A. Draft Declaration of Principles

1. General comments

UNESCO appreciates the inclusion of the following basic elements in the text and suggests that they be maintained in its final version:

- Respect for all internationally recognized human rights and fundamental freedoms, notably respect for freedom of expression (Paragraphs 3 and 10);
- Human capacities building (Paragraphs 10 and 27);
- Cultural and linguistic diversity (Paragraph 1, 10 and 48-51) as essential to ensure the existence of an information society open to all;
- Importance of a strong public domain of information (Paragraph 23);
- Importance of open standards and open source (Paragraph 24);
- Knowledge creation as key objective of the information society (Paragraphs 2, 5, 7, 8, 22, 30 and 53);
- Importance of independent, pluralistic and free mass and other communication media in their various forms (Paragraph 10);
- Respect of gender and youth issues (Paragraphs 15 and 16);
- Respect for the specific needs of the disabled and those with special needs (Paragraph 14);
- Community access as essential for allowing access to ICTs for all at affordable cost (Paragraph 19).

UNESCO suggests to

- Include definitions of the main terms used (for example "ICTs", "information", "knowledge", etc.), possible in a Glossary;
Better determine the scope of “Human capacity” in the information society (both as it relates to skills training in the use of information and ICTs and as it relates to the use of ICTs for teaching and learning);

Make a strong reference, where appropriate, to the role of sciences in the information society and the mutual benefits of sciences and ICTs¹.

Stress the importance of traditional media and information access and their linkage with new ICTs for advancing the information society, for example in multimedia community telecentres;

Make explicit reference to African countries as a target group, especially in the context of the United Nations response to the implementation of NEPAD ICTs development goals;

Make reference to the needs for special solutions for rural and disadvantaged areas;

Enhance the gender perspective where appropriate.

2. Specific comments

UNESCO suggests that the following specific modifications and additions be made:

**Paragraph 1**
Inverse the phrase "….new technologies, in particular information and communication technologies (ICTs) become an essential tool..." as follows "... information and communication technologies, in particular new technologies, become an essential tool...".

Explanatory note: UNESCO believes in the convergence and successful integration of all technologies.

**Paragraph 2**
Inverse the sequence of the enumeration in the first part of the sentence, to be read as follows: "We recognize that information, communication and knowledge...";

**Paragraph 5**
Add after "… to ensure that": "science, knowledge and ....";

**Paragraph 9**
Replace the term “appropriate content” by "relevant content";

**Paragraph 10**
(Alinea 1) Add after "Notably":" the right to education (Article 26 of the Universal Declaration of Human Rights) and ...."

(Alinea 2) Add after "fostering public information": "providing accurate, professional and credible information in order to contribute to ...";

Add new alinea to read as follows: "The recognition of scientific knowledge as a public good. Scientific data and information should be as widely available and affordable as possible";

**Paragraph 19**
Modify as follows: "Public access from centres such as post offices, community multimedia centres, libraries and schools, provides an effective means for promoting universal access in rural and remote areas...."

**Paragraph 20**
Move this paragraph to the end of the Draft Declaration of Principles (new paragraph 53);

Explanatory note: Measuring and mapping the Information society should not only be applied to infrastructure, but also to human capacity development, ICT applications in the fields of education, sciences and
Paragraph 21
Delete "The right to communicate";
Explanatory note: The “Right to communicate” is a vague concept, unclear in meaning and difficult to be translated into legal provisions; UNESCO is of the opinion that the principle of "Freedom of expression" (Article 19 of the Universal Declaration of Human Rights) sufficiently provides for the defence of this right.
Add a new sentence at the end of the paragraph: "wider flows of information (North/South; South/North and South/South) and local contents creation and dissemination are important to underpin this right".

Paragraph 22
Add after "Access to knowledge": "…and information: all …";

Paragraph 24/1 (new)
Add following new paragraph after paragraph 23: "Information preservation: The preservation of information, in all its forms (analogue and digital) is essential for creating a memory-based information society".
Explanatory note: UNESCO considers the preservation of information is an indispensable prerequisite of ensuring its permanent accessibility.

Paragraph 26
Add at the end of the paragraph "…without any restriction to freedom of expression and press freedom".

Paragraph 27
Add after "…civil society organizations": "as well as scientific and academic institutions ----.";

Paragraph 30
Add after …people": ", particularly women, youth and vulnerable groups"

Paragraph 31
Delete "including ICT Literacy";
Add at the end of the paragraph "…tapping into the potentials of ICTs to enhance the quality of teaching and learning and to introduce an higher degree of flexibility in educational needs so as to reach the “Education for All” goals ".
Explanatory note: A clear distinction should be made between ICTs as pedagogical tools (ICT to enhance the quality of teaching and learning) and ICTs as educational discipline (capacity building in the use of ICTs ("information literacy").

Paragraph 34/1 (new) "Universities and research institutions have a critical role in knowledge production, analysis, sharing and dissemination. The availability of world wide affordable networking infrastructure, high speed internet connections, information-processing equipment and training are an essential part of capacity building and education initiatives".

