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## Romania

The Pan-European Regional Ministerial Conference in preparation of the World Summit on the Information Society

**Bucharest**, Romania

November 7-9, 2002

General report

# THE BUCHAREST PAN-EUROPEAN CONFERENCE IN PREPARATION OF THE WORLD SUMMIT ON THE INFORMATION SOCIETY:

# TOWARDS AN INFORMATION SOCIETY: PRINCIPLES, STRATEGY AND PRIORITIES FOR ACTION

9 November 2002

The Member States of the United Nations Economic Commission for Europe met in Bucharest at the Pan-European Conference on the Information Society (7-9 November 2002) and agreed on the following set of principles and priorities:

## **Vision of an Information Society beneficial to all (E-inclusion)**

The European regional conference proposes the vision of an Information Society, where all persons, without distinction of any kind, exercise their right to freedom of opinion and expression, including the freedom to hold opinions without interference, and to seek, receive and impart information and ideas through any media and regardless of frontiers.

The Information Society offers great potential in promoting sustainable development, democracy, transparency, accountability and good governance. Full exploitation of the new opportunities provided by information and communication technologies (ICTs) and of their combination with traditional media, as well as an adequate response to the challenge of the digital divide, should be important parts in any strategy, national and international, aimed at achieving the development goals set by the Millennium Declaration. There is also a need for a people-centred approach, one that emphasizes social, cultural, economic and governance goals. This approach must ensure that the knowledge and experience of citizens is integrated into this process as the driving force behind the new information society.

The Information Society is based on broad dissemination and sharing of information and genuine participation of all stakeholders - Governments, private sector and civil society. Their contribution is vital in the efforts to bring full benefits of the Information Society to all. Governments and other stakeholders should also provide the necessary conditions to ensure women's equal access to information and knowledge, as well as equal opportunities as participants and decision-makers in all aspects, related to the shaping of ICT policies and frameworks. Global and regional initiatives should build upon previous and current initiatives by Governments, regional and international organizations as well as from the contribution of the private sector and civil society.

Member States welcomed the active participation of these stakeholders and their contribution to the overall work.

The following fundamental principles aim at defining the main directions for e-strategies for developing an information society. A number of priority themes of e-strategies can already be identified.

## Principle 1. Securing access to information and knowledge

Individuals and organizations should benefit from access to information, knowledge and ideas. Notably, information in the public domain should be easily accessible. Information is the basis of a well-functioning and transparent decision-making process and a prerequisite for any democracy. Knowledge is the key agent for transforming both our global society and local communities. Public policy should broaden opportunities in providing information for all, including disabled, inter alia by creating content, and thereby redressing inequalities. ICTs have the potential not only to strengthen the effectiveness of public service delivery, but also to involve individuals in shaping government policies. Moreover, communications technology is not an end in itself, but a means of supplying quality content in the information society. In this regard, mass media - in their various forms - are recognized as important means of fostering public information, societal development and social cohesion.

## Principle 2. Promoting universal access at affordable cost

An adequately developed infrastructure is the precondition for secure, reliable and affordable access to information by all stakeholders, and for the upgrading of relevant services. The improvement of connectivity is of special importance in this respect, and it is undertaken by the public and the private sectors, acting in partnership. Community-led development is a critical element in the strategy for achieving universal access to information and knowledge. Community access centres and public services (such as post offices, libraries, schools) can provide effective means for promoting universal access in particular in remote areas, as an important factor of their development. Moreover, in order to ensure greater affordability, policy action should aim at setting up an appropriate open and competitive environment.

## Principle 3. Promoting linguistic diversity and cultural identity

The Information Society is founded on respect for, and enjoyment of, cultural expression. New ICTs should stimulate cultural diversity and plurilinguism and enhance the capacity of governments to develop active policies to that end. Access and contribution to knowledge and information broaden the contents of the public domain and foster mutual understanding and respect for diversity.

## Principle 4. Developing human capacity through education and training

It is important for Governments to develop comprehensive and forward-looking education strategies. People should be enabled to acquire the necessary skills in order to actively participate in and understand the Information Society and fully benefit from the possibilities it offers.

Individuals should be engaged in defining their own needs and in the development of programs to meet those needs.

These skills integrate ICT - related specific notions with broader knowledge, and are generally obtained through primary, secondary and higher education, on-the-job training, but also increasingly through distance learning. Technological change will progressively require life-long learning and continuous training by all. Public policy should take into account inequalities in access to quality education and training, particularly in the case of vulnerable groups and underserved or remote areas. Specific attention has to be paid to training of trainers. ICTs open completely new opportunities for e-learning. New forms of partnership between public and private sectors are needed in this field.

## Principle 5. Setting up an enabling environment, including legal, regulatory and policy frameworks

To maximise the economic and social benefits of the Information Society, governments need to create a trustworthy, transparent, and non-discriminatory legal, regulatory and policy environment, capable of promoting technological innovation and competition, thus favouring the necessary investments, mainly from the private sector, in the deployment of infrastructures and development of new services.

The Information Society is, by nature, a global phenomenon and issues such as privacy protection, consumer trust, management of domain names, facilitation of e-commerce, protection of intellectual property rights, open source solutions etc. should be addressed with the active participation of all stakeholders.

## Principle 6. Building confidence and security in the use of ICTs

To realise fully the benefits of ICTs, networks and information systems should be sufficiently robust to prevent, detect and to respond appropriately to security incidents. However, effective security of information systems is not merely a matter of government and law enforcement practices, nor of technology. A global culture of cyber-security needs to be developed - security must be addressed through prevention and supported throughout society, and be consistent with the need to preserve free flow of information.

ICTs can potentially be used for purposes that are inconsistent with the objectives of maintaining international stability and security and may adversely affect the integrity of the infrastructure within States, to the detriment of their security in both civil and military fields, as well as in relation to the functioning of their economies. It is also necessary to prevent the use of information resources or technologies for criminal or terrorist purposes.

In order to build confidence and security in the use of ICTs, Governments should promote awareness in their societies of cyber security risks and seek to strengthen international cooperation, including with the private sector.

## Principle 7. Addressing global issues

#### General report

International policy dialogue on Information Society at global, regional and sub-regional levels should promote the exchange of experience, the identification and application of compatible norms and standards, the transfer of know-how and the provision of technical assistance with a view to bridging capacity gaps and setting up international cooperation programmes, in particular in the field of creation of content. Sharing success stories and best practice experiences will also pave the way for new forms of international co-operation.

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## **E-Strategies**

It is important for the Governments to promote comprehensive and forward-looking national strategies for the development of the Information Society, involving private sector and civil society. Private sector involvement is crucial for a sound and sustainable development of infrastructures, content and application. National e-strategies need to be adapted to the specific requirements of varied communities and reflect the stage of development and the structural characteristics of the national economy. Such strategies can benefit from existing knowledge and experience and exchanges notably on best practices would play a key role, allowing countries to learn from one another through peer dialogue.

To be effective, beyond the identification of goals, the strategies should include timeframes, indicators and mechanisms for monitoring performance based not only on quantitative but also qualitative criteria.

In the case of smaller countries, regional strategies can contribute to the emergence of larger markets, offering more attractive conditions for private sector investment as well as for a competitive environment. Furthermore ICTs could be of particular relevance in the development context, because they offer opportunities to Public Administrations, help attract private investments and allow for leapfrogging using new and advanced technologies.

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Based on these principles the following priority themes for e-strategies were identified to develop future strategies.

## **Priority Themes**

## E-Government: More Efficient and Accountable

ICT tools will make policies more accountable and transparent and will enable better monitoring, evaluation and control of public services and allow for greater efficiency in their delivery. Public administration can make use of ICT tools to enhance transparency, accountability and efficiency in the delivery of public services to citizens (education, health, transportation etc.) and to enterprises.

E-Business: More Competitiveness and Better Jobs

Enterprises both large and small can use ICTs to foster innovation, realize gains in productivity, reduce transaction costs and benefit from network externalities. In support of this process, Governments need to stimulate, through the adoption of an enabling environment services, regulatory framework for the promotion of private investment applications and content, based on a widely available broadband infrastructure, and foster public - private partnerships. Use of digital technologies can enhance the role of enterprises in promoting entrepreneurship, the accumulation of knowledge, the upgrading of skills, and thereby increasing productivity, incomes and jobs and promoting qualitative improvement of working life. Special attention should be given to small and medium enterprises both as beneficiaries and promoters of e-business.

## E-Society: Broader Local Content and Applications

In the Information Society, the involvement and participation of all, irrespective of gender or economic status, as well as the facilitation of ICT use in daily life and work, is a major objective.

Governments should actively promote the involvement of different stakeholders in the development of applications that improve overall quality of life, particularly in key areas such as education and health, both globally and at the local community level. Public policy should also foster the creation of varied information content, which helps to preserve and disseminate local and national culture, language and heritage. Local authorities have an important role to play, because for citizens they represent the first level of contact with the administrations and they could also foster the development of local communities. Promotion of cultural diversity and identity, including the creation of varied information content and the digitalisation of the educational, scientific and cultural heritage is an important priority in the development of the Information Society. Research on the social and cultural impact of ICTs should be continued.

## E-learning and E-Education: Empowering people

E-learning is about development of skills to access knowledge, which addresses numerous issues such as local content, multi-lingual and cultural diversity and intellectual property rights. Access to knowledge is an essential tool in economic, cultural and social development. The potential exists for all those still outside the reach of the formal educational system to be offered education and information tailored to their need and culture. Education empowers people to overcome poverty, therefore e-learning is one of the most important issues in the bridging of the digital divide.

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### Follow-up

The abovementioned principles and priorities should be submitted as a regional contribution to the WSIS process and its follow-up, and should assist Governments to shape policies and to take necessary action, with a view to developing the Information Society.

Adopted in Bucharest, on 9 November 2002

## **Agenda**

- 1. Opening statements.
- 2. Adoption of the agenda and organization of work.
- 3. Election of officers.
- 4. Ministerial debates on policies: "Regional strategies, national action, good practices".
- 5. Interactive dialogue among governments, business sector and civil society: "Sharing responsibilities: Multi-stakeholders commitments".
- 6. Thematic debates:
  - a) e-government;
  - b) e-learning;
  - c) e-inclusion;
  - d) Quality of life in the Information Society.
- 7. Building Partnerships:
  - a) Business round-table: "Creating an attractive environment for investments in the information society".
  - b) Civil society forum: "Designing new patterns for interaction".
- 8. Defining the Information Society.
- 9. Adoption of final documents.
- 10. Closing remarks.

#### Parallel events:

- 1. Building a **gender** sensitive Information Society (round table)
- 2. **Youth** as users and creators in the Information Society (workshop)
- 3. The role of **mass media** in promoting the Information Society (workshop)
- 4. La diversité culturelle et le pluralité linguistique dans la Société de l'information (événement francophone)
- 5. The role of **new technologies** in developing the Information Society (workshop)
- 6. E-policy and e-regulations in the Information Society (workshop)
- 7. IC&T national projects **permanent exhibition**.

#### The Bureau of the Conference

Chair:

**Dan Nica**, Minister of Communications and Information Technology (Romania)

Vice-chairs:

**Jumaliev Kubanychbek**, Minister of Transportation and Communications (Kyrgyzstan) **Bozidar Milovic**, Minister of Transportation and Communications (Federal Republic Yougoslavia)

**Lucio Stanca**, Minister of Innovation and Technologies (Italy)

**Andrey Korotkov**, First Deputy Minister of Communication and Informatization (Russian Federation)

Members:

Mark **Furrer**, Minister for Communications (Switzerland) Helge **Sander**, Minister of Science, Technology and Innovation (Denmark)

**Robert Rogers** ( Coordinating Committee of Business Interlocutors for World Summit on the Information Society)

**Sean Ó Siochrú** (Nexus, a NGO from Ireland)

General secretary:

**Anda Filip**, Ambassador, Permanent Representative of Romania to the United Nations Office in Geneva

General rapporteur:

**Petru Dumitriu**, minister counsellor, deputy permanent representative, Permanent Mission of Romania to the United Nations Office in Geneva

Representatives of institutional partners:

Pierre Gagné, director of the World Summit on the Information Society

**Paolo Garonna**, the Deputy Executive Secretary of the United Nations Economic Commission for Europe

Carlo Trojan, the Head of the Permanent Delegation of the European Commission in Geneva

## 1. The opening ceremony

The Pan-European Ministerial Conference on the Information Society was held from 7 to 9 November 2002, in the Palace of Parliament. The Conference was attended by 1463 participants, representing 57 governments, international organizations, business sector entities, civil society and mass-media organizations.

The Conference started with an opening ceremony in the presence of H.E. Mr. Ion Iliescu, the President of Romania, who delivered a statement. Other opening remarks were offered by Mr. Yoshio Utsumi, chairman of the High Level Summit Organizing Committee, Secretary-General of the International Telecommunication Union, Mr. Paolo Garonna, Deputy Executive Secretary of the United Nations Economic Commission for Europe, Mr. Helge Sander, Minister for Science, Technology and Innovation of Denmark, on behalf of the European Union and associated countries, Mr. Luciano Maiani, Director General of the European Organization of Nuclear Research (CERN), Mrs. Rita Hayes, Deputy Director General of World Intellectual Property Organization, Mr. Adama Samassekou, president of the First Preparatory Committee of the World Summit on the Information Society, Mr. Robert Rogers, on behalf of the Coordination Committee of Business Interlocutors for World Summit on the Information Society, Professor Harvey Newman, from the California Institute of Technology. A message from Mr. March Marloch Brown, the Administrator of the United Nations Development Program was also presented.

## 2. Adoption of the agenda and organization of work

The first plenary session was chaired by Mr. Dan Nica, Minister of Communications and Information Technology of Romania, as representative of the host country, chair ex-officio of the Pan-European Ministerial Conference on the Information Society. The proposed agenda was adopted. It was also agreed that once various sections and parallel event would start, the chairpersons and moderators will take responsibility for conducting the proceedings. At the same time, it was agreed that the rapporteurs would present brief versions of their reports during the last plenary session, while full texts would be made available later on, and compiled in a general report. The chair also informed about the draft political statement that had been extensively discussed and negotiated in Geneva. He announced that a drafting session might take place in order to finalize the text under the chairmanship of the general secretary.

#### 3. Election of officers

The Conference elected the following four vice-chairmen: Mr. Lucio Stanca, Minister of Innovation and Technologies of Italy, Mr. Bozidar Milovic, Minister of Transportation and Communications of Federal Republic of Yugoslavia, Mr. Jumaliev Kubanychbek, Minister of Transportation and Communications of Kyrgyzstan and Mr. Andrey Korotkov, First

Deputy Minister of Communication and Informatization of the Russian Federation, member of the UNICT Task Force.

Mr. **Helge Sander**, Minister of Science, Technology and Innovation of Denmark and Mr. **Mark Furrer**, Minister for Communications of Switzerland, were also elected as members of the Bureau.

Mrs. **Anda Filip**, Ambassador, Permanent Representative of Romania to the United Nations Office in Geneva was elected secretary-general of the Conference and Mr. **Petru Dumitriu**, minister-counsellor, deputy permanent representative, Permanent Mission of Romania Mission to the United Nations Office in Geneva, was elected as rapporteur general.

Mr. **Robert Rogers**, from the Coordinating Committee of Business Interlocutors for World Summit on the Information Society and Mr. **Sean Ó Siochrú** of Lexus were also elected as members of the Bureau, as representatives of the business community and, respectively, of the civil society.

The following representatives of institutional partners of the Government of Romania, as a host country, were invited to attend the meetings of the Bureau when necessary: Mr. **Paolo Garonna**, the Deputy Executive Secretary of the United Nations Economic Commission for Europe, Mr. **Pierre Gagné**, director of the World Summit on the Information Society, and Ambassador **Carlo Trojan**, the head of the delegation of the European Commission in Geneva.

The first plenary session was closed and the following items on the agenda were subsequently debated in parallel sessions.

# Report on the interactive dialogue among governments, business sector and civil society: Sharing responsibilities: Multi-stakeholders commitment

"Sharing responsibilities: Multi-stakeholders commitments"

(item 5)

Thursday, 7 November 2002

Chair: Mr. Marc Furrer, Director General of the Federal Office for

Communication of Switzerland

**Moderator**: Mr. **Bruno Lanvin**, Head of InfoDev at the World Bank **Rapporteur**: Mr. **Michael Niebel**, Adviser DG Information Society

**European Commission** 

## **Description**

Mr. Furrer stressed the challenges and potential of ICT: challenges of physical access – potential of leap-frogging.

Mr. Lanvin introduced the workshop saying how complex but exciting the WSIS process is and underlined that dialogue between stakeholders is an essential element for the success of the WSIS preparatory process.

Mr. Matti Virttanen (HP) focussed on drivers for success, notably Private-Public partnership for innovative applications and gave concrete examples in the field of e-government.

Mr. Zial Alahad (World Bank) insisted on the potential of the sector for economic growth in spite of the recent economic downturn and identified the key role of regulatory frameworks.

Mr. Peter Gannon from OASIS analysed conditions making successful a specific technology and insisted on the role of open standards in the development of information exchanges.

Mr. Jan Muehlfeit (Microsoft) mentioned the particular responsibility of governments to become model users of technology and to encourage continued innovation.

Mrs. Renate Blohm (Co-ordination of NGO, CONGO) emphasised the progress already made in the dialogue: Stakeholders are already using a common language with governments and NGOs played a key role in shaping the International development agenda.

Mr. Kleinwaechter (University of Aarhus) insisted on the need to bring values at the core of the dialogues and on the role of NGO in this request.

#### Common views

- Trialogue: ways to undertake commitments based on shared responsibilities
- Common views between participants:
  - Value of the dialogue
  - Positive appreciation of the role of ICT in economic and social progress
- Presently shift in the perception of the role of the actors

## **Conclusions**

- 1. Business defines itself not only as a market player but sees its role in a wider political and social context, i.e. helping countries to develop ICT and overcome the digital divide (examples: Romanian healthcare, Polish driving license, Bulgarian passport).
- 2. Business expectations for government go beyond the regulatory framework, e.g. e-government, eEurope and include practical partnership for innovative applications.
- 3. Multilateral organisations have a key role in mediating between governments and the other actors.
- 4. The functioning partnership of all actors in the field of standardisation has to be continued and strengthened to create an open international IS environment.
- 5. NGOs welcome the beginning of a trialogue and offer a structured form, e.g. back-to-back meeting of 500 NGOs before Geneva Summit Meeting. NGOs see progress in the use of a common language by the governmental bodies and NGOs.
- 6. In the triangle of regulation, markets and values the value aspect has been underrepresented until now and should be strengthened with the help of NGOs.
- 7. New forms of partnership and collaboration should be explored and could be inspired by new forms of governance as in the context of the distribution of Internet domain names.

## Report of the thematic debate on e-government

Friday, 8 November 2002

Chair: Mr. Dan Nica, Minister of Communications and Information Technologies of Romania Moderator: Mr. Ian Ascough, Office of the e-Envoy, Cabinet Office, United Kingdom Rapporteurs: Dr. Claudia Oglialoro, Director for multilateral affairs and digital divide programs International Affairs Office, Ministry for Innovation and Technologies of Italy Mrs. Adriana Ticau, secretary of state, Ministry of Communications and Information Technologies of Romania

## Speakers:

- Mr Lucio Stanca, Minister for Innovation and Technologies of Italy
- Mr Andrey Korotkov, First Deputy Minister of Communications and Information Technology, Russian Federation
- Mr Gonciar Victorovici, President, State Committee for Communication & IT of Ukraine.
- Mr Alan Mather, Office of the e-Envoy, Cabinet Office, United Kingdom
- Mr Marc McDowell, Ministry of Foreign Affairs of Canada
- Mr Brendan Tuohy, Secretary General, Ministry of Communications, Marine and Natural Resources, Ireland
- Mr Olavi Kongas, Secretary General, Information Society Advisory Board, Finland
- Mr Alain Mandine, e-government expert, France
- Mr Branco Beric, Federal Ministry of Transport & Communications, Yugoslavia
- Mr Felix Nam ICT Expert, Kyrgyzstan
- Ms Astrid Dufborg, Director, Department for Infrastructure and Economic Co-operation, Swedish International Development Agency

## **Summary of the Report:**

- 1. E-government: What and Why?
- 2. E-government: The Challenges
- 3. E-government: Proposals

## 1. E-government: What and Why?

From the speakers' interventions, it emerged that e-government can be a powerful tool for helping to achieve several objectives of governments:

- **Efficiency**: the possibility for governments of delivering more services with the same resources or delivering the same services with less resources (improving the input/output ratio within the public sector).
- **Effectiveness**: the delivery of better and improved services, and/or services more targeted to citizens' needs.

- Increase of revenues. The introduction of e-applications in governments' functions such as
  taxation or customs operations has proved to increase remarkably the flow of revenues to
  governments.
- Innovation of services: citizens habits and needs evolve over time, and have witnessed a non-negligible cultural break with the advent of the information society. E-government is a tool to assist policy-makers keeping the pace with citizens' needs and expectations through innovative, technology-based solutions.
- Transparency, accountability and fight of corruption: e-government makes procedures and responsibilities transparent and known to the public and to all public operators. Key bottlenecks and critical steps of procedures, which are prone to delays and corruption can be automated, reducing the room for improper operators' behaviour. E-government can therefore be a driving force to fighting corruption.
- Democracy and empowerment of the population. Government online is making democratic information available as never before. Parliaments, legislatures, city councils, and even neighbourhood councils are making laws and draft laws, meeting agendas and minutes, and other reports available online, which brings them closer to the citizen. Citizens, on their side, can exploit, through governments websites, new opportunities for participation and a voice in politics, governance, and society.
- Public sector reform and decentralization. Public sector reform in most countries encompasses as main components: increased efficiency, deregulation, decentralisation, increased accountability, improved resource management, and marketisation. 'Information age reform' means delivering these ongoing reform components with a more overt role for information and with greater use of information technology. With particular regard to decentralisation, IT can provide support for more efficient and effective decision-making at decentralised locations and create new information flows that include those locations.
- Sustain of demand in order to enhance supply of ICT services, infrastructures, equipment: public sector demand for ICT services, infrastructures and equipment is a major component of total demand, and thus has the potential for 'moving the market'.
- Creation of a critical mass of content of local relevance and language: one of the dimensions of the digital divide is the lack of content of local relevance and in local language addressed to the needs of disadvantaged (remote and poor) communities. Interaction with the public administration, in terms of what we need to give and need to take from the public administration, is a basic component of every community's life. And web-based provision of information and facilities for this interaction can thus provide such content.
- Assist the national ICT industry.

## 2. E-government: The Challenges

The main challenge posed by the implementation of e-government programs and applications, as highlighted by several speakers and interventions from the floor, is that of facing and solving the tendency to automating processes - through ICT injections - without re-engineering and reforming them. This can lead to lack of creation of value added, and to the under-use of applications and services by citizens. This was reported as a fact or as a threat by several speakers.

Another challenge that was reported by the speakers lies in the complexity of planning and implementing e-government. This in fact requires the need to carry forward in a co-ordinated fashion diverse programs and policies in fields such as: public sector reform, decentralisation,

infrastructure building (electricity, communications), connectivity (which needs to be at low cost and in remote areas), regulatory and legal reform, human resources (both within the public administration and the population).

