

Minutes of the 2nd Round-Table Meeting on ICT International Competitiveness

1. Date and Time: 17:30 to 19:00, January 22 (Mon.), 2007
2. Location: Special Conference Room No.1 on 8th floor of MIC
3. Attendees:
Saito (Chairman), Murakami (Deputy Chairman), Nishida (Deputy Chairman), Itami (Member), Ito (Member), Uchida (Member), Ohtsubo (Member), Oka (Member), Ogawa (Member), Onodera (Member), Orita (Member), Kurokawa (Member), Nakahachi (Member), Nagao (Member), Nakamura (Member), Hashimoto (Member), Hirose (Member), Furukawa (Member), Wada (Member), Watanabe (Member), Suga (Minister), Tamura (Vice Minister), Taniguchi (Parliamentary Secretary), Aritomi (Vice-Minister for Policy Coordination), Shimizu (Vice-Minister for Policy Coordination), Matsumoto (Director-General for Technology Policy Coordination), Suzuki (Director-General of the Information and Communications Policy Bureau), Mori (Director-General of the Telecommunications Bureau), Terasaki (Director-General for Policy Planning)
4. Minutes of the Meeting:
 - (1) Minister Suga gave the opening speech.
 - (2) The “Interim Report (draft) on the Round Table Meeting of ICT International Competitiveness” (document 1) and “explanatory document for the interim report thereon” (document 2) were accompanied by explanations from deputy chairman Murakami. He explained the causes of the decreasing international competitiveness and the crisis-sharing atmosphere, the countermeasures required, the four-step cycle for enhancing international competitiveness, seven trigger policies, eight individual programs, and the basic strategy for international competitiveness enhancement in three major fields. He also commented on a future approach, as mentioned below.
 - It is necessary to discuss deployment in each individual field and establish something to link the basic strategy. He presented the combined strategy of terminal-based networks or platforms, content and applications as something that plays such a role. He also suggested strategic models for deployment based on the three categories of high-end ubiquitous, low-end ubiquitous and lo-end basic, and deployment based on the establishment of two types of enterprise groups, high-end specialization and low-end specialization. The key point of discussion is how we realize these matters toward submission of a final report and

how we link to the basic strategy for each of the three major fields.

(3) Member Ito (Chairman of the Digital Broadcasting Working Group) explained the review status and issues of the Digital Broadcasting Working Group, and made the following comment as a personal opinion.

- For the research and development of a broadcasting method, the tendency existed for research and development to be conventionally suspended at the stage when a domestic method was determined. It is, however, necessary to unremittingly continue to research and develop new broadcasting methods. A flexible structure of introducing a type of hierarchy and adding the latest research result to the current method will enable you to suggest an appropriate method according to the situation of a partner country by just selecting the necessary functions or tools. Implementing those functions in software will allow the upgrade of a broadcasting method by only adding or modifying the software. It is essential to promote research and development of software further, in a broad sense, including the algorithm for such a broadcasting method.

(4) The chairman explained the review status of the Working Group on Next-Generation IP Network and Wireless Working Group because Mr. Goto (Chair: Working Group on Next-Generation IP Network) and Mr. Doi (Chair: Wireless Working Group) were absent.

(5) Each member agreed on the “Draft Interim Report from the Round-Table Meeting on ICT International Competitiveness” (Document 1).

(6) Each member delivered his or her opinion toward the creation of a final report, and the chairman introduced the opinions of absent members. Each member had the following major opinion. Based on this, each member made specific comments toward creation of a final report.

- Unlike Windows, iPod, Google or Amazon, the background behind the success of Nokia or Samsung is governmental support. In business development, it makes a big difference whether it becomes an object of control or not. PDC being less popular than GSM, and we should be aware, as a lesson, that NGN Release 1 is a product of deliberation by ETSI. The government is required to place a further focus on it.

