

MPHPT

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COMMUNICATIONS NEWS

Biweekly Newsletter of the Ministry of Public Management, Home Affairs, Posts and Telecommunications, Japan

Second Meeting of the World Summit on the Information Society Preparatory Committee (PrepCom 2) Successfully Concluded

1. Participants

The Second Meeting of the Preparatory Committee for WSIS (PrepCom-2) gathered more than 1500 participants representing 146 Member States and numerous international agencies, in addition to business and civil society entities. From Japan, five people participated, including Mr. NOGAWA Yasuaki, Ambassador, Permanent Representative, Permanent Mission of Japan; Mr. ISHIDA Naohiro, Director-General, International Affairs Department, MPHPT; Mr. AIZU Izumi, Executive Research Fellow, GLOCOM -- Center for Global Communications; Mr. HAYASHI Toshihiko, Professor of Economics, the University of the Air.

The Conference concluded with two working documents for a draft declaration and action plan.

2. Organization, etc.

- (1) The Subcommittee 2 was set up for deliberating upon two working documents for the draft WSIS Action Plan and draft WSIS Declaration. Mr. NOGAWA was elected as Chairman of the Subcommittee 2.
- (2) During PrepCom-2, from February 17 through 19, reports from the regional preparatory conferences were made, and a Visionary Panel, eight multi-stakeholder thematic round tables, etc. were took place. The Subcommittee 2, etc. were held from February 20.

3. Outline of PrepCom-2

- (1) February 17: Reports from the five regional preparatory conferences were made. Director-General ISHIDA gave a presentation on the outcomes of the Asia-Pacific Regional Preparatory Conference held in Tokyo.
- (2) February 17: At the Visionary Panel, President Ion ILIESCU of Romania, President Maître Abdoulaye WADE of Senegal, Professor HAYASHI, Mr. Lawrence Lessig, Professor of Law at Stanford Law School (the U.S.), etc. were attended as panelists, and discussed the future picture of the information society.
- (3) February 18 and 19: Eight multi-stakeholder thematic roundtables (ICT infrastructures, regulatory frameworks, ICT applications, human capacity building, etc.) were held. Professor HAYASHI participated as a panelist.
- (4) February 20 through 28: Subcommittee 2
 - i) A working group was set up, and started to work on the establishment of a general structure for the draft Declaration of Principles and Action Plan of WSIS.
 - ii) Subcommittee 2 approved this general structure on February 21, 2003, as a basis for further work. At PrepCom-2 it was agreed upon to continue to scrutinize and deliberate the general structure until PrepCom-3 (to be held in September 2003).
 - iii) The draft Declaration is basically

the compilation document on the outcomes of regional conferences. The draft Declaration basically covers the content of the Tokyo Declaration. Japan will contemplate content of the general structure for the draft Declaration of Principles and Action Plan of WSIS in order to develop Japan's inputs to WSIS. Then, Japan will work stakeholders to reflect

CONTENTS

- Second Meeting of the World Summit on the Information Society Preparatory Committee (PrepCom 2) Successfully Concluded ----- 1
- "Japan-EU Bilateral Consultation" and "Japan EU ICT Symposium" Held ----- 2
- "Study Group on Optimal Area Construction for Cellular Telephone Services" Announces Report ----- 3
- Communications Usage Trend Survey in 2002 Compiled ----- 6
- "Study Group on Desirable Next-Generation R&D Networks toward Ubiquitous Network Age" Held ----- 7

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Japan's inputs upon adopting the Declaration of Principles and Action Plan of WSIS.

4. Schedule

(1) An unofficial meeting will be held

before PrepCom-3.

(2) PrepCom-3 will be held in September 2003, in Geneva, Switzerland.

"Japan-EU Bilateral Consultation" and "Japan EU ICT Symposium" Held

MPHPT and DG Information Society of European Commission held the "Japan-EU Bilateral Consultation" on March 4, 2003, and the "Japan EU ICT Symposium" on March 5, 2003, in Tokyo, for the purpose of promoting mutual understanding and strengthening cooperative ties between Japan and the EU. Both parties exchanged information at these events.

