



*Civil Society Working Group*  
*Scientific Information*  
<http://www.wsis-si.org>

Paris, 10 February 2004

## INQUIRY on Scientific Publications

### Written Evidence submitted to the SCIENCE AND TECHNOLOGY COMMITTEE of the UNITED KINGDOM PARLIAMENT

Our working group is submitting a written evidence, in support of further oral evidence, on the following topic of the inquiry :

*" What are the consequences of increasing numbers of open-access journals, Should the Government support such a trend and, if so, how?"*

Our evidence addresses the point that the government of the United Kingdom should support the trend towards open access to scientific information, by reasons of existing recent international commitments that have been undersigned by the United Kingdom.

Our evidence focuses on the recommendations that have been adopted in December 2003, at the [World Summit On the Information Society](http://www.itu.int/wsis) (WSIS) ( <http://www.itu.int/wsis> ), the negotiation process and subsequent suggestions to implement said recommendations.

Yet another very recent international commitment that might be of interest to consider is the [Final Communiqué of the Meeting of the OECD Committee for Scientific and Technological Policy \(CSTP\) at Ministerial Level](#) ( Paris, 29-30 January 2004 ). Although we had an informal meeting at OECD recently concerning this matter, we will not comment on this commitment in this written evidence, for two reasons. First, because of lack of time, and second because we were not officially involved in the OECD process. However, we will be glad to answer questions concerning this topic during oral evidence.

We assume that the reader is already conversant with the concept of Open Access journals and Open Archives, so there is no need of a lengthy presentation of the topic. For the historical circumstances that lead us to the current situation, an interesting article to consult is [In Oldenburg's Long Shadow: Librarians, Research Scientists, Publishers, and the Control of Scientific Publishing](#) by Jean-Claude Guédon.

There is, however, one important point that we have to stress beforehand : Journals or archives fully comply with our definition of Open Access only if their web sites can be conveniently and freely copied and mirrored. The reason for this point of view will be better understood later on. For the sake of brevity, Open Access journals will be abbreviated as Open Journals, whereas journals where access to content is restricted to paying readers will be abbreviated as restricted access journals or Restricted Journals.

The name <sup>a</sup>WSIS Civil Society Working Group on Scientific Information<sup>o</sup> will be abbreviated as WG-SI.

Our evidence is structured as follows :

- 1/ Presentation of the WSIS from a legal standpoint.
- 2/ Presentation of WSIS paragraphs of interest.
- 3/ Commentaries on selected WSIS paragraphs.
- 4/ The issues within the framework of the WSIS.
- 5/ Propositions towards the implementation of WSIS resolutions by governments.
- 6/ Propositions towards the implementation of WSIS resolutions by funding entities.

### 1/ Presentation of the WSIS from a legal standpoint.

The World Summit On the Information Society ( WSIS ) is a summit of the United Nations. The two main reference resolutions are the ITU Resolution 73, 1998 and the UN General Assembly Resolution 56/183 - 90<sup>th</sup> plenary meeting, 21 December 2001. The summit is being organized by the International Telecommunication Union (ITU). The ITU, headquartered in Geneva, Switzerland is an international organization within the United Nations System where governments and the private sector coordinate global telecoms networks and services. The International Telecommunication Union is unique among international organizations in that it was founded on the principle of cooperation between governments and the private sector. The WSIS is the first UN summit, where the Civil Society does officially participate. In this regard, it is a historic event.

The goal of the first phase of the WSIS has been to prepare two documents : a Declaration of Principles (exhibit C) and a Plan of Action (exhibit D). In a

way, the WSIS amounts to a special plenary session of the UN general assembly. The only WSIS participants that may vote are governments. Civil Society NGOs are non-voting participants, they have the diplomatic status of observers. The Civil Society is officially involved in the preparation of these two key documents. At the end of PrepCom2, some parts of the observers' contribution to the Declaration of Principles and the Plan of Action have been included in the then current Draft Declaration of Principles and Plan of Action. Therefore, a few NGOs contributions have been included at that stage in documents under negotiation. Later on, it was still possible for NGOs to discuss and convince some state delegations to bring to the floor new language or revision, and try to convince other state delegations either to support or not to veto them.

In addition to five regional preparatory conferences, the preparation of the Draft Declaration of Principles and Draft Action Plan was achieved during several preparatory conferences called "PrepCom".

- \* PrepCom-1 Geneva (Switzerland), 1-5 July 2002
- \* PrepCom-2 Geneva (Switzerland), 17-28 February 2003
- \* Intersessional Meeting Paris (France) 15-18 July 2003
- \* PrepCom3 Geneva (Switzerland), 15-26 September 2003
- \* PrepCom3-A : Resumed Session 10-14 November 2003
- \* PrepCom 3B - Second Resumed Session 5 - 6 & 9 December 2003

It can be therefore noticed that the negotiation phase was quite long, and therefore adopted texts are not the product of a summary process.

The WSIS itself is held in two meetings :

- \* Geneva (Switzerland), 10-12 December 2003, where Declaration of Principles ( exhibit C ) and Plan of Action ( exhibit D ) were adopted.
- \* Tunis (Tunisia), 16-18 November 2005, where progress that has been made will be assessed and a further plan of action will be adopted.