Another challenge for policy-makers in charge of e-government lies in the fact that e-government applications normally generate high immediate burden on public financial resources, as opposed to intangible and medium/long term benefits. These have proven to be unfavourable elements in the national political processes of public financial resources allocation.

Finally, a different kind of challenge was presented for debate (and mainly left unanswered) from the floor: since e-government can be a powerful tool for empowering citizens, do governments and public administrations have a true willingness and commitment to hand this power to the people?

## 3. E-government: Proposals

The debate led to several interesting proposals for:

- assisting governments to carry national e-government programs forward, and
- a streamlined approach to the discussion of e-government issues during the WSIS preparatory works.

The main proposals were the following:

A continuing government-to-government exchange of national expertise and best practices on solutions for common issues such as: achieved savings and efficiency gains from e-government and information applications with short-term economic returns; security and privacy of private and public data; legislative and regulatory solutions (e-signature, privacy, public procurement); technical solutions (platforms integration and interoperability), open source (solutions, benefits and costs). International fora such as the Bucharest Pan-European Regional Ministerial Conference and the forthcoming PrepComs for the WSIS, as well as the WSIS itself, offer unique opportunities for this kind of exchanges, opportunities that need to be exploited.

The need for an open international debate, for coordination and for international policies on issues that are 'intrinsically inter-national' - such as computer crime, cyber crime, security - was also highlighted.

Examples of international co-operation programs in the field of e-government were presented. Nevertheless, donor countries and international organisations were asked enhanced support for co-operation initiatives and availability of grants and loans to sustain countries with limited available financial resources

The need for the inclusion of e-government in development and poverty reduction strategies of countries, donors and international organizations was also discussed.

Most donors and international financial institutions and organizations tie the provision of aid and financial support to poverty reduction (or development) strategies (or papers) of countries. Given this, the debate stressed the need to include the development of e-government in such strategies among the priorities.

Several speakers remarked the importance of the availability of updated set of cross-country indicators on e-government national advancements, and country ranking exercises. These have proven to be useful tools in order to monitor implementation, provide rewards and incentives to administrations in charge of e-government, as well as means to eventually ask for more national financial resources.

Finally, the need for a more thoughtful identification and exploitation of the potential for public-private partnership was discussed.

**Appendix** 

# DECLARATION OF THE BISHKEK-MOSCOW CONFERENCE ON THE INFORMATION SOCIETY

We, participants of the Bishkek-Moscow Conference on the Information Society, address this Declaration to the Pan-European Regional Conference on the Information Society, Bucharest, 7-9 November 2002 in order to make a contribution of the countries of the Commonwealth of Independent States and Regional Commonwealth in the field of Communications to the preparatory process of the World Summit on the Information Society.

#### We note that:

- building of the information society is one of the main trends of the mankind development. A human being with all the diversity of his interests is in the focus of the information society concept;
- development of the information and communication technologies (ICT) is of priority for carrying out socio-economic reforms in our countries;
- an important factor determining use of ICTs in our countries is a specific character of the region with its enormous distances, existence of remote, difficult of access areas with sparse population and also with significant differences in the level of economic development of the states;
- development and implementation of the national programmes for transition to the information society are necessary for successful development of ICTs;
- an important role in the interstate integration of information infrastructure in our region should be played by the Regional Commonwealth in the field of Communications (RCC) and Coordination Council of the CIS member states on Informatization attached to the RCC.

## We believe that:

- each person has to have the possibility of access to information and ICT facilities notwithstanding the gender, nationality, confession, social standing and residence;
- shaping of the information society should take place in the atmosphere of mutual trust of all the interested parties;
- when shaping information society the full-scale participation and co-operation of the state, business circles and civil society at the international, regional, national and local levels are necessary;
- improvement and harmonization of the legal base at the international and national levels are necessary for building the information society;
- intellectual, scientific and technical and educational potential accumulated in our countries can and should be used with the object of development of other countries;

- benefits of the ICTs are fully realized when the reliability and safety of the relevant technologies are insured;
- activities undertaken by international organizations aimed at prompt reaction to the cases of violations of information security, exchange of information and technical facilities for combat against violations are of great importance.

#### We come out for:

- preserving cultural and linguistic diversity of the information society;
- taking into account geographical location of the countries of the region;
- further development of scientific researches and training of qualified personnel in the field of ICTs;
- wider use of intellectual potential of our countries in the global division of labour through participation in international projects;
- solution of problems of intellectual property protection at national and international levels.

**We reject** the use of ICTs for the purposes incompatible with international stability and security, for criminal, including terrorist, purposes.

## We consider it expedient to realize:

- 1. analysis of the existing and potential threats to information security, safety of information and communication networks and systems and also development and introduction of methods and facilities for combat against these threats;
- 2. enhancement of the scale of international co-operation in the sphere of ensuring safety of information and communication networks and systems;
- 3. development of international convention on security in the sphere of information and communication networks and systems.

We appeal to the international organizations and investors with a proposal to co-operate in development of the ICTs in the region, first of all in the following priority fields:

- a) development and implementation of a special programme of assistance to the less developed countries of the region taking into account the Istanbul Declaration and Action Plan for bridging digital divide taking account of local development peculiarities;
- b) development of the socially important information services, first of all telemedicine and distance learning;
- c) creation of a broad network of the public access at the local level including post offices which is to ensure equal rights and possibilities for population of remote, sparsely populated and difficult of access areas;
- d) use of high speed communication channels for national scientific and educational networks;
- e) provision of access to the world information resources for the broad masses of population of our countries.

The present Declaration was adopted on the base of the Resolutions of the Bishkek and Moscow stages of the Bishkek-Moscow Conference on the Information Society, which are the integral part of the Declaration.

## Moscow, 24 October 2002.

## Report of the thematic debate on *e*-learning" – Item 6(b)

Friday, 8 November 2002

Moderator: Prof. Dr. Herbert Weber, Fraunhofer Institut Software and Systemtechnik,

Germany

Rapporteurs: Michael Haertel, Federal Institute for Vocational Training, Germany

**Prof. dr. Doina Banciu**, National Institute for Research and Development,

Romania

#### Introduction

The following report highlights the thematic debate on "e-Learning" and gives a short outline of possible follow up activities with view to the World Summit of the Information Society (WSIS) that shall take place in Geneva on 3<sup>rd</sup> and 4<sup>th</sup> December 2003.

The moderator of this session, Prof. Weber, did provide the audience with some detailed information concerning the actual state of the art of e-learning and of already existing good practice within this (new) field of vocational and educational training. A sequence of six presentations followed and opened the floor for a final (very short) discussion:

The secretary of state of the Romanian Minister of Education and Research presented experiences of a national e-Learning implementation strategy, the director of UNESCO Institute for Information Technologies in Education, Mr. Vladimir Kinelev, Moscow, did focus on the need of a new literacy for the information society and stated that political guidelines, ethical principles and educational opportunities are the basis for an educational strategy for the emerging information society. After that Prof. Maria Amata Garito, Director of the Consortium of Italian Universities on-line NETTUNO, introduced into the approach of virtual universities as a consequence of a global system of communication with its multilingual and multicultural challenges for the teachers and students. Prof. R. Mellet-Brossard M. Sc, President Fdr. WebForce International/Permanent Delegate to the United Nations, did comment on the specific situation of e-Learning in Eastern Europe and maintained the important steps of the Romanian government towards an information society.

Mr. Christopher Brennan, Manager of Software, IBM CEMA (Central and Eastern Europe/Middle East/Africa) gave an overview about some examples of e-Government projects and virtual universities around the globe and Mr. Páll Thórhallson, Administrateur Media Division, Director General of Human Rights, Council Europe, closed the presentations with some interesting remarks on media competence (technical skills, social skills, authoring skills, etc.) which users/customers of e-Learning environments need to succeed using this new media. Prof. Weber did finish the thematic debate and presented a short and very precise summary of the different statements.

## The potential of the new Information and Communication Technologies (ICT)

One general message out of the thematic debate on e-Learning is the significant potential of ICT for the modernization of vocational and educational training (VET) systems. This potential is described within the following paragraphs:

Since the start of the 90s economic structures and the world of work have changed sometimes dramatically. Internationally, a radical change from industrial societies to information and communications societies or knowledge societies is to be observed. Ever more workplaces are equipped with information technologies.

ICT has created the means and possibilities for the globalisation of economics and labour, and national economies that cannot take part in this development will be at a serious competitive disadvantage. On a global scale national economies need to keep competitive options open and to show their population prospects of safeguarding their livelihood in their own countries. To achieve this, it is necessary to build up and maintain access to net competence on all required levels.

Knowledge sharing and related project cooperation in this area is of great significance, because major areas of industry will be Internet-based due to the growth rates in Internet technology in a few years. Making sure that small and medium-sized enterprises and their employees can take part in this development is a socio-political and educational goal.

ICT offer a fundamental opportunity to allow access to education and knowledge anywhere on our planet, without place and time restrictions. The Internet will develop into a global library with overpowering influence as an information and knowledge database for all fields.

Access to this database, i.e. provision of the technological prerequisites, the availability of the necessary infrastructure, and the training of personnel qualified to implement and control specific knowledge management systems will become strategic resources or, in other words, factors contributing to added value in all national economies.

New software offers, ever more complex hardware, modern means of communication and an ever greater supply of information demand a continual adaptation of practised labour processes. Purchasing, production organisation, marketing and sales, in short, the whole of business logistics is changing visibly and at shorter and shorter intervals. The new information and communications technologies are the motor of these transformations and have become in the meantime an almost natural part of modern economic and production processes.

Most recently, the development of complex infrastructure on the basis of the development of new telecommunications technologies (internet, intranet) and media-oriented applications (multimedia) has moved to the foreground. The dynamic of the technological transformation process generates a series of problems in addition to numerous positive-constructive perspectives for the economy and for people. In order to retain their "market value" today and in future, jobholders must continually update and expand their qualifications, since the half-life of knowledge is rapidly decreasing.

Lasting employability for the individual and the currently required training need of business can only be secured in the long-term if both sides understand the continuous adaptation and further development of skills as their own responsibility and at the same time as a joint responsibility. In the information and knowledge society, learning is therefore to be understood as a continual, life-long process that serves to ensure employability.

The integration of technology brings together educational methods, contents, services, new media, the Internet, and globally available information networks. As a consequence of globalisation of economies and labour markets, this implies full utilization of international knowledge as well as its delivery on a global scale. "Making use of globally available knowledge" in the interest not only of initial and continuing training but also of innovation is bringing about changes that are being felt by all strata of society.

But while the characteristic feature of the end of the 20th century is profound change in economic structures and markets (e.g. globalisation, rapid development of the supply side of goods and services), education and training systems are not yet adequately prepared for that change. Analysis of the present situation clearly shows that only a small percentage (~ 3%) of employed persons over 30 years of age participate regularly in continuing training schemes. This would suggest an enormous outstanding need for continuing training.

Acquiring knowledge and skills must therefore in future not be restricted in terms of time to just the "classical training phase" spent at school, at university and in companies - for example -, but must take place instead as a lifelong process (learning on demand and just in time ) of satisfying education and training needs.

The technological platform for globally available information already exists: the World Wide Web (WWW), which is increasingly also being used as a platform for delivering knowledge worldwide. The development process can only be speeded up if the expertise and continuing training opportunities are available when they are needed and of course where they are needed. The WWW is thus becoming the basis for the globalisation of knowledge, a universal, globally accessible library. This has its advantages, but it also raises two major problems: firstly the problem of the authenticity of the knowledge made available, a problem which finds expression mainly in the question of the attribution of that knowledge to an author or an authority, and secondly the problem of relating available knowledge to a continuing training need, to a problem at the workplace, this finding expression mainly as a search problem with "lost-in-hyperspace,, effects.

Using e-learning environments VET-systems can make full use of all available technologies from e-mail to video conferencing and application sharing. More importantly it will allow for cooperation among learning groups located across the world with a view to sharing and continually updating educational expertise and experience and what the practical application of this expertise and experience entails at the workplace. It will allow cooperation among learning groups located across the world with a view to sharing co-operative learning and projects. It will allow access to national and international or global (knowledge)-resources.

And in the end it will allow international participation on educational know how and can form the basis of international standards of educational formation.

## **Research and Development Activities**

The challenges for vocational training associated with rapid technological development thus move more and more into the field of vision of national educational policy efforts. Despite many still existing problems the use of modern educational technology is proving to be the central shaping factor for forward-looking vocational training.

"The DOT Force concluded that, when wisely applied, ICT offer enormous opportunities to narrow social and economic inequalities and support sustainable local wealth creation, and thus

help to achieve the broader development goals that the international community has set. ICT cannot of course act as a panacea for all development problems, but by dramatically improving communication and exchange of information, they can create powerful social and economic networks, which in turn provide the basis for major advances in development."1

In addition to technological and organisational questions, questions of an effective promotion of learning, of didactic and methodological standards of learning software and networksupported learning offers as well as the corresponding learning architecture are moving to the foreground in this connection. Especially education policy faces a number of further challenges. Out of many here are only some critical aspects, which need to be clarified:

- How can we make use of the possibilities of the knowledge/information society for the benefit of everybody, of the society and of the economy?
- What can we do to reduce the gap between those who use ICT for learning and training and those who have to renounce the use of ICT.
- Do we need new forms of quality management and new criteria for quality standards?
- Which consequences does the use of ICT have for education and training systems?
- Where (in which sectors) and how should the state (public sector) take over an active role?
- Which are the new responsibilities and roles for the stakeholders in guarantee the use of ICT in education and training?
- What role should the international community play in promoting improved training policies and their governance

## **E-Learning - Claim and reality**

E-Learning -assisted learning environments can assist in information retrieval, support the communication between learners and be the carrier of didactically structured learning modules. E-Learning is not a learning concept, not a learning strategy and not a learning method. It just supports various learning concepts, strategies and methods. There are many possibilities for the didactic implementation of e-Learning-assisted training and learning.

E-Learning is the result of a technology driven development. The future application of e-Learning, however, will be determined by media-didactic, organisational and financial criteria. It is necessary to create terminology and application-related definitions of e-Learning to assist in its planning, introduction, use and assessment. In certain sections standardisation will be advantageous, for example as a prerequisite for quality assurance, interoperability of content as well as for mixing and matching content.

The right planning and organisational embedding as well as the targeted instruction and intensive accompaniment of the learning process by qualified teaching personnel are of decisive importance. The quality of e-Learning is certainly determined by the underlying didactic concept and the way it is planned and implemented by the teaching personnel, even if they perhaps do not interact directly with the learners during the teaching/learning process.

E-Learning offers greater flexibility with regard to time, place and speed of learning than traditional circumstances of learning. It is therefore better suited to the increasing importance of

<sup>&</sup>lt;sup>1</sup> Dot Force Report "Digital Opportunities for All: Meeting the Challenge", 11 May 2001, page 3 (www.dotforce.org).

lifelong learning. It supports self-regulated, application oriented and co-operative learning, especially in continuing education and training. E-Learning requires a high degree of self-organisation and motivation but also offers learners a high degree of freedom during the learning process.

In spite of all this experiences and all advantages of this new learning approach a lot of (research) questions have to be solved to adapt e-Learning to the needs of the majority of users/customers in the public and private sector worldwide. With view to the ongoing preparation activities of the WSIS out of the thematic debate on e-Learning a proposal should be designed which should be presented at the WSIS.

## **Proposal**

Only if one develops powerful need and target group-oriented (that is to say for training personnel, trainees and jobholders) interactive user interfaces, it will be possible to deal with the radical changes in the learning and working worlds which go along with the increasing use of the new information and communications technologies.

In order to support and improve the endeavours for strengthening Human Resource Development (HRD) the models to be developed within these activities have to be replicated within an international process of innovation transfer to improve broad accessibility to quality learning opportunities. In addition to that this proposal could demonstrate a serious approach in order to solve the bunch of problems, which are related to the so-called "Digital Divide".

Some of the still critical aspects of e-Learning could be discussed by an expert group during the next PrepCom in Geneva in February 2003 in order to launch a respective thematic focus on e-Learning for the WSIS in December 2003. This expert-meeting could work along following list of research questions and design an international accepted approach for an e-Learning initiative:

- The lack of a learning model to define the role of e-Learning in the mix of education and training delivery
- The absence of a sustainable business model for e-learning
- The lack of a well tested and relevant delivery technology and learning management system
- The availability of Internet connectivity and the high costs of online Internet delivery (telecommunication infrastructure, fixed lines)
- Internet bandwidth
- Availability of learning material and the high design and development costs of e-Learning material
- Learner support and the facilitation of learning, also linked to the absence of a tested learning model
- Maturity of learners and willingness to migrate to e-Learning
- Acceptance by current educational representatives like teachers/tutors
- Accessibility

## Report on the thematic debate on *e*-Inclusion

Friday, 9 November 2002

Chairperson: Mr. Andrey Korotkov, Senior Deputy Minister, Ministry of

Telecommunications and Informatization, Russian Federation

Moderator: Mr. Carlo Trojan, Ambassador, European Commission

Rapporteur: Dr. François Fortier, UNDP

#### 1. Debates

Six keynote speakers addressed the e-inclusion workshop, touching on the what, why and how of e-inclusion. The six keynotes a briefly summarised below, while the issues, discussion and recommendations are presented in the following sections.

## Mr. Peter Zangl, Deputy General Director, DG INFSO, European Commission

- There are four key issues to e-Inclusion. First, there is a need to increase productivity, thus ensuring growth and government revenues. Second, the process of e-inclusion comprises a) inclusive policy to the Information Society; notably designing specific policies for people with special needs (e.g. disabled and elderly); b) the creation of content in the proper formats and languages, and of appropriate interfaces (more user-friendly); and c) the attention to confidence and acceptability through trust and security of information systems.
- Status of e-Inclusion work so far in Europe. The eEurope 2002 programme has focussed on security, skills and access. Progress has been made, Internet penetration is much higher, but proper use in schools, businesses is not yet guaranteed. Skills have been improved, but are not always relevant.
- The next steps will come through the eEurope 2005 programme, emphasising e-government with interaction and business re-engineering, the e-health and e-learning key sectors, the creation of a dynamic e-business environment, and the generalisation of broadband access to enable interactive applications. The programme will also create a cyber-security group to continue foster trust and security.

## Mr. Rudi Richter, Government Sales Manager, Central and Eastern Europe, Middle East and Africa. Hewlett-Packard.

- HP has seven corporate objectives, one of which being global citizenship. Mr. Richter presented HP's i-community project, which seeks to enable use of technology and access.
- Methodologically, i-community focuses on partnership and the need for shared ownership between communities, governments, and local governments. It also underlines involvement, where HP listens to what people need.

## Mr. Juan Rada, Senior vice-president, Oracle Industries

- This presentation focussed on the need for modernisation of the state, the single largest economic actor in most countries, as a means to improve fiscal management and procurement.
- Issues of e-government: 1) Improve back-office; 2) Connect citizens; and 3) More

services for less. Efficiency in the back office is particularly important, for it increases transparency, massively improves savings, and creates a pool-effect that increases connection and e-use.

• E-government is evolving from dissemination, transaction, interaction to participation.

## Mr. Robert Crétien, Vice-president, Business Development, Canada Post International.

- Canada Post has undertaken to connect all Canadians. For this it needed commitment, obtained from Prime Minister. R&D was crucial, but also a need of coordinated approach in strategy, improved infrastructures, and e-government partnerships.
- Service delivery has evolved from distribution of forms to community access, authentication, and remote banking.

## Dr. Philippe Quéau, Director, Information Society Division, UNESCO.

- UNESCO's first function is to allow a free-trade of ideas, where knowledge is accessible to all, not responding only to a commercial logic.
- Since Internet was created by powerful interests, it needs safeguards to ensure the
  preservation of public domain information and applications. This should include
  endogenous contents that respond to the needs of deprived groups, at costs that all can
  afford.
- Tools must include OSS software, protocols and standards that allow development of further applications appropriate to all needs.
- The intellectual property rights regime must be balanced, defending the rights of both creators and users of information.
- Furthermore, the right to freedom of expression must be protected in cyberspace as elsewhere not yet officially recognised by WSIS.

## Mr. Richard T. Jordan, Special Project Coordinator, International Council for Caring Communities (ICCC).

- Populations are aging quickly in many countries. There is a need for appropriate technologies to respond to this changing situation. ICTs bring challenges to excluded groups, but also many opportunities.
- Inclusion must therefore be the basic principle of WSIS for all groups and communities.
- For example, ICTs can keep unemployed in touch with opportunities, as it does keep NGOs in touch with major events at lower costs.

## Dr. Ivar Tallo, Member of Parliament, Constitutional Affairs Committee, Estonia

- To achieve e-inclusion for all, Estonia has sought an active role for the state: 1) not by attempting to solve all problems, but 2) show initiatives, 3) provide an enabling framework, and 4) promote the Information Society.
- A survey on use and non-use was connected: age, income and education (not gender)
  were the key factors. Many are lacking motivation and skills, but fewer give lack of
  access as a reason for non-use.
- Increasing motivation for use is therefore key, by developing relevant content, and providing reasons for citizens to become users.

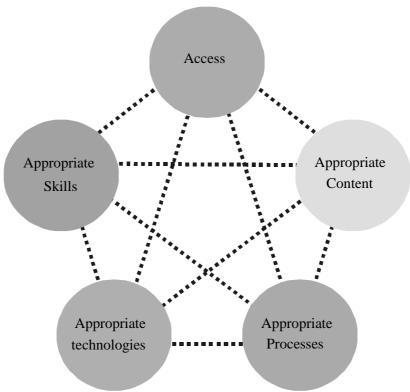
In the ensuing discussion, Mr. Jóhann Gunnarsson, Special Advisor to the Government of Iceland, noted that e-inclusion is relevant and necessary for remote communities of the Artic. He

expects inputs from WSIS to be relevant to those communities.

A British delegate also underlines that access to information is a human right, and that W3C should be supported to develop appropriate technologies, beyond screen-based interfaces. Peter Jordan responded to this that software for blinds have been developed (by blinds themselves) as alternative ICTs, and agrees that such attention and investment are needed.