At the "Japan-EU Bilateral Consultation," both sides exchanged opinions on "ICT policies and action plans of Japan and the EU," "pro-competitive policies," "mobile communications," "digitalization of broadcasting" and "digital rights management," and "Japan EU R&D cooperation in the field of ICT." Japan and the EU agreed to further build closer relationships between the two sides.

At the "Japan EU ICT Symposium," under the theme of "Japan EU cooperation towards Information Society for all," officials of the two governments gave keynote speeches, and presentations and panel discussions were made among leaders from government/industry/academic circles. The participants from Japan and the EU reached a conclusion that toward realization of a global information society both sides shall

encourage pro-competitive policies in the ICT field.

1. Japan-EU Bilateral Consultation [Chairs]

Japan: Mr. NABEKURA Shinichi, Vice-Minister for Policy Coordination
EU: Mr. Fabio COLASANTI, Director-General of the DG Information Society, European Commission

[Outline of results]

- 1) ICT Policy and Japan EU Action Plan
Both sides exchanged information on strategies such as Japanese "Desirable IT Strategy for the Future" and EU policy based on "e-Europe Action Plan 2005". We agreed on maintaining cooperation and the exchange of opinions on the points of accelerating utilization of established infrastructures hereafter, promoting establishment of circumstance of investment and creation of employment and attaining opportunities for participating the Information Society using ICT to all.
In addition, both sides exchanged opinions on progress situations of Japan EU Action Plan in ICT Field.

We agreed on continuing the exchange of opinions on the concrete measures for the future with confirming outcomes up to the present.

2) Pro-competitive policy

Both sides exchanged information on the improvement of competition policies, such as the revision of the Telecommunications Business Law and the review of interconnection rule in Japan and new telecommunications regulatory package, such as the statuses of transferring the domestic laws in each member countries. We agreed on maintaining cooperation in order to further promote competition in the telecommunications field.

3) Mobile Communications

Both sides exchanged information on the current condition of 3G mobile systems and the perspective on 4G mobile systems. We agreed the exchange of opinions on the points such as research and developments and standardization with maintaining cooperation between governments and industries.

4) Digitalization of broadcasting



Japan-EU Bilateral Consultation

Both sides exchanged information on policies and the current status of digitalization of broadcasting in the two countries and agreed to carry out a further exchange of opinions between the two countries.

- 5) Digital Rights Management (DRM)
Both sides exchanged information on the promotion of content distribution and issues of digital rights management and future views towards the development of broadband and agreed to carry out a further exchange of opinions between Japan and EU.
- 6) Japan EU R&D Cooperation in the

Field of ICT

Both sides exchanged information on the current status regarding R&D in the field of ICT and agreed to carry out a further exchange of opinions between Japan and EU.

2. Japan EU ICT Symposium

[Participants]

<Government officials>

Japan: Mr. NABEKURA Shinichi, Vice-Minister for Policy Coordination, MPHPT, and others

EU: Mr. Fabio COLASANTI, Director-General of the DG Information Society, European Commission, and others

<Other participants>

Telecommunications carriers, manufacturers, etc. from Japan and the EU (about 150 people)

[Theme]

Japan EU cooperation towards Information Society for all

[Outline of results]

Both governments presented keynote speeches about the status of the ICT strategy and the pro-competitive policy and discussed on a panel with industries.

We agreed to maintain the pro-competitive policy in the ICT field further on the panel discussion.

"Study Group on Optimal Area Construction for Cellular Telephone Services" Announces Report

Since October 2002, MPHPT has been holding the "Study Group on Optimal Area Construction for Cellular Telephone Services" (Chair: Mr. TAGAYA Kazuteru, Vice-President for Education, Chiba University). The Study Group compiled its findings as a report, entitled "Optimal Area Construction for Cellular Telephone Services," and MPHPT

announced the report on March 10, 2003.

With respect to area construction for cellular telephone services to date, cellular telephone carriers are, in principle, setting up service areas. In the course of setting up service areas, the central government and local governments, when necessary, play supplementary

roles for steadily and sequentially setting up service areas. In less-populated areas, etc., however, there still are a considerable number of areas not covered by cellular telephone services. This Study Group has been conducting research on optimal area construction for cellular telephone services to meet requests for further enhancement of service areas.

