

## Main Points of Proceedings of the 898th Radio Regulatory Council Meeting

### 1. Date

Wednesday, July 27, 2005 16:00 to 17:15PM

### 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), Kashiko KODATE, Hatsuko UKIKAWA

#### (2) Hearing examiner of the Radio Regulatory Council

Tasuku KIYASU

#### (3) Secretary

Masao OKAMOTO (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)

ARITOMI (Director General of the Telecommunications Bureau), TAKEDA (Director General of the Radio Department), OGASAWARA (Councilor) and others

### 4. Contents of proceedings

#### (1) Concerning a ministerial ordinance plan to amend part of the Radio Law Enforcement Regulations (Inquiry No. 25 dated June 8, 2005)

Before establishing guidelines concerning the installation of a specified base station using a frequency in the 1.7 GHz or 2 GHz band, the members of the Radio Regulatory Council deliberated on the ministerial ordinance plan to amend part of the Radio Law Enforcement Regulations in such a way that the term of validity of attestation of an installation plan of a specified base station including the said frequency bands shall be, in principle, five years, based on a protocol submitted by the Hearing Examiner who presided over the hearing and the written opinions (see written opinions obtained at the 405th Radio Regulatory Council Meeting) and drew up a report to the effect that the ministerial ordinance plan is appropriate.

(2) Concerning a plan to amend part of the frequency allocation plan (Inquiry No. 28)

(3) Concerning a guideline plan for the installation of a specified base station using frequencies in the 1.7 GHz or 2 GHz band (Inquiry No. 29)

Because the plan to amend part of the frequency of the frequency allocation plan and the guideline plan concerning the installation of a specified base station using frequencies in a 1.7 GHz or 2 GHz band are closely related, a participant from the MIC dealt with both inquiries simultaneously 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 both plans are appropriate.

a. Explanation by the MIC

(i) Explanation of inquiry No. 28

This plan is intended to amend part of the frequency allocation plan in order to introduce IMT-2000 into the 1.7 GHz and 2 GHz bands and advance an expiry date of frequencies for an MCA land mobile communications system and an airport radio system.

Regarding the introduction of IMT-2000 into the 1.7 GHz and 2 GHz bands, in the FDD method, frequencies from 1,749.9 MHz to 1,784.9 MHz are allocated as transmission frequencies of the land mobile station side, and frequencies of 70 MHz, in total, from 1,844.9 MHz to 1,879.9 MHz are allocated as transmission frequencies of the base station side.

Regarding the advancement of an expiry date of frequencies for an MCA land mobile communications system and an airport radio system, we are proceeding with the transition from an analog method to a digital method at present, but as a result of having studied a frequency allocation schedule, we have found that it is possible to implement an early transition, so we will change the frequency allocation plan and advance the transition period. More specifically, the expiry date of the MCA land mobile communications system will be moved forward from May 31, 2009 to September 30, 2007 and the expiry date of the airport radio system will be moved forward from May 31, 2010 to September 30, 2007.

(ii) Explanation of inquiry No. 29

This is a guideline plan or a so-called licensing policy plan for the installation of a base station for second-generation mobile phones using new frequencies in the 1.7 GHz or 2 GHz bands. Because we have held a public hearing on this guideline plan in advance, the plan we are dealing with is based on the results of that public hearing.

The licensing policy plan arose from the increase in demand for the transition of frequencies from second-generation mobile phones to third-generation mobile phones and the desire to introduce new frequencies. Regarding the 1.7 GHz and 2 GHz bands, because new frequencies could be secured through transition and reorganization, we have decided to allocate these frequency bands to third-generation mobile phones.

Three points were emphasized in the licensing policy: to make effective use of frequencies; to pave the way for new entry; and to establish a transparent and fair allocation criterion.

Before explaining the contents of the licensing policy, I would like to explain the mechanism of the attestation system for a plan to establish a specified base station. In order to establish a large number of specified base stations in a wide range of areas smoothly, only specific people will be able to apply for a license for the necessary frequency for a specific period of time. More specifically, in connection with the frequencies to be announced by the Minister of Internal Affairs and Communications, we will have mobile phone carriers draft establishment plans for establishing a specified base station, based on the licensing policy we are now dealing with and only those who obtain attestation will be able to apply for a license. Since this prevents a competitive application, the successful candidates can install the specified base stations exclusively. The term of attestation validity will be five years, as specified in the response to inquiry No. 25.

