

## **Panel on ICT Growth—1st Meeting**

### **Summary of Minutes**

#### 1. Date and Time

Tuesday, February 12, 2008; 17:00–18:30

#### 2. Location

Special Conference Room 1, 8th floor, MIC

#### 3. Attendees (honorifics omitted)

Panel Members: Murakami (Chair), Asakura, Okamura, Katsuma, Kishi, Shinozaki, Tokuda, Nohara, Furukawa

Masuda (Minister for Internal Affairs and Communications), Okamoto (Parliamentary Secretary for Internal Affairs and Communications), Suzuki (Vice-Minister for Policy Coordination), Ogasawara (Director-General, Information and Communications Policy Bureau), Terasaki (Director-General, Telecommunications Bureau), Nakata (Director-General, Policy Planning), Matsumoto (Director-General, Technology Policy Coordination), Matsui (Deputy Director-General, Minister's Secretariat), Suzuki (Director, General Policy Division), Imagawa (Examiner, General Policy Division), Nagaya (Director, Government Information Systems Planning Division, Administrative Management Bureau), Tange (Director, Policy Planning Division, Local Administration Bureau)

#### 4. Proceedings

(1) Minister Masuda gave an opening address.

(2) Chair Murakami gave his inaugural address as chair and stated his basic ideas as follows:

Last year the focus was on improving productivity, but it has made a dramatic shift toward achieving growth. The policy basis we must adhere to in pursuit of ICT growth is the u-Japan Policy. The u-Japan Policy is fundamentally geared toward ensuring the development of five networks—the key being wireless broadband networks, but also including wired broadband networks, digitized broadcasting networks, transportation networks and device-based networks, such as RF ID tags—and to establish interconnection and interoperability between them. Development of these five types of networks has been progressing steadily. Various policy programs have been steadily implemented with regard to interconnection and interoperability, for example, for development of FMC, triple play, convergence between communications and broadcasting, promotion of RF ID tags and ITS, and NGN. We have

high prospects of constructing the world's most advanced ICT infrastructures in the 2010s. Meanwhile, ICT infrastructures are not being used as widely as we expected. Therefore, MIC's biggest contribution to the growth of ICT may be achieved by investigating how we can optimize our ICT environment— world's most advanced—to achieve such growth.

Back in the 1980s, when people praised Japan as “the No. 1,” microelectronics technology prevailed in every aspect of Japanese industry, leading to innovations in the fields of home electronics, automobiles, and information and communications. Such innovations originating in Japan spread around the world.

We may only be able to achieve new, strong growth after the lost 10 to 15 years following this period of microelectronics prevalence in the 1980s only if every aspect of industry is connected to networks, particularly ubiquitous networks, which will mean drastic changes are required within society, industry and government. I hope this Panel on ICT Growth will trigger such a movement.

The members of this Panel have been selected for their professional expertise. It is my genuine hope that together we can conduct expeditious in-depth discussions and investigate initiatives to directly drive the growth of ICT in our country.

(3) The Draft Meeting Procedures (Reference 1) was approved.

(4) Based on the Meeting Procedures, Chair Murakami appointed Itami as Vice Chair.

(5) Respective members introduced themselves and expressed their aims as panel members. Summaries of their addresses follow.

Asakura:

- I have focused on applications for individuals, so I would like to investigate future ICT growth from three perspectives. The first is to consider software and hardware that it will be possible to create based on new innovations that are sure to emerge following the completion of digitization in 2011 and onward. The second perspective is that of the user. And the third is that ICT must bring about improved living standards in a variety of ways.

Okamura:

- The more essential ICT infrastructure becomes, the greater impact it has on society when it fails. Therefore, security is crucial. I also think establishing seamless networks might be one of the decisive elements of the u-Japan Policy. I would like to offer my opinions from these viewpoints.

Katsuma:

- I would like to contribute to this panel in three areas. The first is improved productivity. Japan's labor productivity is relatively low among OECD members. How can we improve productivity? Blogs, SNS, Internet communities, GPS, mobile communications and all kinds of new tools are now available. How can these tools be widely used by the general public to contribute to improved productivity? The second area is work-life balance. How can we use ICT to change the practice of overworking? Number three is how to make ICT safe and secure for children to use. As excessive safety and security measures could constrain children from fully developing their abilities, finding the right balance is key.