WSIS recommendations, and the word is clear, cannot be enforced. However, they have a strong moral and political weight and negotiations on their content are very intense. If the WSIS recommendations were of no value, why there should be such an intense diplomatic fight around them ?

In fact, it would be quite difficult for any government who undersigned the WSIS texts to take decisions that go against the Declaration of Principles and the Plan of Action. The degree of practical "enforceability" depends on the topic. For example, in the matter of Internet governance, if any recommendation can be approved on this topic, it is highly likely that it would be applied. In the matter of the Digital Solidarity Fund, a much lower level of compliance is expected. At any rate, any government that enacts laws, or any entity (institution, business, NGO) that takes measures, along the lines of the WSIS recommendations shall be very hard to blame, and on the contrary shall receive praises from the world assembly of nations, and from the world civil society.

We had no time to explore this legal point, but we tend to believe that UN recommendations have a "*de lege ferenda*" value, which means that they must be officially considered and discussed, in the preparation process of national laws and executive orders.

Two points must be stressed: first recommendations are adopted only after reaching the consensus of all 176 states, second, they are adopted while taking into account global considerations. Access to Scientific Information is not the sole topic of the WSIS and this is quite appropriate indeed, because this topic is considered within the framework of worldwide societal, cultural, technological and economical development, and not just within the narrower framework of the scientific community as it has been mostly the case until now.

## 2/ Presentation of WSIS paragraphs of interest.

The paragraphs that have been adopted by the assembly of nations and that are related in general, to knowledge sharing and access to scientific information and more specifically to scientific publishing are the following ;

### DECLARATION of PRINCIPLES

#### *A. Our Common Vision of the Information Society*

7. We recognize that science has a central role in the development of the Information Society. Many of the building blocks of the Information Society are the result of scientific and technical advances made possible by the sharing of research results.

8. We recognize that education, knowledge, information and communication are at the core of human progress, endeavour and well-being. Further, Information and Communication Technologies (ICTs) have an immense impact on virtually all aspects of our lives. The rapid progress of these technologies opens completely new opportunities to attain higher levels of development. The capacity of these technologies to reduce many traditional obstacles, especially those of time and distance, for the first time in history makes it possible to use the potential of these technologies for the benefit of millions of people in all corners of the world.

10. We are also fully aware that the benefits of the information technology revolution are today unevenly distributed between the developed and developing countries and within societies. We are fully committed to turning this digital divide into a digital opportunity for all, particularly for those who risk being left behind and being further marginalized.

#### *B. An Information Society for All: Key Principles*

### **3) Access to information and knowledge**

1. 24. The ability for all to access and contribute information, ideas and knowledge is essential in an inclusive Information Society.
- 2.
3. 25. The sharing and strengthening of global knowledge for development can be enhanced by removing barriers to equitable access to information for economic, social, political, health, cultural, educational, and scientific activities and by facilitating access to public domain information, including by universal design and the use of assistive technologies.
- 4.

5. 26 A rich public domain is an essential element for the growth of the Information Society, creating multiple benefits such as an educated public, new jobs, innovation, business opportunities, and the advancement of sciences. Information in the public domain should be easily accessible to support the Information Society, and protected from misappropriation. Public institutions such as libraries and archives, museums, cultural collections and other community-based access points should be strengthened so as to promote the preservation of documentary records and free and equitable access to information.

6.

7. 28. We strive to promote universal access with equal opportunities for all to scientific knowledge and the creation and dissemination of scientific and technical information, including open access initiatives for scientific publishing.

8.

#### **9. 4) Capacity building**

32. Content creators, publishers, and producers, as well as teachers, trainers, archivists, librarians and learners, should play an active role in promoting the Information Society, particularly in the Least Developed Countries

#### **6 ) Enabling environment**

42. Intellectual Property protection is important to encourage innovation and creativity in the Information Society; similarly, the wide dissemination, diffusion, and sharing of knowledge is important to encourage innovation and creativity. Facilitating meaningful participation by all in intellectual property issues and knowledge sharing through full awareness and capacity building is a fundamental part of an inclusive Information Society.

44. Standardization is one of the essential building blocks of the Information Society. There should be particular emphasis on the development and adoption of international standards. The development and use of open, interoperable, non-discriminatory and demand-driven standards that take into account needs of users and consumers is a basic element for the development and greater diffusion of ICTs and more affordable access to them, particularly in developing countries. International standards aim to create an environment where consumers can access services worldwide regardless of underlying technology.

#### **8 ) Cultural diversity and identity, linguistic diversity and local content**

53. The creation, dissemination and preservation of content in diverse languages and formats must be accorded high priority in building an inclusive Information Society, paying particular attention to the diversity of supply of creative work and due recognition of the rights of authors and artists. It is essential to promote the production of and accessibility to all content— educational, scientific, cultural or recreational— in diverse languages and formats. The development of local content

suitable to domestic or regional needs will encourage social and economic development and will stimulate participation of all stakeholders, including people living in rural, remote and marginal areas.