#### **Conclusions**

To articulate and summarise the discussion, the synopsis below regroups and presents the key points made:



- Issues Addressed: What is e-Inclusion; Why address e-Inclusion; How to address it; What has been done; and What to do (recommendations)
- What is e-Exclusion
  - o New digital divide reflects old material divides: Deprived, disabled, elderly (in increasing numbers), unemployed, remote and underdeveloped communities, etc.
  - o Causes: No incentives, no skills, no access (less so in some countries)
- Why e-Inclusion
  - Sustainable human development: Not left behind, missing opportunities, not pushed away as new "digital marginals"
  - o Good governance: Foster participatory democracy, transparency, savings, incentive for citizens to use ICTs
  - o Good economics: increase productivity, growth, public revenues
  - o Good business: New markets, new job opportunities

- How to e-Include: the discussion of the workshop was articulated around five pillars of e-Inclusion, namely access, appropriate skills, appropriate technologies, appropriate content, and appropriate processes.
  - o Access: A real issue, but to be put in context of E & CIS; Emphasis on public access points and broadband
  - o Appropriate skills: Continue efforts undertaken
  - o Appropriate technologies: User-friendly interfaces, through R&D; Use traditional media and combine with face-to-face interaction
  - o Appropriate Content:
    - Right language, endogenous, culturally relevant
    - Respond to actual needs of all: Including and especially deprived groups;
       Make digital content ubiquitous
    - Free flows of ideas: Prevent commercialising public goods through fair IPRs; Build a public domain for information and software; Guaranty freedom of expression
    - E-government needs to evolve: from broadcasting, to service delivery, to transactions, to participation
  - Appropriate Processes
    - Enabling policies: Commitments by all decision makers; Realistic: state cannot solve all problems
    - Participatory design: To ensure stakeholder ownership; To ensure trust
    - Learn lessons from experiences
    - Ensure sustainable programmes
    - Ensure security to further ensure trust
- Initiatives Already Completed
  - o Various programmes
    - eEurope 2002+ for EU Candidate Countries
    - NeDAP for Northern Region
    - The Latin America, Asia and Africa IS development programmes
    - Estonian e-Inclusion programme
    - E-Government strategies: Canada Post and Oracle
    - Civil society programmes: HP i-Communities and International Council for Caring Communities (ICCC)
  - o Progress made, particularly on access
  - O But still to address: Limited skills and inadequate interfaces; Insufficient "digital relevance" of content

## Recommendations

The e-Inclusion workshop recommends that the WSIS Action Plan encourage stakeholders to invest and cooperate, particularly on:

#### General report

- Appropriate technologies and interfaces for all, through R&D (a people-centred approach)
- Relevant contents, in the right format, for all social groups, particularly the deprived
  - o Through identified needs and constraints
  - o Through public domain info and software
- Appropriate processes
  - o Enabling policies
  - o Political awareness and commitments
  - o Participatory and trust-fostering approaches
- In addition, the workshop discussion raised the need for WSIS to officially recognise the right to freedom of opinion and expression, an essential element of e-inclusion. This was also taken into account in the Conference Declaration (taking from the Universal Charter of Human Rights). The workshop therefore recommends that the WSIS plenary fully adopt this element into the global Declaration and Action Plan.

## Report on the thematic debate on "Quality of Life in the Information Society"

Friday, 8 November 2002

Chair: Mr. Lucio Stanca, Minister for Innovation and Technologies of Italy Moderator: Dr. Milagros Gasco, deputy director of the International Institute on Governance (IIG), Spain

Rapporteur: Dr. Marta Poblet, Open University of Catalonia, UOC, Spain.

## Speakers:

- Mr. Razvan Cirica, Secretary of State, Ministry of Labour and Social Solidarity
- Mr. Ian MacArthur, Indian and Northern Affairs Department, Canadian Government
- Ms. Ileana Fedele, Ministry for Justice, Italy
- Mr. Radu Damian, RomTelecom, Romania
- Ms. Lucia Muskova, eSlovakia Association, Slovakia
- Mr. Jonathan Robin, Internet Society
- Mr. Robert Guerra, Computer Professionals for Social Responsibility

#### 1. Debate

As the session was intended to cover a vast array of topics and experiences in multiple areas, the moderator invited the speakers to consider their contributions in the light of the following core question:

➤ How the information society may improve the quality of our lives?

This axis was included to provide an opportunity to examine the kinds of cultural changes the transition to information society would require, as well as to consider the ways in which ICTs facilitate the realization of this objective.

## 2. General conclusions

## 2.1. Functional preconditions

Quality of life consists of a holistic concept that can be made operational and implemented only through the practical management of policy processes and private initiatives in particular situations. Such an approach, therefore, requires being narrowed down in guidelines, procedures, specific goals and instruments, and, most important, cooperation among all those involved.

The first substantive point considered throughout the debate was the necessary preconditions to be met in order to ensure equal opportunities to all citizens and communities. The notion of "equal opportunities" is taken to include valuing diversity and **to recognize communities to be full partners in the Information Society**. These preconditions can be summarized as follows:

- Accessibility to all the citizens, both in urban and remote areas, in order to avoid the digital divide.
- o **High-speed access** to all communities and technical support to migrate to IPv6 networks.
- o **A common technology infrastructure** for effective communications, as an effective tool to facilitate knowledge and training transfer.

o **Partnerships** between all sectors: constructing the information society locally, nationally and transnationally requires the action of multiple actors in mutual cooperation.

There was general agreement on one further point: the information society is a two-sided phenomenon. On the one hand, the information society plays an enabling role by creating new opportunities and new alternatives, insofar as it provides information, values, knowledge and skills. At the same time, however, low connectivity or lack of access to new technology infrastructures may function as a constraining force by limiting possible actions and excluding certain individuals or groups. In this regard, the ability to build partnerships that provide the necessary investments and financial support (i.e. IT support, broadband for audio and digital video communication in e-learning, privacy technology to secure communications, etc.) is perceived as most necessary.

#### 2.2. Actions entertained

In the broadest sense, improving quality of life consists of well-structured and well-managed social programs. This requires also other ingredients, such as cooperative arrangements and an adequate economic support. The actions referred below are the result of implementing at national, regional and local level different strategic projects to transit to the information society:

- ➤ Promoting e-education, e-learning, e-training: facilitating the acquisition of practical skills to improve individual's expectations. (these are the actions carried out by "Aboriginal Canada", connecting Aboriginal communities and providing to them training and knowledge transfer), or eSlovakia (connecting Slovakian schools to the Internet). E-education, in sum, is not only about connecting individuals, groups and communities, but filling this connection with specific contents.
- ➤ Increasing accessibility to public information: The information society makes it possible to put laws, court decisions, local information, databases, etc. to public consultation (these are the projects developed by the Ministry of Justice of Italia, and Romtelecom and the Romanian municipalities)
- ➤ **Promoting e-services & activities**: teleworking, search for jobs, long distance training, knowledge transfer, etc.
- ➤ Raising public awareness of the new Internet paradigm: by establishing a total interface between users and usages, the migration from IPv4 to IPv6 will catalyse societal, political, and economic paradigm changes.
- > Securing privacy and human rights through technology (e.g. "Privaterra" the project designed by Computer Professionals for Social Responsibility facilitating privacy technology to individuals, groups, and NGOs at risk).

## 3. Proposals

Finally, the mediator raised the question that occupied the final part of the meeting, which deals with the specification of concrete indicators to control quality of life in the information society:

➤ Will people feel safer, eat better, get sick less often, or have more fun in the new information era?

This led to a final two proposals that can be summarized as follows:

- > Quality of life in the Information Society must not consist of adapting citizens to the new technologies, but adapting the new technologies to the needs of the citizens
- > Constructing an information society based on human and sustainable development criteria.

## Report on "Defining the Information Society"

Friday, 8 November 2002

Chairman: Mr. Michael Nudelman, Vice President, Israeli Parliament Moderator: Ms. Milda Hedblom, Co-ordinator, WSIS Executive Secretariat Rapporteurs: Mr. Sören Lindh, Senior adviser, Swedish ICT Commission Prof. Dr. Marius Guran. Polytechnic University Bucharest.

## The Workshop

Presentations were made by Prof. Edvins Karnitis, Public Utilities Commission, Latvia, Dr. Antti Kasvio, University of Tampere, Finland, Mr. Varujan Pambuccian, head of IT Parliamentary Commission, Romania, Ms. Fabiola Riccardini, Italian Institute for Statistics, Italy, Mr. Oliver Smoot, ISO President elect, Mr. Ulrich Hartmann, Director, Information/communication, Siemens AG and Mr. Sören Lindh, Swedish ICT Commission (appendix).

## The Information Society is a concept of high political importance

The chairman, Mr. Nudelman, in opening the workshop, emphasised that the Information Society encompasses all aspects of using the technology to solve problems in society, and gave examples of front edge achievements in using IT in the Israeli society and Parliament. Mr. Varujan Pambuccian later followed up this aspect by giving an insight in the IT developments of the Romanian Parliament and in the society.

## Defining the Information Society is a complex matter

Three contributions were more directly dedicated to the main subject of the Workshop: how to define the Information Society.

**Professor Edvins Karnitis** put an opening question: Is the change through the IT technology large enough to motivate a new concept of a society? Prof. Karnitis tended to answer positive to that question, but with some important conditions. Technology may be the strong driving force, but is not a goal in itself. It is necessary to put new technologies into practice and to attain real benefits from them. The development of the information society is an opportunity and challenge for everyone.

Some of the important challenges concern the way knowledge is dealt with in the new setting. Thus, knowledge management is an important factor, with IT as an important tool to create, accumulate, acquire, share and use knowledge resources in society.

Prof. Karnitis highlighted three key components of the Information Society: the *Knowledge economy*; the *Political component* and the *Social component*.

The active inclusion of *knowledge* into the economic model is changing the basic postulates and ideas of the model. It contains knowledge-based activities in any field, including the most traditional industries, in any job or area of activity; it opens the economy for innovation and creates a favourable environment for economic development across countries and regions; it

facilitates the creativity in jobs. The knowledge economy is based on competition, but also requires substantial public regulation.

The *political* component, based on democratic principles, is in essence the possibility, manner and scope of active participation of citizens in the administration of the country. The Information Society gives us an opportunity to return to direct democracy, it tend to narrow down the functions of the national state and to open up a real possibility to radically change the manner of a state's self-governance. Electronic Government means a radical change in an administration's basic principles towards service provision, private-public partnerships and subsidiarity.

The *social* component contains the vision that the key task of the Information Society is to promote harmony and cohesion across society. It involves increase the well-being of all, reducing effects of social fragmentation, close the gaps between rural/urban groups the rich and poor and create harmony between racial and religious groups.

The term *information society* is synonymous with increasing management, systematisation and sharing of knowledge in a society. The process of building the information society will be successful only if all components develop simultaneously. Only educated people can use the new possibilities. Furthermore, the Information Society may best be defined as a process, rather than an end station.

Information society – a sustainable development process of humanity that is conducted by evolving knowledge management, where society develops as a community of highly educated individuals and where the knowledge economy promotes a growing welfare level of the society and every individual.

Along this process, there are several risk factors to observe and deal with.

One such risk factor is the digital divide created by the uneven financial availability of ICT. Others concern the increased need to act individually in the modern society, information overflow and selection as well as technological security.

There is an urgent need to have a more detailed model of the global information society. In that respect, with the closure of the EU Information Society Forum, a much needed discussion platform disappeared.

**Dr.** Antti Kasvio labelled his contribution "Is it time to reinvent the Information Society?". The definition of the new society found on the Europa Information Society website gives prominence to technology as a driving force for development. Dr. Kasvio, however, questioned this perspective, underlining that technology has been spreading in a very unequal manner in different parts of the world. Recent turbulence and technological failures have shown that the road to the Information Society may be a bumpy one.

There is a need to reach a deeper understanding of the mechanisms at play. The actual impacts of ICT are often more modest than expected. We would be more sensitive towards our normative visions concerning the Information Society and the actual changes that are happening in different societies. We should pay attention to change processes that take place at the local level, the real effectiveness of our strategies and upon the ways in which our efforts really increase the knowledge resources of those people we want to help.

Building the new society is a concrete historical project, carried out in different ways in different local environments. The societal consequences of our ICT initiatives depend on the strategies chosen and the effectiveness of their execution. While we tend to direct our main attention to the dissemination and use of the new technologies, the increasing knowledge-intensity of all societal process is actually the key.

An effective utilisation of new ICTs might provide the advanced industrial societies with an opportunity to create new business activities and high-quality jobs, whereas other countries were threatening our competitive positions in some more mature areas of business. It is not self-evident that we can without any problems extend these very same ideas onto a global scale.

The very deep global inequalities that prevail at present in the production and distribution of knowledge assets must be addressed. Therefore we should start thinking how an increasing share of our common knowledge assets could in future be transformed into global public goods. A constructive approach towards intellectual property rights and open standards are important issues in this context.

Reaching increased levels of economic activity on a global scale is at present the only way in which the advanced industrial countries and the leading international companies can find a way out of present economic difficulties. Such revitalisation cannot be achieved except through an effective utilisation of new ICTs all over the world.

*Mr. Sören Lindh* analysed three recent Government policy documents from the Scandinavian countries Norway, Denmark and Sweden. The three examples illustrate the efforts to find a comprehensive national approach to ICT policy in a global setting. They are based on some common principles, focusing on benefit for all, growth and welfare, service development and production processes, the need for new competencies and on users, citizens and clients. The three documents are action oriented.

The document "eNorway 2005" sees ICTs as a means to achieve political goals, and sets the overall goals:

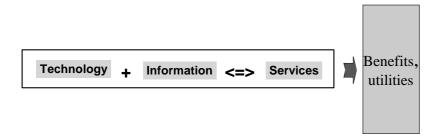
- Creating value in industry,
- Efficiency and quality in the public sector and
- Involvement and identity.

The document identifies five broad action areas:

- A good framework for eNorway;
- Accessibility and security;
- Skills for change;
- Attractive content;
- A modern public sector.

The Danish Green book on ICT Architecture contributes with a detailed discussion on the architecture and the infrastructure of the new eGovernment and Information Society. It focuses on a concept of Enterprise Architecture Framework, within which development of the ICT structures can draw on the experiences and approaches of urban planning. It also includes the task is to define new infrastructures not only for technology platforms but also for the "soft" infrastructure, including databases and registers, information standards etc. A common IT architecture must be service oriented and should support interoperability and development of a joined up government, thus facilitating also contacts with industry.

The Swedish report "Broad services for all—a new stage in ICT policy" adds a digital production chain logic to attain benefits and utilities.



The logic should be interpreted as an extended and modernised IT concept, including both digitised information resources and services. The report argues that this logic also should be guiding the practical IT policy work. This means that IT policy should be subdivided into three co-ordinated but focused components: a technology policy, an information resource policy and a policy for digital services. For each component, policy must address issues of architecture and infrastructure, standards, connectivity and access, competence needs, financing etc.

With such an approach, the next station on the road to the Information Society could be named "the Digital Services Society".

## Measuring the Digital Divide

The process towards the new Information Society requires a close monitoring to give decision-makers and the public a basis for analysis and decisions. *Ms.Fabiola Riccardini* suggested in her contribution a method for measuring the digital divide that has been developed and implemented in a research project within OECD and applied also in a national context in Italy. The research project covers a definition of digital divide, international and national measurements on households, enterprises and governments. Ms. Riccardini started out from definitions of the Information Society very close to those of Prof. Karnitis and Dr. Kasvio above.

The term *digital divide* refers to the disparity in accessing the technologies and resources of information and communication. The digitalisation of the economy and the society may produce differences and gaps between different groups.

Work is now going on to define and implement variables internationally that cover these aspects. They can be divided into two groups. The first is *Infrastructure readiness*, with variables as teledensity, PC density, Internet host density and secure servers density, and *socio-economic enablers* with variables like Internet access cost, levels of education, computer/digital literacy, ICT penetration and intensity indicators.

While much effort is already put into this work, nationally and internationally, it is important to stress further the need for International harmonisation on measures and that national studies are using the harmonised measures for comparability.

## The strategic role of standards for an inclusive Information Society

*Mr. Oliver Smoot* defined the Information Society as an inclusive society where all citizens can seek, receive and impart information and ideas through any media and across any frontier, and where the potential of information and ICT is fully exploited for the common good. International standards have a strategic role in achieving that society. Mr. Smoot gave a brief overview of the

work done by international standards bodies as the ISO, IEC and ITU, as well as corresponding national organisations.

Several new application areas have developed thanks to recently adopted standards. MPEG standards for moving pictures and SGML/HTML can illustrate this, and so can standards facilitating intelligent transport systems, ITS. International standards are enabling instruments supporting the growth of an inclusive Information Society, and should be regarded with attention within the WSIS framework.

## *Mr. Ulich Hartmann* gave an industry view on the standardisation issues.

Guiding principles for international standards work should be: global standards for global products and services, for global markets, in order to exploit economies of scale; use regional or national standards only where justified; standardisation and regulation not to be used as trade barriers; and one standard - one test - accepted anywhere.

Standards are needed for technical and semantic interoperability, for achieving privacy, trust and security, for accessibility and for cultural/linguistic aspects. There are many challenges ahead. They include the rapid development of technology, emphasising the efficiency and speed of standardisation, the growing number of fora for standardisation, the need for broad participation of all stakeholders and a fair resolution of IPR issues.

### Some conclusions

There seems to be a consensus on a number of important points.

- 1. The Information Society is not a static end-of-the-road station, it is a process.
- 2. The visions for the process or the moving long-term goal are expressed as People first, "an inclusive society" and to promote harmony and cohesion across society. There may be many interpretations of this observation. It is evident, however, that hopes to resolve longstanding human and global problems are attached to the concept of Information Society, and that many good forces outside the ICT area must co-operate to fulfil the visions mentioned above.
- 3. Technology is a necessary, important but not sufficient factor to bring about change.
- 4. Knowledge and competence are the key factors for change that can help bring about change, innovation and economic growth.
- 5. A better understanding of the process towards the Information Society and a more comprehensive model of the global Information Society in urgently needed.
- 6. The Information Society must produce. It is important to monitor and put demands on development activities to increase economic activities, to promote a growing welfare of all.
- 7. This productivity approach must be present in all activities, and be a basic principle for building the new ICT architecture and to specify and apply accepted standards for integration and interoperability in services produces.
- 8. Challenges ahead include addressing effects of social fragmentation, unequal access to knowledge, information and technology as well as global public goods.

*Appendix* 

## Defining the Information Society: Scandinavian and Swedish experiences

- contribution to the workshop "Defining the Information Society"-

## A bending and twisting road to the Information Society

The IT industry has almost since its inception shown us the Promised Land, such as the visions of integrated Management Information Systems of the early 70s, interactive computing via terminal systems of the 80s up to the present Internet visions of the intelligent home and working life.

Reality has, however, almost always been different, and often behind schedule. We have seen what we can call the EDP stage, with large mainframe systems, solitary, and with dedicated centralised registers of the 60s and 70s. It was followed by the more complex IT stage, with terminal systems, emerging and maturing PC development, but still with information islands. The past decade has seen the break through of the Internet technology, bringing standards to communications and information exchange. It has changed dramatically the conditions not only for in-house computing and integration over organisation and sector borders, but also for a broad information management and use – but added surprisingly little yet in terms of useful, productive services

In recent years, a number of disturbing factors have come to the forefront of the IT debate, such as:

- 1. Soaring IT costs
- 2. Concerns after the IT downturn
- 3. Unclear and insufficient payback
- 4. Risks for digital divides
- 5. Need for tools to solve problems in business, government and society
- 6. Weak democratic control
- 7. Poor road maps to the future

Over the years, it is fair to say that the gap between promises and observed reality has narrowed. The gap between promised earnings of IT investments and what we experience financially or in our daily life has narrowed, but perhaps not so much. Still we have to take these experiences into account when we try to look around the next bend of the road.

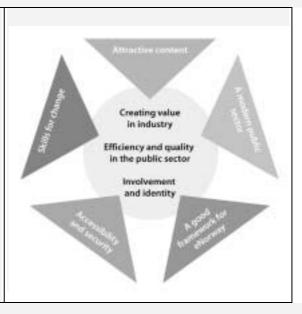
In most countries, the Information Society has been accepted at least as a long-term goal. Bearing in mind that we usually miss the time factor grossly when trying to establish a probable development course in the IT field, it seems reasonable to assume that we will not reach that visionary goal in the next few years. So, let us rather ask what the next stage of this rally can be.

This presentation is based on recent assessments and suggestions of the road ahead from three Scandinavian countries – Norway, Denmark and Sweden. They represent three different approaches in search of a comprehensive national policy in a global setting, but also show a substantial amount of common features.

## eNorway 2005– IT as a means to achieve political goals

eNorway 2005, issued by the Ministry for Trade and Industry, is labelled as a comprehensive government plan for the Norwegian IT policy, affecting virtually all sectors and walks of life. IT is regarded as a change agent, and the government goals are expressed in terms of desired changes in business and society: creating value in industry, efficiency and quality in the public sector and involvement and identity in the development process.

The document (http://eNorge.dep.no) identifies five important factors to achieve these overall goals. First is A good framework for eNorway, building on the interplay between content, skills and (technical) infrastructure, and adapting legal frameworks. Second is Accessibility and security, enabling a wide use as well as public trust in services. Third factor is Skills for change, in working life as well as for citizens. Fourth is Attractive content, from many sources. Fifth factor is a modern public sector, with user-oriented services and acting as a competent and demanding procurer of products and services on the market.



Within this general framework, a number of urgent issues are addressed. They include removing legal obstacles to information exchange, promoting eBusiness, R&D on innovation and value adding, investments in broad band communications, electronic signatures, information security, IT training for teachers and competence development. They also include information sources in the Norwegian language, a competitive content industry, a proactive role for the public sector in content development and safeguards against illegal content, strategy for integrated use of IT in the public sector and a "marketplace" for public procurement.

## **Denmark – Green book on IT Architecture**

The Danish Green book on IT architecture (<a href="http://www.oio.dk/arkitektur">http://www.oio.dk/arkitektur</a>) is published by the IT and Telecommunications Board. It has the subtitle How to create an integrated Government, but has a more far-reaching relevance, as the public IT infrastructure is a dominant factor also for other sectors in society. Thus, the first key questions put to institutions and the public are about how a common IT architecture can improve service and a more efficient public administration.

The Green Book discusses and addresses a number of problems remaining in building a modern technology environment for the Information Society, and the challenge to create common IT architecture for the future.

This effort is part of a process to, *inter alia*:

- 8. formulate a policy for a common IT architecture;
- 9. establish a framework for development and maintenance of a common public infrastructure;
- 10. create a framework for development, procurement and use of IT systems in the public sector;

11. support efforts by individual agencies and create conditions for co-ordination in their implementation.

It is emphasised that a common IT architecture should support interoperability and development of a joined up government, thus facilitating also contacts with industry, define common standards and principles and address "town planning" issues like common investments in infrastructure and be a least common denominator for all players involved, creating opportunities to add on new or specialised features.

The common IT Architecture discussed in the Green Book covers not only the technology ("hard") infrastructure but also the information ("soft") infrastructure, including databases, registers etc. The Green Book envisages consortia to discuss common efforts, and a development process where the Government administration, business and the public can participate. Key concepts are strategic choices, like between integration, consolidation and reuse, innovation, and migration from one environment to another. Recommendations include a multi-layer approach, consisting of layers for user interfaces, user/client services, integrated or joined up services and data (storage) services.

After the public discussion phase, a White Book on IT architecture will be worked out.

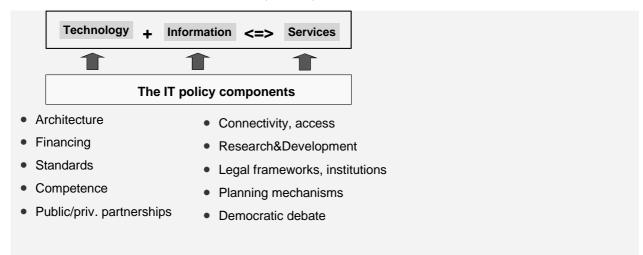
#### Sweden – producing broad digital services for all

"Broad services for all – a new phase in IT policy", published by the Swedish ICT Commission, is an effort to reassess the current IT concept, and to increase demands for results and efficiency of IT investments. From a brief, critical analysis of past experiences of IT development, the report outlines a new approach for IT policy, based on a digital production logic of services to achieve results, benefits and utilities demanded or desired in society (services digitally produced, but not necessary digitally delivered).

The production logic is quite simple, as demonstrated by the following graph.