On optimal deployment of cellular telephone service areas

(Outline)

Chapter 1. Current situation surrounding cellular telephone services

1. Current level of cellular telephone diffusion

- * The number of cellular telephone subscribers has increased year on year, e.g., from 10.2 million in FY1995 to 73.9 million as of the end of January 2003 (the growth has in general been stagnant in recent years).
- * Of telecommunications service-related traffic, 41.9% of the total has been communications using mobile system terminals. This indicates that a shift to mobile terminal-based communications is on the rise.
- * Looking into the ownership of cellular

lar telephones by their attributes, it is understood that the ownership in municipalities other than major cities, and by senior citizens, the low-income group, self-employed people in the fields of agriculture, forestry and fisheries, and unemployed people are running below the national average.

2. Role of cellular telephone services in society

- * With a rapid progress in diffusion, cellular telephones are finding a variety of applications depending upon specific user requirements, in every scene of their daily lives. The use of cellular telephones especially among young people is motivated by personal reasons.

Also, homes, schools and offices are

the main places where cellular telephone terminals are frequently used.

- * Of the number of emergency calls made to the police (number 110 in Japan), calls from cellular telephones are increasing their proportion (21.8% in FY1996 to 49.7% in FY2001).
- * In local public entities, administrative information and other administration services in many fields, including disaster prevention and welfare, can be obtained by using cellular telephones.

3. Trends in introduction of third-generation cellular telephones (IMT-2000)

The IMT-2000 goes into full-scale commercial operations from October 2001. Presently, services are available

from NTT DoCoMo, KDDI and J-Phone groups.

Chapter 2. Current situation of deployment of cellular telephone service areas

1. Progress in deployment as measured by current indicators

- To date, if a municipal government and its branch offices as well as industrial complexes and sightseeing spots therein are all covered for service availability, the entire municipality is deemed as being covered. The coverage ratio is calculated based on the number of such municipalities (“current indicators”).

- In the "e-Japan Priority Program 2002," the numerical target of “increasing by FY2003 the proportion of municipalities of which the main and branch offices are covered within cellular telephone service areas, to over 95%, through the central government’s support in deploying steel towers for mobile communications, in cases where the municipalities deploy the same in less-populated areas, etc.” has been set forth.

The coverage ratio based on current indicators has increased from 92.5% in FY1999 to 94.2% in FY2001.

2. Deployment situation based on re-

gional mesh statistics

- Since easy grasping of the actual deployment situation on the basis of population or area is not allowed by current indicators, the area deployment situation is grasped on the basis of both the regional mesh statistics map and the cellular telephone service area map as prepared from the National Census of 1995.
- Population within an area based on its nighttime population: 123,965,134 (98.7% of all)
- Population within an area based on its daytime population: 124,936,796 (99.0% of all)
- Number of households within an area:

On Optimal Area Construction for Cellular Telephone Services

(Points of the Report)

- To change methods for monitoring the current implementation status of area construction for cellular telephone services (the degree of coverage ratios)

<Before the change>

When municipality halls, branches, industrial parks and all sightseeing spots are covered, it is deemed that a municipality in question is covered as a whole. Based on this assumption, the coverage ratio of municipalities on a basis of the number of municipalities is to be calculated.



<After the change>

The coverage ratio of residential areas can be adequately indicated when referring to the population within an area based on its nighttime population. Based on this assumption, the current implementation status of area construction for cellular telephone services (the degree of population coverage ratios) is to be assessed on a basis of the nighttime population.

- Set forth numerical targets for the population coverage anew

<Less-populated area, etc.>

It is appropriate that a target aiming at enabling additional 100,000 or more to use cellular telephones even in less-populated areas shall be set forth and said target be attained at an earliest possible time before the end of FY2005. Through completion of this target, according to a pro forma calculation, it is thought that more than 90% of population in less-populated areas, etc. will be enabled to use cellular telephones.

<Underground facilities and tunnels, etc.>

With regard to tunnels on highways and national roads, underground stations and shopping areas, it is appropriate that a target aiming at raising the coverage ratio for cellular telephone services to 90% or higher shall be set forth and said target be attained at an earliest possible time before the end of FY2005. As regards other underground facilities and tunnels, it is appropriate that based on trends in assessed demand for the construction of infrastructures for cellular telephone services, the coverage ratio be raised on a flexible basis.