*C. Towards an Information Society for All Based on Shared Knowledge*

10. 65. We commit ourselves to strengthening cooperation to seek common responses to the challenges and to the implementation of the Plan of Action, which will realize the vision of an inclusive Information Society based on the Key Principles incorporated in this Declaration.
- 11.
12. 66. We further commit ourselves to **evaluate and follow-up progress in bridging the digital divide**, taking into account different levels of development, so as to reach internationally agreed development goals, including those contained in the Millennium Declaration, and to assess the effectiveness of investment and international cooperation efforts in building the Information Society.
- 13.
14. 67. We are firmly convinced that we are collectively entering a new era of enormous potential, that of the Information Society and expanded human communication. In this emerging society, information and knowledge can be produced, exchanged, shared and communicated through all the networks of the world. All individuals can soon, if we take the necessary actions, together build **a new Information Society based on shared knowledge and founded on global solidarity and a better mutual understanding between peoples and nations**. We trust that these measures will open the way to the future development of a true **knowledge society**.

## PLAN of ACTION

### C. Action Lines

#### **C1. The role of governments and all stakeholders in the promotion of ICTs for development**

8. The **effective participation of governments and all stakeholders** is vital in developing the Information Society requiring cooperation and partnerships among all of them.
  - a) Development of **national e-strategies, including the necessary human capacity building, should be encouraged by all countries by 2005**, taking into account different national circumstances.
  - b) Initiate at the national level a structured dialogue involving all relevant stakeholders, including through public/private partnerships, in devising e-strategies for the Information Society and for the exchange of best practices.
  - d) Each country is encouraged to establish at least one functioning Public/Private Partnership (PPP) or Multi-Sector Partnership (MSP), by 2005 as a showcase for

future action.

e) Identify mechanisms, at the national, regional and international levels, for the initiation and promotion of partnerships among stakeholders of the Information Society.

### C3. Access to information and knowledge

10. ICTs allow people, anywhere in the world, to access information and knowledge almost instantaneously. Individuals, organizations and communities should benefit from access to knowledge and information.

h) Support the creation and development of a digital public library and archive services, adapted to the Information Society, including reviewing national library strategies and legislation, developing a global understanding of the need for "hybrid libraries", and fostering worldwide cooperation between libraries.

i) Encourage initiatives to facilitate access, including free and affordable access to open access journals and books, and open archives for scientific information

### C4. Capacity building

Everyone should have the necessary skills to benefit fully from the Information Society. Therefore capacity building and ICT literacy are essential. ICTs can contribute to achieving universal education worldwide, through delivery of education and training of teachers, and offering improved conditions for lifelong learning, encompassing people that are outside the formal education process, and improving professional skills.

m) Promote international and regional cooperation in the field of capacity building, including country programmes developed by the United Nations and its Specialized Agencies

n) Launch pilot projects to design new forms of ICT-based networking, linking education, training and research institutions between and among developed and developing countries and countries with economies in transition.

### C6. Enabling environment

13. To maximize the social, economic and environmental benefits of the Information Society, governments need to create a trustworthy, transparent and non-discriminatory legal, regulatory and policy environment. Actions include:

h) Develop a framework for the secure storage and archival of documents and other electronic records of information.

p) Governments, in cooperation with other stakeholders, should promote the development and use of open, interoperable, non-discriminatory and demand-driven standards.

### C7. ICT applications: benefits in all aspects of life

14. ICT applications can support sustainable development, in the fields of public



administration, business, education and training, health, employment, environment, agriculture and science within the framework of national e-strategies. This would include actions within the following sectors:

#### 18. E-health

b) Facilitate access to the world's medical knowledge and locally-relevant content resources for strengthening public health research and prevention programmes and promoting women's and men's health.

#### 22. E-science

b) Promote electronic publishing, differential pricing and open access initiatives to make scientific information affordable and accessible in all countries on an equitable basis.

c) Promote the use of peer-to-peer technology to share scientific knowledge and pre-prints and reprints written by scientific authors who have waived their right to payment.

d) Promote the long-term systematic and efficient collection, dissemination and preservation of essential scientific digital data, for example, population and meteorological data in all countries.

e) Promote principles and metadata standards to facilitate cooperation and effective use of collected scientific information and data as appropriate to conduct scientific research.

### **C8. Cultural diversity and identity, linguistic diversity and local content**

23. Cultural and linguistic diversity, while stimulating respect for cultural identity, traditions and religions, is essential to the development of an Information Society based on the dialogue among cultures and regional and international cooperation. It is an important factor for sustainable development.

b) Develop national policies and laws to ensure that libraries, archives, museums and other cultural institutions can play their full role of content providers including traditional knowledge providers in the Information Society, more particularly by providing continued access to recorded information.

c) Support efforts to develop and use ICTs for the preservation of natural and cultural heritage, keeping it accessible as a living part of today's culture. This includes developing systems for ensuring continued access to archived digital information and multimedia content in digital repositories, and support archives, cultural collections and libraries as the memory of humankind.

d) Develop and implement policies that preserve, affirm, respect and promote diversity of cultural expression and indigenous knowledge and traditions through the creation of varied information content and the use of different methods, including the digitization of the educational, scientific and cultural heritage.

e) Support local content development, translation and adaptation, digital archives,

and diverse forms of digital and traditional media by local authorities. These activities can also strengthen local and indigenous communities.