Paragraph 36
Add at the end of first sentence: "…whilst protecting civil liberties and freedom of expression".
Explanatory note : UNESCO considers that there is a certain danger that the fight against terrorism may relegate freedom of expression and press freedom, which both are among the best bulwarks against violence and hatred.
Replace "in this regard" by "…in the protection of children";

Paragraph 38
Add the following sentence: "In particular, knowledge generated by publicly-funded programmes should be recognised as a public good"
Paragraph 39
This paragraph, to the substance of which UNESCO entirely agrees, is suggested to be moved under Chapter 7 "ICT applications".

Paragraph 43
Delete the word "Radio";
Explanatory note: The limitation of frequency spectrum only to radio should be avoided.

Paragraph 46
Add after "… education" " sciences, culture …".

Paragraph 47
Add at the end of the paragraph the following sentence "Applications fostering access to and participation in all forms of intellectual activity for educational, scientific, cultural and communication purposes should be ensured".

Paragraph 52
Replace "Cyberspace" by "The information society"
Add at the end of the paragraph: "Any standards, guidelines or norms to be adopted should be established by closely involving concerned professional communities".
B. Draft Plan of Action

3. General comments

UNESCO appreciates the inclusion of the following actions in the text and suggests that they be maintained in its final version:

- Fostering universal access (Paragraph 3);
- Enhancing access to public domain information (Paragraph 13);
- Developing and disseminating open standards and open-source software, including the UNESCO software CDS/ISIS (Paragraph 14);
- Fostering cooperation among all stakeholders for effective design and implementation of various initiatives (Paragraph 17);
- Giving priority to locally-available human resources (Paragraph 17);
- Fostering the use of ICTs in education, capacity building for ICT use and training of ICT specialists (Paragraphs 21, 22, 23);
- Promoting good governance whilst respecting the rights and obligations of all stakeholders (Paragraph 28);
- Ensuring a balance between intellectual property rights (IPR) and the public interest (Paragraph 34);
- Guaranteeing cultural and linguistic diversity (Paragraph 42);
- Supporting the creation of local content (Paragraph 43).

UNESCO suggests

- Include results to be achieved, benchmarking and indicators;
- Assign responsibilities for implementation of the various elements of the Draft Action Plan.
- Foster consensus-building among States, intergovernmental and non-governmental organizations, civil society and the private sector on a number of basic concepts, shared values, ethical principles objectives and policies for progressing towards an equitable information society.
- Demonstrate the impact of ICT-based alternative delivery systems through pilot projects, notably for achieving Education for All targets.

4. Specific comments

UNESCO suggests the following modifications of and additions to the various paragraphs:

**Paragraph 14** Add the following after "…networking": "and cooperation and effective and efficient use of collected data and information..."

Explanatory note: UNESCO considers that in the promotion of interoperability principles and metadata standards emphasis should be given to scientific data and information.

**Paragraph 14/1** "Legal regimes: Any legal regime on database protection should
guarantee full and open access to data created with public funding. Restrictions on proprietary data should also be designed so as to maximize availability for academic research and teaching purposes”.

Paragraph 14/2 “Access to scientific information: Electronic publishing, differential pricing schemes and appropriate open source initiatives should be promoted to make scientific information affordable and accessible on an equitable basis in all countries”

Paragraph 14/3 “Use of scientific information: Initiatives to increase scientific literacy and consumer awareness of how to select and interpret scientific information published on the world wide web should be encouraged, recognizing the key role of the media in communicating science”.

Paragraph 14/4 “Promotion of research: Urgently needed research on the following issues should be supported:

- Use of existing and novel information technologies in key areas, such as tele-medicine and education.
- Socio-economic value of public-domain information and open access regimes”.

Paragraph 15 “Data collection: Long-term support for the systematic and efficient collection, preservation and provision of essential digital data, e.g. population and meteorological data, in all countries, should be provided”.

Paragraph 17 Add the following new alinea:

- “The most conducive patterns of cooperation should be designed in order to ensure the effective participation of all countries as producers and consumers of information and knowledge.”
- “The effective use of ICTs for better transmission and sharing of scientific knowledge at all levels should be increased, including the establishment of virtual universities and taking into account local and indigenous knowledge and human resources.”

Paragraph 18 Add the following new alinea:

- “enhancing the capabilities of national institutions in developing countries.”

Paragraph 21 Add the following new alinea:

- “The use of ICT-based delivery systems in formal and non-formal education should be promoted, utilizing different mixes of new and traditional media and appropriate methodologies.”
- “New forms of networking of teachers institutions and teachers should be supported.”

Paragraph 22 Add the following new alinea:
• “Media workers should be offered enhanced opportunities to improve their ICT skills, as they can be instrumental for opening the information society for the general public.”

• “Networks of specialists and of virtual interest groups should be developed as they are key to efficient and effective exchanges and cooperation in the Information society”.

