

Summary Minutes of the 6th Meeting of the Study Group on Network Architecture

1. Time & Date: 10:30 – 12:30, Tuesday, May 22, 2007

2. Place: Special Meeting Room #4, 4th Floor, Mita Kyoyo Kaigisho (Japanese Government Conference Building)

3. Attendees

(Members) (in Japanese alphabetical order, with honorifics omitted)

Tomonori Aoyama, Youichi Isokawa, Naoyuki Iwashita, Gota Iwanami, Yoshiro Okamoto, Hideo Okinaka, Mitsuo Kawato, Akira Miwa (on behalf of Mikio Goto), Hideshige Komatsu, Shinji Shimojo, Harushige Sugimoto, Yoshiyuki Takeda, Tetsuo Takemura, Toshitaka Tsuda, Miwako Doi, Hideyuki Tokuda (Chairperson), Akihiro Nakao, Takashi Hanazawa, Masaki Fujihata, Hiroshi Fujiwara, Motoo Matsuda, Takamichi Miyoshi, Tetsuya Yuge

(Total: 23)

(Ministry of Internal Affairs and Communications)

Kiyoshi Mori (Director-General of the Telecommunications Bureau), Shun Sakurai (Director-General of the Telecommunications Business Department), Katsuya Watanabe (Director of the Telecommunications Systems Division), Yasuo Tawara (Director of the Research and Development Office, Technology Policy Division), Naohiko Hagiwara (Assistant Director of the Telecommunications Systems Division), Manabu Nakazato (Assistant Director of the Research and Development Office, Technology Policy Division)

4. Agenda

- (1) Presentations
- (2) Other

5. Summary of Discussions

[Presentations]

- Member Iwanami presented “Expectations for the New-generation Network from the User’s Viewpoint” (Handout 6-3).
- Member Kawato presented “Study Group on Network Architecture” (Handout 6-4).
- Member Iwashita presented “Next-generation Telecommunications Network for the Financial Industry – Viewpoint from a Future Service Provider Using the Network” (Handout 6-2).
- Free Discussion (Details to follow below)

6. Next Meeting

The next meeting is scheduled for early June. The Secretariat will announce the details at a later

date.

[Main comments and remarks made during free discussion after the presentations]

- From Scenario 1 on the last page of Mr. Iwashita's presentation, he appears to advocate more user-driven approaches. From the viewpoint of the network providers, it may become necessary to pass the cost burden resulting from the sophistication of the network on to the users. Would it not then be necessary to make it visible to the users?
- It would be better to relegate user authentication to the network infrastructure instead of the providers. The question remains as to how to accommodate authentication as a function of the network infrastructure. One outcome of the study on liberty and alliance was that the user's information (demand, footprint) belongs to the user, thus it can be modified in whatever manner the user desires. There is a limit to how far service providers can go in handling the user's information, and we would expect that the network would handle this.
- Whereas Scenario 1 now seems to be the mainstream, it cannot go on like this because security costs too much. Users want to use the Internet as a secure network, while not wanting to spend money. We need to change the tide so as not to end up with something expensive but insecure because of inaction.
- Page 18 of Mr. Iwanami's presentation shows a very large number of blogs originating in Japan. Why is that? In addition, I would like to ask Mr. Iwashita, whom I regard as having a very advanced viewpoint, what ordinary bank employees think of Scenarios 1 and 2.
- One of the reasons so many Japanese blogs exist is probably the environment where anybody can easily access high-speed networks priced at fixed low rates. Another reason would be the high literacy of the Japanese. A third reason might be the excellent communication skills possessed by the Japanese.
- I guess most ordinary bank employees are a little perplexed by the rapid progress of the Internet. In developing banking systems for the future (targeting 10 years ahead), engineers at banks have assumed that the network would not change very much. They have probably never been aware of the rapid changes in networks.
- While I believe discussions are under way about open and secure environments, we will not be able to work out a clear direction on the cost issue unless we give thought to who shall bear the risk. For example, with Scenario 1, a solution can be found within financial institutions, but with Scenario 2, the risk may be too great for financial institutions alone to take, in which case insurance companies may also need to be involved. We may then need to contemplate on, for example, what premium plan should be employed.
- Thanks to the emergence of a download business scheme, as evidenced by the success of iPod, end users of the network now accept the new concept of values whereby they pay for downloads instead of packages. If this new concept of values takes hold, whereby people are willing to pay for the services being securely downloaded, which used to be offered in packages, then a consensus may be reached as to passing the cost burden for security on to the

user.

- I agree to the view that users will be willing to pay the cost if they see the value and necessity. I believe this will also apply to security, and therefore do not worry about that. I am only concerned about how much the network should be involved in the issue of usage. How aware should the network be of data between banks, data between banks and users, and data between users, taking the financial field as an example? In terms of security, it is not good that the network happens to know the user's data. On the other hand, it cannot provide services without knowing the user's data at all. We would like to figure out how much the network should know.
- It seems that when seeking usefulness or wishing to voice their opinions, even by exposing information on themselves, users want to have security (authenticity) guaranteed by a public entity such as a local government. If we can assume the existence of such a guaranteeing agency, then the network would not need to be aware of the content of the information from the user.
- It would be better to have a system where people who should know will know, people who need not know will remain uninformed, and somebody you can trust will inform you of only the results. At the same time, however, there will be cases where you get the information unintentionally or you need to know later what you did not need to know. I believe it will be the job of the network provider or service providers to make the system flexible enough to be able to accommodate users' needs and changes in the situation.
- Only recently has one become able to read information out of somebody else's brain. Security in this case is handled as an issue of bioethics. If reading information out of the brain of somebody with a damaged spinal cord leads to the restoring of motion abilities, then the benefit would outweigh the risk, and it would therefore be acceptable. However, as to whether it is acceptable to ordinary people to have somebody read what they may not even be aware of in their mind, we have just come to a stage where a research organization on bioethics is formed to come up with an idea for society to discuss. Compared with the discussions going on there, ours is still in an embryonic stage, as I see it.
- As to the report in Mr. Iwanami's presentation, that 37% of blogs reside in Japan, are we not overly creating the notion that there is a clear dichotomy between service providers and service receivers? It may not be that everybody views all blogs, but may instead be that various communities, varying broadly in size from small families to large societies, are viewing only their own blogs. Within a tiny community, you may not mind exposing yourself, but if the community is big, you may not want to reveal as much information to the public. Unless we offer a mechanism for controlling how much information on you will be exposed, we might end up building something nobody wants to use.
- As to the data in Mr. Iwanami's presentation, I guess the proliferation of blogs in Japan may be attributable to the young Japanese participating in SNS through mobile phones. In other words, this is probably because high percentages of young Japanese who have an abundance of

time have a mobile phone. A further analysis of the blog users may reveal some more intriguing facts. From these viewpoints, network builders and providers might need to think about offering “requirement services,” for example, providing a mechanism for learning about the users’ requirements.

- Japanese are using many new terminals with many advanced functions. Nonetheless, despite the excellent technologies, Japanese terminals are not as competitive in the international market. International competitiveness used to be proportionate to functionality, but not any more. We need to take heed of this fact to enhance the presence of Japanese products and services.
- In the area of subculture such as animation and comic books, it is more difficult to collect money in Japan than in the U.S. because of the Japanese propensity towards harmony. If, however, we can collect money, then I believe we will be able to enhance our international presence.