The logic should be interpreted as an extended and modernised IT concept, including both digitised information resources and services. The report argues that this logic also should be guiding the practical IT policy work:



This means that IT policy should be subdivided into three co-ordinated but focused components: a technology policy, an information resource policy and a policy for digital services. For each component, policy must address issues of architecture and infrastructure, standards, connectivity and access, competence needs, financing etc.

This means that not only the technology platform for the "production" comes into focus, but also the information platform, of databases, registers, standards for exchange etc, and the digital service platform, of service channels, basic services and standards for design and interactivity. The production bottleneck at this point in time lies within the Information component, where coordinated actions are needed to build up resources (databases etc) to establish standards and develop competence.

This new and broader IT concept can be applied not only to the national IT policy but also to areas like eGovernment, eHealth, eCommerce, eProduction, eTransport and even eDemocracy.

By broadening the IT concept, conditions for public debate and democratic participation change dramatically, as new citizen groups can enter into discussions with better confidence on subjects like service priorities, service design, necessary information resources etc.

#### A new, result oriented stage in IT policy

The three examples cited above are taken from documents produced in the current policy work in the three Scandinavian countries. They are all usually ranked in the first group of countries in the scramble for the Information Society.

The examples build on a common conceptual political platform, with emphasis on

- ♦ benefits for all
- stimulation growth and welfare
- services development
- production processes
- new competencies
- user, citizen and client focus.

They illustrate the problems to develop and implement new policies for this new phase in IT development from three different angles.

They also prove, despite their differences, to be surprisingly complementary. The comprehensive strategies outlined for Norway can be using the architectonic input from Denmark, and find more precise tools by using the Swedish three-component or three-layered approach to IT policy.

# Naming the next stage – the Digital Services Society?

The task of this workshop is to define the Information Society. I am not so sure that these examples contribute much to defining the new Society as such, apart from confirming some of the factors where there is a reasonable consensus.

What I do hope is that this presentation has shed more light on the road, broadened the perspective on how we can (and should?) proceed, and helped to set the goal for the coming stage. Citing the former Swedish Minister for Trade and Industry and chairman of the ICT Commission, I suggest the goal to be set to "create conditions for a Digital Services Society". By doing so, the main focus of societal production is on services, the production mode is digital, but with co-existing layers from the agriculture and industrial societies.

This concept gives ample room for using most of our traditional tools to analyse our societies in this new context, to assess what will be changing by this shift in technology, what new possibilities emerge, and see what problems or challenges in society must be taken on by other means.

When we build the new production infrastructure, we need visions and concrete pictures of how we want the health services, transport systems, the school situation and everyday life to be, say, ten to fifteen years from now. We need to invite broad groupings of citizens, business people and organisations to discuss the future and what we want from it. This will show us if we are building our infrastructure in the right directions, and if our priorities are reasonably accepted. And it will give "production engineers" guidance on how and for what output to build our new production environment.

If the concept of the Digital Services Society thus can contribute to demystify our digital future, maybe it has also helped us better understand and deal with the new society ahead.

# Report of the business session

# "Creating an attractive environment for investments in the information society" Item 8 (a)

Friday, 8 November 2002

Coordinator: The International Chamber of Commerce and the Coordinating Committee of

**Business Interlocutors (CCBI)** 

Chair and moderator: Mrs. Maria Livanos Cattaui, ICC Secretary General

Rapporteur: Ms. Ayesha Hassan, ICC Senior Policy Manager – Paris

# 1. Organization of work

# **Opening**

Chairman:

• Maria Livanos Cattaui, ICC Secretary General

Welcome remarks:

Mihai Daraban, Vice-President of the Chamber of Commerce and Industry of Romania;
 President of the Chamber of Commerce and Industry, Navigation and Agriculture,
 Constanta; ICC Romania founding member

#### Session 1

Policy and regulatory elements: the realities and requirements to nurture domestic and international investment in information and communications technologies. This discussion will explore the critical components of policy and regulatory frameworks and highlight the experiences of business and government with frameworks that work and do not work.

# Moderator:

- **Maria Livanos Cattaui**, ICC Secretary General Paris *Keynote Addresses:*
- Carlo Trojan, Ambassador, Permanent Representative, Delegation of the European Commission to International Organizations Geneva
- **Mark Furrer**, Director General, Federal Office of Communications Switzerland *Speakers:*
- **Helmut Stocker**, Vice President Standardization and Governmental Affairs, Siemens Germany
- **Rémy Fekete**, Partner, Gide Loyrette Nouel France
- Pawel Stelmaszczyk, Government Affairs Manager, Intel Corporation Belgium
- Silviu Hotaran, General Manager Microsoft Romania

#### Session 2

Local entrepreneurship and supportive structures: what does it take to stimulate new business in the ICT arena? This session will delve into the key structural motivators for entrepreneurs through actual experiences and lessons learnt

#### Moderator:

- **Maria Livanos Cattaui**, ICC Secretary General Paris *Keynote Speaker:*
- Mark Furrer, Director General, Federal Office of Communications Switzerland

#### Speakers:

- Christiaan van der Valk, Co-founder and Vice President of Marketing and Business Development, Tekki AB France
- **Jerker Torngren**, Project Director, Internews USA
- **Christer Sturmark**, Internet Entrepreneur, Venture Capitalist and Independent Political Advisor Sweden
- **Marian Popa**, Country Operating Officer, FUJITSU SERVICES (UK) Romania *Rapporteur:*
- **Ayesha Hassan**, ICC Senior Policy Manager Paris

# 2. Bucharest report: Business-led roundtable session:

On behalf of the Coordinating Committee of Business Interlocutors, chaired by the International Chamber of Commerce (ICC) and comprised of among other business organizations, GIIC, WITSA, BCUN, WEF, we would like to express our great appreciation for the opportunity to organize what was an invigorating, and dynamic discussion regarding the key policy and regulatory issues that help to create an environment that attracts investment in Information and Communication Technologies (ICTs) and the knowledge economy, and the critical experiences and impediments to stimulating local entrepreneurship at this most important regional meeting for the World Summit on the Information Society.

These are the basic components to enable the use of ICTs and the information society as a critical tool for to promote economic growth and which will in turn contribute to progress on one of the millennium goals – the alleviation of poverty.

The focus of the panel presentations and the moderated discussion by ICC Secretary General, Maria Livanos Cattaui, was what are the policy and regulatory framework issues that will nurture investment in ICTs and promote local entrepreneurship. We brought together the experiences of government, regulators, multi-national business, legal experts, and entrepreneurs to explore and identify substantive experiences that can be built upon and used in many countries, the issues that can be dealt with at this Summit, and the concerns which will guide the experiences of countries that are forming the infrastructures that will assist them in fully utilizing ICTs as a tool for economic development.

The presentations, discussion and questions from the audience generated the following recommendations regarding the policy and regulatory framework issues that create a nurturing environment for investment in ICTs and the information society, and the impediments to creating such an environment:

- Regulation has its costs and policy makers need to balance regulation with sustainable growth concerns.
- Regulatory packages such as the new EU framework, which gives national regulators more
  flexibility and the ability to accommodate technical, competitive evolvements by taking
  away 'red tape' and hassle for investors is important.
- Implementation of regulatory frameworks present important challenges.
- The model for the telecommunications and communications regulator in a country should be well thought out----the most conducive model will mean consolidation or strengthening of these functions.
- Creating a pro-competitive environment will attract investment by creating a broad market, and it will better meet the needs of consumers/users by lowering prices and increasing choice.

• It is important not to get stuck in our regulations! Maintain flexibility and change if needed.

The question of timing regarding liberalization, and creation of the regulator was explored.

If licenses are granted before a regulator is in place, and if telecoms regulation refers only to competition law many problems arise in emerging countries. Multi-sectoral regulators could optimise the use of public funds and the simultaneous development of different public infrastructures.

It is of great importance to measure what gets done in this area to maximize experiences and to make continued progress in efficiency and effectiveness:

- Key policy needs in the terms of the infrastructures needed to fully utilize ICTs to promote economic growth are:
  - connectivity,
  - competence,
  - confidence, and
  - content creation.

These 4 'Cs' are all key to accelerated economic growth.

Some of the criteria used to assess investment attractions in countries include:

- the presence of a skilled labour force;
- intellectual property protection that can be enforced in local courts;
- the necessary infrastructures must be in place;
- society must have access; and
- the potential for service offerings.

A substantive exchange was had on how to decide when to set up a regulatory authority in the privatisation and liberalization process, and some key questions to ask were identified:

- 1. Is it necessary and timely to establish a regulator?
- 2. Are the jurisdictional parameters set for the regulator?
- 3. Are there measures in place to ensure that there is not redundancy in the system?
- 4. Is the regulator's role clear?
- 5. Is there transparency in a real way in the system?

Sequencing in the policy context is critical and assessing when to open the market in the regulatory structure that is being put in place can make an enormous difference in the success of a country trying to attract investment in the information society and achieving the goal of fully utilizing ICTs to promote economic growth.

These recommendations were balanced with an acknowledgement in the discussion that countries present complex realities and there is no set formula given that for instance, impediments that are part of the system may exist to protect certain users and owners.

It is crucial to avoid replacing one monopoly with yet another if the goal is to attract investment by opening the market, sustaining a competitive environment, and growing the structures that support the information society.

A few other fundamental actions that governments can take to set the stage for investment in ICTs are:

- 1. Sign the basic WTO telecoms agreement to encourage liberalization.
- 2. Define a long-term telecoms strategy for a country to ensure a solid path forward.

The second part of the discussion focused on how to stimulate local entrepreneurship and the supportive structures that are necessary to achieve this goal.

Entrepreneurs and regulators shared their personal successes and failures, their innovations and the challenges they faced in setting up businesses in the ICT and Internet fields and developing the structures that affect entrepreneurship from the government side. This rich dialogue led to the following recommendations and observations:

- The cultural approach to risk-taking, bankruptcy, and failure is a primary factor in how a country's entrepreneurs will act and react. The reality is that cultural ways will only change over time, and setting a tone of acceptance and acknowledgement of the need for risk-taking (and possible negative consequences) is fundamental to establishing a culture of innovative business.
- Human resources must be cultivated through investment in education and life long training to maximize ICTs as a tool for economic growth.
- There must be a strong financial sector that can support investment and take responsibility for consequences of risk and investment.
- Laws regarding IP, contracts and IT security must be developed and implemented to support the risk taking and new partnerships that are part of entrepreneurial growth.
- Specific examples from countries including Romania, Switzerland and Sweden highlighted how these issues have been tackled and what has worked and what has not been as successful

Other input included the importance of government as an early user of ICTs as both a motivating factor in promoting local entrepreneurship and streamlining what is often a huge obstacle to entrepreneurs – the massive amount of administrative challenges they face just to get started.

'One stop shopping' for the administrative needs of entrepreneurs is critical and the role played by diminishing the burdens on entrepreneurs and new businesses to get started cannot be underestimated. Several examples of initiatives in different countries where this issue is being or has been addressed were discussed with solid evidence about how much of a difference this one aspect can make in creating a community of new businesses in a country, and in turn furthering the goal of utilizing ICTs for economic development.

Compiling information through this Summit preparatory process about what does not work to enable other countries to learn and leapfrog will be key.

Another aspect of creating new businesses is the reality that to do so, people who take these risks have to sustain themselves financially and maximize their existing experiences while setting up their business. Consulting is increasingly a means for many entrepreneurs to support and finance their risk taking and to grow new companies – supportive governmental action for consultants will encourage entrepreneurial growth.

In addition, consultants are a knowledge unit, and an investment vehicle for technology companies. Examples of both business people who consult as they build companies and government people who for instance advise companies in their village were discussed.

The attitude of public service providers can be encouraging or discouraging to entrepreneurs trying to manage the administrative and bureaucratic issues to get started. This may seem basic, but the day to day experience of setting up a business can either encourage or discourage more local entrepreneurs to be innovative or not.

International cooperation features among statements of principles for creating and promoting the information society for all.

The need for competitors to be able to find opportunities and the importance for them to be able to trust the entire society not just the telecoms policy was emphasized.

The keys to promoting local entrepreneurship were highlighted by the following points:

- Impediments to local entrepreneurship include administrative obstacles and tax burdens that, if alleviated, would help enterprise progress.
- Legal systems must be trustworthy.
- Bureaucracy must be reduced at all levels of society.
- Corruption must be fought.
- Transparency must be part of action, not just a word; for example the regulator should be required to divulge where it has spent money.
- Basic things like the ability to accept credit card payments, and to allow the deposit of salaries as has been put into regulation in Romania will help to promote entrepreneurship.

The discussion ended with the following concluding thoughts that bring together the main messages from this vibrant exchange:

- Measure what can be measured—strive to measure what is more difficult to measure and stop trying to reinvent the wheel.
- Realize that every SME is a person in front of you and this will guide the elimination of obstacles to help the person, the SME, build new businesses and opportunities for economic growth in the country.
- Make sure that objectives are clear before any drafting of legislation begins.
- Understand the realities of those to be regulated.
- Invest in IT development in schools.
- Do not look at IT and what it can do, ask what problem IT can solve.

Finally, the inclusion of business as a true vector and partner in the development of the information society is important to the success of this Summit and most important for the implementation of the goals of this Summit.

There are no general recipes and one-size fits all solutions – we must focus on the lessons learned and apply them as appropriate to different countries' needs and realities.

On behalf of the CCBI we would welcome a real and intensive integration of business from across the globe, large and small, and all sectors in the work of this Summit to promote the information society for the benefit of all.

# Report on the Civil Society Forum: "Designing new patterns for interaction"

Item 7 (b)

Friday, 8 November 2002

Co-ordinator: Civil Society Plenary Group European Caucus

Facilitators: Claire Shearman (Global Community Networking Partnership);

Sean Ó Siochrú (NEXUS); Renate Bloem (CONGO)

**Rapporteur**: **Karen Banks** (Association for Progressive Communications)

#### **INDEX**

#### I. KEY THEMES AND ORGANISATION OF THE SESSION

#### II. CONCLUSIONS

- The Diversity of Civil Society
- Vision and principles
- Critical Issues and Themes
  - o Access
  - o Empowering Citizens of the Information Society
  - o Securing and extending the public domain
  - o Integrating community into policy frameworks
  - o The WSIS Process and Civil Society Participation

#### III. CONCRETE ACTIONS

- In relation to the WSIS process
- In relation to WSIS Prepcom

# IV. APPENDICES

- Appendix 1. Civil Society Co-ordination Working Group Statement to the Informal Meeting on Content and Themes, Geneva, 16-18 September 2002 (English, French, Spanish)
- Appendix 2. WSIS Youth Caucus Statement, Friday, 8 November 2002
- Appendix 3: World Blind Union Representative to the Civil Society Forum, Friday, 8 November 2002
- Appendix 4: Proposal to forum an IPV6 working group

# I: KEY THEMES AND ORGANISATION OF THE SESSION

The session was structured slightly differently from other parallel sessions using a combination of short introductory pieces followed by open, facilitated discussion. 'Formal' papers and comments comprised only a small part of the Session. The session focussed on maximising opportunities for interaction of all participants, was well attended and many lively debates ensued, leading to several concrete proposal and actions for the WSIS process in general, and PrepCom II specifically.

The session's main goal was to explore the context and diversity of possibilities for participants in terms of:

- Identification of key issues that are not currently on the civil society agenda
- The ways in which Civil Society can organise itself around the WSIS process

The session was organised in two parts and addressed the following main themes and issues:

- The Diversity of Civil Society
- Vision and Principles
- The Regional Specificity of Europe
- Access
- Empowering Citizens of the Information Society
- Securing and Extending the Public Domain
- Integrating Community info policy developments
- Participation of Civil Society in the WSIS Process

# **Part A: Themes and Issues**

A brief introduction outlined the issues already explored and proposed by some civil society groups during the WSIS process to date, the contents of which can be referred to in Appendix I). The goal of the session was to explore and identify important agenda matters that have so far largely been omitted, aiming to highlight a small number of additional critical issues.

The session included two short presentations:

Patrick Gannon, President & CEO, OASIS – Designing new patterns for Interaction Manuel Acevedo, e-Volunteering Unit Coordinator, United Nations Volunteers (UNV)

# Part B: Possibilities and Strategies for Civil Society Participation

A brief introduction outlined the broader context of civil society in the context of UN Summits and the formal and informal situation for the WSIS process so far. The session aimed to focus on options available to Civil Society in terms of having an effective role in and around the process, and especially around the PrepCom II (Geneva February 2003).

The session included one short presentation by Webforce.

Facilitated discussion in both parts of the session led to Conclusion and Concrete Actions as outlined in sections II and III of this report.

# **II: CONCLUSIONS**

#### The Diversity of Civil Society

The first point that the session emphasised was the wide-ranging diversity of civil society. Our diversity is expressed through the nature of work organisations and networks engage with. We are human rights and development groups, teachers and educators, trainers, librarians, technicians and policy makers, academics and grassroots activists. We work from the community level, to national, regional and global levels.

It was felt that the potential role and expertise of some of the newer actors – such as academics, technicians and open source advocates, health care advocates and media professionals – have not been sufficiently integrated into the development of our priorities and strategies.

We aim to engage more actively with these actors through the establishment, for example, of new working groups to capitalise on the expertise of academic and technical experts within the civil society space. Examples were the establishment of a civil society led multi-stakeholder working group on the potential societal impact for Information Society development of the new Internet protocol, IPV6 and a working group for universities and research institutions.

# Vision and principles

Human rights, sustainable development, gender justice and peace must be at the core of the Information society agenda which affirms and build on principles and values contained in international instruments such as the Millennium Declaration, the Universal Declaration of Human Rights, CEDAW, the Beijing Platform for Action and Agenda 21.

The WSIS agenda recognises the right to information and communication as a human right with associated responsibilities, to be enjoyed by all and recognised as a pre-condition for equal participation in society, a means to increase all people's quality of life and liberties and contributes to building peaceful and harmonious societies.

Several participants raised concerns about the way in which there is a danger that the external context of war and conflict in the world today could impact in a negative way in achieving these goals.

#### Critical Issues and Themes

The participants noted the importance of the issues already explored and proposed by some civil society groups during the WSIS process to date, the contents of which can be referred to in Appendix I). The goal of the session was to explore and identify important agenda matters that have so far largely been omitted, aiming to highlight a small number of additional critical issues.

The treatment of topics is likely to differ from region to region and it will be necessary to address certain of the themes and issues on the WSIS agenda from a regional perspective. For example, in relation to building confidence and security in the use of ICTs, Europe is taking a lead in developing policy frameworks that will have an impact on the rest of the world. We should ensure that European values based on fundamental principles of democracy and human rights are reaffirmed in the development and implementation of policy frameworks.

#### Access

In relation to the specific European context, the reality of access is not universal. Some people assume that it is only in the global South that fundamental access needs are a prime concern, but these same concerns are as urgent in Europe and elsewhere. This situation reflects major structural, political, social, economic and cultural inequalities, which continue to exist in most, if not all, European countries.

In addition to the crucial question of access, participants in the Civil Society Forum session emphasised three other critical issues.

# **Empowering Citizens of the Information Society**

In an Information Society that wishes to empower people to be active and responsible citizens in the local, national and global contexts, and to use ICTs as a means of supporting open and

effective dialogues to seek solutions to difficult situations such as conflict resolution, education is paramount.

Young people – who are often amongst the most competent and creative users of ICTs - have a crucial role to play here as agents of change. Volunteers and volunteer networks, often through activities carried out by Civil Society organizations, also have a major role to play by raising awareness and building capacity to appropriately apply ICTs in local and national development processes.

# Securing and extending the public domain

Securing and extending the public domain in relation to content, tools and applications is critical in terms of:

- preserving and promoting cultural diversity
- delivering government services (such as health, education, social services etc)
   economically and efficiently
- the strengthening of active participation of citizens in democratic processes
- building accountability and transparency into governance processes
- developing new models of representative democracy

Governments should consider the benefits of open source, open content and open standards solutions in the allocation of public resources towards implementation of all of the above.

# **Integrating community into policy frameworks**

The centrality to, and current absence of, 'community' in Information Society and sustainable development policy frameworks at all levels was noted. New types of partnerships between community groups, local governments and the private sector are playing a key role around the globe in implementing and shaping Information Society development at the local level in terms of governance, sustainable development, local democracy, education, employment and community enterprise. Community has become an important integrative and inclusive mechanism for effecting successful multi-stakeholder partnerships and approaches at the local level. This needs to be more explicitly acknowledged and reflected in the WSIS processes and outcomes.

#### The WSIS Process and Civil Society Participation

There was substantial discussion about the ways in which Civil Society can participate more effectively in the WSIS process. Key points included:

- we see WSIS as a process and not a series of disconnected events and meetings
- there is still room for a lot more progress in terms of deepening the level of Civil Society participation in the full range of WSIS discussions and activities
- the ways in which Civil Society are quite different from traditional intergovernmental approaches. The challenge lies in finding ways in which our Civil Society processes and methodologies can be more effectively integrated into the WSIS mechanisms and approaches
- the need for the various Civil Society working groups and caucuses to develop clearer positions and demands in preparation for PrepCom 2

- to develop in parallel with this process, appropriate mechanisms for multi-stakeholder discussions and negotiations on key issues, led by civil society, as has already been implemented in the case of the multi-stakeholder gender caucus
- the need for Civil Society proposals and interests to be incorporated into the processes for setting the WSIS agenda and drafting the Declaration and Action Plan for PrepCom 2 in a timely manner

#### III: CONCRETE ACTIONS

# In relation to the WSIS process:

- 1) Awareness raising at the national and local levels. Governments, working in association with Civil Society, the private sector and the CSD, need to more actively promote and provide resources for the awareness, participation and mobilisation of actors and networks in the WSIS processes
- 2) Providing financing and resources to develop effective ways in which ICTs can be used to support this process
- 3) With regard to the need to address fundamental access issues and recognize the structural, political, social, economic and cultural inequalities that continue to exist, international agreements regarding universal service delivery would be useful in acting as a benchmark for implementation at the national level
- 4) In relation to open content and open source software development, the creation of a universal content and software library under the patronage of UNESCO was strongly supported
- 5) Effective financing mechanisms to support local Information Society development both within and between developed and developing nations, should be explored. One example would be via support to volunteer-powered initiatives to help bridge the digital divide, nationally and internationally, which would expand the operational activities of Civil Society in this regard. Youth and Universities would play a particularly central role in such initiatives. Models, such as the type of co-financing arrangements that have been used in the context of the enlargement of the EU, might be appropriate in the WSIS context, along with due consideration of social and environmental standards

# In relation to WSIS Prepcom

To date we have not been not equal actors in either the formal WSIS process or the tripartite approaches that are being promoted. We are looking for ways in which we can contribute to improving this situation.

