# Meeting of the Study Group on Sophistication of Emergency Telecommunications—6th Meeting Summary of Minutes

### 1. Date and Time

Tuesday, February 26, 2008; 4:00 to 5:50 p.m.

# 2. Location

Special Conference Room No. 1, 8th floor, MIC

# 3. Attendees (honorifics omitted)

(1) Sub-Council Members

Hitoshi Aida (chair), Shingo Omori (represented by Kazunori Okada), Hideo Okinaka, Shinichiro Sakata (represented by Akira Uemura), Sadahiro Sato, Yoshiyuki Sukemune (represented by Hirokazu Shimizu), Nobuko Takahashi, Noriyuki Tsuchimori (represented by Masahiro Ide), Kiyoshi Tokuhiro, Isao Nakamura (sub-chair), Yuichiro Nishio, Hiroki Hirasawa, Kensuke Fukuda, Shunzo Yamaguchi (represented by Mitsuo Yoshida), Masaki Yokoi, Tatsuhisa Yoshimura (represented by Masahide Oka), Makoto Yoshimuro

(2) Observers

Tatsuo Nakafushi (Cabinet Secretariat), Hiroshi Sonoda (Cabinet Office), Yutaka Shibuya (Metropolitan Police Department), Makoto Abe (Metropolitan Police Department), Kenichi Saito (Metropolitan Police Department), Yoshinari Tanaka (represented by Hisaya Sakurai) (Fire and Disaster Management Agency), Hideyuki Ashiya (Ministry of Land, Infrastructure, Transport and Tourism), Masanori Takahashi (Meteorological Agency), Hiroyuki Fujimoto (Coast Guard), Takashi Yoshida (Ministry of Defense)

(3) Presenter

Yoshitaka Kohama (NTT Facilities)

(4) MIC Representatives

Takeuchi (Director-General, Telecommunications Business Department), Takeuchi (Director, Telecommunication Systems Division), Hishinuma (Head, Security and Reliability Countermeasures Office), Yamashita (Deputy Director, Telecommunication Systems Division), Nakamura (Deputy Director, Land Mobile Communications Division), Murakami (Deputy Director, Public Safety Radio Communications Office), Watanabe (Head, Telecommunication Systems Division)

#### 4. Subjects

- (1) Presentations
- (2) Points of Discussion
- (3) Others

#### 5. Meeting Summary

#### [Presentations]

• Nishio (JSAT) delivered a presentation based on "Availability of the VSAT Application" (Reference 6-1).

• The Secretariat delivered a presentation based on "Questions to Organizations That Wish to be Designated Emergency Telecommunications Organizations and Their Answers" (Reference 6-2).

- Kohama (NTT Facilities) delivered a presentation based on "Power Outage Measures in the Age of NGN -- Towards the Security of Lifelines" (Reference 6-3.)
- Yokoi (Nomura Research Institute) delivered a presentation based on "Securing Emergency Telecommunications in Other Countries -- Report on Additional Study Items" (Reference 6-4).
- Okada (in place of Omori, National Institute of Information and Communications Technology) delivered a presentation based on "Supplemental Remarks on Call Time Limit --Combination of Call Control and Call Time Limit" (Reference 6-5).
- There were no remarks in the question-and-answer session on References 6-1 to 6-4.
- o. The following is the summary of the question-and-answer session on Reference 6-5.
- Is data on actual hold time collected by telecommunication operators?
- -> During a disaster, congestion occurs and the exchanges are at full load. There is no allowance for the exchanges to measure hold time (call time), so there is no actual data. I expect that the organizations that receive emergency calls have such data.
- At the time of a disaster, many people panic and the hold time could be longer.
- The call time limit should be applied to general calls, not to emergency calls.
- The reference says, "It is necessary to control such within the capacity of the exchange." However, the rule for prioritizing connection of emergency calls has been fulfilled before a connection is established. It is not identified once the connection is set up and the exchange is inactive. It would therefore be difficult to add another process, considering the processing capacity.

