Study Group on Establishing Usage Environments for Next-Generation Broadband Technology

Summary of Minutes (2nd Meeting)

1. Date Monday, January 29, 2007 2 to 4:15 p.m.

2. Location Conference Room 1001, 10th floor, Ministry of Internal Affairs and Communications

3. Attendees

(1) Committee members (honorifics omitted)

Mikio Ihori (substitute for Yasuhiro Kusaka), Takashi Ushikubo, Hiroyo Ogawa, Satoshi Kurokawa, Takashi Koike, Takeyoshi Sasou, Makoto Tsubokawa, Masao Nakagawa (Vice-Chair), Akira Hashimoto, Mitsutoshi Hatori (Chair), Tatsuaki Hamai, Ryuuhei Fujiwara, Tomokuni Matsumura, Mitsuji Matsumoto, Kenji Murao (substitute for Takayuki Mabuchi), Hiroyuki Yashima, Yasuhiro Yamato, Tetsuya Yuge

(2) MIC representatives

Mori (Director-General of the Telecommunications Bureau), Emura (Director, Advanced Network Division), Katagiri (Senior Promotion Officer, Advanced Network Division), Usuda (Deputy Director, Advanced Network division), Sugiura (Director, Electromagnetic Environment Division)

(3) Observer (honorifics omitted)

Tsutomu Noda (Japan Cable Laboratories)

4. Outline of proceedings

(1) Draft minute of the 1st Meeting

The Secretariat confirmed the previous draft minutes on Reference 2-1 and it was approved by the attendees.

(2) Trend of the broadband technology at home and abroad

The Secretariat explained Reference 2-7 and no questions and answers were made in particular.

(3) Trend of the broadband technology

Presentations were made on Reference 2-2 by Member Tsubokawa, Reference 2-3 by Member Hamai, and Reference 2-4 by Yuge. The following exchanges about Reference 2-2 occurred.

[Details of exchanges]

- In response to a question about the cost and characteristics of bend-free optical cables, it was explained that the cost may be reduced by mass-production effect but it is uncertain if the quality will be as same as the current ones. As for their characteristics, it was explained that effort is being made to increase the confinement effect in the optical fiber to prevent leaking.
- In response to a question about the use of different types of WIPAS, it was explained that what type to use is determined by taking into consideration the user density and the possibility of laying cables.

(4) Trend of CATV technology

Observer Noda made a presentation on Reference 2-5 and the following exchanges were occurred.

[Details of exchanges]

- In response to a question asking why the two-core system is often used for CATV, it was explained that even if it is changed to one-core system in the future, the remaining core is applicable for another use since there is not much difference in the laying costs between both the systems.
- As for a question regarding the standardization of DOCSIS 3.0 and c.LINK which the US is taking the lead in implementing, it was explained that the US was taking the lead in the development and standardization in terms of technology.
- In response to a question about the method of passing over rivers or to isolated islands, it was explained that they did not know whether any such case existed in the US but that in Japan there existed cases in the 23 GHz band which primarily used stable wired connection and installation was made taking into consideration the stability and flexibility of wireless connection.

(5) Trend in the mili wave-related technologies

Member Ogawa made a presentation on Reference 2-6, and the following exchanges occurred.

- In response to a question asking if tolerance against mist can be expected in the 60 GHz band or higher as same as in the 34 GHz band, it was explained that tolerance could be expected since those bands were almost equivalent in their properties.
- In response to a question on the relationship between the band requiring license (71-76 GHz band and 81-86 GHz band) and the band requiring no license (92-95 GHz band) in the US, it was explained that the former was mainly used by providers and the latter was used by those other than providers. In response to a question about interferences in the band requiring no license, it was explained that there was primarily no great possible effect since technical

standards had been developed so that no interference could occur.

- In response to a question about the cost and penetration status of wireless CATV, it was explained that the cost was expected to be comparatively low because of point-to-multipoint connection, but that such cases were rarely found.
- In response to questions about the downsizing of antennas, it was explained that antennas for short distance had already been downsized.
- In response to a question about the method to cope with the attenuation of the 60 GHz band caused by resonance with air molecules, it was explained that the attenuation was being dealt with by adjusting to the window for resonance.

[References distributed]

Reference 2-1 Study Group on Establishing Usage Environments for Next-Generation Broadband Technology, Summary of Minutes (1st Meeting)

Reference 2-2 Initiative for broadband access technology

Reference 2-3 Initiative for broadband by KDDI

Reference 2-4 Initiative for the next-generation broadband technology

Reference 2-5 Current status (services and technologies) and future trend of CATV

Reference 2-6 Recent trend of R & D of mili waves

Reference 2-7 Trend of the broadband technology at home and abroad

Reference for information 2-1 Study Group on Establishing Usage Environments for Next-Generation Broadband Technology, Summary of Minutes (1st Meeting)