- 1) We advocate greater participation of Civil Society participation in national delegations and consultations.
- 2) We welcome the opportunity to work with the hosts and stakeholders of the WSIS process and in preparations for PrepCom II, in the formulation of the meeting Agenda, the organisation of sessions including content and themes and identification of speaker.
- 3) We invite governments, the private sector and intergovernmental agencies to work with us in establishing multi-stakeholder dialogues within civil society (for example through informal or formal workshops) led by civil society, on a series of priority issues and themes between now and the Summits in Geneva and Tunis. Suggestions of such issues included:
  - How ICTs can best be applied to achieving objectives as set out in the Millennium Declaration – the Millennium Development Goals
  - The IPV6 protocol societal impacts in the context of the Information Society

IV: APPENDICES

Appendix 1. Civil Society Co-ordination Working Group Statement to the Informal Meeting on Content and Themes, Geneva, 16-18 September 2002

#### CIVIL SOCIETY COORDINATION GROUP

Statement to the Informal Meeting on Content & Themes Geneva, 16-18 September 2002

#### 1. INTRODUCTION

This document contains the comments and contributions of the coordination of representatives from civil society organizations grouped into sub-committees, caucuses and working groups issued from the final civil society plenary formed during PrepCom1. This statement is our answer to the report presented by the Chairman of Sub-Committee 2 (Content and Themes), containing the two non-papers, respectively on the "Principles guiding the preparatory work and the WSIS" and proposed "Themes for the WSIS". This document should be considered as our common contribution to the informal meeting on content and themes, convened in Geneva, September 16-18, 2002.

The WSIS offers an unprecedented opportunity for an in depth exchange among a wide range of stakeholders, that could lead to a better and more widely shared understanding of the very diverse challenges and opportunities for human development posed by the "Information Society", as well as to identify possible dangers. This implies that human needs in the realm of information and communication, and the goals of human development, must be at the heart of the discussions. Only if there are adequate opportunities to confront different perspectives will it be possible to achieve basic consensus on goals and strategies. We understand that this is the spirit in which the Summit was convened and our proposal adopts this spirit.

The coordination of civil society organizations endorsing this document has been somewhat encouraged by the progress on principles and themes with regards to initial proposals. More precisely, we understand that the principles and proposed themes should be considered as guidelines encouraging further developments and concrete proposals to be submitted by all participating groups to governments' decisions.

However, we still have a number of major concerns relating to the contents of the two non-papers. These concerns, and our proposals to overcome them are highlighted in the sequel of this statement. We are confident that all these concerns will be taken into account and all these proposals will be reflected in the final report of Sub-Committee 2, showing a common will to achieve consensus and work towards general interest outcomes.

#### 2. GUIDING PRINCIPLES

2.1 Most of the guiding principles proposed in non-paper 1 are welcomed

#### These are:

- Extension of the benefits of the information and communication society to all, and the necessity of their development-orientation
- Need to find a shared understanding and to raise awareness of the information and communication society and to meet the challenges of the digital divide
- Priority given to preservation of linguistic diversity and cultural identity

- Prevalence of international solidarity and co-operation
- Assessment of the fact that ICTs are a tool for achieving economic and social goals, and not an end in itself
- Importance of universal and inclusive access
- Importance of communities and of utilizing ICTs for the benefit of disadvantaged groups

We nevertheless insist on the recognition that the digital divide issue should be tackled in its broadest understanding, in order to guarantee democratic and equitable access and participation. This means addressing not only the North/South digital divide but also the enduring inequities within both developed and less developed nations, and generally speaking the political and social barriers, along with technical, educational, gender and economic ones, that are major causes of marginalization.

In addition to "access", there is a requirement to develop and provide the means for the effective use of ICTs by diverse groups, as providing equitable opportunities to advance and successfully participate in the achievements and benefits of the information and communication society. Moreover, diverse realities of social groups such as indigenous people, diasporas and migrants, as well as specific needs of groups such as older persons and the disabled, should be addressed. In addition, we consider that culture is lively and evolving, therefore not only preservation of linguistic diversity and cultural identity, but also fostering their development should be prioritised. Furthermore, youth contributions to overall development of the information and communication society should be emphasized. Finally, gender-based analyses and perspectives must be introduced into all proposals, action plans and follow-up programmes, so that gender equality can be guaranteed in the information and communication society, as enshrined in the Convention on the Elimination of All Forms of Discrimination against Women and the Beijing Platform for Action.

To secure these guiding principles and ensure the achievement of these shared objectives, we consider indispensable the addition of the following principles for the overall work of the Summit.

#### 2.2 Human rights and human development are the basis for the WSIS

The information and communication society must necessarily have people at its centre. Human rights and human development must be the fundamental basis for consideration of all other principles, themes and possible outcomes within any UN-sponsored summit. Approaching the information and communication society from a rights perspective implies putting human dignity, human development and our rights as global citizens above technological considerations or the commercial producer-consumer relationship. Therefore, the goal of the WSIS should be achieved in reference to the Human rights framework established by the United Nations, as articulated in the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, the International Covenant on Civil and Political Rights, the Convention on the Elimination of All Forms of Discrimination against Women, and many other documents that have been adopted by member states.

The lack of a Human Rights Perspective in the proposed WSIS guiding principles remains one of our major concerns. With this regard, we appreciate the reference already made to the UN Millennium Declaration in non-paper 1. However, we consider that Human rights and human development deserve more than a loose and indirect reference. We therefore insist on the explicit inclusion in the guiding principles, as well as in the final Summit declaration, that:

Human Rights are a fundamental basis for all developments in an information and communication society. United Nations Millennium Declaration principles, and specially those stated in its section V (Human rights, democracy and good governance) constitute both the framework and the evaluating criterion of these developments.

# 2.3 The WSIS must recognize that communication is a universal right

Communication is a fundamental human need, indispensable for the organization of societies. A WSIS that makes human rights a guiding principle for all other thematic discussion must, therefore, take up the concept of communication as a universal human right. Human interaction and the exchange of information and content to facilitate active citizenship - the participation of all individuals and communities in the public space - are missing from most of the proposals we have received.

The sole reference to Access to information is too restrictive. People should be recognized in their full quality as citizens, not just consumers or users of technology and services. The focus should be put on people and the services they require, rather than on services and the people who use them. Participation and communication and effective use concepts should be affirmed. We thus propose that the guiding principles as well as the final Summit declaration include their mention:

Communication - understood as a participative and interactive process essential to human coexistence, human formation and citizenship and community building - and information-sharing should be the thematic focus of the summit. Technology should be at the service of these.

# 2.4 Ensuring and extending global information commons

This is needed to achieve both the reduction of inequalities and the stimulation of intellectual creativity and technological innovation in an Information and Communication society. Furthermore, it should be recognized that the global commons, that have been developed by means of public funding and that derive from our shared physical environment, constitute a public resource, which should not be sold for private profit making. We therefore consider that the guiding principles as well as the final Summit declaration include provisions with this respect:

Securing and extending Global commons is a major way of bridging the digital divide and of ensuring the minimal equitable conditions for the overall development of intellectual creativity, technological innovation, effective technology use and successful participation in the information and communication society. These are the necessary pre-conditions for realizing the values and principles of Freedom, Equality, Solidarity and Shared responsibility adopted in the United Nations Millennium Declaration.

#### 2.5 Other concerns

Among the guiding principles proposed in non-paper 1, some remain between brackets, yet to be discussed by Sub-Committee 2. Among them, we note the one stating that "The Summit should consider, in a balanced manner, infrastructure and content issues". In the light of above points, the coordination of civil society organizations endorsing this document urges Sub-Committee 2 and more generally speaking all government representatives to reaffirm, in the guiding principles as well as in the final Summit declaration that: The Summit should consider, in a balanced manner, infrastructure and content issues.

Another bracketed principle refers to "The importance of the issue of information network security". We consider this to be a sub-theme, not a principle, and in any case that security issues should not be considered separately from privacy issues.

#### 3. THEMES

The list of themes contained in non-paper 2 cover some of the important aspects of the information and communication society, but do not seem to be clearly defined in a coherent framework. Taking into consideration the inputs to and results of PrepCom1, as well as the principles guiding the summit that we have suggested above, we propose the following categories as a comprehensive framework for WSIS themes. We have attempted to represent in the content of each thematic category discussed below most of the major issues articulated by all participating groups in the WSIS process to this point. The specific issues mentioned do not aim to be exhaustive nor exclusive of other important issues. In this section, the framework and themes are only briefly outlined. For the sake of clarity, specifications and possible sub-themes are developed in an Annex entitled "Elaborating on themes".

3.1 *Understanding the information and communication society (conceptual framework)* 

In order to fulfil the guiding principle of "The need to find a shared understanding of and to raise awareness of the information and communication society and how the challenges of the digital divide can be met", it seems important to include this section as part of the agenda.

3.1.1 The Foundations of the information and communication society

In this category, the WSIS would develop a shared definition and understanding of the information and communication society: what is it, who and what purposes it should serve, and on what ethical bases it should function.

3.1.2 Contribution of the information and communication society to the opportunities for human and social development

As a basis for building a better understanding of the potential and risks of the information and communication society, the WSIS would examine the particular roles and responsibilities the information and communication society has to play in contributing to development and would evaluate its social impact. The WSIS would also identify the means to ensure the broadest distribution of opportunities for human and social development and effective technology use within an information and communication society and the emerging technology environment on which it is based.

- 3.2 *Cross-cutting themes*
- 3.2.1 Bridging divides and creating opportunities for effective participation in the information and communication society

Overcoming the barriers to people and countries in accessing, participating and providing opportunities for effective use of the emerging technology environment in the information and communication society should be a concern present in all the themes of the WSIS agenda.

3.2.2 Gender perspectives

In accordance with the Millennium Declaration, the Convention on the Elimination of All Forms of Discrimination against Women, the Beijing Platform for Action and other instruments adopted by the UN, the WSIS must address gender perspectives within the information and communication society in all aspects of the agenda.

# 3.3 Developing a framework

The themes in this group concern the basic conditions for the functioning and development of the information and communication society.

#### 3.3.1 Regulatory and policy framework

This would look at how the information and communication society should be regulated and developed, within a perspective of fulfilling the objectives of human rights, democracy, development and good governance.

# 3.3.2 Building the infrastructure

In this category, the WSIS would focus on the technical aspects of evolving the information and communication society from its present state, including the establishment of technical standards.

# 3.3.3 Tools, services and applications

In this category, the WSIS would examine tools, services, and applications in the information and communication society that should be pursued in addressing human needs.

# 3.3.4 Governance issues

In this category the WSIS would address issues concerning transparent governance as well as the particulars of governing the information and communication society.

#### 3.4 Purposes of the information and communication society

The themes in this group concern the wherefore of the information and communication society, and as such should be given equal importance to the previous group of themes.

# 3.4.1 Knowledge society

In this category, the WSIS would address themes that recognize the creation and management of knowledge as the key benefit to humankind of the information and communication society.

# 3.4.2 Developing content

This category would address the policies, regulations and financing to ensure production and circulation of diverse content.

#### 3.4.3 Peoples, communities and rights

In this category, the WSIS would address the rights of people and communities in the information and communication society, and needs that are not addressed by commercial perspectives on the information and communication society.

The main emphasis here is, on the one hand, to articulate support for people's empowerment and for their full participation in their countries and communities; and on the other hand, to promote community-driven and community-based enabling initiatives including traditional and innovative uses of communication and information management and processing tools at the community level.

#### 4. ANNEX - ELABORATING ON THEMES

- 4.1 Understanding the information and communication society (conceptual framework)
- 4.1.1 The Foundations of the information and communication society

The primary emphasis here would be on defining the role of human rights in the information and communication society in the context of the United Nations system. Integral to this, the distinct roles of governments, civil society, and the private sector would also be established. The diverse realities of different types of communities in the information and communication society would also be addressed here.

4.1.2 Contribution of the information and communication society to the opportunities for human and social development

Themes would include: the creation of economic opportunities; the role of ICTs in health, agriculture, and other life-critical sectors; the role of ICT-based communication for development; building national policies and capacity in developing countries; the roles and impacts of investment and speculation in ICT-based development; the role and limits of E-commerce in development; the impact of ICTs on employment and migration.

- 4.2 *Cross-cutting themes*
- 4.2.1 Bridging divides and creating opportunities for effective participation in the information and communication society

This implies explicitly recognizing a complex of different types of barriers, not the proverbial, monolithic "digital divide", along with the need for creating opportunities for effective participation in the information and communication society through the use of ICTs, including training, finance, sourcing, technology design and others. Major emphasis would be placed on addressing barriers and developing the means to ensure effective participation in all aspects of ICT development on the part of the least developed countries (LDCs).

Other themes addressed here would include: social, economic, and educational barriers; political, cultural and historical barriers; requirements for achieving universal and equitable access; and the distinct roles of governments, civil society, and the private sector in bridging barriers to the information and communication society, as well as means for ensuring effective participation through targeted training, micro-finance and local market development.

# 4.2.2 Gender perspectives

This would imply focusing on the broad themes of reducing gender discrimination and improving participation of women in the information and communication society, capacity

building and training for women, and the use of ICTs to improve the lives and livelihoods of women worldwide.

Specific themes would include: supporting wide participation by women ICT specialists in policy and decision making at all levels in the ICT sector; supporting women's greater access and control over resources necessary for their empowerment; encouraging women to explore the convergence and between cultural and traditional forms of communication with the technologies currently available; enhancing the possibilities of women at all levels utilizing ICT tools to transform gender hierarchies in society and to challenge stereotyped roles that they are expected to fulfil; using new and alternative forms of ICTs to counter the negative portrayal of women in the media, examining and addressing old and new forms of exploitation and violence against women in the information and communication society.

# 4.3 Developing a framework

# 4.3.1 Regulatory and policy framework

Regulatory themes would include areas such as: freedom of expression; data protection; privacy and network security; privacy in the workplace; consumer protection, specially with regards to spamming and profiling; intellectual property rights, public domain and fair use, public services, the establishment of appropriate policy and market structures and regulating media ownership and concentration; and extending rights of workers and their trade-unions to the use of the internet and intranets of companies for purpose of communications and solidarity: defining online rights for on-line workers is a necessity which includes provisions to protect workers in very intrusive workplaces and unprecedented monitoring and surveillance conditions. Finally, given the borderless characteristics of ICTs, an appropriate framework for establishing the competence of jurisdictions should also be elaborated.

Themes addressing the development of the information and communication society would include: policies for autonomous development of national and regional information societies; securing and extending the global information commons as a major way of bridging the digital divide; sustainable and environmentally responsible development of ICTs as well as the use of ICTs to enable sustainable and environmentally responsible development and conservation efforts worldwide; determining the appropriate use of new and traditional ICTs; capacity building in governments, civil society, and the private sector; financing and deployment of technology; and examination of social and regulatory impacts of this framework.

Recognizing participatory design as an indispensable tool for ICT development, this category should also establish as an integral part of this framework a continuing process for the implementation and review of summit themes and principles, and mechanisms for the implementation, monitoring and enforcement of rights recognized in the information and communication society by the WSIS.

# 4.3.2 Building the infrastructure

Themes would include: the extension of Internet connectivity, wireless technologies, and other advanced ICTs to meet outstanding human needs in all societies; infrastructure needed to extend participation of the developing world in the Information and Communication society; sustainability; continuing support for open source technologies; building bridges between different types of media, including radio, television, print and the Internet; addressing the needs of rural communities; ICTs needed to address emergency situations, as articulated in the

Tampere Convention; and supporting the deployment of community radio and television broadcasting sectors.

# 4.3.3 Tools, services and applications

Major thematic subcategories here would include technologies that facilitate active citizenship and improved government; support universal access to knowledge and global communication and cooperation; and the improvement of the standards of living adequate to the health and well being of all people.

Specific themes include: the building of bridges between the media: radio, television, press and Internet; ICTs for E-government, including citizen input into political processes; support for disaster mitigation and relief operations; support for long-term archiving for cultural preservation; and tools to facilitate cross-sector co-operation.

# 4.3.4 Governance issues

Themes would include: democratic management of international bodies dealing with ICTs, including Internet governance; the use of ICTs for administration management and decentralization; building consensus and strengthening governance through ICTs; and enhancing public accountability and transparency through the use of traditional and new forms of ICTs. Internet governance, with special emphasis on developing and securing global information commons, is a major theme. This includes: the development of common infrastructure and standards; the domain name management system seen as a public service and not as a commercial and financial speculation opportunity; the need for a more balanced regional representation in international bodies dealing with ICTs; the establishment of minimal requirements on Internet international bodies, which should be representative and transparent; and a fair renegotiation of bilateral network interconnections and multilateral peering agreements, towards better balanced and lower cost international route and hub repartition, instead of the current US- and Euro-centric Internet topography.

# 4.4 Purposes of the information and communication society

# 4.4.1 Knowledge society

Such themes would include: educational goals; distance learning; facilitating both formal and life-long learning; development of information literacy; access to knowledge; support for cultural and linguistic diversity; needs of young people in the knowledge society; addressing the root causes of the technological and intellectual brain drain from developing countries; capacity building in academia to support the knowledge society; alternative and community-based technologies; redefining the concept of knowledge to take into account local, indigenous, and diverse knowledge systems.

# 4.4.2 Developing content

Major themes would be development of the global information commons, preservation of language, fostering cultural diversity and development of local content.

Specific themes would include information as a public good, with due consideration for intellectual property as protection for authors; the role of the media; freedom of expression and of the media; public financing for developing non-commercial content; support for development of non-commercial and independent media; enabling people and women in particular to access

and participate in the development of content that represents their own realities and diversities; prevention of content dumping.

# 4.4.3 Peoples, communities and rights

Major thematic subcategories here include: information and communication rights; the creation of electronic commons, free public spaces and technical resources that can be used to meet human needs; community control of ICT infrastructures; capacity building; and the multiplicity of dimensions of diversity.

Specific themes here would include: the empowerment of communities through ICTs; support for oral information and cultures; privacy; support for independent, community controlled media and other community-based and community-owned forms of communication; the needs of people with disabilities; needs of the elderly; support for cross-cultural communications; and geographic-specific themes.

# Appendix 2. WSIS Youth Caucus Statement, Friday, 8 November 2002

In order to stimulate the WSIS process and involve youth in a more structured and democratic way, the youth caucus suggests the adoption of the following text:

"Youth participation is of vital importance for the WSIS process. Therefore, the participation of youth representatives will be secured through a youth forum, preceding the second and third preparatory committee and the Summit in Geneva. The result of this forum will be an outcome document encompassing the youth's perspective on the topics debated in the Summit. This document will be presented through a speech to the plenary of the Summit. Furthermore, national governments, NGOs and the private sector are encouraged to bring youth delegates, who are representative and have affinity with the Information Society, to the preparatory committees and the Summit itself. After the Summit in Geneva the procedures will be evaluated and, if necessary, adjusted for the Summit in Tunis."

# Appendix 3: World Blind Union Representative to the Civil Society Forum, Friday, 8 November 2002

The following is a summary of issues contained in the draft Manifesto of the WBU for the World Summit of the Information Society.

The WBU represents 600 member organisations and 180m blind and visually impaired people. The Manifesto has been endorsed by the European Blind Union region. The following issues may serve as an overlay to the Civil Society forum.

- 1. The WBU asserts that, in the information age, access to information is a human right with associated responsibilities that must be enjoyed by all as a pre-condition for participation in society.
- 2. The human rights of blind and partially sighted people that should be respected, and which have wider relevance, and which should be put into a World Summit action plan are:
  - The right to access all information that is in the public domain on equitable terms to other sectors of society.

- The right to universally accessible products and services.
- The right to a fair balance between interests of content creators and of users.
- The right to be heard and to be involved in decisions in relation to the Information Society that affect them.

# Appendix 4: Proposal to forum an IPV6 working group

Recognizing that the necessity of awareness growing of the societal implications of IPv6 has been explicitly recognized by the Civil Society Co-ordination of the WSIS Executive Secretariat in an email to the IPv6 Task Force dated 11th September 2002

Recognizing that new Information Society convergences and mobile communication interfaces in the coming years will be enabled by the new IPv6 Internet architecture and that these convergences will impact the I.S. agendas of all stakeholders.

Recognizing that the Council of Europe on June 18th 2002 reaffirmed the European Commission's February 2002 identification of IPv6 as a priority, announcing that it "invites the Commission to evaluate the social impact on society, on the citizen and on private businesses of the IPv6 implementation"

Recognizing that most Public Sector, Private Sector and Civil Society groups, and several sovereign States have little knowledge of the IPv6 architecture under which they will progressively operate on all levels of on-line and on what are currently still many levels of off-line activities

The WSIS. Civil Society Session meeting in Bucharest on November 9<sup>th</sup> 2002 encourages all stakeholders to create a common discussion/action forum to contribute to ensuring future economic and personal prosperity throughout the world. The meeting furthermore requests that this document be brought to the attention of the coming regional WSIS PrepComs and associated meetings for their consideration.

# Rapport de la session parallèle consacrée au « Rôle des médias pour promouvoir la société de l'information » Vendredi, le 8 novembre 2002

Moderateur et rapporteur : M. Alain Modoux, ancien directeur général de l'UNESCO pour la communication et l'information

La session comportait deux *panels*: l'un était consacré à la **presse écrite**, l'autre aux **médias électroniques.** Les débats ont été riches et denses. Beaucoup d'interventions mériteraient d'être mentionnées dans ce rapport oral, mais vu le temps extrêmement court mis à disposition, je vais mettre en évidence les **4 points** qui sont ressortis des débats et que j'ai retenus en raison de leur **portée plus politique** que technique.

- 1. <u>La représentativité des *panelists*</u> : celle-ci doit être relevée, car elle permet de mieux mesurer le poids des prises de position et suggestions que je vais résumer dans quelques instants :
  - □ En ce qui concerne la **presse écrite**, tous les journaux d'audience nationale et internationale d'Europe et d'Amérique du Nord étaient représentés par l'un ou l'autre des *panelists*, que ce soit par l'intermédiaire :
    - de l'Association mondiale des Journaux (World Association of Newspapers);
    - du Comité mondial pour la liberté de la presse (World Press Freedom Committee) ;
    - de l'Institut international de la presse (International Press Institute).
  - De même pour la **radio** et la **télévision**, que ce soit par l'intermédiaire :
    - de l'Union européenne de Radio-Télévision (European Broadcasting Union);
    - de l'Association des Télévisions commerciales européennes (Association of Commercial Television in Europe);
    - de l'Association internationale de radiodiffusion (International Association of Broadcasting);
    - de l'Association européenne des Radios (Association of European Radios).
  - De plus, l'ensemble des syndicats européens et nord-américains de journalistes étaient représentés par l'intermédiaire de la Fédération internationale des Journalistes (International Federation of Journalists).

Cette forte représentativité des médias européens et nord-américains démontre

- a) l'intérêt des médias de cette partie du monde pour le *Sommet mondial sur le Société de l'information*;
- b) mais aussi les inquiétudes de ces mêmes médias quant aux décisions qui pourraient être prises par les Etats et les conséquences de ces décisions sur le libre exercice du journalisme et, plus particulièrement, sur la liberté de la presse.

# 2. Panel sur la presse écrite

A la question : faut-il une législation ou une réglementation spéciale pour contrôler les contenus circulant sur Internet, la réponse a été catégoriquement " non " ! Comme indiqué dans la *Déclaration de Sofia* que les Etats ont fait leur en 1997 (29<sup>e</sup> session de la Conférence générale de l'UNESCO), "les nouveaux médias devraient bénéficier de la même protection en matière de liberté d'expression que les médias traditionnels."

On a également abordé la question de l'impact des technologies de l'information et de la communication (TIC) sur les conditions de travail des journalistes : les TIC ont profondément modifié ces conditions, par exemple, dans les domaines de la mobilité, de la rapidité, de l'accès aux sources. Par ailleurs, la concentration des médias, liée à la synergie de la numérisation des données, risque d'entraîner un appauvrissement des contenus. Certains thèmes, certaines approches journalistiques sont abandonnées, car trop chères et peu « vendables ».

