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Summary by the Chair of the "International Conference for Asia Broadband Strategy" and the Report of the "Study Group for the Asia Broadband Program" Announced

With the target of transforming all of Asia into a global information hub, in collaboration with other Asian countries, through information origination toward the rest of the world and the rapid increase of information distribution within the region reflecting Asian cultural diversity, MPHPT has been holding the "International Conference for Asia Broadband Strategy" (Chair: Mr. USHIO Jiro, Chairman and Chief Executive Officer, Ushio Inc.) and the "Study Group for the Asia Broadband Program" (Chair: Mr. GOTO Shigeki, Professor, Department of Information and Computer Science, Waseda University), in order to deliberate necessary measures for creating a broadband environment within the Asian region. After a series of meetings, the Conference compiled the "Summary by the Chair" and the Study Group also compiled its report.

1. Background

With regard to the "Asia Broadband Program" directed under the "e-Japan 2002 Program" (adopted on June 18, 2002 by the Advanced Information and Telecommunications Society Promotion Headquarters: IT Strategic Headquarters) and the "Basic Policies for Economic and Fiscal Policy Management and Structural Reform 2002" (Cabinet Decision of June 25, 2002), MPHPT held the "International Conference for Asia Broadband Strategy" (Chair: Mr.

USHIO Jiro, Chairman of Ushio, Inc.) as a forum for proposing basic guidelines in developing the "Asia Broadband Program," hosted by the Minister for Public Management, Home Affairs, Posts and Telecommunications. At the same time, MPHPT held the "Study Group for the Asia Broadband Program" (Chair: Prof. GOTO Shigeki, Waseda University), hosted by Vice-Minister for Policy Coordination TSUKIO Yoshio, Ph.D., as a forum for deliberating an Action Plan in order to develop specific

content of the Plan and to achieve the goals of the Plan, based upon proposals of the "International Conference for Asia

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Broadband Strategy."

On December 16, 2002, at the second meeting of the "International Conference for Asia Broadband Strategy," the report from the "Study Group for the Asia Broadband Program" was recognized as appropriate and the "Summary by the Chair" was adopted.

2. Future schedule

MPHPT will, paying due respect to those "Summary" and "Report," develop the "Asia Broadband Program" within FY2002.

The "Summary by the Chair" is as follows:

[Unofficial translation]

Summary by the Chair

December 16, 2002

International Conference for Asia
Broadband Strategy

The Advanced Information and Telecommunications Society Promotion Headquarters --IT Strategic Headquarters, headed by Prime Minister KOIZUMI Junichiro-- decided that the "Asia Broadband Program" should be formulated within FY2002 as one of the concrete policy measures toward the "realization of an internationally-balanced IT society such as construction of international Internet networks" as clearly stated in the "e-Japan Priority Policy Program – 2002" (adopted on June 18, 2002).

The International Conference for Asia Broadband Strategy convened by Mr. KATAYAMA Toranosuke, Minister for Public Management, Home Affairs, Posts and Telecommunications with the purpose of contributing to the formulation of the "Asia Broadband Program," has been deliberating thereon. The Conference today compiled the results of a series of deliberations as the following summary:

1. Basic recognitions, etc.

(1) Basic recognitions at this Conference

a) Each country/economy in the Asian region has a rich diversity in various ways such as geographical, social, economic, cultural and linguistic aspects, while at the same time maintaining closer relationships with each

other. In recent years, active business deployment of the companies in each country/economy in Asia and vigorous international exchanges/moves, etc. of people have in progressed. In addition, joint efforts across borders have been carried out, as exemplified by moves toward conclusion of FTAs, etc. and symbolized by the success of the 2002 FIFA World Cup™ Korea-Japan.

b) Asia is also one of the world's leading regions in terms of broadband. The diffusion rates of broadband in Hongkong, Japan, the Republic of Korea and Taiwan are ranked high in the leading countries/economies of the world. Furthermore, Japan has become a country that offers broadband services (DSL) at the world's most inexpensive price level.