- Propose promotion measures for raising the population coverage ratio

In order to promote construction of service areas, it is effective to reduce operating costs.

i) Utilization of networks maintained and possessed by local public entities

To utilize networks maintained and possessed by local public entities, such as fiber-optic networks for management of public facilities, as wire entrance links for use of cellular telephones

ii) Expansion of wireless entrance, etc.

To ensure wireless links between cell station facilities and switching facilities of cellular telephone service carriers

43,614,036 (98.9% of all)

- Number of meshes within an area: 231,734 meshes (61.1% of all)
- Number of meshes where nighttime population within an area is one or more: 135,375 meshes (86.9% of all)

In less-populated areas, a progress on deployment of cellular telephone service areas is unfavorable when compared to the national average.

Chapter 3. Direction of deployment of cellular telephone service areas

1. Basic concept

- In light of the situation today where cellular telephone services are inseparably related to the daily life of the people, it is expected that cellular telephone services are made available to as many people as possible, but there are still many areas in which the service is not available. For further deployment of service areas, a large amount of costs is needed for deployment and operation of required facilities.
- It is considered that service area deployment will be carried out in areas badly in need of area deployment, by considering anticipated service needs, area deployment costs, substitutability with other communications means, and so on.

2. Involvement of public entities in service area deployment

- Cellular telephone service areas have steadily expanded on the basis of competitive deployment among cellular telephone carriers.
- Meanwhile, there is a situation in which, unlike in densely populated metropolitan areas with a large volume of potential traffic, cellular telephone carriers, who are also private companies, do not find a huge incentive for deployment of service areas in less-populated regions that do not warrant profitability.
- Considering the position of cellular telephone services in the society, although it is a basic rule that individual cellular telephone carriers deploy facilities independently one after another, public entities like national and local governments would also have to play a supplementary role. Government-subsidized and

local government's own projects have been implemented since FY1991 and FY1997, respectively, and they promoted service area deployment in less-populated areas.

3. Estimation of profitability in service area deployment

- If public entities take up a supplementary role in service area deployment, the burden on cellular telephone carriers in deploying cell stations is dramatically reduced.
- Recently, many cellular telephone carriers cannot participate in government-subsidized and local government's own projects, because costs for facilities and operating costs to be borne by cellular telephone carriers are not justified by new revenues anticipated within the area covered by a cell station.
- The number of cellular telephone subscribers that a cellular telephone carrier requires to bring the revenues and expenditures into balance over six years (a deduction period for communications equipment) in installing and operating one cell station for cellular telephone service, is estimated based on model cases.

4. Measures for promoting service area deployment

- Circuit charges for wire circuits as installed by NTT regional companies between a cell station and an exchange of a cellular telephone carrier make up most of cell station operating costs.
- For operating costs, through adoption of measures for alleviating a burden on cellular telephone carriers, the improvement of the balance of payments and turning it into an incentive for business operations is effective as a measure to promote further area deployment.
- Measures for reducing operating costs

(1) Utilization of networks as built and maintained by local public entities

The networks built and maintained by local public entities, including fiber-optics networks for control of public facilities, should be used as wire entrance circuits for cellular telephones.

- In Yamaguchi Prefecture, a model project utilizing the "Yamaguchi Information Supernetwork (YSN)" is implemented.

(2) Expansion of wireless entrance, etc.

This ensures wireless circuits from a cell station to switching facilities of the cellular telephone carrier.

- Other measures
 - Development of less expensive cell stations, etc.
 - Promotion of utilization of cellular telephone services (e.g., utilization of cellular telephone services for delivering administrative information)
 - Review of a charge that cellular telephone carriers are to bear in local government's own projects

5. Future direction of service area deployment

(1) Basic concept

- Cellular telephone carriers are expected to further expand service areas in order to adequately satisfy the users' needs in consideration of the public nature of this service.
- In proceeding with it, it is appropriate that they not only alleviate a facility deployment cost burden in government-subsidized and local government's own projects, but also promote area deployment while cutting down on a burden of operating costs by positively utilizing the networks as built and maintained by local public entities as well as wireless entrance circuits, etc.

