Building Inclusive Information Societies

Dutch Perspectives for the WSIS

SPECIAL INTEREST REPORT

August 2003

Building Inclusive Information Societies

Dutch Perspectives for the WSIS

Hivos
IICD
OneWorld Nederland

PRINCIPAL RECOMMENDATIONS FOR THE DUTCH DELEGATION

- *A people-centred information society*

  The WSIS should strive for a multi-stakeholder approach, including the private sector, governments and civil society, in which the needs of people are at the centre of the information society, rather than a technology-driven approach. The EU text for part B (common vision) on this issue should be incorporated verbatim in the Declaration.

- *Local content, not just multilingual content*

  An equitable, fair and inclusive Information Society needs to reflect the diversity of its people. They will learn, communicate, contribute and retrieve content with more intensity through a language and context that is close to them. The Declaration should emphasise diversity and local content, not multilingualism.

- *Human rights central*

  What is valid for the real world should be valid for the 'virtual world'. The Information Society should be based on internationally agreed human rights. All parts of the Declaration and Action Plan resulting out of the WSIS should be placed in the context of the protection of these fundamental – and non-negotiable – human rights.

- *Governments should protect freedom of expression*

  The text should stress that governments are instrumental in protecting freedom of expression on the Internet, in line with the Universal Declaration of Human Rights, refraining from censorship.

- *Education – a priority*

  The key to an inclusive Information Society is equitable access to information and knowledge, encouraging people to navigate information in the best possible way to develop themselves and their community. The Dutch delegation should include an education specialist in order to articulate this.

- *Curriculum integration*

  ICT-enabled learning should be integrated into curriculum – not through IT-education but by using ICT-tools in "regular" classes.

- *Fair use of information*

  International agreements should be made respecting and articulating the balance between fair use of information for non-commercial purposes versus the interests of those holding Intellectual Property Rights and copyright. The Action Plan should stipulate how this fair use is guaranteed. Intellectual property rights should not prevail over the right to education and knowledge.

- *Privacy rights versus public interest*

  Personal information held by private or public bodies should be protected from any unauthorised disclosure. The EU should guard the balance of citizens' right to personal privacy and freedom of expression on the one hand and law enforcement's need for interception on the other. The Action Plan should include clear indicators on the rules and boundaries of using personal information.

- *Stimulate open source software*

  The production and use of free and open software and content must be encouraged and covered by public policy.

- *Community access points*

  Community access points are an important way to achieve 'universal access'. The government has an important role in creating an enabling environment and should ensure access in urban, provincial and rural areas.

- *Access to information is access to power*

  The right to seek, receive and have access to (affordable/free) information should be made explicit under key principle 2 of the Declaration.

- *E-government and access to data in the public domain*

  Free access to data in the public domain is a necessary condition so that everyone has the means to exercise his citizenship. The EU, with its *e*Europe experience, should take the lead in the field of e-government, reflecting her position in the declaration by adopting article 39 on participative democracy, long-term transparency etc and translating it into clear and measurable actions and targets in the Action plan.

- *National e-strategies*

  All countries should develop national e-strategies. Besides stimulating the use of ICTs in all policy areas, such as education, international trade and public services, e-strategies contribute to government transparency, accountability and a liberalised trade environment.

- *Transparency in international trade*

  ICTs can play a role in addressing the adverse effects of tariff and non-trade concerns, for example by facilitating more transparency of rules and regulations. The Declaration should include a commitment to develop a competitive and liberalised trade environment, with national regulation to ensure transparency, open standards and fair trade.

- *An environment of trust*

  The Action Plan should include a roadmap towards more transparency of what regulation applies for e-commerce, ensuring that transparent legislation is developed.

- *ICTs as a tool towards poverty eradication*

  The Declaration recognises ICTs as a tool contributing towards the realisation of the Millennium Development Goals, including poverty eradication and education for all. This underscores the relevance of the summit.

INDEX

INTRODUCTION

What is the role for communication in the creation of a future society like we envisage it to be? The discussion about the “Information Society” has recently intensified in forums worldwide, inspired amongst others by the increasing presence of ICTs in our daily lives, and by the upcoming World Summit on the Information Society (WSIS). This UN summit will be held in December 2003 in Geneva.