### **C11. International and regional cooperation**

26. International cooperation among all stakeholders is vital in implementation of this plan of action and needs to be strengthened with a view to promoting universal access and bridging the digital divide, *inter alia*, by provision of means of implementation.

#### **D. Digital Solidarity Agenda**

27. The Digital Solidarity Agenda aims at putting in place the conditions for mobilizing human, financial and technological resources for inclusion of all men and women in the emerging Information Society. Close national, regional and international cooperation among all stakeholders in the implementation of this Agenda is vital. To overcome the digital divide, we need to use more efficiently existing approaches and mechanisms and fully explore new ones, in order to provide financing for the development of infrastructure, equipment, capacity building and content, which are essential for participation in the Information Society.

#### *D2. Mobilizing resources*

b) Developed countries should make concrete efforts to fulfil their international commitments to financing development including the Monterrey Consensus, in which developed countries that have not done so are urged to make concrete efforts towards the target of 0.7 per cent of gross national product (GNP) as ODA to developing countries and 0.15 to 0.20 per cent of GNP of developed countries to least developed countries.

#### **E) Follow-up and evaluation**

28. A realistic international performance evaluation and benchmarking (both qualitative and quantitative), through comparable statistical indicators and research results, should be developed to follow up the implementation of the objectives, goals and targets in the Plan of Action, taking into account different national circumstances.

a) In cooperation with each country concerned, develop and launch a composite ICT Development (Digital Opportunity) Index. It could be published annually, or every two years, in an ICT Development Report. The index could show the statistics while the report would present analytical work on policies and their implementation, depending on national circumstances, including gender analysis.

b) Appropriate indicators and benchmarking, including community connectivity indicators, should clarify the magnitude of the digital divide, in both its domestic and international dimensions, and keep it under regular assessment, and tracking global progress in the use of ICTs to achieve internationally agreed development goals, including those of the Millennium Declaration.

c) International and regional organizations should assess and report regularly on universal accessibility of nations to ICTs, with the aim of creating equitable opportunities for the growth of ICT sectors of developing countries.

e) Develop and launch a website on best practices and success stories, based on a compilation of contributions from all stakeholders, in a concise, accessible and compelling format, following the internationally-recognized web accessibility standards. The website could be periodically updated and turned into a permanent experience-sharing exercise.

#### F) Towards WSIS phase 2 (Tunis)

29. Recalling General Assembly Resolution 56/183 and taking into account the outcome of the Geneva phase of the WSIS, a preparatory meeting will be held in the first half of 2004 to review those issues of the Information Society which should form the focus of the Tunis phase of the WSIS and to agree on the structure of the preparatory process for the second phase. In line with the decision of this Summit concerning its Tunis phase, the second phase of the WSIS should consider, *inter alia*.

a) Elaboration of final appropriate documents based on the outcome of the Geneva phase of the WSIS with a view to consolidating the process of building a global Information Society, and reducing the Digital Divide and transforming it into digital opportunities.

### 3/ Commentaries on selected WSIS paragraphs.

Commentaries are needed to better appreciate the meaning of the texts, their extent as well as their legal and political consequences within the context of Open Access.

## DECLARATION of PRINCIPLES

### *A. Our Common Vision of the Information Society*

7. This paragraph is based on a language promoted by ICSU (International Council for Science) (<http://www.icsu.org>) in section C3, it was heavily modified and shortened by the US delegation, while being put in the first section A. The <sup>a</sup>sharing of research results<sup>o</sup> is underlined, which is quite fitting with the Open Access philosophy

8. It is recognized that the rapid progress of these technologies opens completely new opportunities to attain higher levels of development. Open Access may be identified as one of those new opportunities.

10. The term win/win proposition has been present for a long time in the various drafts, but has been removed, possibly being too colloquial, and replaced by the term <sup>a</sup>digital opportunity for all<sup>o</sup>. Open Access may be identified as a win/win proposition because it creates immediate benefits to transition countries, while providing long term savings to industrialized nations.

### *B. An Information Society for All: Key Principles*

#### **3) Access to information and knowledge**

15.

16. 26 This importance of the public domain is recognized, and this implies that national regulations should not hinder its growth. The role of libraries and archives is underlined.

17.

18. 28. This is a key paragraph for Open Access. The term <sup>a</sup>strive<sup>o</sup> is a strong term that replaced <sup>a</sup>encourage<sup>o</sup> upon proposition of the Iranian delegation, after negotiation with the United States. The words <sup>a</sup>including open access initiatives for scientific publishing<sup>o</sup> are the results of the joint efforts of the WG-SI and the Croatian delegation that brought this language to the floor. Tense negotiations were conducted with the United States and the European delegations to the effect of agreeing on a precise language that they would not veto. China and India were consulted also on the precise language.