- For the development of human resources, it is necessary to develop domestic human resources globally by such as enhancement of overseas study programs or welcoming Japanese businesses for overseas work experience. In Japan-leading fields, it is indispensable internationally to develop more foreigners in Japan.

- In high-order layers, it is important to offer services or business models tailored to meet overseas needs in conjunction with automobile and home appliance industries in Japan's advantageous fields, such as mobile-wallet phones, IT home electronics, Internet or ITS. Especially, IT home electronics should take quick action to not miss Internet-ready streams. For the establishment of a broadband network based on the Asian broadband plan, the wireless technology utilizing unused frequency bands should be supported in Asian countries, rather than the optical infrastructure that requires more time for improvement.
- For the policies to be implemented over many government ministries, some schemes are required to promote the programs across the country, such as providing a control inside the administration or a function that enables overall coordination, or taking budgetary steps without sectionalism among ministries. The ICT international competitiveness council presented in the interim report should be clearly positioned as the conference to address a comprehensive view toward collaboration between industry, government and academia, enhancement of scientific and industrial technologies, intellectual properties and international standardization. In addition, the authorities concerned should be firmly involved in the council.
- At any rate, the enthusiasm to make a world standard is necessary. In Japan, there has been a kind of illusion that the world's best technology or highest technology will be a world standard. Looking to the world, the world's best technology is not number one in the world, but the technology aiming to be the world's best can be number one in the world.
- Discussions are expected to clarify a target field, a specific enhancement approach, joint efforts of the government and private sectors in three major fields, and enhancement of activities taken by the government for foreign countries or standardization organizations in Dejours standards.
- Everyone agrees on the seven trigger policies or the direction of the interim report. It is, however, necessary to clarify the basic core strategy in making a final report so that individual policies are not scattered. From the viewpoint of human resource development, it is important to formulate a basic strategy because of the increased opportunity to give ICT human resources a meaningful job and develop them in an actual work field. With agreement on the establishment of an ICT international competitiveness conference, we have to also discuss the establishment of a new ministry for controlling the entire ICT environment in Japan, such as an information communication ministry.

- The interim report covers a wide range of information, including a long-term approach and a short-term one. It is therefore necessary to implement those approaches in an easy-to-manage manner. Those approaches should be initiated according to a market demand. It is effective to match Japan's hardware advantage with the entire ubiquitous plan. Due to industrial limitations, we agreed that education and training should be conducted according to the programs set up by the government.
- In overseas markets, manufacturing only terminals is not competitive. It is extremely important to focus on a target country or region and develop its market in a Japanese style, in collaboration with the people concerned, based on the trust relationship between countries. The specific measures of this plan should be contained in the final report.
- Animation is one of Japan's beautiful contents. In addition, documentary films are also good content. For instance, overseas deployment of a content that introduces the world heritages of Japan will break the ice in spreading Japanese content. For Japanese companies to make content together to compete with overseas major content enterprises is considered ingenious. Selling content is a sort of cultural exchange. In overseas development of such content, it is necessary that a kind of showroom be established in some target countries, sometimes by means of ODA, and efforts be made to gain their understanding of the content.
- It was astonishing that the interim report was made on an extremely severe note, but that we basically agreed on the report. We also agreed to place a ubiquitous-specific district. In that district, we should not be satisfied with an international standard or something close to it, and we have to actually acquire an overseas market. To enhance Japanese competitiveness in the ICT field in the future, it is indispensable to support venture businesses that will be or are advancing overseas, especially in development of human resources, in cooperation with academia, government and industry. The manufacturing of terminals is one idea, but end users are attracted to content or applications following such terminals. We should discuss making a platform beginning with such content or applications. Offense as well as defense should be considered for overseas deployment. As a rule, any market should be open, but we should discuss how we defend the market.
- While the parts and components have a high share in the international market, the terminal share is not high. This cause must be analyzed so as not to choose a wrong direction. A target image toward improvement of international competitiveness should be shared to have the same direction comprehensively. In terms of international

standardization, it is impossible for everything to go well with only Japanese technology. Rather, it is extremely important to establish a cooperative structure with foreign countries, with emphasis on how Japanese technology should be incorporated well.