Paragraph 23

Add the following new alinea:

• “The development of internationally compatible descriptors and standards for distance and e-learning courseware and for e-learning institutions should be fostered”.

Paragraph 28

Add the following new alinea:

• “Increased participation of citizens in civic life and in decision making by means of ICTs should be fostered.”

• “The development of appropriate information and communication tools to support decision making and to encourage dialogue should be promoted.”

• “The role of women and youth in the Information society and the diffusion of information on gender and ICT policy issues should be enhanced.”

• “The training of women and youth in ICT literacy and technical skills in order to enable them to enter empowered into the information society should be improved.”

Paragraph 35

Add after “… local level “: “…, where community media, including community multimedia centres should be developed as important means of ensuring participation of communities in the:

Paragraph 39

(new)

Add the following new alinea:

“Appropriate materials should be developed in open access multimedia forms and translated and adapted to the context of Least Developed Countries (LDCs), for development workers such as NGO staff, health officers and community leaders.”

Paragraph 42

Add the following new alinea:

• “Linguistic diversity as well as the production, safeguarding and dissemination of diversified contents in the media and global information networks should be encouraged.”

• “The role of public radio and television services in the development of audiovisual productions of good quality should be fostered.”

Paragraph 43

Add the following new alinea:

• “The use of ICTs by cultural industries in developing countries
should be fostered.”

• “The international exchange of cultural goods and services through the development of endogenous cultural industries and the use of ICTs for exhibitions and for promoting and marketing cultural works should be fostered.”

• “Developing countries must enhance their communication capacities, including their capacity to produce local content for the media.”

• “An international framework for the preservation of digital heritage should be developed.”

• “Private sector’s contribution to enhancing cultural diversity in the Information society should be encouraged.”

**Paragraph 44**
Add the following new alinea:

• “Community media should be supported”.

**Paragraph 50**
Add the following new alinea:

• “Public Service Broadcasting and Community Media have specific and crucial roles to play in ensuring the participation of all in the information society.”

**Paragraph 53**
Add at the end of alinea 4: “… especially community media and multimedia centres that serve as communication and information platforms for development”.

**Paragraph 56**
Add to heading: “… and local technology promotion”
Add at the end of the paragraph: “Successful technology convergence requires identification and promotion of existing local technologies and technological solutions, as intrinsic elements of the technology capacity of developing countries”
Note

1. Science is a key public good that underpins the information society. The fundamental scientific and technological components of the Information Society have been driven by the search for fundamental knowledge and solutions to specific problems. The Information Society tools, from electricity and radio waves to the World Wide Web and browsers, were all first developed in scientific and academic laboratories.

Scientific research and technology are key drivers in today’s economies as twin pillars of progress in knowledge and quality of life for all humankind. Information and communication technologies have the capacity to increase accessibility to scientific knowledge internationally.

As enabling technologies, information and communication technologies are central to scientific research. ICTs help scientists perform basic and applied research, build partnerships and scientific international consortia, collect data, conduct experiments, manage laboratories, and communicate their findings to their peers and the public. The digital world in which we live is not only a product of science but a fundamental force for shaping the scientific research agenda and determining how scientific knowledge will unfold, be utilized and above all, be shared, in the future.

However, despite this potential, the knowledge divide will widen if inequalities are not addressed properly. Increasing inequalities in access to ICTs reduce opportunities for individuals and institutions to use scientific knowledge that could help foster innovation, facilitate efficient decision making, and support education and training. The digital divide addressed by WSIS shares many of the same characteristics of the scientific divide, defined by the enormous gap in scientific research, innovation and diffusion of technology.

In addition, present systems for the publication and dissemination of scientific information do not provide adequate access to knowledge originating in many developing countries. While scientific data and information from one country may or may not be specifically relevant to another country’s needs, all countries must be able to develop and communicate their own knowledge.

In order to reduce these inequalities and to achieve Sustainable Development and the Millennium Goals, science, technology and innovation will have to play a fundamental role, maximizing the possibilities and benefits of ICTs in the areas of basic and applied research, education, health, agriculture, technology, economic development and government.

Therefore, facilitating and ensuring equitable access to scientific knowledge and to software tools for analysing and disseminating this information is essential, as well as making available to universities and research institutions world-wide affordable networking infrastructure, information-processing equipment and training.

The essential role of science and scientists in building the Information Society has been understated in the Draft Declaration and Draft Plan of Action. The scientific community urges governments to clearly recognise such a role in the Declaration of Principles and in the Plan of Action of WSIS.

The statement “Science in the Information Society”, attached to this submission, is the product of a workshop organised by ICSU and the ICSU Committee on Data for Science and Technology (CODATA), in partnership with UNESCO. The workshop took place in Paris on 12th March 2003 and involved over 60 scientists, science managers and representatives of international agencies from all over the world. A full report of the workshop and webcasts can be found at www.icsu.org.