The concrete contents of the establishment guideline are as follows. Regarding the 1.7 GHz band, which is a frequency that can be used throughout the country because the FDD method by which different frequencies are used as an upward frequency and a downward frequency is 15 MHz and the frequency that can be used in Tokyo, Nagoya and Osaka is 20 MHz, both frequencies are divided into blocks of 5 MHz. The reason that these frequencies are divided into blocks of 5 MHz is because the minimum unit of W-CDMA which has been standardized as IMT-2000, is 5 MHz. Regarding frequency bands which cover the whole country, we will allocate frequencies in 5 MHz blocks to no more than two new carriers initially and will allocate remaining bands according to the availability of frequencies. Regarding the Tokyo, Nagoya and Osaka bands, we will allocate additional frequencies in 5 MHz blocks, not only to new carriers but also to existing carriers whose frequencies are very tight. In this case, the allocation criterion is that carriers having a bandwidth of allocated frequencies exceeding a specific criterion will be obliged to accommodate a greater number of users. Thus, carriers having fewer frequencies are distinguished from carriers having many frequencies.

Next, regarding the 2 GHz band, a frequency of 15 MHz has been reserved at present as the TDD method in which different frequencies are used as an upward frequency and as a downward frequency. When this frequency is converted into the FDD method, it becomes 7.5 MHz and because it is difficult to handle this frequency unless one carrier uses it from the viewpoint of the number of accommodated subscribers, the frequencies in the 2 GHz band will be allocated to one new carrier.

Regarding the frequency range, etc. of a specified base station which is the target of the establishment guideline, we will use the frequency that we want to designate in the frequency allocation plan under inquiry No. 28 and the system to be used will be limited to a third-generation mobile communications system that is based on international standards.

Arrangement and installation of the specified base stations, the start of operation thereof as well as development of systems, including terminals thereof and installation of base stations will be implemented within two years. We will have carriers install the specified base stations so that the coverage rate is 50% or more of the population within five years. However, since Tokyo, Nagoya and Osaka are areas where frequencies are comparatively tight, we will have carriers install base stations in these areas within three years.

The method of attesting an establishment plan will be such that the frequency bandwidth which can be applied for is 5 MHz, which is the smallest unit possible. From the viewpoint of introducing competition, applicants will be limited to those who have not yet engaged in any third-generation mobile phones business, including their parent companies and subsidiaries. The requirements that will be examined are technical capabilities, financial foundations, a system for equipment maintenance, measures to prevent interference and a contribution to the sound development and smooth operation of a telecommunications business. No attestation will be given to applicants who do not comply with these requirements, even if there are fewer than two applicants. If there are three or more applicants who comply with these requirements, attestation will be granted to the applicants that have a comparatively higher degree of requirement compliance.

When deciding how to allocate additional frequencies, those frequency bands that cover the whole country can be allocated to 1,000,000 users per 1 MHz under the present state of art, but taking it into consideration that new carriers are going to start a new business, we will relax the criterion in such a way that applicants can apply for an additional allocation when the number of

users per 1 MHz exceeds 500,000. When new carriers apply for an additional allocation after the frequency bands which cover the whole country have been allocated, the Tokyo, Nagoya and Osaka band will be the allocation target. The Tokyo, Nagoya and Osaka band will be allocated when frequencies become tight, regardless of whether or not the applicant is a new or existing carrier, but applicants can apply for an additional allocation only when they satisfy the condition that, in the case of a carrier to whom frequencies equivalent to or lower than 15 MHz have already been allocated, the number of users per 1 MHz should be 500,000 or more. In the case of a carrier to whom frequencies higher than 15 MHz to 25 MHz have already been allocated, this figure should be 750,000 or more and in the case of a carrier to whom frequencies exceeding 25 Hz have already been allocated, it should be 1,000,000 or more.

When there are competitive applications for additional frequencies, we will give priority to an application in which the number of users per 1 MHz exceeds the set criterion of the number of users per 1 MHz, which, in relation to the applicant, is higher. In our original plan, we decided to give priority to applicants whose number of users per 1 MHz is larger. However, because we obtained public comment stating that this is not fair, we changed it to a method of by how much the number of users per 1 MHz exceeds the application criterion.

When an existing carrier does not clear the criterion of the number of users per 1 MHz during the application period, we will provide a system whereby the applicant can apply for an additional allocation, even after the initial application, by notifying to the Minister of Internal Affairs and Communications when the number of users per 1 MHz reaches the criterion figure.