(2) Establishment of new indicators and targets of deployment

- In grasping the progress of area deployment in the future, it is appropriate to make the population within an area based on its nighttime population that can appropriately indicate the progress of area deployment within the residential areas, as a new indicator.
- To correct a disparity in area deployment between disadvantaged areas in less-populated areas, etc., it is appropriate to aim at increasing the population within an area in less-populated regions, etc.
- For the length of a period to achieve area deployment targets, it is appropriate to establish deployment targets over a three-year period because, in the long-term view, there are many undefined elements such as a progress in IMT-2000 service area deployment.

- For the deployment target, since the population as covered by a single cell station becomes fewer and fewer with a future progress in service area deployment, it is difficult to dramatically increase the population within an area in a short time. However, it would be appropriate to establish a target of making the service available to over 100,000 new cellular telephone users in less-populated districts, and to achieve the target at the earliest possible date by the end of FY2005 (theoretically, if this target is met, cellular telephone service would be made available to over 90% of the population in less-populated districts).
- The current indicators are not considered as deployment objectives, but it is appropriate to continue to monitor the situation through the current indicators.

Chapter 4. Direction of radio frequency (RF)-shielding measures

1. History of RF-shielding measures

- The cellular telephone service would have to be made available in enclosed areas like expressway tunnels or underground shopping arcades so that it can contribute to the advancement and diversification of people's daily lives, including improved convenience for road users, from the standpoint of optimal use of radio waves.
- Since FY1993, enclosed or underground areas have been added as the subject areas for steel towers construction projects for mobile communications, and RF-shielding measures have been taken for them. From FY1999, enclosed or underground areas have been developed as RF-shielding projects by using the Spectrum User Fees as the financial re-

source.

2. Current status of deployment

- Highway tunnels
Expressway tunnels: 73.3%
Tunnels on roads under direct national control: 83.3%
- Underground shopping areas: 84.2%
- Underground railway stations: 58.9%

3. Future direction of deployment

For expressway tunnels and tunnels on roads under direct national control, underground railway stations and shopping areas, over 90% deployment is intended for achievement at the earliest possible date by the end of FY2005. For other enclosed or underground areas, it is appropriate to promote deployment in consideration of future trends, such as demand for deployment.

Communications Usage Trend Survey in 2002 Compiled

MPHPT has compiled the Communications Usage Trend Survey as of the end of CY2002 in order to grasp the usage trends in telecommunications and broadcasting services within households (those making up households), offices (establishments) and companies (enterprises).

[Highlights of the survey results]

- The second largest number of Internet users
The number of Internet users was 69.42 million, an increase of 13.49 million over the previous year. This number is the second largest following the U.S.
- The population coverage rate surpassed the 50% line for the first time. The population coverage rate was 54.5%, growing by 10.5 percentage points over the previous year
- The population coverage rate rose from the 16th rank in 2000 to the 10th.

[Main points]

- The household coverage rate of the

Internet drastically increased.

The household coverage rate of the Internet drastically increased by 20.9 percentage points over the previous year to 81.4%.

- The household's usage rate of broadband networks doubled.

Broadband circuits as access methods to the Internet at home doubled from 14.9% in 2001 to 29.6%.

- The digital divide still exists.

The Internet penetration rates of all groups (by age, income, gender and size of municipality) grew by comparison to the previous year; however, disparities among age groups were still large. Complaints/grievances from individuals on the Internet that ranked high were security-related matters.

As for complaints/grievances, the top spot was held by privacy protection (54.1%), viral infection (41.4%) being in second place.

- The reason why some consumers do not use the Internet was "there is no need."

The top reason was "there is no need,"

followed by "difficult to operate PCs, etc." (23.4%), "anxiety about privacy protection" (14.8%).

- About 30% of individuals suffered harm.

Upon access to the Internet from PCs, 28.8% of users suffered harm, such as viral infection, unwanted e-mails, etc. When looking into specifics, the top spot (20.7% of the total users) was filled by "viral detection/infection."

- About three-fourths of enterprises suffered harm.