Kishi:

- I have two points I would like to investigate as part of this panel. One is to identify why the ICT industry, which has definite growth potential, has not developed in line with this potential. For example, in the United States, convergence has already begun not only between communications and broadcasting, but also with regard to content, involving the advertising industry, brands and companies that advertise. Japan is two laps behind the United States. Meanwhile, the United Kingdom recognizes ICT as part of the creative industry, which also encompasses design and advertising, and has studied all of them together. Japan should examine peripheral industries, including intellectual property, when investigating ICT.

I would also like to conduct an investigation from the perspective of Japan's growth potential. Considering the potential for ICT to improve productivity in other industries and improve living standards, it is important to determine out how to promote ICT in ways that will allow it to effect surrounding industries. To that end, deregulation plays a crucial role. Digital technologies and networks must be used to improve productivity in areas such as medical care, care of the elderly, education and e-government in ways that also improve convenience.

Shinozaki:

- The key to riding the rising tide called "ICT" is the "power to connect technological changes and systemic changes." Systems such as legislation and industry practices are finding it hard to keep up with the new frontiers opened up by technologies. This is the case universally, rather than being specific to Japan. Whether or not growth can be achieved at these frontiers depends on how flexibly the society has to link systemic changes with technological changes.

It is also important to implement bold policy programs to concentrate Japan's strengths, rather than implementing small programs which please everyone but dissipate policies. For example, optimizing the power of media convergence from the perspectives of "global connection," "cross-generational connection," and "public-private connection" may allow Japanese content, including education-related content, to expand around the world. It does not simply mean an increase in content export. It contributes to the development of teachers in developing countries, and, over the longer-term, creates future generations of people with a favorable view of Japan, thus expanding our human capital base and building the foundation for wealth creation.

Implementing specific projects to deal with infrastructure through content by connecting public and private roles will definitely contribute, in a long run, to the strategy to make Japan's technologies the global standards.

Tokuda:

- One part of the u-Japan Policy has not yet been implemented. The first challenge of this panel is to encourage the creation of value across a broad spectrum. The ability to make connections between the real world and the world of information is one of the advantages of ubiquitous networks. With this advantage, we can create not only economic value, but also cultural and intellectual value, amongst others. Fusion between non-ICT services and ICT services, fusion between non-IT objects and IT objects—a great deal of new value will emerge from such fusions. This can also apply at the level of communities. If we create hybrid communities that encompass real space as well as cyberspace, we can create safer, more secure, and highly stable communities.

The second challenge is the balance between innovations brought about by technologies and innovations in social systems. For example, a robot is not defined under the Road Traffic Act. The city of Peccioli in Italy is considering conducting a trial of a garbage collection robot. A social framework that allows such an unconventional trial is required for the realization of the u-Japan Policy.

The third challenge is whether content can be produced that can be accessed using any type of terminal. Non-terminal-dependent content is not yet available. In addition, unfortunately, the existence of a wide variety of protocols is hampering the development of seamless networks, particularly for controlling home appliances. With regard to collaboration, collaboration on 3-D space has not been achieved in the world of information. When all of these things become possible at the same level as that of existing communications, we may

be able to maximize the advantages of being connected and of getting connected.

Nohara:

- I have three points for this panel to consider. Point one is that, in determining policy, we need to take a global perspective wherever possible. I have noticed that discussions at many committees tend to become domestic-focused. Other countries' economies are expanding, so we need global thinking, including working on other countries. And as part of such efforts, we must consider proactive cooperation with other ministries and agencies. Point two is to develop a new way of presenting the concept of "ubiquitous." It is important that as bright a lifestyle as possible be presented. Point three is to focus on the power of the private sector as much as possible and revitalize it by adopting, rather than excessive legislation, regulations the fulfill the minimum requirements.

Furukawa:

- At Dubai Airport, automatic check-in is possible even for international flights. In South Korea, people can obtain their resident cards from at home. These things are not possible in Japan yet. I believe the goal of the u-Japan Policy is to make our government and society the world's most technologically advanced, so that Japanese people will not be overwhelmed no matter where they go around the world. If we are to achieve this goal, we need to determine why we have not so far achieved it: whether it is because our technology has not been advanced enough or because our systems have not been developed enough. With regard to areas where our systems are behind, we should make recommendations on how to change the systems. Meanwhile, in order to literally make the word "ubiquitous" a reality, I believe, it is crucial to realize what the world implies, namely, "universal" and "equal." Now is the time for final tax returns to be filed. To certify income and withholding tax, we need to print electronic data on paper and mail it, and then manually input the data into the e-TAX system. This is just one example of inefficiency.