19.

#### **20. 4) Capacity building**

32. The whole civil society, including the WG-SI, lobbied so that the language <sup>a</sup> copyright holders<sup>o</sup> will be removed in favor of recognizing the active role of content creators that are, unfortunately, often obliged to yield or sell their copyrights under questionable or inequitable circumstances to publishers that are then using and abusing those rights ( often well beyond the true intent of creators) that were primarily conceived for the protection of authors. Indeed the fact that scientific authors are passively donating their copyrights to restricted journals, without the possibility to negotiate the terms of copyright transfer ( in particular the duration of copyright transfer ) illustrates the fact they do not play an active role. This raises serious questions about the fairness and legal validity of such copyright transfer <sup>a</sup>agreements<sup>o</sup>. We would recommend that in order that scientific content creators to retain an active role, the duration of copyright transfer related to donated scientific content shall not exceed five years, upon which the copyright is returned to the author, which is then free to give his/her work to the public domain as originally intended.

#### **6 ) Enabling environment**

42. It is recognized that Intellectual Property protection ( a ill-suited term that covers dissimilar issues such as patents and copyrights ) is important to encourage knowledge sharing and not to restrict it.

44. The development of open, interoperable, non-discriminatory standards is promoted. In particular, in the case of Scientific Publishing, the development of a proprietary and expensive Digital Object Identifier (DOI) system CrossRef (<http://www.crossref.org>) by an alliance of commercial publishers, discriminates against Open Access publishers that cannot interoperate with such a system, for all practical purposes, for financial reasons.

#### **8) Cultural diversity and identity, linguistic diversity and local content**

53. The creation of local scientific content is encouraged. Many transition countries are often subsidizing through their national academies, restricted scientific journals that are little known and have little impact. Open Access is an attractive paradigm for developing local scientific content production and publishing. In fact, this is one of the reasons of the key support of some transition countries at the WSIS in favour of Open Access. However poor connection and low bandwidth is an obstacle in order to access to those local Open Access servers. A practical condition is that mirrors of those Open Journals be installed in high bandwidth servers in industrialized countries so that those journals become easily available.

21. 66. An interesting aspect of the summit is that progress will be evaluated. Nations that are going to be slow to implement the WSIS recommendations will face the judgement of fellow nations with an official venue, where of course the civil society will make it best to showcase those who are compliant as well as those who are reluctant. Non-compliant nations might therefore pay an heavy political price, while a compliant nation, like Norway, reaps international prestige and influence.
- 22.
23. 67. It is underlined that the information is a society based on shared knowledge, well in tune with the Open Access paradigm and in conflict with the business model of restricted journals.

## PLAN of ACTION

### CI.Action Lines

C1. The role of governments and all stakeholders in the promotion of ICTs for development.

8. It is underlined that governments should take effective actions. It also suggest that other stakeholders such as civil society groups should contact members of national parliaments, and government in order to invite them to take effective actions. Within this framework, the WG-SI is planning to make every effort so that parliamentary inquiries are conducted in various countries. The current inquiry is a good surprise that spares us the effort to initiate a parliamentary inquiry in the United Kingdom.

a) Legal actions as other practical measures in favour of Open Access are therefore expected to be part of each national e-strategy by 2005.

b) It is interesting to note that a structured dialogue involving all relevant stakeholders, is recommended at each national level.

d) An Open Access initiative can be built as a Multi-Sector Partnership (MSP) by 2005. In fact, in the United Kingdom, this partnership may include a business entity, since a commercial Open Access publisher ( <http://www.biomedcentral.com> ) is located in the Kingdom.

e) At the international level, the United Kingdom may participate to program providing financial support to Open Access Journals, as well as international Open Archives projects.

### C3. Access to information and knowledge

10.

h) The language of this paragraph was successfully promoted by the International Federation of Library Associations and Institutions ( IFLA ) ( <http://www.ifla.org> ) whose lobbying has been very active and efficient at the WSIS. The Open Access paradigm is very well suited to the development of digital public libraries, in

contrast to the restricted access paradigm which creates countless practical and legal problems.

i) This paragraph is a key paragraph in explicit support to Open Access and was the occasion of an intense lobbying by the WG-SI and many diplomatic fights. The initial text of this paragraph has been written by the WG-SI and has been included in the governments@draft at the end of PrepCom2. The text came under discussion during PrepCom3. The current text is fruit of the joint efforts by the Kenyan and Croatian delegations at PrepCom3B. The words 'free and affordable access' may seem redundant at first glance, but it was added at the request of the representative from Sudan ( at PrepCom3, during an *ad hoc* government working group where Dr. Francis Muguet was kindly allowed to assist.). It may be explained from the perspective of an access from a developing country, where the cost of communication and not just the free access to the server must be taken into account. The WG-SI also included books because accounts of scientific research are also reported in books. Support to the open archive initiative (<http://www.openarchives.org> ) is also explicitly mentioned. Open archives constitute a crucial component of the Open Access movement, along with Open Access journals.