- For the call time limit processing, introducing a function in the terminal that measures the time and automatically cuts the call does not increase the burden of the exchange.
- -> It is not enough to provide the calling party a feature that does not cut priority telephone and emergency calls. The called party also needs a function to determine whether the calling party is a priority telephone, and if so, it does not cut the call. It could be difficult to implement these capabilities with the terminals alone.
- -> There is an issue of spreading terminals that have a call time limit function. Points of Discussion
- The Secretariat delivered a presentation based on "Comments to Points of Discussion (Proposal) and Handling" (Reference 6-6) and "Points of Discussion of Sophistication of Emergency Telecommunications (Proposal)" (Reference 6-7).
- $\circ$  The following is the summary of the question-and-answer session.
- Reference 6-7 on page 26 describes the call time limit "except for emergency calls." This means that only emergency calls to the organizations are exempt from the limitation and calls from the organizations are limited. If the customer owned and maintained (COAM) network fails or has congestion, the network of a telecommunication operator is used. Under this rule, while the organization staff is giving instructions via telephone, the call could be cut off.
- -> An emergency call itself has no alternatives, and as it directly concerns the protection of human lives, it is difficult to limit call time. Whether to exempt the organizations that receive emergency calls from the call time limit or not should be considered in parallel with the other organizations that use emergency telecommunications. Whether to rule out all organizations that use emergency telecommunications or partially rule them out needs further discussion.
- -> Even at a designated organization, not all terminals are priority telephones. It is therefore possible to have limited and unlimited cases, and emergency calls themselves should be put into the general terminal column rather than the priority terminal column.
- I think priority telephones are set up so that no problem occurs in rescue operations. The principle is to review designation of organizations and consider a call time limit without hampering rescue activities. If we will not be able to do what we are doing now in the new system, the system is useless.
- I've heard in a past meeting that the data from seismometers in municipalities is sent through telephone lines. If the call time limit is applied, the transmission could fail. When defining the limit time, this should be noted. The purpose of the call time limit is to prevent congestion. Any limiting of essential communications should be avoided.

- -> We would appreciate you telling us how much time it takes to transmit seismic data. The current priority communications handle only voice. If it can also handle data transfer and leased lines, the application of a call time limit could be avoided.
- -> Whether to transfer data in a voice form via modem is determined by municipalities. Changing this needs discussion.
- The social merits and demerits of applying a call time limit should be listed, with remarks on possibilities and risks. Unless this issue is discussed with the classification of priority telephones, confusion could occur.
- The description on page 7 of Reference 6-7 is vague. It is not clear which of Internet email, data communication, or mobile phone email is discussed. To avoid confusion, this issue should be treated as a service rather than a network function such as "'a service that can be deployed' on the network."
- -> Page 7 indicates the needs and feasibility. I think we have spent too much time talking about the needs. We are planning to balance both issues. We have the basic idea of seeking to possibly expand priority handling to data transfer. It is difficult to implement the services listed in the description of needs with the Internet, but it might be possible in a controlled network.
- Page 68 of Reference 6-7 mentions "the disclosure of address change information by municipalities." However, whether to disclose such is judged by municipalities. Does this mean the operators need to explain why they want that information? Does MIC have anything to do about this?
- -> We have also been explaining to the municipalities, but we are in the position of respecting self-governance. By law, the land readjustment information is provided to the parties and administrative organizations concerned, and notification is provided to the police and fire departments, but not always to telecommunication operators.
- Page 49 of Reference 6-7 mentions "the consideration of a comprehensive and appropriate UPS." Not only depending on UPS, it is also necessary to reduce the power consumption of the terminal devices and implement a power outage mode where unnecessary functions are cut.
- On page 30 of Reference 6-7, concerning the relationship between the number of calls and traffic intensity, the traffic area is drawn as a square, but there is a margin in the number of calls, so it should be a rectangle.
- -> Since the system design assumes the peak traffic, the square shape in relation to the traffic hold time is optimal. It can never be a rectangle.
- -> During a disaster, the hold time would be longer than usual. It could not be drawn as a

straight line extending the usual traffic. Applying a call time limit requires excess processing within the exchange. The call processing capacity of 1 million calls might not be attainable. The relationship chart should be treated as a rough illustration.

# [Others]

• Chair Aida said that, since the Point of Discussion (Proposal) would be summarized as a Report (Proposal) in the next meeting, any amendment should be submitted to the Secretariat by Friday, February 29.