Tokyo Ubiquitous Network Conference
"Toward the realization of a Ubiquitous Network Society"
Chairman's Report

Introduction

1. The "Tokyo Ubiquitous Network Conference" as the WSIS Thematic Meeting on a Ubiquitous Network Society, jointly organized by the Japanese government, the International Telecommunication Union and the United Nations University, was held in Tokyo, from 16 to 17 May 2005. The conference was chaired by Mr. Kozo TAKAHARA, Vice Minister for Policy Coordination, Ministry of Internal Affairs and Communications of Japan, with approximately 600 participants drawn from governments, international organizations, the private sector and civil society.

2. This conference reaffirmed the WSIS Geneva Declaration of Principles and Plan of Action (hereinafter, referred to as the "Declaration of Principles"). This conference also confirmed that the vision for a ubiquitous network society should be shaped through inclusive partnership of all stakeholders.

WSIS and realization of a ubiquitous network society

3. Many countries are embarking upon efforts towards the realization of a ubiquitous network society that will make possible easy connection anytime, anywhere, by anything and anyone. This represents the next important step in the evolution of the Information Society. In the Declaration of Principles, the provision of "universal, ubiquitous, equitable and affordable" access to ICTs and the assurance that everyone can benefit from the opportunities that ICTs can offer, are regarded as two of the key principles embodied in the Information Society. These are important elements for a ubiquitous network society, and in addition, the promotion of measures to support the realization of such a society - such as further development of technologies, enhancement of knowledge sharing and capacity building, and efforts to bridge the digital divide - could represent a significant step forward to the realization of these key principles.

4. A ubiquitous network society is a society where it is possible to seamlessly connect "anytime, anywhere, by anything and anyone", and to exchange a wide range of information by means of

accessible, affordable and user friendly devices and services. In such a society, people will be able to share knowledge and information easily which will help them achieve their full potential in promoting sustainable development and improving the quality of life. It will support the design and realization of a people-centered information society, where the secure and reliable flow of information will be ensured.

5. A ubiquitous network society has the potential to assist in achieving Millennium Development Goals and to help resolve pressing global issues such as poverty and hunger, education, gender equality, child mortality, healthcare, environmental sustainability, people with disabilities, indigenous people, welfare, ageing, security and disaster prevention. For instance, advanced knowledge can be acquired anywhere by using the Internet or mobile communications, advanced e-health can be made available through satellite communications and information on disasters can be gathered using sensors and conveyed immediately via networks. On the other hand, in order to realize a ubiquitous network society, it is necessary to address the concerns and barriers regarding ICT usage such as the digital divide as well as accessibility, standardization, compatibility, interoperability, privacy and security issues.

6. At the Tokyo Ubiquitous Network Conference, experts and representatives from governments, international organizations, the private sector and civil society from around the globe met to share their experience and insights on the possible future development of a ubiquitous networks society. This was facilitated by the discussions in five sessions: "Bridging the Digital Divide", "Knowledge Sharing - Capacity Building", "Technologies leading a Ubiquitous Network Society", "Civil Society session: Shaping a "Ubiquitous Network Society" for Human Needs" and "Toward the design and realization of a Ubiquitous Network Society".

Toward the realization of a ubiquitous network society

7. In these sessions, it was proposed that the following measures should be taken to design and realize a ubiquitous network society.

(1) Bridging the digital divide

The digital divide is rooted in such factors as geographic, economic, educational, and social conditions. It is essential for everyone to recognize that ICTs have the capacity to promote socioeconomic development and improve the quality of life. To bridge the digital divide towards a ubiquitous network society, each country should actively formulate an enabling environment for ICT development, allowing for the widespread adoption of new technologies, develop infrastructure and content, promote applications and enhance capacity building. Multi-stakeholder partnership among

governments, international organizations, private sector, and civil society, including the media, is essential.

To achieve this goal, it is essential to provide access to ICT infrastructure that is universal, ubiquitous, equitable and affordable. This can be realized by practical and cost-effective solutions and leapfrogging via new technologies. Ensuring access for disadvantaged groups and remote rural areas is of major importance. Efforts must be on-going with respect to realizing one of the key elements of the Declaration of Principles, which is to ensure that everyone, everywhere, can benefit from the opportunities that ICTs can offer.

A ubiquitous network society makes it possible to connect "anytime, anywhere, by anything and anyone". The digital divide will only be truly bridged when we establish an environment in which the information-disadvantaged, such as the elderly, women, youth, children and people with disabilities can participate equally in socioeconomic activities using ICTs, and in which we can all enjoy a better quality of life in a secure and reliable environment.