#### **C4. Capacity building**

m) It implies that national bodies are invited to finance Open Access Initiatives through the help of UNITAR for example.

n) An innovative Open Access initiative can certainly be construed as a pilot project involving news of forms of ICT-based networking, between and among developed and developing countries. For example, our proposal (see below) of a preprints servers that would allow encrypted preprints, as well as a peer-to-peer service could both qualify as pilot projects.

#### **C6. Enabling environment**

13.

h) this seems quite in tune with the Open Archive Initiative.

p) this reaffirms what has been written in paragraph 44 of the Declaration of Principles.

#### **C7. ICT applications: benefits in all aspects of life**

14. Open Access Initiatives may also be considered as ICT applications within the framework of national e-strategies.

18. E-health

b) The only way to truly facilitate access to the world's medical knowledge that is contained in scientific journals is that all medical journals should be open access. It is an urgent health matter, an international emergency. It is not exaggerated to state that people are currently dying because of the lack of open access that prevents many medical practitioners from accessing to updated or specialized medical

knowledge.

22. E-science

b) This is yet another paragraph where Open Access is explicitly supported. WG-SI has been very active in promoting Open Access in this paragraph. ICSU has been active in promoting 'differential pricing', that may apply both to the price being paid by readers, within the Restricted Access paradigm, as well as publication charges paid by authors within the Open Access paradigm.

c) This content of this paragraph is the text exactly as it has been written by the WG-SI during PrepCom2. It has been accepted in the governments' draft and was never modified ever since. It has been a very pleasant surprise to notice that the innovative use of peer-to-peer technology has been encouraged, while in some misinformed circles the word P2P has been assimilated to piracy. The recent legal decisions in high courts in the United States and in Holland has clarified the distinction between the technology and the content that is channelled through this new ICT technology. The P2P technology in fact alleviates the bandwidth demand to servers, because the download burden is shared between users. A P2P between scientists may constitute a third component of the Open Access movement, along with Journals and Archives, that would allow also the sharing of informal documents ( lecture notes, conference presentations, etc.. ) either within restricted groups ( group P2P ) or worldwide.

d) Within scientific digital data, we also inclined to include also databases such genomic databases.

e) This language of this paragraph has been successfully promoted by IFLA.

### **C8. Cultural diversity and identity, linguistic diversity and local content**

23.

b) Again the crucial role of libraries, archives is underlined. It must be stressed that the local 'traditional or indigenous knowledge' of such a country like Great Britain includes naturally Science which is a vibrant part of the local knowledge, even before the days of Isaac Newton.

### **D. Digital Solidarity Agenda**

27. It is clear that action in favour of Open Access can be accounted within the framework of a national contribution to The Digital Solidarity Agenda..

#### *D2. Mobilizing resources*

b) Developed countries are going to have to make concrete efforts to fulfil their international commitments to financing development. Efforts that could be made in favour of Open Access can be included in the fulfilment of international commitments. In fact, developed countries governments are quite desperate to find development schemes that would be the most effective, while spending as little as possible. In this context, Open Access appears almost like miraculous, because any financing action that could be undergone is expected not only to have a



practical impact in developing countries but also to benefit to developed countries, up to the point of generating significant long term savings in those developed countries. Open Access financing can be achieved both in the name of a national scientific effort, but also in the name of international solidarity, therefore being able to draw financial resources and political support from different allocated budgets and ministries.

#### E) Follow-up and evaluation

28. An interesting aspect of the WSIS is that evaluation of the concrete efforts is going to be achieved. The WG-SI would make every effort so that the effective implementation of Open Access to scientific information would be realistically evaluated, building a strong international pressure towards its implementation.

a) The WG-SI would make every effort so that Open Access compliance is included in the composite ICT Development (Digital Opportunity) Index and analysed the ICT Development Report.

b) Open Access compliance should be evaluated in terms of an element to bridge the digital divide, in both its domestic and international dimensions.

c) International and regional organizations should assess and report regularly on the progress of Open Access.

e) The WG-SI is going to make every effort so that effective and successful efforts in favour of Open Access will be reported in the WSIS website on best practices and success stories,

#### F) Towards WSIS phase 2 (Tunis)

29.

a) In Tunis, efforts in favour of Open Access are going to be officially evaluated before the assembly of the world nations, resulting in a strong political pressure towards effective steps before 2005.

#### 4/ The issues within the framework of the WSIS.

The issues at the WSIS, were discussed both from the perspective of developing and transition countries as well as from the standpoint of industrialized nations.

##### 4.A/ Issues from the standpoint of developing countries :

###### 4.A.1 Access to scientific information located in industrialized countries.

As we raised awareness, during the WSIS negotiations, Open Access is a prerequisite to sustainable development. Without a decent access to scientific knowledge, any able scientist and engineer is almost forced to flee to a country where such a decent access exists, therefore creating a brain drain which is an insufferable damage to nascent academic bodies that are the basis of a high quality education system. The brain drain also affects the pool of technologists that constitutes the reservoir of high tech entrepreneurs.