Regarding the TDD band in the 2 GHz band, because 15 MHz should be required by one carrier, we will set the frequency bandwidth that can be applied for to 15 MHz.

Attestation will be granted to new carriers, as with the 1.7 GHz band, but because it is appropriate to have a variety of new carriers participate in the establishment of the specified base stations, it is prohibited for the same carrier to apply for both 1.7 GHz and 2 GHz bands. The requirements to be met are the same as those with the 1.7 GHz band.

Our schedule is such that if a positive report is drawn up for our guideline plan at this meeting, we will entertain attestation applications for a period of one month or longer and after the MIC examines the applications, we will attest the establishment plan and refer the matter to the Radio Regulatory Council during or after autumn this year.

(Furthermore, results of the public hearing were explained.)

b. Main questions and answers

- How is frequency allocation to existing carriers that handle third-generation mobile phones implemented at present? A participant from the MIC replied to this question as follows: *“In the 2 GHz band, 20 MHz has been allocated to NTT DoCoMo and Vodafone and 15 MHz has been allocated to KDDI. In the 800 MHz band, 15 MHz has been allocated to KDDI. There are about 13,700,000 users in NTT DoCoMo, about 18,700,000 in KDDI about 1,300,000 in Vodafone.”*

- Can a new mobile phone do anything new for consumers because of the new frequency allocations, or are new mobile phones the same as conventional mobile phones in terms of functionality? A participant from the MIC replied to this question as follows: *“Functionally, the new mobile phone is the IMT-2000 and the basic specification thereof remains the same in providing voices, data, images, etc. through a mobile phone, but we hope that various enhancements will be devised within said specification.”*

- The British and US Embassies in Japan are opinion providers among many other public opinion providers. Are their opinions objective? A participant from the MIC replied to this question as follows: *“The British Embassy, the US Embassy and the Delegation of the European Commission to Japan have provided opinions, and these opinions generally requested Japan to establish a criterion under which fair competition can prevail. The background of this request may be that Vodafone is a mobile phone carrier representing Europe or the UK and that the Americans generally have a tendency to claim technical neutrality and we suppose they may have made this claim this time too.”*

- Concerning the number of users when applicants apply for an additional allocation of frequencies, you said that you would give priority to an application in which the number of users per 1 MHz exceeds the criterion of the number of users per 1 MHz, in relation to the applicant, is higher. How is this figure calculated? A participant from the MIC replied to this question as follows: *“When the criterion for the number of users is, for example, 750,000, when it exceeds 750,000 and is 800,000, a comparison will be made by the numerical value obtained from dividing 800,000 by 750,000. This calculation method is described clearly in the guideline.”*

- In the case of existing mobile phone carriers, you presume their future capabilities based on their past achievements. How will you examine technical capabilities, etc. of new mobile phone carriers? A participant from the MIC replied to this question as follows: *“We will request applicants to prove the following information as concretely as possible. For example, regarding the rationality and validity of their revenue and expenditure outlook, are their plans to increase the number of subscribers and their ARPU forecast reasonable? Regarding fund collecting, what is the ratio between investment and borrowing? What are the composition of*

*investors-to-be and the financial standing of the investors-to-be like? Regarding technical capabilities, how thoroughly have they prepared technical personnel? What results have they achieved? What sort of technical capabilities do they have?"*

- Frequencies in a 1.7 GHz band will be allocated to only two carriers, but when any new carrier that wants to make inroads into the field of mobile phone services requests an additional allocation, how will you deal with this? A participant from the MIC replied to this question as follows: *"Because there is so much demand for frequencies, supply exceeds demand so we will try to re-organize frequencies in other frequency bands to secure frequency bands for mobile phones."*

- In which countries is the TDD method used? A participant from the MIC replied to this question as follows: *"The TDD method is planned for use with IMT-2000 in Europe and China as in Japan, and it has already started in some countries like the Czech Republic. The TDD method will be deployed in China soon."*

- Only a 2 GHz band can be used with the TDD method. What about the improvement of PHS? Have you compared it with iBurst? A participant from the MIC replied to this question as follows: *"Both PHS and iBurst are based on TDD but not on the IMT-2000. At present, we cannot say whether PHS and iBurst will be disseminated internationally. This has not been dealt with by the ITU yet."*

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