c) The advantages of broadband platforms are "constant connection" and "flat rates." Broadband platforms provide people with a new environment, thus dramatically overcoming time/space restraints in social communications compared with the past. Broadband platforms with such features will contribute to improvement of the quality of life, stimulation of creative activities, invigoration and improved efficiency of corporations, NGOs, administrations, etc. They will also contribute to the shared understanding of a broader range of diversified cultures, promotion of science, etc., and encourage further development of society, economy and the cultures of Asia. In particular, the significance of facilitating cross-border activities and exchanges is highly appreciated.

d) However, from the viewpoint of sufficient utilization of such effects of broadband, Asia as a whole is still in a developing stage. Even in countries/economies with comparatively higher diffusion rates of broadband, some point out that it is difficult to say that available circuit capacities are fully utilized because of insufficient broadband demand. Meanwhile, in developing countries/economies, the most urgent task is to construct basic and conventional telecommunications infrastructures, let alone broadband. The digital divide still remains intact.

At present, the amount of international information distribution among

the countries/economies in the Asian region is small in comparison with those in the North American and European regions. While trade amounts between the tripolar hubs of Asia, North America and Europe are nearly equal, the amounts of information distribution between the "Asian and North American regions" and the "Asian and European regions" respectively are extremely smaller than those between the "North American and European regions."

e) In Asia, henceforth, it is considered that the cross-border activities of individuals, corporations, NPOs, etc. will gain much more significance through FTAs, etc. Thus, further development of societies, economies and cultures should be encouraged as an axis of such invigorated activities.

Broadband will be one of key infrastructures for development of such an Asia in the 21st century. In order to utilize the effects of broadband to the fullest through introduction and diffusion of broadband, countries/economies in Asia are requested to make efforts to implement measures for constructing network infrastructures and promoting their use, as well as for closing the international digital divide.

The results of these efforts will be extremely meaningful in that multifaceted activities would flourish, the amounts of information distribution within the Asian region and between Asia and the rest of the world would increase, and Asia would become one of the key information transmission bases (international ICT hubs).

f) In the years ahead, it is vital that such common recognitions be shared and mutually concerted actions be taken by citizens, governments, private companies, NPOs, and international organizations, etc. in Asian countries/economies.

(2) This time, the Study Group for the Asia Broadband Program, established by MPHPT for the purpose of deliberating details of the "Asia Broadband Program," has compiled its outcome as a report [see annex]. This Conference, based on the above-mentioned basic recognitions under (1), hereby understands the contents of this "Report" as appropriate.

2. Proposals

This Conference, based on the report of the "Study Group for the Asia Broadband Program," hereby proposes the following:

(1) Goals

Upon promotion of introduction/diffusion of broadband in Asia, setting 2010 as a tentative target year, a common goal in Asia is to invigorate information distribution within the Asian region and make the Asian region as a whole a global information hub. Specifically, paying respects to the diversity of Asia, it is appropriate that domestic efforts and international support be directed at, for instance, the following goals:

- 1) In each country/economy in Asia, the goals on the number of broadband users, etc. for each country/economy should be set forth at the earliest possible stage. When targets already exist, the targets are to be achieved ahead of schedule. Thus, people in Asia should be allowed to have access to broadband including access from various public facilities, and to use applications utilizing broadband advantages to the fullest (e.g., e-governments at central and local levels, distance learning, etc.).
- 2) In response to broadband diffusion in Asia, construct international intra-regional broadband networks with sufficient bandwidths for directly linking countries/economies in Asia.
- 3) Increase amounts of information distribution (network bandwidth) between "Asia and North America" and "Asia and Europe" to the same level as those between "North America and Europe."
- 4) Facilitate transition of IPv4 networks to IPv6-ready networks in Asia.
- 5) Digitalize and archive cultural assets in Asian countries/economies, share them via broadband and transmit them to the rest of the world.
- 6) In order to encourage economic activities and human resources exchanges, etc. among Asian countries/economies, develop machine translation technologies, etc. suitable for the multilingual environment in Asia.
- 7) With regard to human resources development, drastically increase the number of engineers/researchers in the ICT field. To this end, establish

ICT training centers in each Asian country/economy, especially Japan should make efforts to at least double the number of trainees to be accepted and that of experts to be dispatched.

