes as much as possible, it is appropriate that Channels 32 and 47, which are allocated to general broadcasters who, at the present stage, have not set specific dates for the establishment of stations, should be allocated to NHK General Broadcasting and NHK Educational Broadcasting, for which specific station establishment dates are definitely set. Therefore it was decided that Channel 32 be allocated to NHK General Broadcasting, Channel 47 to NHK Educational Broadcasting, and Channel 56 to general broadcasting carried out by a private broadcaster at Nakashibetsu Digital Station, and that Channel 61 be allotted to general broadcasting conducted by a private broadcaster at Kushiro Digital Station. On the basis of the above, the Plan for the Available Frequencies Allocated to Broadcasting will be partially changed.

(6) Authorization of Japan Broadcasting Corporation's Services Covered by Article 9, Paragraph 3, Item 1 of the Broadcast Law

(Consultation No. 27)

Since any service covered by Article 9, Paragraph 3, Item 1 of the Broadcast Law needs to be authorized by the Minister of Internal Affairs and Communications in accordance with Article 9, Paragraph 10 of this law, Japan Broadcasting Corporation filed an application for the authorization of services that come under the abovementioned item. MIC gave an explanation as follows on this matter. Subsequently the council deliberated the application and submitted a report stating that this authorization is acceptable.

a. MIC's Explanation

Under Article 9, Paragraph 3, Item 1 of the Broadcast Law, Japan Broadcasting Corporation may, in addition to performing its primary services, allow private entities the use of equipment or facilities in its possession or lease such assets to private entities provided doing so does not

create obstacles in the fulfillment of the abovementioned primary services. It is also stipulated that any such additional service shall be authorized by the Minister of Internal Affairs and Communications in accordance with Article 9, Paragraph 10 of the aforementioned Law.

In this case, Japan Broadcasting Corporation filed an application for the authorization of new types of services involving use and leasing.

With regard to services employing Japan Broadcasting Corporation's equipment, facilities, land and so on, authorization has so far been obtained concerning services to allow the use by private entities of land to construct broadcasting halls and research laboratories, as well as services to allow the use by private entities of land to construct transmission stations and relay stations. In connection with this, other entities including private broadcast stations request that authorization be given also to services involving land that is not in current use and services involving leasing, neither of which are covered by current authorization.

Taking such circumstances into account, Japan Broadcasting Corporation intends to have the following done with regard to the currently granted authorization of services involving the use of land for broadcasting halls and for research laboratories by private entities, as well as of services involving the use of land for transmission stations and relay stations by private entities. In addition to land in current use, land that is not in current use will also be covered by the authorization and leasing will be made permissible as well as use. For the purpose of realizing the above, Japan Broadcasting Corporation filed an application for the authorization of services whereby land in its possession will be used by private entities or leased to such entities for such purposes as projects contributing to the public interest of local communities.

With regard to this application, Japan Broadcasting Corporation (NHK) formulated implementation standards concerning the use and leasing of its land for purposes of services under Article 9, Paragraph 3 of the Broadcast Law.

The description of the standards is as follows: First, in the case of land used in the provision of NHK's services, the period of use by private entities will be one year or less in principle. As regards land that is no longer in use and is planned for disposal or land that will not be suitable for use until after a considerable period of time has elapsed, appropriate periods will be set and such periods will, in principle, not be renewed.

Secondly, NHK will limit the kinds of purposes to those which, in NHK's judgment, do not carry the risk of leading to misunderstanding about the nature of NHK, will contribute to the interest of local communities and do not carry the risk of having a particular impact on the land

lease market.

Thirdly, with regard to the issue of fees, land use will, in principle, not be free of charge. Prices will be set at market levels. However, as regards land of low marketability, the following will apply: Prices will be set by taking account of items such as taxes and other public charges as well as administrative costs. In the case of high public interest, it will be possible to make use of land free of charge.

The application pertaining to the subject matter was assessed on the basis of the Broadcast Law, with the result that this matter was judged to be acceptable. Thus the services as stated in this application will be authorized.

b. Key questions and answers

• A question was asked as to whether authorization will be given in such a way that the appropriateness of acts such as the leasing of land or the like will be assessed on the basis of the implementation standards formulated by Japan Broadcasting Corporation. MIC answered that the desired practice would be not to give authorization to individual items on a one-by-one basis but to grant blanket authorization to services covered by the implementation standards.

(Office responsible for the above wording: The Secretariat of the Radio Regulatory Council.)