

Radio Regulatory Council—932nd Meeting
Summary of Minutes

1. Date and Time

Wednesday, June 11, 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), Kashiko Kodate

(2) Hearing Examiners of the Radio Regulatory Council

Toshiji Sato, Shuichi Nishimoto

(3) Secretary

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

(4) MIC Representatives (including Secretariat representative)

Terasaki (Director-General, Telecommunications Bureau), Tanaka (Director-General, Radio Department) and others

4. Meeting Proceedings

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

(Proposition No. 5)

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 and MIC Notice No. 239 of 2008. Subsequently, a formal objection was filed against these instances of type designation and was then mooted on June 11, 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 Saiji Sato to preside over the hearing as chief examiner and Shuichi Nishimoto as assistant examiner.

○ MIC's Explanation

In this case, a formal objection was raised to seek the nullification of the instances of type

designation regarding broadband power line carrier communication equipment that were publicly announced in the Official Gazettes of March 17, 2008, and April 21, 2008.

In the first place, the formal objection discussed under Proposition No. 5 was filed on May 16, 2008. The petitioner is a single individual. The proposition is similar to Proposition No. 24 of 2007 and Propositions No. 1 and No. 2 of 2008.

The formal objection is to the type designation publicly announced in the Official Gazette of March 17, 2008, and April 21, 2008, for a total of seven instances.

MIC assessed the filing criteria on the basis of the above and found them appropriate, except for the petitioners' qualifications to file an objection. MIC decided to suspend its assessment of the petitioner's qualification to file the objection. The reason for this decision is that the petitioner, who declares himself to be a broadcast viewer/listener, is also a licensee of an amateur radio station; there is therefore a possibility that facts regarding specific legal profits will become clear in the very near future. MIC intends to demand clarification on that matter during deliberations at the Radio Regulatory Council.

(2) Evaluation of surveys on the use status of radio waves in FY 2007

(Consultation No. 28)

In fiscal 2007, surveys were conducted on the use status of radio waves in the frequency band between 770 MHz and 3.4 GHz, and evaluation was made of the extent of effective use of radio waves on the basis of these surveys. MIC gave the following explanation on this evaluation. After deliberation, the council submitted a report that the evaluation is acceptable.

○ MIC's Explanation

Before explaining the surveys on the use status of radio waves conducted in fiscal year 2007, the following should be pointed out. The use status of radio waves is surveyed on an approximately three-year cycle for each of three frequency ranges in accordance with Article 26-2 of the Radio Law with the aim, for example, of helping redistribute radio waves to realize their optimal use. The results of such surveys are publicly announced, and by taking into account people's opinions, the effectiveness of the use of radio waves is evaluated.

With respect to fiscal 2007, such surveys were carried out regarding the frequency band between 770 MHz and 3.4 GHz used by radio stations which were in operation as of March 1, 2007 and belonged to the government, local public bodies or private entities. The survey items

included the numbers of licensees, the numbers of radio stations, the volume of communications, the specific use patterns and the status of the introduction of technologies to use radio waves effectively. The following survey methods were used: analyzing information contained in the databases of the Productive and Reliable Telecommunications Network for Radio Stations in each of 11 areas in Japan, which are under the jurisdiction of the Telecommunications Bureau and the like; and questionnaire surveys sent to individual radio stations. To consolidate the survey results, the surveyed frequency band was divided into seven individual frequency segments, within which, respective radio wave use systems were classified according to their utilization on either a national or regional basis.

The results of the surveys are as follows: As a whole, there is a significant increase in portable radio communications. In individual coverage areas, the volumes of radio communications roughly correspond to population distributions, and in terms of the ranking of volume the Kanto Region comes first, followed by the Kinki, Tokai and Kyushu regions in that order.

According to the results of the analysis of the numbers of radio stations for individual frequency segments, in the segment between 770 MHz and 960 MHz, the number of portable radio communication stations using the 800 MHz band is about 80 million, which accounts for 99.52 percent. The breakdown of the remaining 0.48 percent is as follows: The number of MCA land-based mobile communication stations using the 800 MHz band is about 310,000. The number of local disaster control radio communication stations and personal radio stations combined is about 30,000.

In the segment between 960 MHz and 1.215 GHz, the greater part is accounted for by systems such as air traffic control radar beacon systems, aeronautical DME/TACAN and traffic alert and collision avoidance systems.

In the segment between 1.215 GHz and 1.4 GHz, 99.86 percent is accounted for by amateur radio stations, with the remainder used by experimental stations and premises radio stations for telemetry, tele-control and data transmission.

In the segment between 1.4 GHz and 1.71 GHz, portable radio communication stations using the 1.5 GHz band make up 99.68 percent. The remaining 0.32 percent is accounted for by MCA land-based mobile communication stations and the like.

In the segment between 1.71 GHz and 2.4 GHz, about 99.34 percent is accounted for by portable radio communication stations. Of the remainder, 0.66 percent is made up of PHS stations, and 0.0031 percent is accounted for by PHS base stations (registered stations),

experimental stations and the like.

In the case of the segment between 2.4 GHz and 2.7 GHz, about 40,000 stations equipped with N-STAR satellite mobile communication systems are using this band segment. These systems are used for amateur radio communications, S-band satellite voice broadcasting and so on.

The segment between 2.7 GHz and 3.4 GHz is heavily used by ship radars, airport surveillance radars and the like.