In many developing countries, the Internet connection bandwidth is low and the cost ( often depending on the amount of data being transferred ) is very high. Therefore, a practical way, without waiting that network facilities are upgraded, is to install local mirrors of resources located in industrialized countries. One must note that Australia ( not a poor country ) is maintaining a proxy server (a transparent mirror) at the national level to save transoceanic bandwidth. Therefore the development of scientific resources that can be easily mirrored ( or proxied ) is urgently needed. In difficult conditions that are not so uncommon, the copy of the resources on digital media such as CDs offer an attractive solution. CDs are very cheap to produce and to send by regular mail, and can be distributed efficiently even in remote areas. To give practical examples, MDPI had to send a CD in Russia to implement a mirror of its Open Access journals in this country. In Africa, many university campuses and libraries have just a phone dial up connection, while having a decent 10/100 Ethernet local area network. Sending CDs to those campuses and installing local mirrors might constitute practical and immediate remedies to the current dire situation.

It must be stressed that not all the web sites of so called "Open Access Journals", that allow effective free access, do not technically allow an easy mirroring, even though their content is also stored in Open Archives. Progress must be achieved in this regard.

With good intents, as advocated by ICSU, some differential pricing initiatives have been undertaken to alleviate the cost of access to the content of restricted journals located in developing countries. First, those differential pricing initiatives have always been undertaken within a rather rigid framework of digital right management and authentication that the poorest developing countries have not even the resources to manage. Furthermore non academic personnel such as students, engineers, medical practitioners are excluded from those deals. Second, those initiatives cannot allow mirrors, efficient proxies and of course, copying on

physical media is absolutely out of question. Therefore, differential pricing initiatives within a restricted access context, are technically unable to bridge the digital divide and meet the WSIS challenge.

In this context, it is not surprising that the World Federation of Engineering Organisations, (WFEO) ( <http://www.unesco.org/fmoi/> ) has voiced, during the speech of its representative at the WSIS, an explicit support to Open Access.

#### 4.A2 Access to and development of scientific information sources in developing and transition countries.

Developing and transition countries are also trying to develop their own scientific resources. It feels really unfair to them that their own scientists must donate papers to media that they cannot afford to buy. Local scientific journals, to which local scientists may submit their papers are ignored in the industrialized world as well as in other developing countries. China is an example and recently Lu Yongxiang, president of the Chinese Academy of Science undersigned the [Berlin declaration](#) (29 Dec 2003) (*exhibit B*). We may give also the example of Croatia, whose delegation has been so supportive during the WSIS. Croatian scientific journals are subsidized by the Academy of Science, but even if the subscription cost is low, very few libraries ( even inside Europe ) are subscribers. Turning to the Open Access paradigm make sense. However, and this specifically true for servers based in Africa, heavy access to Open Access journals servers located in developing countries may clog already saturated connections. Therefore, mirroring must be implemented in high bandwidth computer centers in industrialized countries, to allow fast and efficient access from industrialized countries as well as from other developing countries.

It is also clear that an international funded waiver program is necessary concerning publication charges, otherwise yet another digital divide on the authors' side will be created. It should allow any researcher in any country (even in supposedly rich ones) but without enough official financial assistance to be able to submit papers to affordable Open Access journals ( 500 euros publication charge). Such a program could be modeled as an extension of a past waiver program from the [Soros foundation](#) that was targeted only to specific countries.

#### 4.A/ Issues from the standpoint of industrialized countries :

In industrialized countries, in contrast to developing countries, the awareness in favour of Open Access is not as recent. In the [Budapest Open Access Initiative](#) (*exhibit D*) (February 14, 2002), a [clear strategy](#) was outlined that considers both the Open Archives initiative and the Open Access Journal movement :

*To achieve open access to scholarly journal literature, we recommend two complementary strategies*

*1. [Self-Archiving](#): First, scholars need the [tools and assistance](#) to deposit their refereed journal articles in open electronic archives, a practice*

*commonly called, self-archiving. When these archives conform to standards created by the [Open Archives Initiative](#), then search engines and other tools can treat the separate archives as one. Users then need not know which archives exist or where they are located in order to find and make use of their contents.*

*11. [Open-access Journals](#): Second, scholars need the means to launch a new generation of journals committed to open access, and to help existing journals that elect to make the transition to open access.*

This awareness was spurred by the spiral of ever increasing subscription prices to restricted journals. With commercial publishers, the current situation can be understood as the result of an unfair market place. With a few learned societies, this can be understood if those learned societies see their publications as their main financial resource for maintaining an important infrastructure, while adopting the policy that free diffusion of knowledge is not their prime concern. We feel that learned societies, if they wish to keep their privileged tax exempted status ( which amounts to indirect state grant ) should abide by a few ethical guidelines, which should include the adoption of an Open Access policy, now recommended by the WSIS, and therefore also implicitly recommended by the United Kingdom government.

It has been stressed many times that the current situation is absurd, in macroeconomical terms, because the scientific community is donating content to publishers that are then reselling to the very same community, the very same donated content at a very high price.

In moral terms, it has been underlined also that the mission of the research agencies and philanthropic foundations would be indeed incomplete, if they are funding research for the benefit of the whole humanity, while not taking care that accounts of funded research efforts are not freely available to the whole humanity.