Upon use of ICT networks, 76.2% of enterprises suffered harm, such as viral infection, unauthorized access, etc. When looking into specifics, the top spot (75.0% of the total enterprises) was filled by "viral detection/infection."

<Outlines of the survey>

The "Communications Usage Trend Survey," which is composed of the following 3 sections: "Households," "Offices (establishments)" and "Companies (enterprises)," has been conducted annually since 1990* as a statistical survey

authorized by MPHPT in accordance with the Statistical Report Coordination Law. In 2002, the survey was conducted as indicated in Table [Details of the survey]:

(*The section "Companies (enterprises)," which was conducted as the annual survey on "Corporate Networks" in 1993, 1995 and 1996 separately, has been added in 1997 as a section of "Communications Usage Trend Survey.")

[Details of the survey]

	Households	Offices (Establishments)	Companies (Enterprises)
Survey period	As of December 2002		
Survey area	Nationwide	Nationwide	Nationwide
Object samples surveyed	Households (including single households) headed by someone aged 20 or older as of April 1, 2002	Establishments with more than 5 regular employees excluding the industries of "Postal Services" and "Telecommunications" as defined in JSIC	Enterprises with more than 100 regular employees, excluding the industries of "Agriculture," "Forestry," "Fisheries" and "Mining" as defined in JSIC.
Number of samples	6,400	5,600	3,000
Effective replies (Rate)	3,673 (12,175 people) (57.4%)	2,739 (48.9%)	1,994 (66.5%)
Items surveyed	Communications usage trend		
Sampling Method	Random sampling (Stratified Two-stage Sampling on city, town or village status)	Random sampling (Systematic Sampling on regular employee size for each industry)	Random sampling (Systematic Sampling on regular employee size for each industry)
Method of survey	Mail survey (real mail)		

Note: "JSIC" stands for "Standard Industrial Classification for Japan."

"Study Group on Desirable Next-Generation R&D Networks toward Ubiquitous Network Age" Held

On February 28, 2003, MPHPT convened the "Study Group on Desirable Next-Generation R&D Networks toward Ubiquitous Network Age" for the purpose of deliberating upon comprehensive promotion measures toward construction of the next-generation R&D networks, which will comprise a key infrastructure of ubiquitous networks.

1. Backgrounds and purposes

With respect to future evolution of networks, it is anticipated to head toward "ubiquitous networks" which will bring about drastic improvements in terms of convenience and reliability, through deployment of broadband platforms utilizing optical technologies, full-scale shift to IPv6-ready networks, combination with consumer electronics with ICT functions, ultrasmall chips, etc. A new ICT society will be realized by the ubiquitous networks, so it is essential to further enhance network-related technologies and fully utilize networks to realize multifaceted applications anticipated for the age of "ubiquitous networks."

R&D networks as testbeds will play roles to accelerate R&D on network-related key technologies and support practical verification research, putting R&D results including application technologies into practical use. Such R&D networks are anticipated to bring about diversified repercussion effects including i) contribution to creation/expansion of various businesses, ii) invigoration of local communities through facilitation of information transmission from communities, and iii) human capacity building brought about by practical R&D environments.

In this context, the Japan Gigabit Network (JGN), as an R&D network, has been encouraging trends toward broadband networks in Japan since its inauguration of operation in 1999, for facilitation of R&D on network technologies and application technologies thereof based on R&D being conducted by about cumulative 600 institutes utilizing JGN.

Considering such background, in order to construct the next-generation R&D networks with new functions con-

ducive to ensuring of international competitiveness toward the ubiquitous network age, MPHPT convened the Study Group for the purpose of identifying required conditions and deliberating upon R&D themes to be carried out and promotion measures, etc. for realizing said themes.

2. Topics to be deliberated upon

- 1) Current status and effects of the next-generation R&D networks
- 2) Future perspectives of the next-generation R&D networks
- 3) Requirements of and measures for fully utilizing the next-generation R&D networks
- 4) Promotion measures for realizing the next-generation R&D networks
- 5) Socioeconomic effects created upon realization of the next-generation R&D networks

3. Schedule

The first meeting of the Study Group was held on February 28, 2003. The Study Group will compile its outcome as a report by June 2003.