(2) Measures to be taken

In order to contribute to achievement of the above-mentioned goals under (1) through facilitation of broadband introduction/diffusion, it is vital to i) construct network infrastructures, ii) stimulate user demand for attractive broadband applications and digital content, etc., iii) prepare common key infrastructures including legal schemes and technologies, etc. for ensuring secure and smooth use of broadband, and iv) foster human resources and promote exchanges of human resources. Measures should be taken from these viewpoints.

In this case, each government including the Japanese Government, private corporations, NPOs, international organizations, etc. should make concerted efforts in a well-collaborated manner.

a) Major policies

- 1) Developing the national strategy, legal platform, policy and appropriately enforcing them

Preparation of network infrastructures in each country/economy in Asia should, in principle, be led by the private sector. To complement such endeavors, it is essential for each government, etc. to develop a national strategy including the setting forth of goals, legal platforms, etc. such as pro-competitive policies, and to appropriately enforce these. In order to support those efforts and cooperate thereon, it is vital to specify priority countries/economies, further strengthen existing measures for dispatching missions to conduct policy dialogues, etc., experts, etc. as well as to implement these programs in a comprehensive and well-organized manner.

- 2) Preparation of international network infrastructures

It is anticipated that international traffic will sharply increase along with diffusion of domestic broadband in each country/economy. In response to such traffic increase, it is critical to prepare international broadband network infrastructures, international IXs, and hubs suitable for these in Asia. To this end, in addition to R&D on key technologies, etc., relevant private providers, etc. in collaboration with governments, etc.

should facilitate such preparation on the basis of international harmonization and cooperation.

- 3) Preparation of network infrastructures in developing countries/economies

It is vital to prepare network infrastructures in developing countries/economies and rural areas, from the viewpoint of bridging the digital divide. It is desirable that IP networks including broadband, which can realize lower-priced IP telephony service, be prepared. Because IP networks cannot be sufficiently prepared by private businesses, it is indispensable for public organizations, etc., including governments and international organizations, to support such efforts. To this end, the official development assistance (ODA) budget, etc. should be further increased.

- 4) Facilitation of transition to IPv6

In response to the diffusion of broadband in each country/economy in Asia, the transition of networks to IPv6-ready ones becomes an important task. Each government should i) set forth goals concerning introduction/diffusion of IPv6-ready networks, ii) promote the transition to IPv6, iii) stimulate demand for IPv6 through R&D/verification experiments pertaining to IPv6-ready applications, digital content, ICT equipment, etc., and iv) carry out awareness campaigns through the holding of international fora, etc. for deepening understanding on IPv6. Furthermore, closer relationships among sectors, including governments, private businesses, NPOs, etc., should be established.

- 5) Development and commercialization of network technologies

Considering the reality of Asia--dotted with areas in which fiber-optic networks are hardly laid because there are many mountainous areas and islands--new infrastructure technologies suitable for Asia should be developed and put into practical use, such as fiber-optic, satellite communications technologies, including the ultrahigh-speed Internet satellite (WINDS: Wideband InterNetworking engineering test and Demonstration Satellite) and Quasi-Zenith Satellite System, and other radio communications technologies, etc.

- 6) Preparation of technologies/rules comprising broadband platforms

In order to facilitate distribution of digital content over broadband platforms, i) rulemaking concerning intellec-

tual property rights, etc. should be established with appropriate applications, ii) security measures should be actively promoted through verification experiments on authentication technologies, etc.

