Document 8-1

Study Group on Communications Terminals in IP Era Draft Summary of Minutes (7th Meeting)

1. Date:

Tuesday, May 8, 2007, 2 p.m. to 4 p.m.

2. Location

Special Conference Room 4, 4th floor, Mita Kaigisho (Conference Hall)

3. Attendees (Last names in Japanese alphabetical order; honorifics omitted)

(1) Members

Hitoshi Aida (Chair); Mutsuya Asano (alt.: Yoshikazu Kobayashi); Ryuichi Inagaki; Masashi Oshima; Takemitsu Kunio (Alt: Naoki Sato); Mikio Goto (alt.: Akira Miwa); Hiroshi Kondo; Yoshiyuki Sukemune; Nobuko Takahashi; Yoshiyuki Takeda; Miwako Doi; Takashi Hanazawa (Alt: Hiroshi Hamada); Toshiki Hayashi; Susumu Hirano (Acting Chair); Hiroshi Fujiwara; Akira Maeda (alt.: Yujiro Iizuka); Yuichi Matsushima; Makoto Miwa; Toshio Yamada; Akira Murakami; Suguru Yamaguchi; Tetsuya Yuge; Makoto Yokozawa; Fumio Watanabe

(2) Ministry of Internal Affairs and Communications

Mori, Director-General of the Telecommunications Bureau; Sakurai, Director-General of the Telecommunications Business Department; Takahashi, Director of the IT Security Office; Naito, Deputy Director of the Telecommunications Consumer Policy Division; Watanabe, Director of the Telecommunication Systems Division; Nakamura, Deputy Director of the Telecommunication Systems Division

- 4. Agenda
- (1) Presentations
- (2) Others

5. Outline of proceedings

 \circ Main comments of members are as follows.

- The relationship of convenience with safety and reliance should not be too extreme in the scenarios as to whether all control functions be integrated into the network or transparent to the extent possible. Considering that communications terminals must use the network, case-by-case scenarios will also apply from the economic perspective—a generalized scenario

will not work. In addition, when talking about communications terminals, effectiveness will not be ensured unless terminals are employed through the use of a network.

- The concept of developing engineers will have to be reviewed as the IP era nears. When a number of services become available in software and/or hardware forms thanks to the development of new technologies, it will be difficult to ensure the level of engineers and meet end-user needs with the conventional concept of tests and human resource development.
- From the perspective of the business environment, business is feasible if people pay for the value. It is therefore necessary to look at it from the viewpoint of new business. Responding to the market mechanism will bring the development of engineers back on track.
- At issue is what kind of logic is to be used, in what kind of range, in order to develop personnel and resources and improve the system, and who should do what in order to shift to IP terminals must be studied. Since total harmonization cannot be achieved in the transition period and various issues will arise, it is necessary to organize the concept for the period until everything is completed.
- The telephone network has played a central role so far, and telephone experts could understand and deal with problems. In the IP system, it is anticipated that measures cannot be taken against problems without knowledge of everything from the bottom layer to the application layer. Therefore, human resources capable of making comprehensive judgments must be developed.
- In the NGN, it is assumed that all the platforms are integrated from the top one to the bottom one without transferring part of the platforms, and the same service structure as the current one, where services are performed consistently across the board, is imagined. In addition, the business model will come closer and closer to the mobile Internet, and it will not destroy the present base, where each network is vertically integrated.
- There is an argument that even services in the top layer on the NGN are to be controlled; however, the issue of whether services are well developed and customers are satisfied will arise in the situation where the portability of content that is not bound is experienced.
- There can be no standards except the international standards. However, certainly, discussions without users do not work. How can we envisage international standards based on which users in Japan can efficiently receive services on international networks while Japanese international

carriers efficiently maintain competitiveness?

- There are many methods for forming a consensus, possibly ranging from international standards, such as ITU-T and IETF, to *de facto* standards and the market mechanism. In between, there is a method where a consensus is formed by matching customer needs and supplier needs. Technical standards for communications, however, are determined either by international standards, a rigid world, or where the market is strong, in many cases, and the improvement of the mechanism is now argued.
- In contrast to international standards, there are several kinds of options for strategies where technical operators and technology suppliers face the international market as well as for the administrations backing them. Japan has recommended *de facto* standards and promoted open policies.
- Even if some disadvantage is solved between specific stakeholders, the solution method cannot be generalized in a form such as the standards. It is therefore necessary to develop a neutral and highly specialized and functional mechanism to solve disputes, and persons in charge, such as commissioners, should be appointed.
- The role of alternative dispute resolution (ADR) is not limited to either the solution of disputes between carriers or the determination of economic compensation. Having a grudge means there was a mismatch between the operation and the technology adopted. It is therefore also important to develop a feedback mechanism for guidelines and standards.
- The basis of whether the solution method should be based on technology, compensation, or the business performance of carriers is shifting in Japan. Under such circumstances, in order to make responsible decisions, a group of experts, including technical experts on infrastructure, business experts, and experts on legal structures and standards, will be required to be responsible for grudges from the perspective of minimizing user disadvantages.
- As rules and measures for hedging an ideal image of the combination of services and the business structure, the organization of commissioners alone will be insufficient, and use of the existing framework will be required. It will be necessary to provide assurance flexibly and on a timely basis.
- The current strength of Japan is that network users form almost 100 percent of the population.

How the world's top quality users are involved in the discussion of terminals and architecture is important in terms of what kind of new communications terminal mechanisms can be produced to lead the world standards. User involvement in the testbed and during the transition period to new services can also be considered.

- There is a concern that the architecture of future terminals will become more complex, and it will be required to visualize it comprehensively for users.
- It seems that the term "terminal" limits our ideas and an appropriate alternative term for "terminal" will have to be studied.
- As for content portability, services are increasingly provided without depending on physical terminals or access, such as in the case of Internet PCs and mobile phones. As for the relationship between services and terminals, services will become more independent from terminals and access instead of accelerating the integration.
- Users purchase services, not terminals, and they pay for physically existing terminals that are suitable for receiving services. Therefore, many users cannot understand the fact that services are dependent on carriers and providers. On the other hand, can anything other than physically existing terminals be considered to connect services to users?
- Spatial services, which can be executed immediately whenever users desire, will be applicable whereby, for example, a certain vocal phrasing enables phone calls and displays a popup screen.
 While what is considered now is not advanced to such a stage, it is an ignition to start communications services using personal accessories or software.
- It seems that users purchase technology that enables them to receive services. The situation where users purchase services means the situation where suppliers are responsible for realizing services completely and there are no engineers. Neither engineers nor manufacturers will be willing to do such.
- The definition of the term "users" will have to be determined for future studies. Discussions could substantially vary, depending on their subjects. If the definition remains unclarified, it will cause confusion in discussions.