

Radio Regulatory Council  
Summary of Minutes (912th Meeting)

1. Date

Wednesday, December 13, 2006, 3:00 to 3:51 p.m.

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, Koshiko Kodate, Hatsuko Ukigawa

(2) Hearing Examiner of the Radio Regulatory Council

Shuichi Nishimoto

(3) Secretary

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

(4) MIC representatives

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

4. Minutes of the Meeting

(1) Regarding the draft plan to partially modify the *Frequency Allocation Plan* and the draft ministerial ordinance that partially amends the *Regulations for Enforcement of the Radio Law*, the *Radio Equipment Regulations*, and the *Ordinance Concerning Technical Regulations Conformity Certification of Specified Radio Equipment*

(inquiries No. 31 and No. 32 of October 11, 2006)

The Council accepted the contents of the draft ministerial ordinance and the draft plan to partially modify the *Frequency Allocation Plan* given in the title above and submitted a report after deliberating on the matter based on written statements and

written opinions (see *Written Opinions from the 419th Radio Regulatory Council Hearing*) submitted by the Hearing Examiner, who presided over the opinion-hearing procedure. The drafts pertain to the introduction of 5-GHz-band wireless LANs usable both indoors and outdoors that will not be subject to licensing.

- (2) Regarding the draft ministerial ordinance that partially amends the *Regulations for Enforcement of the Radio Law* and the *Radio Equipment Regulations*

(Inquiry No. 35)

Representatives from the MIC explained that this matter was related to Inquiry No. 36 and would be handled together with Inquiry No. 36.

- (3) Regarding the draft plan to partially modify the *Frequency Allocation Plan*

(Inquiry No. 36)

Representatives from the MIC explained that this matter was related to Inquiry No. 35 and would be handled together with Inquiry No. 35.

A hearing on Inquiry No. 35 is obligatory under Article 99-12 Paragraph 1 of the Radio Law. In light of this, the Council determined that conducting a hearing on Inquiry No. 36 together with the hearing on Inquiry No. 35 was appropriate. The Council named Shuichi Nishimoto as the hearing examiner presiding over the hearing procedure.

• MIC's explanation

This matter pertains to systems that use 315-MHz-band specified low-power radio stations for telemeters, telecontrols, and data transmission. This matter is being institutionalized on the presumption that the 315-MHz-band specified low-power systems will be primarily used as tire-pressure-sensor systems, which have been introduced based on lessons learned from accidents caused by tire failures and punctures in the U.S., or as keyless-entry systems, which automatically lock or unlock car doors or perform other functions.

Until now in Japan, radio stations not subject to licensing that use very weak signals have been used for these applications. Now, however, we are seeking to introduce radio systems that are consistent on an international basis that allow

increases in antenna power because cases of interference have occurred at these extremely low-power radio stations from other radio systems and from the standpoint of harmonizing the international circulation of automobiles.

In view of this context, MIC established draft technical standards for specified low-power radio stations using radio signals in the 315 MHz band and solicited a broad range of opinions from the public over a one-month period beginning in October 2006. At this time, based on the results of these steps, MIC is consulting the Council on the establishment of related regulations necessary for the introduction of 315-MHz-band tire-pressure sensors, keyless-entry systems, and other similar systems.

The concept behind the tire-pressure-sensor system is to allow drivers to monitor tire pressure while driving. The system consists of a sensor embedded in the tire that monitors the air pressure in the tire. The sensor sends radio signals in circumstances when air pressure can be checked accurately to a display. The system includes a function that issues a warning or alarm when the tire pressure drops significantly.

The keyless-entry system is a system that allows the driver to lock or unlock doors or to start or stop the engine from outside the automobile. By regulating keyless-entry systems as specified low-power radio stations, it will be possible to realize systems that are less susceptible to interference because the signal strength and field strength will be 50 to 60 times stronger than current systems in use.

Specifically, the ministerial ordinance adds the 315 MHz band to the frequency bands used by unlicensed specified low-power radio stations that are stipulated in Article 6 of the *Regulations for Enforcement of the Radio Law*. As for the *Radio Equipment Regulations*, the ministerial ordinance stipulates the addition of an interference prevention function, a transmission time restriction device, and other functions to be furnished in the systems as well as stipulating the antenna power deviation, the frequency tolerance, the strength of secondary radiated emissions, and the spurious emission intensity.

Note that, as in previous cases, MIC plans to handle the specified low-power radio station applications and antenna power values through amendments to Ministry bulletins.

The draft plan to partially modify the *Frequency Allocation Plan* adds low-power services as the purpose of radio stations operating at frequencies between 287.95 MHz and 322 MHz, the frequencies planned to be used by the systems. The draft plan also states 313.625 MHz to be the center frequency of the used frequency band in the attachment to the allocation plan.

Note that because this frequency band is currently used by aeronautical mobile services, the draft plan places the condition on this addition of low-power services that the use of this frequency band by radio stations for low-power services shall not cause harmful interference to other radio stations or receiving equipment that operate in adherence with the frequency allocation table and that the low-power radio stations are required to provide protection from harmful interference from other radio stations.

- (4) Regarding a blanket license for specified radio stations belonging to Digicom Co., Ltd.