Furthermore, standardization of technology in Asia should be actively carried out.

- 7) Preparation of infrastructures for international collaboration (testbeds, etc. for application development, etc.)

Preparation of an international broadband testbed for technological development and verification experiments pertaining to broadband, including applications, digital content, ICT equipment, etc. among researchers in Asian countries/economies through use of the ultra-high-speed Internet, should be promoted as a broadband infrastructure for international collaboration.

- 8) Promotion of applications utilizing broadband

In order to encourage the introduction/diffusion of broadband and utilize broadband to solve problems, various applications utilizing broadband features such as transmission of video with realistic sensations should be promoted.

To this end, public applications such as distance learning systems linking educational institutions, etc. in Asia, e-governments at central and local levels contributing to improved transparency, etc. of administration, e-commerce, international exchanges, etc. should be actively promoted by each country/economy. At the same time, international support and cooperation through technical cooperation, international joint projects, etc. are to be carried out.

- 9) Digital archives of cultural assets in Asia

The diversified cultures formulated in the long history of Asia are not only Asian assets but also the world's assets. It is vital to preserve and utilize these for a long time, from the viewpoint of deepening the mutual understandings of different cultures and invigorating/developing local economies. To this end, it is vital to promote the construction of "digital archives," including virtual museums archiving the cultural heritage, traditional performing arts, films of Asian countries/economies, etc. An environment should be prepared in which such archives can be shared via broadband by people in Asia and the rest of

the world, actively presenting attractive Asian cultures. Governments and international organizations should actively support such activities through ODA, etc.

- 10) Efforts to respond to the multilingual environment in Asia

In Asia, there are many languages. In some cases, the multilingual environment in the Asian region may become an obstacle to mutual exchanges and the provision/acquisition of important information. To this end, R&D on machine translation/retrieval technologies between multiple languages in Asia should be promoted.

- 11) Human resources development/exchanges in the broadband age

Considering the current status that Asia lacks human resources in the ICT field, it is vital to make greater effort than before to carry out human resources development and exchanges through technology transfer, including ICT engineers and researchers with advanced and specialized knowledge and skills.

Specifically, governments and international organizations should drastically expand efforts to hold training courses and dispatch experts focusing on broadband, actively promote additional construction of ICT training centers, etc. in Asian countries/economies and support for such efforts. In addition, efforts at various levels including the private sector, NPOs, etc. should be strengthened and collaboration with each other intensified.

- 12) Bridging the digital divide

Considering the significance of bridging the digital divide, toward developing countries/economies and rural areas, developed countries and international organizations should further accelerate and expand efforts to support them through assistance by official funds such as ODA, etc.

Japan's ODA has been conducted on a request basis from recipient countries/economies. Some point out that Japan's ODA has many problems such as lack of functions for sustainable development, and fewer economic development effects. Thus, transition of ODA from a request basis to an active project-forming scheme should be considered. When considering the significance that networks link Asian countries/economies, Japan should actively offer ODA to multiple countries/economies, currently being treated as a few exceptions. In ad-

dition, implementation of ODA projects utilizing information and communications technologies, such as distance learning, telemedicine, etc. should be actively promoted.

In particular, at the G8 Kyushu-Okinawa Summit meeting held in July 2000, the Japanese government stated that Japan would prepare a comprehensive cooperation package with a total of about 15 billion dollars. Japan should steadily implement the package toward achievement of the goals.

- b) With respect to other initiatives, these should be implemented in line with the report of the "Study Group for the Asia Broadband Program."

As regards details of individual concrete initiatives, it is appropriate that these be studied further.

- c) Deliberations at this Conference cover the Asian region to date. It is appropriate that initiatives applicable to island countries in the Pacific should be promoted.

