Main Points of Proceedings of the 900th Radio Regulatory Council Meeting

1. Date

Wednesday, October 12, 2005 16:02 to 16:42PM

2. Venue

Ministry of Internal Affairs and Communications conference room (conference room No. 1002, 10th floor)

3. Participants (honorific titles omitted)

(1) Committee members of the Radio Regulatory Council

Yasuhiko YASUDA (Chairman), Takeo IGUCHI (Deputy Chairman), Junichi HAMADA, Kashiko KODATE, Hatsuko UKIKAWA

(2) Hearing examiner of the Radio Regulatory Council

Shuichi TANAKA

(3) Secretary

Kazuyuki MITSUI (Assistant Director of the General Affairs Division, Telecommunications Bureau)

(4) Ministry of Internal Affairs and Communications (hereinafter referred to as “the MIC” in this section)

SUDA (Director General of the Telecommunications Bureau), SAKURAI (Director General of the Radio Department) and others

4. Contents of proceedings

(1) Concerning a ministerial ordinance plan to amend part of the Radio Law Enforcement Regulations, the Radio Station Operation Regulations and the Radio Equipment Regulations (Inquiry No. 34)

Concerning the captioned ministerial ordinance plan related to the introduction of a high-speed,

large-capacity maritime satellite communications system at sea, the increase in the number of fixed stations that do not require regular inspection and the increase in frequencies used for an 18 GHz-band radio access system, a participant from the MIC offered the following explanation and a question and answer session was held, as set out below.

A hearing of this matter is obligatory pursuant to Article 99.12, paragraph 1 of the Radio Law, and Shuichi TANAKA was designated as the hearing examiner to preside over the hearing procedure.

a. Explanation by the MIC

This subject consists of three items. Firstly, concerning the amendment of an applicable ministerial ordinance related to the introduction of a high-speed, large-capacity maritime satellite communications system at sea, while the establishment of an environment for using the Internet which has conveniences such as optical fiber, ADSL and radio LAN has been promoted in recent years, the need for high-speed, large-capacity communications between sea and land is increasing in the maritime field worldwide. In consideration of such need, an on-board earth station which can perform high-speed, large-capacity communications at sea (ESV) was debated at the World Radio Communications Conference (WRC-03) held in June 2003 and it was made possible for the ESV to communicate with a space station with a stationary satellite function in C band or Ku band. Thus, we will establish the necessary regulations, based on this background.

The ESV performs communications between a portable, mobile earth station installed on a ship and a portable base station on land, via an artificial satellite. The communications speed is +M bps at maximum and it is expected to provide services such as an Internet connection. The ESV services are expected to commence in Japan in early 2006.

There are four main contents to be amended. The first point is to establish technical standards for the ESV and an operational range, based on the response of the Radio Regulatory Council. The second point is to add the ESV, using a Ku band, as specified radio equipment for which technical regulations conformity certification can be obtained. Meanwhile, the C band has been

excluded from the ESV on the grounds that the demand for the C band would not be as high as the Ku band, which shares frequencies with other radio equipment, etc. The third point is to add the ESV using the Ku band as specified radio equipment for which a blanket license can be obtained. Meanwhile, the C band has been excluded for the reasons stated before. The fourth point is to add the operation of the ESV to the simple operation category for which no radio operator is required.

Next, we consider the increase in the number of fixed stations that do not require the regular inspection. First of all, regular inspection means a system for inspecting whether or not a radio station for which a license has been obtained maintains its original conditions such as a designated frequency and designated antenna power. However, because the performance of maintaining the quality of radio waves in recent radio equipment has become so advanced, no regular inspection is required for a lower-power radio station, a small-scale radio station or the like because there is almost no risk of these affecting other radio stations.

As to what kind of fixed stations do not require regular inspection, while a multiplex-channel (a radio system which multiplexes information such as voices, data and images and transmits it) requires regular inspection, in principle, only a branch station for a city, town or village digital broadcast communications system, among the systems composed of a key station and branch stations, does not require regular inspection. Regarding a radio station with a single communications channel, a telemeter system does not require regular inspection as a radio system that is composed of a key station and branch stations and a police radio system, disaster prevention radio system and fire radio system do not require regular inspection as a radio station, which is not composed of a key station and branch stations.

However, replacement of a police radio system, etc. with a digital radio system has become popular recently. When a radio system is digitized, the character of the radio system is changed to that of a multiplex-channel system or to that of a radio system composed of a key station and branch stations. Despite the improvement in reliability of radio equipment due to digitization, such an unreasonable situation occurs that radio systems which did not require regular

inspection in the past will now require regular inspection. At that stage, we will establish the relevant regulations so that no regular inspection is required for a police digital radio system, disaster prevention digital radio system and fire digital radio system, to overcome this unreasonable situation.

Next, regarding the increase in frequencies used for a 18 GHz-band radio access system, we established technical standards for a 18 GHz-band radio access system in October 2003, but originally, the technical standards were intended for the construction of a local intranet so that broadband services could be received in remote places such as mountainous regions and isolated islands.