Concernant l'accès aux sources publiques d'information, la situation est très insatisfaisante. Un effort d'harmonisation transfrontalière est indispensable pour faciliter l'accès des journalistes à l'information publique et cela à tous les échelons : national, régional et local.

3. La session sur les médias a achevé ses travaux en consacrant 45 minutes à l'examen du projet de *Déclaration de Bucarest* tel qu'il se présentait à l'ouverture de la *Conférence paneuropéenne sur la Société de l'information* (texte daté du 22 octobre 2002). Les représentants des médias ont fait un certain nombre d'observations et remarques sur le texte et ont préparé une série d'amendements visant à l'améliorer ou à le compléter, cela naturellement dans l'optique des médias.

De manière unanime, les représentants des médias ont exprimé leur vive préoccupation à l'égard du **Principe 6** relatif à la **sécurité** et ont préconisé sa suppression pure et simple. Conscients des difficultés qu'une révision profonde du projet de *Déclaration* susciterait au niveau des négociations entre Etats, les représentants des médias ont rédigé quelques lignes à l'intention du comité de rédaction, qui reflètent en quelques mots le rôle et les préoccupations des médias dans la société de l'information.

\* \* \*

Les représentants des médias ont pris connaissance de la version finale de la *Déclaration de Bucarest* et m'ont chargé, en tant que rapporteur, de souligner qu'ils ont pris note avec satisfaction :

- d'une part, que le **rôle particulier des médias** a été introduit dans le texte de la Déclaration ;
- d'autre part, que le **Principe 6** sur la **sécurité**, bien qu'il ait été maintenu, a subi des modifications propres à rassurer, dans une certaine mesure, mais pas totalement, les médias.

Cela dit, les représentants des médias remercient la Roumanie et les Etats qui ont prêté attention à leurs préoccupations et ont activement contribué à ce que le projet de *Déclaration* soit amendé dans un sens plus acceptable pour les médias.

# 4. Panel sur les médias électroniques

Le panel a tout d'abord exprimé sa très grande satisfaction à l'égard de l'Accord historique auquel sont parvenus les quatre grandes organisations faîtières européennes et nord-américaines de la radio et de la télévision, représentant, d'une part, les **radios et télévisions de service public** et, d'autre part, les **radios et télévisions commerciales**. Dans l'esprit de ses auteurs, le texte de l'Accord est une contribution au *Sommet mondial sur la Société de l'information*. C'est pourquoi les *panelists* ont souhaité que les **principes** et **objectifs** définis dans cet Accord soient insérés d'abord dans la *Déclaration de Bucarest*, puis, ultérieurement, dans celle du *Sommet mondial* lui-même. Ce texte met en exergue trois grands **principes** et **objectifs**:

- a) offrir un contenu de qualité à la société de l'information ;
- b) les **libertés** et les **valeurs fondamentales** doivent être respectées et encouragées ; la radio et la télévision sont des instruments importants pour encourager le **développement** et la **cohésion sociale** dans le monde numérique.

Le texte de l'Accord fait partie intégrale de ce document.

#### SOMMET MONDIAL SUR LA SOCIETE DE L'INFORMATION

# Contribution des radiodiffuseurs européens aux préparatifs du Sommet

Considérant le rôle clé de la radiodiffusion, y compris de la radiodiffusion numérique et des services avancés dans les années à venir, pour créer une société de l'information dans laquelle tous les citoyens sont présents et à laquelle ils peuvent participer,

et conscients de la contribution des radiodiffuseurs à des valeurs fondamentales comme la liberté d'expression et d'information, la liberté et le pluralisme des médias et la diversité culturelle, valeurs qui devraient former les fondements de la société de l'information et qui s'inscrivent déjà au nombre des acquis européens,

les organismes de radio et de télévision ayant souscrit à ce texte proposent d'intégrer les principes et objectifs suivants dans les documents destinés au Sommet:

#### 1. Offrir un contenu de qualité à la société de l'information doit être un objectif prioritaire

La technologie de la communication n'est pas une fin en soi mais un moyen de fournir et de conserver des informations et des contenus, d'élargir le choix du public et d'ouvrir des possibilités d'interactivité et de personnalisation. La société de l'information ne peut s'épanouir que si tous les citoyens reçoivent toutes les informations pour une participation démocratique à tous les niveaux, et notamment des informations objectives et des opinions diversifiées, et s'ils ont accès à une large gamme de productions audiovisuelles et autres contenus, notamment à tout ce qui peut refléter les cultures nationales et régionales et la vie des communautés locales. Les médias électroniques et, en particulier, la radiodiffusion de service public ont une responsabilité pour produire, rassembler et distribuer des contenus de qualité afin de répondre aux besoins politiques, sociaux et culturels des sociétés démocratiques.

#### 2. Les libertés et les valeurs fondamentales doivent être respectées et encouragées

Pour garantir les libertés, les valeurs et les droits fondamentaux, à plus forte raison dans le contexte de la mondialisation, un cadre juridique est nécessaire. La liberté d'expression et d'information, le pluralisme et la diversité culturelle doivent constituer la pierre angulaire des médias électroniques et de la société de l'information toute entière. Des sauvegardes efficaces sont nécessaires pour garantir l'indépendance et le pluralisme des médias ainsi que l'accès à l'information, et pour protéger la dignité de la personne humaine, la sphère privée et la propriété intellectuelle. Le principe de légalité est essentiel non seulement pour protéger les droits et les libertés mais encore pour garantir, par exemple, une utilisation efficace et méthodique des fréquences. L'accès du public à une variété importante de contenus peut être amélioré par diverses mesures: adapter les règles de publicité et de parrainage afin qu'elles soient plus cohérentes et non discriminatoires à l'égard des radiodiffuseurs, mieux protéger les contenus des radiodiffuseurs dans lesquels ils ont investi, transformer les médias sous contrôle étatique en organismes de service public jouissant d'une indépendance éditoriale et créer des plateformes ouvertes et interopérables pour les nouveaux médias électroniques.

# 3. La radio et la télévision sont des instruments importants pour encourager le développement et la cohésion sociale dans le monde numérique

En fournissant de l'information et du divertissement pour tous, la radio et la télévision sont étroitement liées au quotidien des citoyens. Présents dans pratiquement chaque foyer, les services de radiodiffusion sont donc idéalement placés pour contribuer au développement démocratique, social, culturel et économique, et pour promouvoir la discussion de sujets d'intérêt général et véhiculer des informations fiables concernant l'éducation, la protection de la santé, etc.

La radiodiffusion en clair, de portée universelle, offre à tout un chacun l'accès à l'information à des conditions abordables. Elle seule assure, par exemple, que tous les membres de la société continuent de bénéficier d'une couverture en direct des grandes manifestations sportives et autres événements. La radiodiffusion de service public se doit de servir toutes les catégories d'audience y compris les plus vulnérables et les minorités. La radiodiffusion commerciale, qu'elle soit financée par la publicité ou par un système d'abonnement, aide à atteindre des d'objectifs politiques majeurs comme la production de contenus originaux et variés et l'existence d'une pluralité de sources d'informations.

Les nouvelles opportunités nées de l'ère de l'information devraient bénéficier à l'ensemble des communautés. La radiodiffusion numérique, avec ses fonctions interactives avancées, sera un outil essentiel pour mettre les services de la société de l'information à la disposition de tous. Elle contribuera ainsi à réduire la fracture numérique.

UER - Union Européenne de Radio-Télévision

AIR - Association internationale de radiodiffusion

ACT - Association des Télévisions Commerciales européennes

AER - Association Européenne des Radios

# Report on "Building a Gender Sensitive Information Society" (parallel event)

Thursday, 7 November 2002

Chair: Mr. Paolo Garonna, UNECE Deputy Executive Secretary Moderator: Ms. Victoria Popescu, MFA, CEDAW expert, Romania Rapporteur: Ms. Ewa Ruminska Zimny, Regional Adviser, UNECE

This parallel event was organized by the UNECE and the Romanian government, in cooperation with ITU Working Group on Gender and ICT, UNIFEM and UNDP. It aimed at mainstreaming gender into policy debate during the WSIS process through: (i) raising the awareness on trends and issues related to gender and ICTs that are specific to the region; (ii) establishing a platform for dialogue among governments and other stakeholders (iii) recommending follow up actions and activities. The conclusions were presented at the closing plenary session by the Rapporteur, Ms. Ewa Ruminska-Zimny. The additions proposed by the participants were accepted by the plenary session and the relevant sentence from the final report from the Bucharest Conference reads as follows: "Governments and other stakeholders should provide the necessary conditions to ensure women's equal access to information and knowledge as well as ensuring their equal role as producers and decision makers in all aspects related to the shaping of IT policies and frameworks".

#### **Opening statements and speakers**

The opening statements were made by Ms. Simona Miculescu, Counsellor to the President of Romania, Mr. Paolo Garonna, UNECE Deputy Executive Secretary, Mr. Yuri Misnikov, UNDP Regional Support Center and Ms. Irina Socol, Director, Siveco, Romania. The speakers underlined the importance of a gender perspective in building the Information Society, ICT-related risks and opportunities, the need for close cooperation among stakeholders at national at regional levels and the role of UN agencies. The message from Ms. Caroline Hannan, Director, Division for the Advancement of Women, United Nations, presented by the Chair, highlighted the ICT potential to become a central tool for women's empowerment and the promotion of gender equality in the context of reaching Millennium Declaration Goals (MDG) and the Beijing Declaration and Platform for Action.

Speakers: Ms. Daniela Semenescu, Director, Ministry of Labour and Social Solidarity (Romania), Ms. Thérèse Gastaut, Director, Department of Public Information, UN; Mr. Willy Jensen, Director, Norwegian Post and Telecommunication Authority; Ms. Tattu Mambetalieva, Adviser to the President and Regional Project Manager GIPI (Kyrgyzstan); Ms. Cornelia Rotaru, General Director, Business Development Center (Romania), Ms. Natasa Gospic, Senior Adviser Telecom Srbske, Chair ITU Working Group on Gender Issues; Ms. Osnat Lubrani, Director, Regional Programme Director, Central and Eastern Europe, UNIFEM.

#### **Summary**

Presentations and the discussion focused on various aspects of participation in Information Society (IS), gender specific barriers and ICT related opportunities in a broader context of MDG. It was underlined that gender equality refers to all ICT areas (users, producers and decision makers). It reflects not only core UN values embodied in international standards of human rights, and conventions (CEDAW) but is also critical for economic growth. Women represent 50% of

potential consumers for ICT products and services and labour force in ICT sector bringing ideas for new products, services and management styles. Economic arguments are especially relevant to the ECE region, where women are well educated, including in math and science (as seen in Romania and other countries).

Concerns about gender digital divide were expressed. The situation in transition countries needs attention due to the deterioration of women's position in the economy during the 1990s. Disproportional cuts in employment and shifts of women's jobs to the lower end of the labour, cuts in family benefits and social protection, and persistence of traditional views of women's role resulted in lower income /wages, less time for learning ICT related skills and unfavourable social climate for using ICT-related opportunities.

Gender specific barriers in access to ITC include: high access costs and technology choice; limited access to learn new skills (lack of information and encouragement to apply for ICT training), insufficient networks and perception of ICT as a "male" sector. Differences among women in access to ICT as determined by geographical factor (urban-rural areas), family status (single mothers) and age (difficult access for women over 40-45 years old) were highlighted. It was agreed that limited data on women's position as ICT users, producers and decision makers does not allow for more comprehensive evaluation of the gender digital divide.

Opportunities for using ITC as a tool for advancing gender equality were discussed by a number of speakers in relation to advancing gender justice (awareness raising, discrimination, violence), increasing women's employability (best practices in using ICTs for developing women's businesses, improving access to jobs and markets), using ICT for networking at national, regional and global levels; E-learning and increasing women's political participation through egovernance.

#### **Conclusions**

- Attention to gender equality is critical for building IS based on human rights and economic arguments
- The WSIS process is a good opportunity to mainstream gender into IS debate. The
  side event could serve as best practice as the ministerial Conference in Bucharest
  was the first regional prepcom, where gender aspects of IS were an integral part of the
  meeting and were reflected in the final document
- The involvement of all stakeholders in the preparation and discussion at the sideevent was highly appreciated and considered as a key factor in the follow-up process
- Follow up activities should focus on using ICT –related opportunities to advance gender equality against the background of women's potential and good education

#### **Recommendations for follow-up:**

The recommendations were addressed to all stakeholders -- governments, private sector, civil society and international community.

- Including a gender perspective into a debate and preparation of national ICT strategies and fully involving women in the development of e-governance systems.
- Building and developing women's capacity to use ICT for entrepreneurship and business development

- Developing activities, initiated by Governments, to encourage gender mainstreaming in telecommunication institutions, especially for infrastructure development and related projects ensuring the affordable access especially for disadvantaged women, such as those living in rural areas, single mothers and older women.
- Launching the process of preparation of national reports to assess the situation of women and men as users, producers and decisions makers in the ICT. Such reports should be jointly prepared by governments, NGOs and private sector, with the support of international organizations sector to serve as a background for policy debate and as an input into WSIS 2003 Geneva and WSIS 2005 Tunis
- Actively involve women into the WSIS process among others through including at least 30% of women into national delegations to all WSIS meetings.

# Report on "Youth as Users and Creators in the Information Society"

Thursday, 7 November 2002

Co-ordinator: International Youth Foundation

Moderator: Ms. Maja Andjelkovic, International Institute for Sustainable Development Rapporteur:Mr. Yves Courrier, WSIS Executive Secretariat, Mr. Victor Costan,

student, Romania

#### Introduction

The Youth Panel themed "Youth as Users and Creators in the Information Society" was held on November 7th, parallel to "Ministerial Debates on Policy." About 80 persons including representatives from the business sector, civil society and government, attended. The panellists presented their organizations' activities around youth in ICTs and the WSIS process after which an active question period followed.

The organizations represented in the panel are:

- AEGEE Europe
- International Youth Foundation
- Digital Youth Consortium
- Youth for Habitat International Network
- Dutch National Youth Council
- Youth for Intergenerational Justice and Sustainability
- Global Knowledge Partnership
- TakingITGlobal.org
- Youth Ambition Association for Slovenia

The participants showcased their organizations' goals, projects and strategies for youth involvement in ICTs for development.

# **Key messages**

Youth are users and creators of ICTs. Youth are very often not only early adapters of ICTs, but also born in an era when their society, government, schools and homes depend to a large extent on computers and ICTs.

# 1. The presentations

The youth organizations consider themselves a highly concerned part of this Summit, because the decisions taken here will reflect on the present and future structure of the Information Society, in which they are major stakeholders. Speakers claim the opinion of youth should be taken in consideration because:

- Innovative and creative **changes were brought by youth** (including web-enabled youth and community networks, which is a major contribution towards a sustainable Information Society)
- Youth are producing local content while keeping in mind global concerns
- Youth are a source of energy and creativity: they are **passionate**, **generous**, **altruist** and **enthusiasts**.

# 2. The agendas

- **Promoting democracy and equity**: the youth adopted the moral values of the developed society they live in and represent, and wishes to spread these values and beliefs to young people in other regions of this world.
- Access to knowledge for everyone: the first step in bridging the Digital Divide is providing access to the Internet. Without that, the gap can only become wider between the well-developed countries offering access to information to the future generation and the un-developed countries where the young ones cannot access information. Also, the possessors of knowledge must make it freely available, and searching engines should allow for easy retrieval of any piece of knowledge of interest from the huge collection of information that is the Internet.
- **Determining and helping young persons to get involved**: the Internet can cancel any distance, and spread information instantaneously. Using this facility, young persons should be **made aware of their rights, and of the benefits and responsibility** of getting involved in their society, thus becoming motivated to be active elements
- ➤ Having the society acknowledge the important role of the youth: considering the important role young people play in our society, their opinion should be taken in consideration when taking decisions, so each organization strives to achieve communication between the young ones it represents and the governments. Most decision making bodies are ignoring the power and creativity of the young workforce, so the youth organizations try to intermediate between their members and other stakeholders. Also, efforts should be made for acknowledging youth as informed and responsible citizens, and major agents of change, thus leaders in the information society.
- Producing and gathering information useful to the young persons: since young persons make up for a big percentage of the total Internet users, it is only natural that sites be created which address their interests. The main concern here is to think globally and act locally, as most projects are international in scope, but community-based. The content produced is in the spirit of protecting the local culture from being wiped out by the globalisation wave, reflecting local culture, values and language, and improving cross-cultural understanding. The organizations are striving to create a word-wide network of young persons exchanging information, experience and best practices.
- Training the specialists that will bridge the Digital Divide: when at a young age people have the highest capacity for learning, and they should be helped to make use of that. Youth organizations are cooperating with high-schools and companies in order to offer training and internships, chances for young ones to discover and develop their skills.
- ➤ Obtaining support for projects: youth organizations have a hard time finding the necessary resources to make projects that would contribute towards the improvement of the condition of young population come true. Governments should be more involved in this, and invest more in the future of their nations. More resources could be obtained by identifying issues common to youth and other stakeholders in the information society, so they can be dealt with by cooperation.
- Making a better world for future generations: the young ones will suffer most from damages done to the environment, and wish to insure the future generations will benefit from a safe and healthy environment, achieved through sustainable development.

#### 3. The activities

Youth organizations represented here showed many diverse, action-based ICT projects, addressing all points on their agendas. The work done so far is impressive, but it could have been even better if it were not for lack of financial and legal support of government. Every organization is actively improving the quality of the ICT of both the present and the future by helping cooperation between young citizens and software development companies, training and motivating young people to become more involved in the ICT. Young people usually have a much more idealistic perspective on life than adults, and youth organizations use that to promote the sharing of knowledge necessary to bridge the Digital Divide.

#### **Conclusion**

The opinion of the youth must be heard of and acknowledged in the Summit preparatory process, because they are very active users of the ICT, and its main source of creation and innovation. Unfortunately, the current situation is that young people are a too often untapped resource of ICT development and IS policy making, because the young citizens are regarded as a source of problems, instead of solutions to vital issues, like bridging the Digital Divide.

The youth therefore expect from the Summit the establishment of a regulatory environment that recognizes and incorporates youth-specific issues and the key role played by the youth in the information society, and enables the youth to bring an even greater positive contribution in the future.

**Appendix:** 

# **European Declaration on the World Summit on the Information Society**

Youth Proposed Text Bucharest, Romania 7-9 November 2002

Youth are users and creators of information and communications technologies. As early adopters, adapters and innovators, youth are stakeholders that have valuable input into and are greatly affected by ICT policy.

In order to stimulate the WSIS process to involve youth in a more structured and democratic way, the youth caucus had prepared the following "Youth Proposed Text" for the Pan-European Regional Conference in Bucharest.

Furthermore, we encourage national governments, NGOs and the private sector to bring youth delegates, who are representative and have affinity with the Information Society, to the preparatory committee meetings and the Summit itself.

#### Introduction

- 1. We, the representatives of member of the United Nations Economic Commission for Europe, have met this week in Bucharest, Romania, 7-9 November 2002. We discussed the challenges and opportunities presented by the information revolution, began to define our vision for the information society, and identified concrete opportunities for action from a pan-European perspective. These conclusions are designed as input to the World Summit on the Information Society, to be held in Geneva (Switzerland) in December 2003.
- 2. Our countries include some of the richest and most developed in the world, with the highest rates of literacy, the most Internet connections per capita and a relatively strong culture of transparency, democracy and respect for human rights. Our region also encompasses countries currently in a period of economic transition, whose citizens require special consideration in the information society. The last ten years have seen a truly extraordinary revolution take place in our citizens' ability to access, create, utilize and benefit from information and knowledge. We recognize our responsibility in making the information society a success story for all today's and future generations.
- 3. Recognizing the difficulty for policy-making to keep pace with the forces of change, we believe more work must be done to harness the full potential of digital applications for achieving sustainable development. Information Communication Technologies (ICTs) will enhance social and community services, access and quality of education, employment and investment frameworks and dematerialisation, which will in turn decrease environmental depletion. By all this, ICTs will promote the emergence of a more equitable information society. We have to ensure the information society does not have unintended negative consequences such as human exploitation, privacy invasion or environmental degradation. Above all, we must ensure our global information society remains people-centred a society where the decrease of global inequalities is a major goal, where the natural resources are protected, where individual learning and expression,

relevant local content, cultural diversity and citizen-commitments are valued and nurtured.

- 4. While we still have much work to do at home, the significant progress we have already made towards creating an information society means we not only have a special obligation to help those of our neighbours who are lagging behind, but an ability to make a tangible contribution to realize digital opportunity for all. The digital divide between the "information haves" and "information have-nots" is a serious trend that must be reversed. This gap reflects, and has the potential to exacerbate, the serious social and wealth disparity between various parts of the world. At the same time, access to information and applications of information and communication technologies are powerful enablers for poverty reduction and can thereby give significant contributions to promote equality on a global level.
- 5. The information society is a global society. More than ever before, information, finance and ideas online have little regard for national borders. With the changes impacting our society, politics, culture, and environment, there is a pressing need for public understanding and policy response: a cohesive vision of where we are heading and creation of a road-map to guide the path towards our goals for a sustainable society. Given the global nature of the information society, this mutual exchange and commitments must take place at a global level to be effective.
- 6. To this end, we recognize the vital opportunity of the World Summit on the Information Society, as well as other international initiatives led by the United Nations such as the UN ICT Taskforce, UNESCO's Information for All program, and the development work of the International Telecommunications Union. We also recognize the importance of other bilateral initiatives such as the G8 DOTforce, the European Commission's Information Society Directorate General, private-sector efforts such as that led by the World Economic Forum, and cross-sector or civil society efforts spearheaded by networks such as the Association for Progressive Communications, the Global Community Networking Partnership, and the Global Knowledge Partnership. We also recall the commitments made by member states to the Millennium Development Goals, and believe action towards achieving these targets, particularly around education must be central to our vision for an Information Society.
- 7. The forces driving change in information and communications were a dominating topic of public enthusiasm and media attention in mid-to-late 1990s. Yet, perhaps as evidenced by the downturn in the technology share market, too much emphasis was placed on purely the economic potential of change, at the expense of their equally pervasive social, cultural, environmental and political impacts. More recently, following the events of September 11<sup>th</sup>, the global fight against terrorism has become the priority concern of world leaders. However, we affirm that the Information Society is a larger issue requiring a broader response over the long term it is literally a revolution in how we live, work and play. And indeed, coming to terms with these changes and nurturing the development of an information society can present numerous benefits in the shorter term. Inciting the global economy and creating sustainable livelihoods through entrepreneurship, preventing conflict through enhanced cultural understanding, developing new ways to protect and restore our environment, and saving lives through health-care innovation, are just some of the digital opportunities we might grasp through concerted and sustained international effort.

8. We call for attendance at the highest levels of political representation at the Summit, as well as the active participation of all stakeholders including governments, international inter-governmental organizations, non-governmental organizations, business, trade unions, academics, women and youth.