- (3) On the "Asia Broadband Program"

- a) An action plan of the Japanese government, the "Asia Broadband Program," should be formulated within FY2002 in accordance with (2) above.
- b) With regard to implementation of the "Asia Broadband Program," taking into consideration that the IT comprehensive cooperation package of the G8 Kyushu-Okinawa Summit for bridging the digital divide states cooperation with official funds of a total of about 15 billion dollars within a five-year term, Japan should implement priority initiatives listed in 1) through 12) above during three years from FY2003 through FY2005.
- c) Upon implementation of the "Asia Broadband Program," international promotion schemes should be prepared, including utilization of the existing schemes, such as the Japan-China-Korea ICT Ministerial Meetings, ASEAN + 3, Asia Pacific Telecommunity (APT), Asian-Pacific Economic Cooperation (APEC), the Asian Info-communications Council (AIC), etc. In addition, in Japan a system for implementing those initiatives should be prepared including those for private companies, etc.

3. In conclusion

In order to prepare broadband environments in the Asian region, it is critical that Japan take leaderships in many aspects including implementation of the "Asia Broadband Program."

For example, the World Summit on the Information Society (WSIS) will be

held in December 2003 and in 2005. At a WSIS Asian regional conference to be held in Tokyo in January 2003, it is considered vital that Japan introduce proposals for gaining the understanding of Asian countries/economies, thus, contributing to WSIS. WSIS, a United Nations event, is a good opportunity to present the "Asia Broadband Program,"

an Asian initiative for constructing a broadband environment, to the world and to contribute to development of the world. We sincerely desire that these proposals and the "Asia Broadband Program" will lead to prosperity, peace and stability of Asia and the world.

Advanced Radio Technology Symposium 2002 Held

-- UWB (Ultra-Wideband) wireless system --

MPHPT, under the joint auspices of the Communications Research Laboratory (CRL), Independent Administrative Institution and the Association of Radio Industries and Businesses (ARIB), held the "Advanced Radio Technology Symposium 2002" on December 9, 2002, under the theme of ultra-wideband (UWB) wireless system.

For details refer to the Japanese web site

http://www.soumu.go.jp/s-news/2002/021120_2.html

Along with the serious shortage of available frequencies, MPHPT has been implementing measures for promoting efficient use of radio spectrums so that frequency resources can be provided on a stable basis.

The objective of this symposium, as one such policy measure, is to promote efficient development of frequency resources through presentations and lectures on the latest trends, etc. in advanced radio use technologies by front-line policymakers, researchers, etc. from Japan and overseas.

At this symposium, under the theme of "UWB (Ultra-Wideband) wireless system," the following lecturers were invited:

- Dr. Michael J. Marcus, Associate Chief for Technology, Office of Engineering and Technology, Federal Communications Commission (FCC), the U.S.
- Dr. Robert J. Fontana, President, Multispectral Solutions, Inc.
- Prof. Maria-Gabriella Di Benedetto, University of Rome La Sapienza
- Prof. KOHNO Ryuji, Ph.D., Division of Physics, Electrical and Com-

puter Engineering, Graduate School of Engineering, Yokohama National University, and UWB Technology Group of CRL

- Dr. WAKANA Hiromitsu, Director, Yokosuka Radio Communications Research Center, CRL

Dr. Marcus and Dr. Fontana introduced various aspects of UWB radio communications systems in the U.S., including policy matters, case studies, applications, etc.

Prof. Benedetto presented Ultra-Wideband Concepts for Ad-hoc Networks (UCAN), a Research and Technological Development (RTD) Project sponsored by the EU's Information Society Technologies program (IST-Program) of the Fifth Framework Programme (FP5), and a study on UWB radio communications systems at the University of Rome La Sapienza.

Prof. KOHNO explained R&D trends

of UWB radio communications systems and necessity for introduction thereof in an easy-to-understand manner. Dr. WAKANA introduced the latest progress in research on radio communications systems such as UWB, High Altitude Platform System (HAPS) and Intelligent Transport Systems (ITS) at CRL.

