(Released on December 1, 2003)

Summary of Meeting of the Radio Regulatory Council (No. 878)

1. Date and Time

November 12, 2003 (Wednesday)

16:00 to 16:52

2. Location

Meeting Room of MIC (Ministry of Internal Affairs and Communications)

(Meeting Room No. 1001 on the 10th floor)

3. Attendees (Honorifics omitted)

(1) Members of the Radio Regulatory Council

Yasuhiko Yasuda (Chairperson), Takeo Inokuchi (Vice-Chairperson), Junichi Hamada, Kashiko Kodate

(2) Hearing Examiner of the Radio Regulatory Council

Taku Kiyasu

(3) Secretary

Masao Okamoto (Deputy Director of the General Affairs Division, Telecommunications Bureau)

(4) MIC (Ministry of Internal Affairs and Communications)

Fujioka (Deputy Director-General of the Minister's Secretariat), Takeuchi (Director of the General Affairs Division, Telecommunications Bureau), and others

4. Minutes of the Meeting

(1) Regarding the draft ministerial ordinances that partially amend the Regulations for Enforcement of the Radio Law, the Regulations for Procedure for Obtaining a Radio Station License, the Ordinance Regulating Radio Equipment, the Ordinance Concerning Technical Regulations Conformity Certification of Specified Radio Equipment, the

Rules for Radio Operators, Rules Concerning Calibration of Measuring Instrument, Etc., and the ministerial ordinance concerning the survey, etc. of actual radio spectrum usage

(Consultation No. 31 of September 10, 2003)

Having deliberated the draft ministerial ordinances in the title concerning the establishment of a new self-confirmation system of technical regulations conformity for radio equipment and the shift to a registration system from the designated certification agency system, and the introduction of a testing system for power line communication equipment using frequencies from 2 to 30MHz, and so forth, based on the written opinion and protocol submitted by the hearing examiner who presided over procedures for inviting public comment (refer to the post-hearing opinion from the 386th Radio Regulatory Council's written opinions), the Council concluded that the draft was appropriate and returned an affirmative reply.

Note that the Council added the following comment: "The written opinions include a comment indicating that in view of the fact that the expanded frequency band (the range of 2 to 30 MHz) that will be used by power line communication equipment could become the source of interference for other radio communications and broadcasting in the present circumstances, and opinions and requests are voiced from organizations and so forth that are using the band concerning the impact that the expansion may have on the existing radio communications and broadcasting, careful attention needs to be paid so that the testing systems will not affect the existing radio communications and broadcasting when introducing and operating such systems. The Council also wishes to ask MIC to pay careful attention similarly." MIC answered this comment as follows: "MIC intends to pay full attention when starting the introduction and operation of testing systems for power line communication equipment, as recommended by the Council opinion."

(2) Regarding a blanket license for specified radio stations that belong to NIPPON TELEGRAPH AND TELEPHONE WEST CORPORATION

(Consultation No. 38)

MIC explained the blanket license for specified radio stations that belong to NIPPON TELEGRAPH AND TELEPHONE WEST CORPORATION and provided

a Q&A session as follows. The Council deliberated this matter and replied indicating that the Council regarded it as acceptable.

a. Explanation by MIC

This application was submitted by NIPPON TELEGRAPH AND TELEPHONE WEST CORPORATION (NTT West) for a blanket license for fixed wireless access systems.