(Inquiry No. 37)

MIC gave an explanation as follows of the application by Digicom Co., Ltd. for a blanket license covering INMARSAT portable mobile earth stations. After discussions, the Council submitted a report to the effect that the application was acceptable.

• MIC's explanation

Digicom Co., Ltd. is a company that provides telecommunication services and sells satellite communication devices, among other things. At this time, the company has submitted a blanket license application for Mini-M and BGAN INMARSAT terminals in order to provide telecommunication services with portable mobile satellite communications.

The INMARSAT system began in 1982 as the first international satellite communications system for shipping and was operated at the outset by the International Maritime Satellite Organization, an intergovernmental organization. The system initially used analog communications, but INMARSAT has over the years moved to a digital format, reduced the size of its radio equipment, and increased its data transfer capacity. At the same time, the system has been made

more sophisticated and its services have been diversified to include INMARSAT systems for aircraft and land-based mobile stations. This blanket license application is for devices that are assumed to be used primarily on land.

With the privatization of the International Maritime Satellite Organization in April 1999, operations of the INMARSAT system were turned over to Inmarsat plc, a private U.K. company. Prior to privatization, only one telecom per country was permitted under contract to provide INMARSAT services. In Japan, Kokusai Denshin Denwa Co., Ltd., now the KDDI Corporation, operated these services. Since privatization, however, it is now possible that multiple telecoms in one country operate INMARSAT services. This course of events has led to Digicom Co., Ltd. submitting a blanket license application for INMARSAT radio stations.

After investigating the application based on *Radio Law* orders, MIC found that the frequencies applied for by the applicant were consistent with the MIC's *Frequency Allocation Plan* and that the frequency allocation was feasible. Because it was determined that the specified radio stations in the application met all conditions stipulated under the *Essential Standards for Opening of Specified Radio Stations*, MIC believes granting the blanket license is appropriate given the condition, based on Article 27-5 of the *Radio Law*, that the applicant must adhere to the effects of international coordination.

(5) Regarding a blanket license for specified radio stations belonging to Space Communications Corporation and JSAT Corporation

(Inquiry No. 38)

MIC gave an explanation as follows of the application by Space Communications Corporation and JSAT Corporation for a blanket license covering portable mobile earth stations to be established for the purpose of providing Internet and other transmission services onboard maritime craft. After discussions, the Council submitted a report to the effect that the application was acceptable.

• MIC's explanation

The radio stations for which a blanket license is being applied for by Space Communications Corporation and JSAT Corporation are part of a satellite

communication system that makes it possible to use high-speed, large-volume Internet communications while at sea.

The introduction of this system was finalized at the 2003 World Radio Conference of the International Telecommunication Union, and the related regulations were established in Japan in February 2006. This system makes it possible to use VSATs (very small aperture terminals), a system conventionally used by fixed land-based stations, while moving at sea. Using the same satellites as used by fixed satellite services, this system realizes high-speed communications, with maximum speeds on the order of several Mbps, even while at sea. The frequencies allocated for this system are in the 5–6 GHz C band and the 14 GHz Ku band. The radio stations in this application only use the Ku band.

Because the frequencies used by this system are also employed by terrestrial radio stations, when operating this system under international rules, the system must be operated at least 125 km, in the Ku band, and 300 km, in the C band, away from the coastline of coastal countries, unless otherwise agreed to by the coastal country, to avoid interference with terrestrial radio stations. In Japan's case, however, this system is regulated so that it can be used in the Ku band within 125 km of Japan's coastline because there are no fixed radio stations that use the system's frequencies in the Ku band.

After investigating the application based on *Radio Law* orders, MIC found that the frequencies applied for by the applicant were consistent with the MIC's *Frequency Allocation Plan* and that the frequency allocation was feasible. Because it was determined that the specified radio stations in the application met all conditions stipulated under the *Essential Standards for Opening of Specified Radio Stations*, MIC believes granting the blanket license is appropriate given the condition, based on Article 27-5 of the *Radio Law*, that the applicant must adhere to the effects of international coordination.

- (6) Regarding a blanket license for broadcasting-satellite stations belonging to JSAT Corporation

(Inquiry No. 39)

MIC gave an explanation as follows of the application by JSAT Corporation for a pre-permit for the JCSAT-3A satellite. After discussions, the Council submitted a report to the effect that the application was acceptable.

- MIC's explanation

In preparation for the decommissioning of its JCSAT-3 satellite in 2007, JSAT Corporation launched a replacement satellite in August 2006. JSAT Corporation has applied for a radio station license for this replacement satellite, JCSAT-3A, ahead of the planned switchover to JCSAT-3A in March 2007. Note that the Radio Regulatory Council has recognized in September 2006 the change to the *Plan for the Available Frequencies Allocated to Broadcasting* involving JCSAT-3A.

After investigating, based on Article 7 Paragraph 2 of the Radio Law, the conformance with technical standards, the feasibility of assigning frequencies, the financial footing, and conformance with essential standards, MIC found that the application was in full compliance and requests that a pre-permit be granted based on this investigation.

(The Secretariat of the Radio Regulatory Council  
is responsible for the wording of this document)