(6) Furukawa explained the reference document he submitted as follows:

- I think the transformation of Japan's government to e-government processes has prioritized the creation of electronic systems above everything else and remains at the stage of introducing IT into the existing procedures. Rather than just introducing IT, we must properly assess the procedures.
- Two of the problems are that information systems are not shared or that the government has very few experts.

- The Upper House has implemented an electronic voting system, but the Diet should introduce procedures to further optimize ICT. In promoting ICT, the Diet, as the decision-making body, should recognize the value of ICT.
- People in South Korea can obtain their resident cards from at home. Each card has a watermark. The watermark technology was developed by a Japanese company, but was adopted not in Japan, but in South Korea. Frankly, I wonder why such a technology is not accepted and implemented in Japan.
- My impression is that, in Japan, security comes before user convenience. For example, you need to input data on the specific e-TAX software because of security considerations.
- South Korea has established positions of IT specialists within its civil service system. We may refer to this when investigating Japan's system.

(7) With regard to the Draft Disclosure of Meeting Proceedings (Reference 2), it was decided that panel meetings will be open to the public in principle. The proposal that reference documents used at the meetings as well as summaries of minutes be posted on the MIC Web site was approved.

(8) The Draft Panel Meeting Procedures (Reference 3) was approved.

(9) The secretariat explained the current status of ICT strategies, the current status of growth, and the agenda both in Japan and abroad based on References 4 and 7. Subsequently, panel members made the following remarks:

Okamura:

- When we look at the field of education as one of the various areas of priority, it is doubtful that networks are fully optimized. One possible way of utilizing a network would be that when you click on certain year, you can immediately jump from Japanese history to world history, and compare Japan and Europe. Rather than just focusing on Japanese history, you can link it with world history. When you want to know what Edison did, you can jump from world history to a science textbook to see his inventions, and how they were developed later in history. Networks can be optimized to offer very creative education.

In terms of content, we don't have comprehensive system like "fair use" in the United States, so the industry is coming up against constraints that make optimization difficult. To protect

intellectual properties, particularly copyright, in real terms, protection will not suffice. We must also be flexible in striking the balance between free use and the development of new technology.

As for e-government, I once tried to jump from a government portal site, called “e-Gov” to a page where specific procedures are described, but I could not get to the page. Improving e-government to make it better for users is definitely one of the challenges.

Furukawa:

- The issue of work-life balance must be included in the agenda items listed in Reference 7. In order to encourage the participation of as many people as possible, including women, we need to clarify our commitment to the addressing issue.

Katsuma:

- People today, especially the younger generations, take telecommunications, fixed-rate Internet access and fixed-rate mobile communications services for granted. Although the number of people who access the Internet more than one or two hours per day is increasing, this has not contributed to the international competitiveness of businesses or the entire Japanese government. We must find out the reason for that. We need to find out why the high penetration rate of terminals and the Internet has not lead to improved productivity. We may need to really get our hands dirty and examine every possible reason.

Asakura:

- We have such enhanced ICT infrastructures, why have we not been able to optimize them? Apparently, businesses use ICT infrastructures, but I wonder how far they go to optimize them. I suspect they are just using ICT as one of their corporate systems, so there is no benefit to individuals. We should take the perspective of working out how to empower individuals.

Kishi:

- We should consider the growth strategy for ICT over several time spans. Empowerment of individuals is definitely important, but may take a little longer. It can be a mid-term issue. Meanwhile, Reference 7 refers to consumer- or user-generated content. In the United States, for example, content created by non-professionals cannot contain advertising. So, it is hard to establish a business model. Only professional content is eligible to carry paid advertising—that’s their basic standpoint. We must differentiate short-term issues from long-term issues. Otherwise, things will get confused.

Nohara:

- Reference 7 doesn't pay much attention to Japanese companies expanding their overseas business and revitalizing local markets. Companies operate not by focusing solely on the Japanese market. When we study Japan's international competitiveness, we do not see Japan merely as a market. For example, Japanese animation and content are popular in other countries, a trend that has been labeled "Japan cool" in recent years. Most content providers are SMEs and do not have all the skills required to operate their businesses globally. If we provide support to help them launch global operations, the scale of their business, including infrastructure in the surrounding areas, will increase and consequently enhance Japan's international competitiveness.

Shinozaki:

- In terms of the power to get connected, local systems as well as global ones are essential. For instance, with regard to regional systems, ICT should not be developed independently by individual prefectures or local governments. Although there have been some cross-prefectural movements at the working level, we should link ICT and other policy programs and provide incentives to remove various barriers. Such efforts will ultimately become major factors underlying the successful implementation of the policy.