This symposium with some 300 participants surpassing the official capacity of seats showed the high interest in UWB radio communications systems. Lecturers gave valuable and informative presentations on UWB radio communications systems. MPHPT expects this symposium to encourage deliberations on introduction of UWB radio communications systems in Japan, at the same time, MPHPT will continue to implement measures for promoting efficient use of radio spectrums.



OECD Secretary-General Donald Johnston Pays Courtesy Visit on Senior Vice-Minister KATO

On December 6, 2002, Mr. Donald Johnston, Secretary-General, the Organization for Economic Cooperation and Development (OECD), paid a courtesy visit on Mr. KATO Norifumi, Senior Vice-Minister for Public Management, Home Affairs, Posts and Telecommunications, Member of the House of Councilors. At the meeting, the Senior Vice-Minister and the Secretary-General exchanged opinions on information and communications fields in Japan.

The outline of the meeting was as follows:

1. At first, Senior Vice-Minister KATO referred to the Economic Survey of Japan 2002 of the Economic and Development Review Committee (EDRC), that states "In the network sectors, the regulatory framework is most advanced in the telecommunications sector. In some segments strong competition has developed and prices have come down from levels which were around the highest in the OECD area." He expressed thanks to

the Secretary-General that OECD appreciated policy measures including such pro-competitive policies as collocation and unbundling in Japan's telecommunications field and promoted competition/rate reductions as a result of those pro-competitive policies. Then, Senior Vice-Minister KATO explained the current status of sharp decrease in charges for broadband and drastic increase in the number of broadband users by presenting graphs, etc.

Secretary-General Johnston, in response to the explanation, commented that Japan's achievement and progress in diffusing broadband is very impressive and will encourage such endeavors around the world.

2. Then, the Senior Vice-Minister introduced the Asian Regional Conference for the World Summit on the Information Society (WSIS) (to be held in January 2003 in Tokyo) and the "Asia Broadband Program" to the Secretary-General. In particular, Se-

nior Vice-Minister KATO explained that the "Asia Broadband Program" is an initiative for promoting information transmission from the Asian region and contributing to the development of the Asian region. He added that the progress report of deliberations on the Asia Broadband Program will be presented at the WSIS Asia Regional Conference and the OECD-APEC Global Forum to be held in Hawaii immediately after the Asia Regional Conference, so that a broader range of opinions will be exchanged.

3. Furthermore, both sides exchanged opinions on the establishment of the Postal Services Corporation, a new government-owned public corporation.
4. In closing the meeting, the Senior Vice-Minister and the Secretary-General confirmed that collaborative ties between the two parties shall be further strengthened.

Economic Survey of Japan 2002 (excerpt)

Regulation of network sectors needs to be further developed with attention given to enforcement and appropriate staffing of the regulatory authorities

In the network sectors, the regulatory framework is most advanced in the telecommunications sector. In some segments strong competition has developed and prices have come down from levels which were around the highest in the OECD area. Lower prices will help the government in its policy to promote the use of information and communications technologies. A more complex and competitive market is, however, highlighting regulatory issues that need to be addressed. The abuse of dominant market position by the incumbent remains a problem, requiring greater use of ex ante measures and stronger powers of investigation. Above all, more effective enforcement is required. It is also evident that the regulator (in this case the previous Ministry) needs to respond to the evolving market by hiring specialists rather than relying on rotation within the civil service. This issue will also be important in the electricity and gas sectors where deregulation is much less advanced and is one consideration the other being the need to clearly establish impartiality in moving to independent regulators. Lack of progress in the electricity sector stems from the excessive influence by the existing integrated companies over the government's policy-forming bodies. In all the network sectors, structural measures to establish competition must remain on the agenda. Continued prudential-vigilance may also be required to address problems in the insurance sector and the development of the capital markets should be promoted.