- We agree on the draft interim report that presents the very severe recognition of the ICT industry in Japan and suggests countermeasures based on it.

It is essential to secure global dominance in a high-end market if the aim is for the ICT industry to become the industry leading a global market like the automobile industry. It is extremely significant to enter the western market consisting of ICT advanced countries. Looking ahead five or ten years, we should make a high-end market while increasing Japanese software power, and we should ensure superiority in the high-end market and try to make inroads into the ICT advanced country market. At this time, it is significant to learn from the examples of success and failure, analyze market characteristics and find a means of survival.

The basis of competitiveness enhancement is business. Taking risks, each business should establish a new standard in a severe international market and proceed with technological innovation not only in the product field, but also in the business model field, thus redoubling efforts toward a global market. In the open source software field particularly, international mobilization of excellent human resources has already begun. There is the possibility that human resources can choose a business. Considering that, each business should be prepared to pave a new path while drawing on your imagination positively. Though it is said that content should enter Asian market, countries where internationally popular languages such as English and French are spoken, are negligible.

The government must work together on the approach for enhancement of international competitiveness. It is necessary to establish cooperation not only with MIC, but also with other ministries and agencies, as well as the support of policy makers and the public. It is also necessary to improve the interim report, which contains terms that only experts can understand.

- The interim report is written well as a general statement. In future specific discussions, it is necessary to consider what field or market is targeted and what work priority is determined while evaluating competitors. It is indispensable to have advanced technology in order to acquire international competitiveness. The advanced technology means not only state-of-the-art, sophisticated technology but also price or service quality. MIC should establish strong cooperation with other ministries before implementing policies.

- The industry is prepared to enhance international competitiveness in the ICT field as its own issue. As a communication field characteristic, it is somewhat difficult to achieve unless there is no positive cooperation between the carrier providing services and the government determining competition rules. From such point of view, governmental support is important. Industrial common issues or subjects should be resolved through collaboration among academia, carrier, government and industry. The government should develop and promote a variety of policies strongly on the assumption that other countries are also making approaches for enhancement of competitiveness.

The interim report states that it takes two years to get the basic cycle from step 1 to step 4 off the ground. It is desired, however, to acquire governmental support continuously over several years. In particular, we hope that flexible subsidies will be offered over multiple years for the areas where is too risky for a single business to take advantage of business opportunities. We hope to offer ODA R & D support, easy-to-use financial support by ODA that does not burden other countries, or human resource development support. Standardization activities should be comprehensively discussed and addressed, in terms of technology development, human resource development and standardization policies, so that Japan's technology becomes a world standard. Especially, we hope that NGN will be further supported in formulating a standard.

The minimum condition for enhancing international competitiveness is an equal footing with other foreign competitors. In particular, it is essential to discuss improvement of the competition environment in the market of a developing country not only with WTO, but also with the government concerned. Policies should be considered from a broad point of view in collaboration with MIC and other ministries, as well as among academia, government and industry. International development may cause conflicts of interest among businesses. It is, however, necessary to take action according to a single direction.

- In the short term, aggressive promotion should be conducted in strong cooperation between industry and government, between private sectors, or between ministries, as necessary, with regard to the superiority of Japanese technology actually exemplified as international development, just as with the Japanese digital broadcasting system deployed in Brazil. This will result in further promotion of the broadcasting equipment business or broadcasting terminal business at which Japan is good. In the medium and long terms, it is significant to have the viewpoint of making Japan prosperous in international collaboration in terms of enhancement of international competitiveness through an inter-country game based on Japan's specialized component or parts technology, or merchantability including CE equipment productivity or product planning ability. As a

fundamental scheme for enhancement of international collaboration, it is necessary to internationalize the acquisition of R & D areas, standardization processes or intellectual properties.