However, because this system has a high-speed transmission rate of 156 and because it can be manufactured cheaply and quickly, people in some areas have raised specific questions such as: "*Can we not use the system for voice telephone services over a public telephone network between isolated islands and main islands, although this use was not originally intended?*"

In order to meet such a specific demand we will add new frequencies that can be used to provide subscriber lines over a public telephone network and we will amend the Radio Equipment Regulations accordingly.

b. Main questions and answers

- In connection with the increase in the number of fixed stations which do not require regular inspection, is the purpose of the restrictions mainly to prevent interference? A participant from the MIC replied to this question as follows: "*Yes, the main purpose of the restrictions is to prevent interference.*"
- Regarding the addition of a new use for the 18 GHz-band radio access system, do you restrict areas for this system by ministerial ordinance or similar law? A participant from the MIC replied to this question as follows: "*A specific request has been raised only in southwestern Japan at present, but because there are probably some other prefectures that have the same conditions, we will establish the area where the 18 GHz-band radio access system can be used*

in the entire country, without restriction."

(2) Concerning a plan to amend part of the frequency allocation plan (Inquiry No. 35)

Concerning a plan to amend part of the frequency allocation plan related to the introduction of a high-speed, large-capacity maritime satellite communications system at sea and the addition to the 18 GHz-band radio access system, a participant from the MIC offered the following explanation and a question and answer session was held, as set out below.

This matter is not subject to a hearing, but because it is closely related to inquiry No. 34, we decided to conduct a hearing for both inquiries simultaneously and Shuichi TANAKA was designated as the hearing examiner to preside over the hearing procedure.

a. Explanation by the MIC

The purpose of these inquiries is to amend a part of the frequency allocation plan related to the introduction of a high-speed, large-capacity maritime satellite communications system at sea and the expansion of the 18 GHz-band radio access system.

The amendment of the frequency allocation plan in accordance with the introduction of a high-speed, large-capacity maritime satellite communications system at sea is intended for C band and Ku band and since communications via a space station for a stationary satellite was made possible at WRC-03, we will amend the frequency allocation plan so that we can institutionalize a satellite mobile earth station in Japan.

Regarding the amendment in accordance with the expansion of the 18 GHz-band radio access system, we will add 17.82 to 17.85 GHz and 18.57 to 18.60 GHz bands which were only allocated for a small-capacity fixed station for public services, for a telecommunications business with a radio access system and public services, assuming an increase in demand for these frequencies in the form of subscriber lines over a public network.

b. Main question and answers

- Will you be allocating a bandwidth of 30 MHz? A participant from the MIC replied to this question as follows: "*Yes, a bandwidth of 30 MHz will be allocated. Although this is a small bandwidth, the transmission rate of this radio access system is low enough for 30 MHz to be adequate. We will allocate 30 MHz for a particular isolated island line, etc. in order to prevent interference.*"

(3) Concerning a blanket license for a specified radio station belonging to KDDI Corp. (Inquiry No. 36)

Concerning a blanket license related to the introduction of a dual-band terminal of KDDI Corp. and Okinawa Cellular Telephone Company, a participant from the MIC offer the following explanation and a question and answer session was held, as set out below. After deliberation, members of the Radio Regulatory Council drew up a report to the effect that the blanket license is appropriate.

a. Explanation by the MIC

KDDI corp. has applied for a blanket license of an INMARSAT BGAN (Broadband Global Area Network) type terminal for a portable mobile earth station to provide telecommunications services via portable mobile satellite communications services.

Regarding the technical standards for this system, we established regulations therefore in September 2004. The BGAN type terminal, which is the subject of this inquiry, derives from GAN (Global Area Network) which is the service name of a terminal for mini-M type 64 kbps data communications and because a speed increase in data transmission has been realized, the first letter of broadband is used.

Therefore, a feature of BGAN is that data communications can be performed at a higher speed than with conventional INMARSAT. More specifically, data of up to 432 kbps maximum can be transmitted via a BGAN type terminal, whereas data of up to 64 kbps was transmitted by a conventional mini-M type terminal before. The KDDI Corp. expects to start the said services at

the end of October 2005.

As a result of having examined this application, based on an applicable ministerial ordinance, we found that the possibility of frequency allocation conformed to the allocation policy established by the MIC, so frequency allocation is possible. Furthermore, since this application is considered to conform to all the conditions prescribed in the essential standards for establishing a specified radio station, we believe that it will be appropriate to grant a blanket license.

b. Main questions and answers

- What is the estimated demand for the portable mobile earth station? A participant from the MIC replied to this question as follows: "*The estimated demand is about 136 stations by the end of 2005, and after that, the system will increase by about 200 to 500 stations every year. Besides, demand for the said station will increase in the following fields and uses: areas where a communications infrastructure has not yet been established, people carrying the station while on business trips, backing up a business network, and a measure for emergency*."

(Responsibility for the wording: Secretariat of the Radio Regulatory Council)