Fixed wireless access systems are systems that connect the central offices, etc. of carriers to offices and homes through direct radio communications. The 22GHz-, 26GHz-, and 38GHz-band fixed wireless access systems related to this application were institutionalized in December 1998 as systems that would enable large-capacity communication that dealt with the expanded use, etc. of the Internet in conjunction with promoting competition in the local communications markets. The fixed wireless access systems are mainly divided into two types: PMP systems and PTP systems. The PMP system connects a base station on a carrier to multiple subscriber stations in a one-to-many relation. The PTP system connects a base station on a carrier to a subscriber station in a one-to-one relation. The application is concerned with the former types of systems, and the company wishes to grant them a blanket license for these subscriber stations. As the meeting of the Council held in May of this year deliberated on a similar application from NTT East, this is the second application for a blanket license for them since the fixed wireless access systems were institutionalized. As the fixed wireless access systems use a high frequency band such as the 26GHz band, it has been difficult until now to make the radio equipment smaller and less expensive in some respects. Since those problems have become solvable with technical developments, etc. and radio equipment that can respond to rapidly increasing demand for high-speed Internet services in general households can be deployed now, the systems have arrived at the situation where they can utilize the advantage of a blanket license system that allows many radio stations to be opened with reasonable flexibility.

NTT West wishes to install the fixed wireless access systems in areas where broadband environments have not been developed within the jurisdiction of the Telecommunications Bureaus in Kinki and Tokai, urban areas that have existing condominiums, etc. where optical fiber cannot be laid, and so forth. NTT West

estimates that the company will install about 900 stations on a base station basis and provide a best-effort transmission rate of 40Mbps when using the QPS systems and 80Mbps when using 16QAM and 23Mbps and 46Mbps, even when using the Ethernet frames, in the next five years. The systems are configured in such a way that users can select a suitable channel so that they may choose the QPS system to maintain a connection when signal attenuation may occur due to radio characteristics in periods of bad weather such as rain and choose transmission with the 16QAM method when weather conditions are good.

MIC examined this application based on the relevant radio laws and regulations. Concerning the feasibility of frequency allotment, the company desires to have the frequency bands listed in frequency block table D1 and the D1 block be used by radio stations that provide 22GHz-, 26GHz-, and 38GHz-band fixed wireless access systems defined in Separate Table 7-1 in the Frequency Assignment Plan. MIC recognizes that their desired frequency allotments are feasible and will not cause any trouble in other communications, such as crosstalk, even allowing for the maximum number of operational radio stations, and the application meets all the requirements established in the Essential Standards for Opening of Specified Radio Stations.

For these reasons, MIC wishes to grant the company the blanket license based on the provisions in Article 27-5 of the Radio Law.

b. Main contents of the Q&A session

- The following question was asked: “How is NTT East, which has already started using the systems, doing?”

MIC answered and made remarks as follows: “They have a good reputation. The NTT East systems are targeted for less-populated areas and NTT West intends to address the urban areas in which optical fiber, etc. have not been laid ahead of others for now. MIC expects the NTT West’s systems to diffuse because the public will understand that their benefits can be comparable to those of optical fiber systems once the systems have been installed.”

- The following questions were asked: “Are the locations or areas that will install a fixed wireless access system, for example, condominiums that cannot install ADSL services? When the number of subscribers increases, I assume that the effective rate

will be a value derived from dividing the maximum rate with the number. So, will the connection speed become slower?"
MIC answered as follows: "ADSL also becomes slower when users are located far away from its central office, and fixed wireless access systems provide high-quality information comparable to optical communications. NTT West seems to have set up a certain number of subscribing households as the manageable range to manage stable quality of information flow, and if the actual number of subscribing households exceeds the setting, they will install another base station to maintain the quality level. That is what MIC thinks the company is planning."
- The following question was asked: "Does the company have something like a standard that tells it to install another base station when the transmission rate is lowered to such and such value?"
MIC answered as follows: "From what MIC gathered from NTT West, they attach 8 to some 20 households to one base station, and when the number of households exceeds that range, they will install another base station."
- The following question was asked: "I wonder how the transmission rate is switched when it rains. Is the rate switched when it actually rains or is the rate set to be changed at the time when the weather forecast, etc. say it will rain?"
MIC answered as follows: "MIC hears that the company's system can assume two modes. One mode can change its transmission rate automatically, and the other needs human intervention for manual changes at central offices, etc. The company seems to prefer to use the manual mode, so weather data or forecasts must be watched. The whole system, however, is configured in a way that the automatic switching mode can be also applied."

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