(2) Knowledge Sharing - Capacity Building
Significant innovations in applications and the emergence of media rich contents for capacity building and knowledge sharing are anticipated. The deployment of these applications and new forms of content should contribute to the effective enhancement of capacity building which, in turn, is the key to realization of a ubiquitous network society.

WSIS needs to continue addressing the ICT infrastructure, policy and regulatory readiness, and human capacity building for realizing the benefits of ICTs. A more sophisticated system of contents development will be needed to take advantage of a ubiquitous network society – as we enter the "New Content Era" – in different parts of the world.

We need to support the realization of a ubiquitous network society through three key steps.

- The first step is related to bandwidth (e.g. broadband) and the promotion of regulatory change.
- The second step is to promote flexibility, adaptiveness and openness in relation to content development, sharing and delivery.
- The third step is to support human resources development in key areas related to a ubiquitous network society.

(3) Civil Society session: Shaping a "Ubiquitous Network Society" for Human Needs

Civil Society is committed as an equal partner to building inclusive, people-centered information and communication society, premised on the principles enshrined in the Charter of the United Nations and in the Universal Declaration of Human Rights.

Civil Society actively pursues the objectives of sustainable development, democracy and gender equality for the attainment of a more peaceful, just, egalitarian, accessible and sustainable world.

A "Ubiquitous Network Society" must:

- Be development-oriented, ensuring equitable and sustainable distribution of resources
- Recognize the goal of accessibility for all, emphasizing the needs of people with disabilities and the poor
- Respect the Internet end-to-end principles and open source, open content, open courseware, and open standards
- Uphold human rights, rights to self-determination, and particularly the risks to privacy, for example from the leakage of personal information

Civil Society is an equal partner in shaping a "Ubiquitous Network Society" from design to implementation, including monitoring and evaluation.

(4) Technologies leading a Ubiquitous Network Society
Each country needs to cooperate in research & development and standardization in various areas of ubiquitous network technologies.

The development of core technologies of the ubiquitous network, including RFID, sensor network, and mobile communications, needs further improvement and testing so that technologies are user driven and environmentally friendly.

Both the developed and developing countries need to continue discussions on how to ensure that a ubiquitous network society can be realized in as short a time as possible. At any future conferences, the following key areas should be discussed.

- Direction and milestones.
- Identification of core technologies.
- Identification of items for standardization and acceleration of the discussions to ensure compatibility between different systems.

- Promotion of international cooperation and partnerships.

(5) Toward the design and realization of a Ubiquitous Network Society

Several visions emerging in the world, which indicate the next important step in the evolution of the global information society, are seemingly converging in a basic direction. Thus, it is important for the world to possess globally shared visions of a Ubiquitous Network Society by continuing to make opportunities to deepen mutual understanding.

- A Ubiquitous Network Society where anyone can be easily and seamlessly connected to the network will differ from conventional society in that it allows interaction with literally "anybody" in the world. Consequently, the global society is required to prepare for a new stage, where everyone ensures the safe and secure distribution of information in a highly reliable environment, while at the same time respecting the diverse distribution of information based on liberal intentions. In short, we need a good balance between rights/benefits and responsibilities/obligations. Achieving harmony between these two issues will be indispensable to the sound development of a Ubiquitous Network Society.

- It will be essential to build a new social system incorporating this harmonization mechanism on a worldwide basis, fully recognizing discrepancies among regions in different stages of ICT development, in order to globally foster the benefits of a Ubiquitous Network Society, including the developing world.

- It is collaboration that will enable us to cope with any unpredictable challenges arising in the future from the advent of a Ubiquitous Network Society. Hence, the governance of a Ubiquitous Network Society will incorporate cooperation among all stakeholders including governments, international organizations, the private sector and civil society at local, national, regional and international levels.

Conclusion

8. In a ubiquitous network society − it will be possible to seamlessly connect "anytime, anywhere, by anything and anyone", through the development of information and communication infrastructure which will provide ubiquitous access to ICTs, through human resources development and by bringing benefits to everyone from the opportunities that ICTs can offer − we can say that we are making a substantial contribution to realizing the key principles set out in the Declaration of Principles.

9. In order to establish a set of principles for a ubiquitous network society with governments playing a leading role and with the cooperation of other stakeholders, some kind of implementation mechanism such as organizing a ministerial conference on a ubiquitous network society should be considered.

10. To realize a ubiquitous network society, it is recommended that all stakeholders including governments, international organizations, the private sector and civil society work together throughout the whole process at local, national, regional and international levels and take the above mentioned measures.