Comparisons of different years reveal that the number of personal radio stations decreased from 60,000 to 28,000 over three years. The number of airport radio telephone communication stations decreased steadily due to the fact that a transition was made to the 400 MHz band. As regards 1.5 GHz band portable radio communication, the number of second-generation mobile telephone stations decreased, since those mobile telephones were replaced by third-generation equivalents. In the case of MCA land-based mobile radio communication using the 1.5 GHz band, analog systems decreased, and a transition was made to the digital 800 MHz frequency band. As regards portable radio communication using the 2 GHz band, this frequency band is used globally for third-generation mobile telephone communications. The 1.7 GHz band is also used across the globe. In this respect, third-generation mobile telephones increased smoothly compared to fiscal year 2004. N-STAR satellite mobile communication systems and S-band satellite voice broadcasting systems are steadily increasing.

The results of the evaluation of these survey outcomes are as follows: As for the status of effective use of radio waves, measures for effective use are taken for the 800 MHz band and the 1.5 GHz band with the aim of dealing with demands for frequencies for rapidly increasing third-generation mobile communication systems. These measures include transitions to different frequency bands. Firstly, we identified that studies are being made of systems into which it is appropriate to introduce the TDD band. This band is a portion of the 2 GHz band, which is internationally designated for use by third-generation mobile communication systems. Secondly, we identified that, by taking the progress of new technologies into account, technical requirements and procedures are being developed to introduce broadband mobile radio access systems that bring us closer to realizing wireless broadband communication and bridging of the digital divide.

Regarding the necessity of new effective use, we observed that with regard to the frequency range between 770 MHz and 960 MHz, it is necessary to ensure following for the purpose of meeting the demands for frequencies for third-generation communication systems: that effective use be made of the 770 MHz band and the 960 MHz, which will become vacant as a

consequence of the digitization of terrestrial television broadcasting; and that steps be taken to promote an arrangement whereby a transition will be made, by way of consolidation, to the 800 MHz band, which is a portion of the currently used 800 MHz band/900 MHz band.

As regards screen image FPU's using the 800 MHz band, it is necessary that the picture quality that supports HDTVs be improved in keeping with the digitization of terrestrial television broadcasting. Thus it is necessary to make studies of measures to effectively use frequencies, such as the realization of narrow bands capable of increasing transmission capacities without expanding currently used frequency bands.

As for radio microphones, the system for introducing the digital method into specified low-power radio stations is currently being developed. With regard to licensed stations, it is necessary to make studies of the introduction of the digital method in order to increase the number of channels in keeping with demands. This matter is currently being discussed at the Telecommunications Council.

As regards airport radio telephones, close attention must be paid to changes in the number of radio stations so that the transition to the 400 MHz band (digital frequency band) is assured, with the aim of meeting demands for frequencies for third-generation mobile communication systems.

In the case of local disaster control radio communication, close attention must be paid to changes in the number of radio stations so that the transition to the 260 MHz band (digital frequency band) is assured, with the aim of meeting demands for frequencies for third-generation mobile communication systems.

As for personal radio communication, the number of radio stations has decreased significantly. Therefore, it is appropriate to abolish personal radio communication by November 11, 2022, which is the expiration date for the application of the current technical standards, on condition that simple radio systems that do not require qualifications as radio operators be secured.

Demands for electronic tag systems and the like are expected to increase. Such being the case, as regards voice STL/TTL using the 950 MHz band, it is appropriate that transitions be made primarily to the 60 MHz band and the 160 MHz band, both of which are for broadcasting use, for the purpose of meeting demands for frequencies for the abovementioned electronic tag systems and so on. It is also appropriate that the transition deadline be set for fiscal 2015, taking into account matters such as the possibility of introduction of corresponding equipment in other frequency bands.

As for MCA land-based mobile communication using the 800 MHz band, it is appropriate that the transition from analog to digital systems be further promoted, as analog systems are decreasing, whereas progress is being made in the penetration of digital systems.

In the frequency band between 1.4 GHz and 1.71 GHz, in order to meet the demands for frequencies for third-generation mobile communication systems, it is necessary that studies of reorganization continue to be made, including the issue of the frequencies secured due to the decrease in the number of frequencies allocated to MCA land-based mobile communication using the 1.5 GHz band.

As regards the frequency band between 1.71 GHz and 2.4 GHz, in order to meet the demands for frequencies for mobile communication systems, it is necessary to undertake technical studies of mobile communication systems utilizing the TDD method. Such studies should take into account technological progress. Following this the systems should be introduced.

As for the frequency band between 2.4 GHz and 2.7 GHz, restrictions are imposed, over a portion of the band, on the operation of broadband mobile radio access systems. In order to resolve this issue, it is necessary to undertake studies toward the improvement of reception capacities of terminals for N-STAR satellite mobile communication systems. An explanation of such studies is as follows: The frequency band for broadband mobile radio access systems and the frequency band for N-STAR communication systems are adjoining. Therefore partial operating restrictions are imposed on radio access systems for the purpose of ensuring satisfactory operation of both types of systems. Consequently, it is necessary to conduct ongoing studies to resolve this issue.

The frequency bands between 950 MHz and 1.215 GHz, 1.215 GHz and 1.4 GHz, and 2.7 GHz and 3.4 GHz are heavily used by radars and the like. Usable frequencies and so on are internationally specified for many of the systems using radio waves. Therefore, it is difficult to change over to other frequency bands. However, as regards radars, it is desirable that the development and introduction of spurious emission reduction technologies and so on be studied with a view to furthering effective use of frequencies.

(3) Other

MIC explained outlines of the account settlement and business report for fiscal 2007 of Japan Broadcasting Corporation.

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