- In specific promotion in three major fields, it is necessary to show the full performance of Japan's specialized hardware technology. To achieve this, it is required to clearly show our viewpoint of what system should be provided in the global world. We should recognize that software supports such a viewpoint. We should suggest that the research and development of software interfacing between hardware systems and content should be aggressively rolled out.
- The business models of the current mobile phones have two aspects: one that the vendors have exhausted domestic resources and the other that the vendors have manufactured the world's leading new advanced equipment through the third generation. What carriers can or should do in the future is to use a common platform on a global scale, cooperate with overseas carriers or enter the overseas markets. While keeping superiority in materials or 3G, the vendors must advance in a variety of ways. In that sense, it is necessary to think of cooperation between vendors and carriers as including R & D. Superiority in terminal equipment must be implemented by content or platforms through collaboration with networks. Well-balanced discussions should be conducted. It is also necessary to consider international competitiveness when talking about domestic competitiveness.
- Having a viewpoint of keeping or improving Japan's competitiveness for a long term to make a whole report is desired. It is important to be aware of the nationality, diversity and culture of other countries when addressing a matter. In the television field, a long-term development period is behind the trend of a high-definition grade or flat-screen television. We agree on the opinion that the potential for development in Japan will not be maintained and/or improved unless there are continuous efforts to develop a new method.
- In terms of enhancing the international competitiveness of content, there seems to be no further discussion about simpler handling of rights, development of human resources or rule for decentralization of mass media. Content has so far been discussed in many types of council, panels or working groups in each ministry. There is no wonder that the issue can almost seem talked out. The problem is how the results of the discussions can be implemented. At that time, it is important to choose what organization should be used for implementation. An image of "international competition" should be clarified as well. In the broadcasting industry, Google and Yahoo will be international competitors. The entire

competition in the ICT field cannot be imagined. It should be clarified to continue discussions on the fields to be enhanced or necessary policies.

- This discussion focuses on mobile terminals too much. From the viewpoint of ICT international competitiveness, ubiquitous terminals include RFID and sensor networks, for instance. There is a way of international competition in the platform field for industrial application including traceability, for example. We feel that it is necessary to cooperate with strong Japanese industries, such as the automobile industry, in order to promote a national project.

In the home information appliance field, where Japan is competitive to some extent, it is becoming difficult to use terminals by themselves for competition. It is necessary to discuss how a total solution system should be established using Japanese advantages, such as copyright protection, security or technical reliability. Working with the government, industry and academia to realize education for ICT human resources is desired.

- It is essential to make a world-class Japan brand. Japan brands in ICT are broadband & ubiquitous computing. Core raw materials would be optical fiber, mobile phones and digital equipment. In making a Japan brand, it is important to systematize not only a single product, but also components, terminals or content, and make an approach as a total strategy according to a regional demand including improvement of sales channels or marketing. It is indispensable to analyze Japan's advantages and disadvantages and the world market toward creation of a final report and then to narrow down a specific target as to how a Japan brand should be built and developed or what scheme is made to support such a brand through further discussions.

- It is necessary to again clearly define what international competitiveness is. It is essential to clarify what gaps exist between the ICT world in 5 years, 10 years or 20 years, the current Japanese potential, and how the gaps are bridged in order to set a strategic direction. In that situation, the direction will be clarified if the government, industry and academia play their own roles and discover what they should do together in their roles. For the ubiquitous-specific district, we agree on the opinion that we should discover a way of generating a successful experience and developing it horizontally or globally. Speed and the ability to get things done are essential. It is effective for government, industry and academia to work together or for ministries to cooperate. It is necessary to think from a user's point of view in the course of aiming at total optimization, not partial optimization.

(7) The chairman explained that the third meeting would be held in April, after which he closed the meeting.