We are also underlining that Open Access would also benefit economically to small and large businesses that may access freely to scientific and technical information, and therefore, adoption of an Open Access policy is expected to spur economical growth and high tech employment.

In the [Budapest Open Access Initiative](#) (*exhibit D*), the [Bethesda Statement on Open Access Publishing](#)(30 June 2003) (*exhibit A*) and the [position statement by the Wellcome Trust in support of open access publishing](#) (October 1,2003) various philanthropic foundations and institutions have taken a position in favour of Open Access.

The [Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities](#) (22 Oct 2003) (*exhibit B*) constitutes a step further, because it is a declaration that has been undersigned by the majors French and German public research and funding agencies. Greece also joined.

Within the very short time frame of this inquiry, the CNRS ( <http://www.cnrs.fr> ) and INSERM ( <http://www.inserm.fr> ) the two main French research agencies that undersigned the [Berlin Declaration](#) did not had time to officially submit

evidences to this inquiry. However, it might be possible, during oral evidences, to relate informally their positions and their motives.

We shall not deal further with those topics, which we expect, will be dealt with, in considerable details in other written evidences.

If the transition to the Open Access paradigm is to be as fast as possible, the funding entities ( research agencies, philanthropic foundations) must be able to propose a compulsory Open Access policy, which fund recipients must comply with.

Within the context of the WSIS, if industrialized countries can make savings while supporting Open Access, this is very good, but Open Access is still a recommended policy even if it were the case that the implementation of Open Access would result in extra costs in industrialized countries.

It appears quite certain that in the long run, the implementation of Open Access journals and archives would generate huge savings if subscriptions to costly restricted journals can be canceled. The problem is that current restricted journals are maintaining a huge digital archive of past scientific work, therefore universities, libraries, public and private research laboratories might feel compelled to maintain their subscription to restricted journals only for this reason. An effective remedy to this situation must be proposed. We propose that a legal statute would affect past and existing copyright agreements concerning donated scientific content, limiting the duration of the transfer agreement to five years. We are not proposing to limit the duration of the copyright protection itself, simply the copyright will be turned back to the author, or its employer, while the article should become automatically freely available in Open Archives. The author will keep the full copyright protection concerning non financial items such as quotes, excerpts, plagiarism, etc.. Of course, this measure must be extended to other countries to be effective.

Concerning the policy that should be adopted by funding entities, it is clear that because of shear inertia, or because of fear of retribution from publishers, a compulsory policy must be adopted.

Concerning the compulsory submission of preprints to an archive, some serious and valid concerns by authors must be taken into account. Some authors are eager to send open preprints as they see preprints as ways to quickly protect their scientific priority. On the contrary, some authors are afraid that some errors that might be pointed by referees, be revealed worldwide, or even rejection of manuscripts be known. This could prove embarrassing. In other circumstances, some restricted publishers would not even consider manuscripts whose content has been publicly revealed under the motive of lack of novelty. To address those issues, it is proposed ( F.Muguet ), that it could be offered as an option to authors to encrypt submitted preprints. The decryption keys would be only publicly released by the authors for the preprint version that is deemed acceptable to authors. If the manuscript is rejected, no decryption key is ever released. Implementation of such a policy does not offer much technical obstacles and an encryption module is already available in the [GNU EPrints](#) software. The fine prints of this optional encryption policy must be still refined.



## 5/ Propositions towards the implementation of WSIS resolutions by the United Kingdom government.

Succinctly we would recommend as legal national actions that might undertaken by the United Kingdom parliament or government, within the framework of the implementation of the WSIS resolutions, the following items :

1/ Limit the duration of past and future agreements that concern copyright transfer to a publisher, in the matter of donated scientific or educational content, to five years.

2/ Maintain the legal and tax status of non-profit organizations only to learned societies and philanthropic organisations that abide by an Open Access policy.

3/ Participate to the WSIS digital solidarity fund, and affect part of its financial resources to fund Open Access and Open Archives initiatives worldwide, either as direct support to those initiatives or by financing publication charge waiver programs.

4/ Participate in the follow up procedure of the WSIS, while taking care that Open Access compliance is monitored.

5/ Enjoin state research agencies to enforce Open Access policies ( see below ).

6/ Provide support to a public Digital Object Identifier system.

7/ Participate to WSIS pilot projects and to Multi-Sector Partnerships (MSP).

6/ Propositions towards the implementation of WSIS resolutions by the funding entities.

Funding entities should

1/Provide specific funding for publication charges in affordable Open Access journals.

2/Provide funding or assistance to Open Archives in proportion to their usage by funded scientists.

3/Enforce that funded scientists submit their preprints in an Open Archive, either in an open format, or in an encrypted format.

4/ Enforce that funded scientists submit their papers to Open Access journals if available in the related domain, otherwise leave the final version of their preprints, finalized with corrections, in an open format in an Open Archive.

5/Encourage funded scientists to use P2P software in order to share scientific knowledge.

6/ Become accredited at the WSIS, actively participate to the WSIS process, to pilot projects and to Multi-Sector Partnerships (MSP).