# Towards a Pan-European Vision for the Information Society

- 1. Our vision is for a participatory and sustainable information society, where citizens are empowered to influence and contribute to the development of their local and global communities both online and offline by developing content, celebrating diversity, learning for life, connecting with government, and using technology and information to better address global problems. Our vision is based on the guiding principle for the 21<sup>st</sup> century, agreed upon in the Millennium Declaration and Agenda21 participation, transparency, democracy, equality, human rights along with intergenerational and intragenerational justice.
- 2. We must ensure equitable access to an information society people cannot be left behind. We understand the digital divide is largely a social divide and that an information society and its potential to help solve world wide problems will never be fully realized while populations remain hungry, where children do not learn to read, where women and girls are discriminated against, where health is poor and the threat of war is present.
- 3. An information society is about much more than laying telephone lines and installing computers in schools. Creating equitable access to technology is vitally important, yet we also need to determine what type of society we are trying to create with these tools both in terms of how its characteristics are different from the model of society that came before, and in terms of the principles and philosophies underlying our commitment.
- 4. In our vision of the Information Society, people are empowered by their access to and control of information. Whereas in the industrial society, information was scarce and access came at a premium, in the new information society the problem is more likely to be information overload. Barriers to entry such as education, cost, and distribution are no longer major difficulties. Increased literacy means more people can create content, documenting their stories, presenting new ideas, highlighting their cultures. And new technologies mean content can be infinitely copied electronically and instantaneously distributed to and accessed from locations anywhere in the world. A special importance will lie in the field of management of information and data.
- 5. In our vision of the Information Society, local cultures are revitalized as people create local content. In the industrial society, culture was relegated to institutions art galleries, museums, movie theatres, and mass media. It was controlled by a small number of major companies, editors, and producers. Less sources of content meant less cultural and linguistic diversity. In the Information Society, the tools to record, preserve and distribute culture are easily accessible. Indeed, entertainment and culture is seen increasingly as a participative rather than passive activity.
- 6. In our vision of the Information Society, people have an enhanced sense of community through online interaction. As more people interact with, create and share content, "information" which was previously considered a static resource or media becomes more akin to a creative community. Online communities are not merely substitutes for real-life

interaction, but a powerful opportunity for new interaction based on common interest, a place for lifelong learning. Online communities can also help reinforce, connect and preserve physical community identities - providing a place for publishing local content, sharing stories, discussing issues and developing solutions to local challenges. As people's daily lives are increasingly busy and fragmented, online communities can provide a point of reference and continuity.

- 7. In our vision of the Information Society, the 'global village' enhances people's international outlook, ingrains a sense of solidarity with people of other cultures, and supports new mechanisms to address global challenges by joint efforts. Online communication can just as easily be with someone across the world as across the street, and through personal communication, citizens can gain a better understanding of others cultures and daily challenges, reducing conflict and fostering collaboration. Citizens are able to connect more effectively with governments and international institutions such as the European Union and the United Nations to contribute to solving global problems.
- 8. In achieving our vision of the information society, one of our greatest hopes is young people. Those under 25 years of age comprise more than half the world's population. Almost two-thirds of the population in many developing countries is aged 14-25. Having grown up with technology, many young people have little memory of a society without computers or telecommunications. We must tap into their skills and value their participation. In this new paradigm, youth like all citizens are not just passive consumers and recipients of information, content and culture, but rather are active participants in creating and shaping the Information Society.

## **Action Plan for an Empowering Information Society**

## 1. Access and Connectivity

We commit to bridging the digital divide, to ensure everyone has access to the information society.

- a. Basic conditions must exist as pre-requisites for an information society, such as education (especially literacy), peace, healthcare, and a sustainable environment, and we commit to achieving the millennium development goals while recognizing that ICTs can be important tools for poverty reduction and environmental protection.
- b. We are convinced that an enabling framework is essential to bridge the digital divide. To do so, we see the "Global Deal" as a major component: This means the co-financing of development in poor countries by rich countries, reciprocated by the adoption of certain standards. A positive example of Co-Financing Mechanisms is the Co-Financing practiced within the Enlargement Process of the European Union.
- c. In providing access to information, it is vital to use the most appropriate technologies available, not simply the latest, broadest, or most advanced. Empowering "low-tech" technologies can include community radio and community networks, portable media such as videos and tapes, and even the telephone. While it is recognized such technologies do not all match the

interactive and social nature of the Internet, they are all aural technologies accessible to the illiterate.

d. Private sector investment within/by small-to-medium-sized-enterprises should be encouraged in the information society, including through the increased provision of micro-credit. Large scale initiatives by governments or business can only go so far – for the information society to reach the village level and for communications technologies to become ubiquitous, local entrepreneurs are required to champion and market the products, and we encourage the growth of the open-source software movement to provide flexible and economical solutions to worldwide markets.

## 2. Content

- a. One of the most exciting opportunities presented by the Internet is the low cost of entry to producing your own content; whereas previous mediums required large investment in television transmission licenses, newspaper printing machines, or distribution systems, the Internet makes publishing easy. Promoting the development of expression online, and ensuring it remains free and accessible must be one of our key goals. An 'information society' must include a public space for the free exchange of information and ideas.
- b. While our world is becoming a 'global community' through enhanced communications, we also have a heightened sense of belonging to a local community or place. Providing and encouraging creation of local content on the Internet, such as helping citizens interact with government services, access local news, experience their own culture and monitor environmental conditions is vital to ensure the information society becomes relevant to people's day-to-day lives. We support freedom of speech in this regard.
- We recognize the importance of content creators, for-profit and not-for-profit. Europe and North America have a proud history of cultural, educational and informational product development. We believe that the quality and diversity of local content for new interactive mediums will be a key indicator of our readiness for an information society. Community and Public Service Broadcasters, key institutions in the new information society, have an important role to play in championing local content and developing services. Where appropriate they should extend and re-purpose their services from television and radio to digital interactive media. Furthermore, content will be an increasingly important sector in the knowledge economy, and all nations should place emphasis on the development of home-grown content industries including broadcasters, educators, journalists, film-makers and academics. Without such industries, the most successful content producers with large home-markets will dominate content worldwide. In this regard, we endorse the concept of local content quotas combined with government incentives to preserve and promote local cultural identity and locally relevant information.

## 3. Education

a. The information society also requires pervasive change in our approach to education. As some of the jobs of the future are yet to be invented, it is unlikely

that tomorrow's workforce will stay in the same job or even the same sector for long. Students will require generic and transferable skills in the areas of literacy, communication, research, science, languages, technology, as well as the development of an open mind and adaptability.

- b. Our formal education system is changing from being teacher driven to student driven. With more information easily accessible through a simple Internet search than could ever be imparted by a teacher, providing context that allows students to decipher relevance and meaning helping students turn information into knowledge must become a key goal of the formal education system.
- c. Technology is changing the way classrooms operate, integrating multimedia textbooks, online research, and student presentations with the assistance of ICTs, making learning more interactive and participatory. The success of these programs is partly due to innovative design, and partly due to the fact that students find it natural using technology in day-to-day situations. However we recognize the same can't always be said of teachers, and there is a need to match the integration of technology into the curriculum with more rigorous professional development. One opportunity is for students to help train their teachers in ICT matters not only does this tap a resource existing within schools, but it builds student confidence and creates a learning community, where everyone has something to share.
- d. More informal approaches to education are also valuable in the information society, providing young people with an opportunity to learn through practical experience at voluntary non-governmental organizations, community service, and business activities. Formal education systems need more flexibility to allow students to undertake and gain credit for such activities. Peer based education, where students help students, and student exchange programs are also beneficial and popular.

## 4. Employment

- a. Technology has changed the structure of the economy, making many jobs obsolete and putting people out of work. Yet, the information society also increases flexibility, emphasizes collaboration over hierarchy, creates the need for ongoing learning at work, and reduces the distinction between our home and workplace. Effort and resources must be put into retraining workers for knowledge-based industries, while also recognizing the state has some responsibility for some who can not easily change occupations due to age or skills.
- b. New industries have been developed as a result of technological change, and from the hubs of Silicon Valley to Stockholm, the information society is a now a major part of our Pan European economy. Europe and North America are technology leaders, with more patents than other regions, and a higher percentage of workers in knowledge-based or high-skilled jobs. These new industries are built upon innovation, and instilling a sense of entrepreneurship. A culture of risk-taking and the skills to take an idea and turn it into a profitable venture are vital to ensure the sustained growth of these industries, and new ones not yet envisaged.

c. Fostering entrepreneurship is vital not just here in Europe and North America, but in every part of the world. Supporting young entrepreneurs in the developing world with education, financing, mentorship and encouragement is a critical pathway to bridging the digital divide and fostering the creation of sustainable livelihoods.

### 5. Health

- a. Information is a powerful tool for health promotion, prevention and care. We must use all available communications technologies for the distribution of information related to priority health concerns, such as HIV/AIDS, family planning, hygiene and sanitation, and drug use. Information and communications technologies can be harnessed to assist in the provision of medical care and services, including the use of video conferencing to connect specialist virtual doctors to patients at remote or under-resourced community health facilities.
- b. At the same time, we recognize the many health concerns specifically associated with the information society and the knowledge-based economy. These including obesity caused through lack of exercise, vision impairment and chiropractic problems caused by computer usage, and cancer caused by electronic radiation. We must promote awareness of these ailments and develop strategies to reduce their prevalence.

## 6. Multilingualism

a. The many languages of Europe are an integral part of our culture, heritage and individual national identities. As English increasingly dominates as the international language especially on the Internet, there is a difficulty in finding and navigating online content in our own native languages. In the longer term, without a major place within this new medium of choice, our languages may slip from day-to-day usage. Consequently, we must support the development of local content industries, encourage our own native-language national broadcasters, and ensure that government information is translated into multiple languages. We can also harness technology to help achieve this goal, through the use of machine translation – investment in the development of this technology would improve its effectiveness and accuracy.

## 7. Environment

- a. While the information society was originally meant to herald the development of a paperless world, the result has not been positive for the environment. Indeed, paper usage has more than doubled with the widespread use of sophisticated printers and copiers. This rebound-effect is also experienced e.g. in the field of transport or electronic waste. A global framework should be established, which creates prices that internalise costs for the global common goods. Thus it can be guaranteed, that innovations, which are to be expected, further contribute to environmental decrease rather than help to solve environmental problems.
- **b.** Other major environmental concerns include the use of rare minerals in computer circuitry, mining for which is destroying unique rainforest and the habitat of endangered species. The short usable life-span of computers also creates masses

of waste products full of heavy metals, plastics and glass for landfill. We commit to encouraging the computer recycling industry and strict enforcement of related health and safety legislation.

## 8. Safeguarding the vulnerable & Privacy issues

- a. Recognizing that global communications have enabled the growth of a cyber-pornography industry degrading to all, we will take action to bring access in line with community expectations, underlined by a belief that the most effective barriers to access are personal initiative and parental control. Illegal pornography can never be tolerated and we commit to redouble efforts to shut-down this illegal industry and the related international trafficking of women and children.
- b. We believe that online privacy is a basic human right, and we support any practice or law that respects this right, in accordance with the *Convention for the Protection of Human Rights and Fundamental Freedoms*. We recognize the importance of storing Internet usage data by governments and ISPs, with use of such data responsibly restricted to court-authorized searches.

### 9. Governance

- a. The concept of governance extends beyond decision-making within formal government structures. It includes how decisions are made within and between all institutions including corporations, civil society organizations and intergovernmental agencies. The information society provides an opportunity to require greater transparency from and interaction with all institutions with public roles and responsibilities.
- b. Due to a close interconnectedness between globalisation and ICT use, problems in the Information Society no longer arise on national levels, but on a global level. Therefore, we encourage the strengthening of existing global government systems to address the challenges of today.
- c. Increasing government communication and service delivery online can make governments more efficient, transparent and accountable to their citizens. Governments should develop comprehensive websites with clear system to navigate through the many policies, programs, and services they offer. All governments should aim to provide tools and online forms to support tax payments, social security, and other common transactions. Specific information in a clear manner explaining government policies and laws helps make politics more accessible. Online publishing of information such as budgets, ministerial reviews, and transcripts of parliamentary debate helps keep governments accountable to their electors.
- d. We encourage the utilization of technology to make voting processes more responsive, accessible and efficient for citizens of all ages, especially the increasingly disengaged group of young voters.

## 10. The world's biggest untapped resource: YOUTH

The world's largest untapped resource in creating an information society is not technology, but young people. Youth are a huge and growing demographic, making up more than two-thirds of the population of some developing nations. Yet, young people have too often been seen as a burden rather than an asset, a group to be taught but not to teach, and to receive but not to give. We commit to working with youth to change this paradigm. After all, young people, the first European generation to have grown up with computers, have a lot to offer: energy, enthusiasm, and above all expertise to help bridge the digital divide. While young people have been at the forefront of almost every innovation in the development of the information society, from the founding of Microsoft through to the dot.com era, it is only now that we formally recognize their potential in a development context. Youth need to be engaged in decision-making processes related to the information society – as students, and as citizens with an affinity for technology, they are informed stakeholders in the evolution of education and innovation. We commit to supporting youth efforts and engaging them as participants in broader initiatives towards realizing digital opportunities and an information society for all.

(This "Youth Text" was prepared by Nick Moraitis, Youth Caucus Facilitator and adapted by Youth Caucus contributors to the Pan-European Regional Conference. Youth Caucus contributors include: Maja Andjelkovic, International Institute for Sustainable Development; Michael Furdyk, TakingITGlobal; Giuliano Gennaio, E-inclusion site; Ashok Regmi, YouthActionNet; Adrian Pintilie, AEGEE Europe; Itir Akdogan, Youth Association for Habitat and Agenda 21; Jetze van der Ham, Dutch National Youth Council; Tim Hudina, Youth Ambition Association of Slovenia; Maike Sippel, Youth for Intergenerational Justice and Sustainability)

## Rapport sur « La diversité culturelle et la pluralité linguistique dans la Société de l'information » (événement francophone)

Vendredi, le 8 novembre 2002

**Président modérateur** : Monsieur **Roger DEHAYBE**, Administrateur Général de l' Agence intergouvernementale de la Francophonie

**Rapporteur** : Monsieur **Pietro SICURO**, Directeur de l'Institut francophone des technologies de l'information et de la formation, Agence intergouvernementale de la Francophonie

En ouvrant les travaux, le Ministre de la Culture de la Roumanie, Monsieur Razvan THEODORESCU s'est félicité de l'initiative de l'Agence intergouvernementale de la Francophonie d'organiser un atelier-débat sur la problématique de la diversité culturelle et la pluralité linguistique au sein de la Société de l'information. Le Ministre a rappelé qu'il n'est plus à démontrer que le monde où nous vivons aujourd'hui a besoin d'un dialogue des cultures, d'un dialogue respectueux des identités propres et des droits universels. Pour enrichir l'humanité, chaque peuple doit être en mesure d'exprimer ses singularités et ses sensibilités.

Monsieur Roger DEHAYBE, Administrateur Général de l'Agence intergouvernementale de la Francophonie, avant de donner la parole aux différents experts invités, a présenté les cinq pôles de réflexion et l'ordonnancement des échanges à l'assistance composée de près de cent cinquante représentants de la société civile, du secteur privé, d'organisations internationales et de gouvernements.

En faisant référence à la Déclaration ministérielle sur la promotion de la diversité culturelle et au Plan d'action, adoptés par la Francophonie, en juin 2001 à Cotonou, Monsieur DEHAYBE a souligné que la mise en œuvre de la Société de l'information peut favoriser la liberté d'expression, l'appropriation des connaissances et la compréhension de l'autre, mais aussi peut contribuer à l'uniformisation, à la réduction au plus petit commun dénominateur et à une dynamique d'exclusion. Devant ces perspectives contrastées, il a incité l'auditoire à mener une réflexion argumentée sur les thèmes proposés et à s'exprimer librement afin de formuler des propositions susceptibles d'être prises en compte dans la Déclaration finale de la Conférence régionale Europe/Amérique de Bucarest.

### L'expression des singularités dans la Société de l'information

Monsieur Adama SAMASSÉKOU, Président du Comité préparatoire du Sommet mondial sur la Société de l'information, Président de l'Académie africaine des langues (ACALAN)

Monsieur Jean-Claude GUÉDON, Conseiller scientifique de l'Internet Society, Professeur à l'Université de Montréal

Pour nourrir le débat, le Président du Comité préparatoire au SMSI, Monsieur Adama SAMASSEKOU fait état de la situation paradoxale de l'Afrique face aux enjeux de la Société de l'information. En effet, le continent africain n'est pas encore pleinement dans cette Société de l'information même si l'information circule dans les pays qui le composent. L'Afrique est continent de singularités : l'enseignement est dispensé dans des langues qui ne sont pas des

langues maternelles ; la justice est parfois rendue par un interprète ; les langues officielles sont des langues « venues d'ailleurs » mais elles sont entrées dans le patrimoine historique du continent.

Dès lors, les questions fondamentales se présentent de façon relativement simple : qu'est-ce que l'Afrique doit préserver de ses acquis culturels ? Comment bâtir un développement hors de ses langues et, pour partie, hors de ses cultures ?

Sans entrer dans un débat qui ne fait pas l'objet de l'atelier, la situation africaine a confirmé que la diversité culturelle, selon le choix des peuples librement exprimés, peut et doit être maintenue grâce aux TIC pour faire face aux enjeux de l'avenir.

La réflexion sur l'expression des singularités se prête, par ailleurs, à une métaphore avec la biologie. En effet, un livre comme « The Future of Life » (Wilson) invite à établir des rapprochements entre diversités biologique et linguistique. Les espèces vivantes peuvent maintenir leur diversité en dépit de réductions importantes de l'espace écologique qui leur est imparti; cela dit, ces phénomènes obéissent à des effets de seuil au-delà desquels on observe un effondrement (éco-spasme). La disparition rapide des langues en ce moment soulève donc une question cruciale : sommes-nous en train de vivre cet effondrement de la diversité linguistique.

Quelle que soit la réponse, une parade existe sous la forme de création d'espaces libres. Reste à imaginer l'équivalent de ces espaces libres dans les domaines linguistiques et culturels. Une solution se trouve dans le modèle offert par la création de domaines publics, genre de parcs naturels (à ne pas traiter sous forme de ghetto, cependant) des langues et des cultures, où la créativité peut se déployer hors de logiques strictement économiques. Ainsi pourront être établis des circuits de communication et des espaces de flux qui, jouant sur des modes de diffusion diversifiés, peuvent à l'intérieur même des ensembles linguistiques majoritaires préserver la multiplicité des langues et la diversité des pratiques culturelles.

Aux langues minoritaires, les technologies de l'information et de la communication, en permettant à chacun de s'exprimer en pleine liberté, offrent une chance de survie et plus encore de reviviscence. La question est de savoir comment reconstruire des espaces de survie ? Sans doute, encore une fois, en s'appuyant sur le modèle des espaces ou autres domaines publics.

Par ailleurs, l'internet a démontré la possibilité d'une circulation très fluide de tous les produits culturels, ouverts ou, inversement, soumis aux droits de propriété. Effrayés, les grands producteurs de biens culturels y ont d'ailleurs vu une menace sur leur capacité de contrôler leurs produits et ils se sont appuyés sur la propriété intellectuelle pour tenter de réprimer cette libéralisation de la circulation permise par la technologie. Pourtant, il n'y a aucune raison de freiner les possibilités techniques de circulation des biens dans le but de renforcer les dispositifs de protection de la propriété intellectuelle. Mieux vaudrait placer la protection de la propriété intellectuelle dans le fil des développements technologiques, et non contre eux.

## La société civile face à la diversité culturelle : des principes à la réalité

Monsieur Alain AMBROSI, Président, Carrefour mondial de l'Internet citoyen

Madame Valérie PEUGEOT, Coordonnatrice de Vecam (Veille européenne citoyenne)

Quels mécanismes mettre en œuvre pour faciliter la production de contenus diversifiés et spécifiques sur la Toile ? Cette question est au cœur de l'implication de la société civile dans l'émergence de la Société de l'information. Plusieurs réponses sont esquissées : la valorisation des initiatives locales exemplaires ; l'usage des différentes langues dans l'univers numérique ; une large résonance des attentes des citoyens ; un nouveau partenariat entre la société civile, les gouvernements et le secteur privé.

Si l'on tient à défendre la diversité culturelle et donc à refuser le modèle unique, il faut commencer par remettre en cause la terminologie et préférer à « Société de l'information » l'expression « Sociétés de l'information ». Les TIC permettent en fait de donner une voix à ceux qui n'en ont pas et de leur donner une voix pleinement autonome libérée des médias traditionnels trop souvent déformants. Les ONG jouent, en ce sens, un rôle déterminant puisqu'elles sollicitent et font circuler la parole collective. Elles favorisent également l'appropriation de moyens cognitifs qui permettent aux citoyens de construire leur parole, et non plus seulement d'apprendre à « cliquer ».

Pour qu'il n'y ait pas d'exclus dans la Société de l'information, il faut promouvoir l'usage des logiciels libres et encourager la production de contenus ouverts. L'avenir de la Société de l'information est, en effet, dans son ouverture à l'usage par le plus grand nombre. Ce constat qui semble aujourd'hui évident conduit à affronter, dès à présent, les questions du droit d'auteur et de la propriété intellectuelle non pas pour les supprimer mais pour les adapter à d'inévitables évolutions.

## L'éducation et la formation à distance : un secteur en pleine mutation

Jean-René BOURREL, Responsable de programme, Technologies éducatives, Institut francophone des technologies de l'information et de la formation, Agence intergouvernmentale de la Francophonie

Madame Martine JAUDEAU, Rédactrice en chef de THOT (bulletin numérique de Formation à distance)

L'atelier a manifesté l'accord des participants sur un point : les contenus éducatifs comme les démarches et prestations de formation doivent être respectueux des spécificités culturelles des populations. L'éducation et la formation doivent se fonder sur la diversité des cultures pour préparer au dialogue de celles-ci au sein d'une « mondialisation maîtrisée, par le respect des différences, par la concertation avec la société civile et le secteur privé, par la consolidation des synergies régionales » (Razvan THEODORESCU, Ministre roumain de la Culture).

La communauté francophone a, à présent, pour mission de faire percevoir combien la société de l'information est aussi la société de la formation. Aussi faut-il sensibiliser bon nombre de décideurs politiques à une évolution générale qui tend à « l'hybridation » entre enseignements présentiels et à distance.

Face à une situation mondiale dominée par les industriels et les marchands du savoir – comment ne pas s'inquiéter du projet de l'Organisation Mondiale du Commerce (OMC) d'inscrire l'éducation au nombre des produits du commerce international ? - , la communauté des pays ayant le français en partage doit dans le même temps affirmer le droit à la différence culturelle et celui à l'éducation, au « savoir partagé ».

La reconnaissance pleine et entière de ce dernier droit est la condition pour que la Société de l'information devienne la Société de la formation, pour que la société informationnelle devienne la société cognitive.

Plusieurs questions appellent, à présent, des réponses en actes notamment celle de l'appropriation de l'ingénierie de la formation à distance. Les activités relevant de celle-ci doivent être endogènes, c'est-à-dire adaptées aux besoins, aux attentes et aux moyens des populations destinataires.

Si l'on convient de reconnaître que les nations constituent encore les meilleurs points d'ancrage de la diversité culturelle en matière de politique éducative, la question qui se pose est celle de la mobilisation des didacticiens et acteurs nationaux : comment les amener à contextualiser les approches pédagogiques, à prendre en considération représentations mentales et « composants socio-psychologiques » (Recteur Ioan MIHAILESCU) des enseignants et des apprenants, à tenir compte enfin des contraintes imposées par les situations et environnements généraux d'apprentissage ?

Les plates-formes de travail collaboratif répertoriés par le bulletin électronique « THOT » (<a href="http://www.thot.cursus.edu">http://www.thot.cursus.edu</a>) méritent, sur ces points, le plus grand intérêt.

## Les partenariats entre aires linguistiques pour assurer la diversité

Monsieur Daniel PIMIENTA, Directeur, FUNREDES (Association Redes & Desarrollo)

Monsieur Didier OILLO, Administrateur des programmes, Technologies de l'information, Agence universitaire de la Francophonie

Le patrimoine linguistique mondial se réduit aujourd'hui à 6.000 langues. Deux langues disparaissent chaque jour. Ces pertes étant irrémédiables, la préservation des langues existantes constitue l'un des piliers de la diversité culturelle. Une langue peut alors exprimer plusieurs cultures, aussi sa disparition peut-elle avoir des effets diversement préjudiciables.

Seuls le chinois, l'hindou et l'anglais ont plus de 500 millions de locuteurs. L'ensemble des locuteurs utilisant les langues latines (espagnol, roumain, portugais, français, italien) est évalué à plus de 785 millions contre 630 millions pour les locuteurs de langue anglaise. Toutefois 45,8% d'internautes dans le monde sont de langue anglaise contre 14,3% de langues latines. Les pourcentages relatifs aux pages web sont du même ordre de grandeur que ceux des internautes (50% pour l'anglais contre 16,4% pour les langues latines). Si on se réjouit de la croissance constante de la présence des langues latines sur la toile, on ne peut que s'inquiéter de voir les langues des pays du Sud ne figurer dans aucune statistique et être pratiquement absentes du web.

Face aux risques que font peser la globalisation et ses corollaires sur le patrimoine linguistique, les concertations entre hispanophones, lusophones et francophones se sont multipliées au cours des deux dernières années. Des stratégies d'action ont été adoptées à Paris et à Lisbonne pour promouvoir la diversité culturelle.

## Le défi de la fracture numérique

Madame Ndeye Maimouna DIOP, Vice-Présidente, ISOC-Sénégal, Conseiller technique, Technologies de l'information auprès du Secrétariat général du gouvernement du Sénégal

Monsieur Pierre OUÉDRAOGO, responsable de programme Société de l'information, Institut francophone des technologies de l'information et de la formation, Agence intergouvernementale de la Francophonie

La fracture numérique apparaît en fait comme une superposition de différentes disparités nationales et internationales : fractures géographique, énergétique, technologique, linguistique, éducative et culturelle, mais surtout sociale et économique.

Pour réduire cette fracture numérique, il est fait appel à la coopération et à la solidarité internationales. Mais comment peuvent s'exprimer ces dernières ? En passant d'une logique de l'assistance à une logique du partenariat et de la responsabilité mutuelle. La démarche du Nouveau Partenariat pour le développement de l'Afrique (NOPADA/NEPAD) traduit en actes cette évolution.

L'Afrique a fait ses choix et demande à être accompagnée pour les faire aboutir dans le respect de ses priorités, de ses cultures et de ses langues. Il incombe aux pays développés de répondre, à présent, aux attentes et aux urgences exprimées non seulement par l'Afrique mais par l'ensemble des pays les moins avancés et les pays en transition, notamment ceux de l'Europe centrale et orientale.

# Report of the "Panel on e-policy and e-regulations for the information society"

Saturday, 9 November 2002

Rapporteur: Mr. Dae-Won Choi, United Nations Economic Commission for Europe (UNECE)

Chairperson: Mrs. Brigitta Schmögnerova, the Executive Secretary of United Nations

Economic Commission for Europe (UNECE;

Moderator: Mr. Hamadoun Touré, General Director of the Telecommunications

Development Bureau, International Telecommunication Union

- 1. The United Nations Economic Commission for Europe organized a special panel on E-Policy and E-Regulatory Framework Development for the Information Society under the auspices of the TSIED with special reference to transition economies, in Bucharest, Romania on 9 November 2002 in conjunction with and in the context of the Regional Conference of the World Summit on the Information Society (WSIS), which will take place on 7-9 November 2002 in the same venue.
- 2. The following speakers took part in the panel discussions: Mrs B. Schmögnerova, chairperson, the Executive Secretary of UNECE; Mr H. Touré, moderator, General Director of the Telecommunications Development Bureau, ITU; Mr DW.Choi, rapporteur, UNECE secretariat; Mr I.Erenyi, Director General, Ministry of Informatics and Communications, Hungary; Mrs A.Ticau, Deputy Minister, Ministry of Communications and Information Technology, Romania; Mr A. Korotkov, First Deputy Minister, Ministry of Telecommunications and Informatization, Russian Federation; Mr George Stoev, Director General, E-Commerce Centre, Bulgaria; Mr A. Koloduke, Executive Director, Information Society Union, Ukraine; Mr D. Souter, Executive Director, Commonwealth Telecommunications Union, UK; Mr Y. Hohlov, Chairman of the board, Institute of the Information Society, Russian Federation; Mr F. Nam, UNDP office in Kyrgyz Republic; Ms M. Meissl, DG Information Society, European Commission, Ms. S. Ghernaouti-Helie, HEC, University of Lausanne; Mr R.Badrinath, Director, ITC; Ms M. Hedblom, Executive Coordinator, WSIS/ITU; Mr E. Katsh, Department of Law, University of Massachusetts.
- 3. Main objectives of the panel were to provide a synthesis of discussions on the development of e-Policy and e-Regulatory Framework for the Information Society at the national, regional and global level. It also aimed at contributing to the WSIS 2003 by summarizing main issues currently being addressed, explore implications for the Pan-European region, and set out future directions based on recommendations put forward by regional and international experts.
- 4. The debate has focused on the establishment of an enabling legal environment for the Information Society by means of appropriate regulatory instruments taking into full consideration new technology development and the specific regional context. It also highlighted the best practices of e-policy implementation for reducing the digital divide and enhancing the knowledge economy development. The panel stressed that whilst the role of private sector is becoming more relevant, public policy does matter at the national and international level in creating an enabling environment for the Information Society.

- 5. At the panel and the plenary session, the United Nations Economic Commission for Europe (UNECE) publication of "Information Economy Report 2002-2003" was launched as an annual review series and a major contribution prepared to assist member States, particularly from transition economies, in developing and implementing e-strategies, e-policies and e-regulatory framework towards a knowledge-based economy. The publication contains a series of national progress reports prepared by relevant experts from 16 countries taking stock of current initiatives of e-policy development in the region. The report was put together by members of the UNECE Team of Specialists on Internet Enterprise Development (TSIED) who met at the UNECE/EU Joint Expert Panel on E-Strategy and E-Policy Development in Transition Economies, 3-4 October 2002 in Brussels. It also benefited from contributions of the South East Europe Digital Economy Project of the European Commission. The report highlights several key areas that decision makers in transition economies should consider when formulating policies on the Information Society. It serves two main purposes: to enable the country concerned to appraise the institutions and mechanisms that contribute to Information Society development in terms of country assessment; and to encourage better dissemination of relevant policies and best practices in terms of knowledge economy development.
- 6. ITU Director introduced the report, which provides an overview of national e-development strategies, main policy directions and instruments, relevant legal and regulatory framework, and the state-of-the-art e-statistics as available. The reports included in this publication are from Albania, Azerbaijan, Bulgaria, Estonia, Hungary, Kyrgyzstan, Latvia, Lithuania, Poland, the Republic of Moldova, Romania, the Russian Federation, Slovakia, Slovenia, The former Yugoslav Republic of Macedonia, Ukraine, with other countries of the region to be added as of the forthcoming edition. It also contains a brief regional overview on the main regional trends and future directions. The Director of ITU commended the timely contribution of UNECE with the publication and stated that it would serve as a reference material for events in the context of the World Summit on the Information Society: the Pan-European Regional Conference in Romania in 2002, the World Summit on the Information Society in Switzerland in 2003 and in the year 2005 in Tunisia, and emphasized the importance of cooperation between ITU and UNECE for further work on the next edition of publication comprising other regions as resources are available.
- 7. Speakers from transition economies mentioned that in the early 1990s, some governments in the region conceived the modernization of the communications infrastructure as a prerequisite of economic development. This relatively early start in some countries provided an initial head-start over other transition economies. Since the mid-1990s, many of the transition economies have made remarkable progress in the ICT areas in terms of developing strategic plans and implementing them across different sectors of economy. In particular, accession countries have made substantial development both in telecommunications infrastructure and in regulatory or legal framework where the process of negotiation on EU accession has played decisive role in aligning domestic laws in harmonization with the EU Directives, namely telecommunications acquis and e-commerce acquis.
- 8. However, as with many other aspects of the transition process, there are still growing disparities among countries in terms of the Internet access and affordability. While average connection fee of the Internet in some countries has lessened by more than three digits over the last years, in some other countries it is still 10 times more expensive when connection speed is 10 times slower. Given the low level of income per capita, average connection affordability in these countries remains at lower level than OECD average.

- 9. Some panellists stressed that in the Internet development, the leading transition economies were considered to stand also ahead as regards the connectivity and affordability. Nonetheless, they pointed out that the countries that completed successfully the first wave of liberalization in telecommunications, have not been not necessarily succeeding in entering into the second wave of the Internet deployment. The main reason was that liberalization of telecommunications sector has not led automatically to the liberation of Internet connectivity. This dilemma is strongly present in many transition economies, where sequence of policy has not accompanied the required mix of policy.
- 10. Participants added that E-policy would likely be effective when adjustment policy mix is adequately accompanied. Strategic planning towards the information society development across the region is omnipresent, but the degree of aligning policy mix with the long-term objectives for economic growth and appropriate policy instruments varies significantly across the region.
- 11. As for the e-policies, both telecommunications policy and information society development policy were mentioned as two main building blocks. The objective of the Telecommunication Policy is introducing equal and transparent conditions for the development of the telecommunication market so that its users would be provided with good quality telecommunication services at affordable prices. For pre-accession countries conditions would be established for joining the European and global structures. To achieve that it is necessary to fully comply with the European Community documents. Because there are many conceptual differences between national e-strategies and global network environment, linking them would require innovative approaches. This is where the dividing line between trade policy issues and e-policy issues resides, in the grey area between multilateral trading system and digital trading system.
- 12. Participants emphasized that apart from telecommunications policy, there is an important element to be considered, namely, Information society development policy. They stressed the needs of identifying appropriate measures for implementing core principles of the ICT development strategy beyond telecommunications sector development, promoting competition, encouraging investments, setting an adaptable regulatory framework, providing open access to networks, ensuring universal information services, promoting equal rights of access to information resources, diversify and affordability of content, including preservation of cultural and linguistic diversity, recognizing the necessity of regional and global cooperation among major stakeholders with particular attention to the digital divide.
- 13. A special reference was made to competition in telecommunications sector and the ensuing Internet development sector. It was indicated that many transition economies are failing to deliver the second area of e-policies due to the inertia created by the incumbents for stabilizing its monopoly ownership coupled with the induced policies of governments to grant certain degree of privilege to attract further foreign investment and thereby raising revenues. E-policy's long-term objectives should be to provide an environment where markets become more competitive yet ensure that a minimum of services would be available to all users at an affordable price and that the basic rights of consumers be protected. A number of speakers stressed that this aspect has no been fully materialized in the region.
- 14. Participants also considered that e-regulation in cyberspace constitutes another important building block for establishing the enabling environment for the information society. The term e-regulatory framework refers broadly to legislation, regulation, directives, case decisions, relevant policies, international agreement, architectural changes, self-regulation and any other means

under development that might be employed to affect parameters of current legal system and control variables of cyberspace. The e-regulatory framework development would provide a coherent, reliable and flexible approach to the regulation of electronic communication networks and services in fast moving digital markets. In general, it was mentioned that development of digital economy raises a host of new legal issues driven by a number of factors: open networks, borderless transfer of data, anonymity, jurisdiction, choice of law, copyright, data protection, privacy, digital signature, contract, liability, online dispute resolution, etc. which could be summarized as dematerialization, deterritorialization, depersonalisation detemporalization, and convergence of law and new technologies.

- 15. At present, a set of EU regulatory framework relating to information society, namely, telecommunications acquis and e-commerce acquis represent the most advanced form of e-regulation in the ECE region. They are not only comprehensive but also legally binding on member states. CEEC and the Baltic states have put their implementation plan of transposing these EU acquis as part of their negotiation package for accession.
- 16. The process of developing a proper regulatory framework on information society in line with the EU Directives and implementing them in the respective acceding countries would create significant externalities for neighbouring countries of South East Europe and other transition economies. Thus it would be important to understand the current process of implementing the EU Directives relevant for the information society and the potential impact on other transition economies. At present, decisive activities in the pre-accession process start to concentrate into 31 negotiation chapters. Among the latter, 3. Freedom to provide services, 6. Competition policy, 10. Taxation, 19. Telecommunications and information technologies, 23. Consumers and health protection, 28. Financial control would be important chapters relevant for the Information Society.
- 17. Three questions were raised during the open panel discussion: effectiveness of SMP approach; role of soft law in e-regulations; and role of ICT for the development of a knowledge-based economy.
- 18. Participants also heard that the over the last years, the UNECE has been instrumental in providing a forum for exchange of ideas, experiences, and best practices on e-policy and e-regulatory framework development. In this context the UNECE has organized a number of events: UNECE Workshop on E-Government in Budapest, November 2001 held in collaboration with the Hungarian Government, UNECE Workshop on E-Regulatory Framework Development in Geneva, February 2002, UNECE Forum on Online Dispute Resolution in Geneva, June 2002, UNECE/EU Joint Expert Panel on E-Strategy and E-Policy Development in Brussels, October 2002 and the forthcoming UNECE International Seminar on E-Government to be held on 13-14 December 2002 in Caserta, Italy in cooperation with the Italian Government, and the forthcoming UNECE workshop on e-security and knowledge economy in February 2003 in Geneva.
- 19. Finally, the Director of ITU stated that continuous discussion of the subject matters dealt by the panel would be useful for governments, business community and consumers alike to better understand how to set a strategic direction in maximizing the economic benefits of using new technology and the accruing social welfare, not only raising awareness of the current situation but also provide a vision of the potential implications and upcoming challenges to cope with. To this end, it was recommend that enhanced institutional synergy be further established among relevant intergovernmental agencies such as MoU between ITU and UNECE on Information

Economy Development with special reference to E-policy and E-regulations for the Information Society.

20. Mr Choi, the rapporteur of the panel, made its summary presentation at the final plenary session based on discussions held at this panel, and it was agreed that ITU and UNECE will collaborate on these issues in close cooperation with UN regional commissions and other international organizations such as the European Commission, OECD, WIPO, UNCITRAL, UNCTAD, World Bank, ITC, ICC and NGOS, and finally with other regional WSIS secretariat in order to bring the positive results accruing from the implementation of e-policy and e-regulations to the benefit of members states, wish special attention to the digitally marginalized sectors, regions and countries.

## Report on "The Role of New Technologies in Developing the Information Society" (workshop)

Saturday, 9 November 2002

Chairman: Professor Harvey B. Newman, California Institute of Technology

Rapporteur: Dr. Iosif Charles Legrand, Senior Researcher California Institute of Technology

## **Keynote speakers<sup>2</sup>:**

## Dr. Serban Valeca, Romanian Minister of Research

RTD & INNOVATION POLICIES in Support of the Development of the Information Society in Romania

## Professor Harvey Newman, Professor of Physics, California Institute of Technology and US CMS Collaboration Board Chair

Grids, Networks and IT Developments for the Science: Drivers of the Formation of an Information Society

## Mr. Jean François Soupizet, European Commission

The Role of Technologies in the Development of the Information Society

## Professor Tony Hey, Director e-Science Core Programme, United Kingdom

e\_Science, Grids and Virtual Organizations

## Dr. Hans Hoffmann, Director for Scientific Computing and Technology Transfer, European Center for Nuclear Research (CERN)

High Energy Physics Research and the Information Society

## Dr. William Johnston, Head of Distributed Systems Department, Lawrence Berkeley National Laboratory and NASA Ames Research Center

The Future of Cyberinfrastucture in Science

## Dr. Dave Reese, Chief Technology Officer - CENIC (presented by Prof. Harvey Newman)

CalREN: Towards an Optical Network for California, and National Light Rail for the US

## Professor Donald Riley, Vice President and Chief Information Officer, University of Maryland

The Internet Education Equal Access Foundation, and the Formation of a Global Information Society

### Dr. Fabrizio Gagliardi, European Center for Nuclear Research

Grid Developments for High Energy Physics and the Information Society

## Professor Nicolae Tapus, Polytechnic University Bucharest

Grid Initiative and Research Programs in Romania

<sup>2</sup> The complete presentations from the Workshop are available at :http://cil.cern.ch:8080/WSIS/

### **Speakers:**

Professor Artur Serra, University of Barcelona Dr. Jonathan Robin, IPv6 Task Force of EU

## **Report**

On behalf of the scientific community, we would like to express our great appreciation for the opportunity to organize this parallel workshop and present a range of state of the art projects, as well as current trends in the development of "intelligent", large scale distributed systems based on high performance networking infrastructures, that will drive the development of a global Information society.

We live in a pivotal decade. Global collaborations engaged in frontier research in fundamental and applied science face unprecedented challenges -- in data access, processing, data communications, and information sharing on a global scale. It is these challenges that must be overcome if these projects are to harness the intellectual power of the collaboration's young scientists, and to make possible breakthroughs in our understanding of the nature of matter, spacetime and the early universe, the climate and evolution of the earth past and future, and man's genomic makeup. And it is the solution to these technological problems, if implemented as standards, broadly applicable in many fields that could have a transformational effect on society, while enabling scientific discovery.

The data volumes to be explored by the largest projects in high energy and nuclear physics, bioscience, cosmology or in Earth observation are progressing from millions of Gigabytes now to a billion Gigabytes in the coming decade. Network bandwidths (and effective data transmission rates) will progress, through the use of state of the art optical transmission technologies, from the Gigabit/sec to the Terabit/sec range during this same time. In addition to the volume of the data, the real challenges lie in the complexity of the data, whose information content far exceeds that of the world's digital libraries, and in the need to process, distribute, share, and collaborate in exploring the data, as the means to scientific discovery.

Computer scientists and scientists in many disciplines have developed Grid systems over the last four years that promise to enable secure, managed, transparent and ubiquitous access to worldwide-distributed computing, data storage and networking resources for the first time. These systems are based on middleware that provides uniform tools and services for:

- ➤ Automatic resource discovery
- ➤ Management of complex workflow involving many compute and data intensive steps at different geographic locations
- Autonomous fault management and recovery, for both applications and infrastructure
- Managing large, complex and diverse data archives that are maintained by experts at different sites, and must be accessed and updated by collaborating organizations
- > Distributing and managing massive datasets that must be accessible by world-wide collaborations

A recent second generation development in Grid systems that holds great promise for society at large is the creation of Web Services, as a means of making this technology available to a vast population of users, and easily adaptable to a wide range of working environments. Web Service architectures allow for ensembles of services to be mutually discovered and organized, and to

cooperate to form a new generation of autonomous, artificially intelligent software systems; systems able to solve a new generation of complex problems using worldwide-distributed resources, and capable of providing support to global Virtual Organizations.

Finally, there is the emerging Knowledge Grid -- a synthesis of the second generation "Semantic Web" and Grid Services. The Knowledge Grid provides mechanisms to impose structure on the information and service components, so that people can more easily build problem-solving systems for specific problems in a wide range of disciplines. The experience and work of the Artificial Intelligence community is being adapted to develop rule-based languages able to describe the paths of information flow within very complex systems.

In order to realize the potential of these developments, to the benefit of society as a whole, we need to address the problem of *Pushing Back the Digital Divide*. What we mean by the *Pushing Back the Digital Divide* in the scientific research community is to make generally available the latest generation information technologies and infrastructures, in such a way that scientists from many world regions are made full partners in the process of exploration and discovery. These developments could have a transformative effect on the conduct of research, and eventually on business processes in industry and commerce.

Application of these methods more broadly could change society by allowing us to interact seamlessly, persistently and ubiquitously with information in our daily lives. Given appropriate investments of governments and international funding agencies, and additional support as appropriate from the private sector, this transformation could be accomplished within the next five to ten years.

By including students and young scientists directly in this process, we are able to create a "sustainable cycle of innovation", wherein continuing application development enables scientists, and society at large to cope with, adapt to, and exploit ongoing advances in Information Technologies, with a level of capability that grows exponentially in time.

To realize this Vision, governments, international institutions and funding agencies should:

- > Support establishment of international standards for Grid systems (i.e. the Global Grid Forum), and international policies for authorized shared use of Grid resources across national and regional boundaries
- Provide adequate funding to continue R&D and deployment of new-generation of Web and Network technologies
- > Support the migration of major existing applications across a broad range of disciplines in science and engineering to the latest generation of network and distributed system technologies
- Support education and training in state of the art Grid & Network technologies for new communities of users
- > Create open policies, and encourage inter-regional development programs, to help *Push Back the Digital Divide*.

The Cornerstone of the Information Society is education and research. Universities and colleges are the key to providing the "human infrastructure" necessary for any country to participate in the global information society. They train and educate the young people that are needed to create, operate and maintain the technical infrastructure and applications, and they provide the base for innovation and entrepreneurship.

For the economies in transition, participation in these developments is essential and requires:

- ➤ Investment in infrastructure for e-Science, that will maximize the benefits of good universities while strengthening their highly educated communities, including both faculty and staff
- ➤ Providing Information Technology and Communications infrastructures that allow research communities to compete and collaborate globally
- Enabling growth of e-Business, e-Health, e-Learning, e-Content and e-Government
- Encouraging a process by which innovative ideas and developments at universities, by themselves or in cooperation with industry, are able to form the "seed corn" and core elements of many of the companies of the future
- Encourage new forms e-Utility businesses that will fuel economic growth.

Creating a sustainable process of innovation, based on recent developments in Web Services and network technologies, will lay a solid foundation for an Information Society, with lasting benefits for the world's populations. This "creative process", where rapid new developments in IT infrastructure and software systems enable new classes of applications, which in turn drive new demands and further infrastructure advances - should be a central theme at the World Summit on the Information Society in Geneva next year.

## **Adoption of final documents**

During the second plenary session, the Chairman of the Conference, Mr. Dan Nica, gave the floor to the general rapporteur, Mr. Petru Dumitriu, to present the reporting scheme. The general rapporteur, in his turn, introduced the fifteen rapporteurs who made brief presentations on the fifteen items, subitems and parallel events of the Conference.

The secretary general, Ambassador Anda Filip was subsequently invited to introduce the draft political document. With no objections, the political document of the Bucharest Pan-European Ministerial Conference on the Information Society was adopted. The text of the Bucharest Document, entitled "Towards An Information Society: Principles, Strategy And Priorities For Action" is reproduced at the beginning of the present general report.

## **Closing remarks**

Mr. Hamadoun Touré, the head of the Bureau for Telecommunication Development in the International Telecommunication Union and Mrs. Brigitta Schmögnerová, the Executive Secretary of the UN/ECE made remarks on the quality and the outcome of the Conference.

Mr. Dan Nica, the Chairman of the Pan-European Ministerial Conference on the Information Society also addressed the Conference. The session and the Conference were declared closed.