The significant opportunities that ICTs can catalyse have not gone unnoticed in developing countries. Precisely those people, who could benefit most from these opportunities, are often excluded from the “Information Society”. The value of an inclusive information society is not limited to a country’s borders, but lies precisely in the exchange of experiences, in accruing knowledge about what is yet foreign to us. Therefore it is critical to maintain an international perspective and include the South in the discussion even when formulating policy from a European perspective, in order to encourage a fruitful Information Society.

In this context, HIVOS, IICD and OneWorld Netherlands facilitated a discussion for a one-year period, named *Building inclusive information societies: Dutch perspectives for the WSIS*. The discussion aimed to address some of the most prominent issues related to the Information Society, whilst at the same time encouraging the Dutch public to understand the complexities and relevance for them as a world member of the Information Society.

Independent theme experts led both online and face-to-face discussions with participants from a broad spectrum of professional backgrounds, including the public and private sector, NGOs, researchers, educators, youth representatives, etc. Topics included the priority themes of *Cyber Rights: property, privacy & freedom of expression, ICT & Education, Civil Society & Empowerment* and *Trade & Entrepreneurship.*

This report summarises the results of these discussions and links them to the current status on an international level. For this we used the EU input for the intersessional meeting in Paris (July 2003) and the WSIS concept Declaration that resulted from this meeting. The concept Action Plan has not been included, as this is a mere list of possible action and is not yet the result of wide discussions.

Per theme, recommendations are made to the Dutch delegation. The summaries are not intended to be conclusive, but aim to provide insight into what priorities resulted from the Dutch expert debates. We hope to provide food for thought, inspiration for fruitful discussions and a favourable climate towards an inclusive Information Society.

August 2003

Hivos

IICD

OneWorld Nederland

Hilde Janssen, born in the Netherlands but based in Jakarta, Indonesia, is an independent journalist. She has years of experience writing on development topics, having travelled extensively throughout Asia. Her travels brought her ample hands-on experience of practical tools, including ICTs, to combat poverty and empower the poorest of the poor. In this article, Hilde provides a vision of the "Information Society" and reflects on how ICTs affect the lives of people around the world.

TALKING ABOUT A REVOLUTION

The Information Society, Digital Dilemmas and Fair Balances

By Hilde Janssen

It's inevitable: our lives are changing, in each and every aspect, as information and communication technologies continue to develop at breakneck speed. ICTs are catapulting us into the Information Society, transforming our world, enabling profound and unprecedented changes in communication between people. They create huge opportunities, but also pose new problems in the quest to bridge the global divide.

'What about an ordinary telephone information number!', grumbled a Dutch passenger, responding to the announcement of disrupted railway traffic – and being instructed to 'please consult our website'. He obviously had neither a computer nor an Internet connection, but knew enough to feel sidelined.

Just like the Indian girl in the cyber city of Hyderabad who asked me eagerly what the word fax on my business card actually meant. She was a showbiz dancer and, with ten years of English schooling, well-educated given her lower middle class background. She was familiar with the words fax and Internet, as these are written on almost all phone booths, which are omnipresent in India. But she had no clue that phone lines can transmit far more than just the human voice. However, a few kilometres down the road thousands of her peers earn a good living in call centres handling telephone inquiries of customers in faraway America, while others are busy with medical transcriptions, listening to the digitally recorded voices of American doctors.

ICTs blur the borderlines of the global divide, just like they blur previously clear boundaries between work and personal life, public and private realms national governments and international governing bodies. But modern technology, however revolutionary, will not automatically wipe out the existing differences. It does not offer equal access to opportunities to make this world a better place as many cyber gurus had hoped. Overwhelmed by the first contact with the World Wide Web they proclaimed that the cyberspace civilization would create a more humane, equal and fair world. Now, some of them have become disillusioned, confronted with what they experience as the resurgence of corporate and government interests. However, our so-called Information Society is continuously evolving, and while the changes are taking shape the debate on the emerging dilemmas intensifies.

Information Society for All

The industrial era is coming to an end. The industrial revolution that started with the discovery of the steam engine has undoubtedly been succeeded by the information revolution with the computer chip and the Internet. And this is just the beginning. Moore's law[i], which has proved true since 1965 by doubling the power of the computer chip every 18 months, will stand tall for another 50 years according to experts in molecular electronics. All along the cost of chip

memory will continue to decline, rapidly transforming our world from an industrial society into an information society. Nowadays information and knowledge are the driving force of economic growth, development and quality of life.

As our Information Society is an evolving one, it is defined and characterized by a mixture of factual observations, commitments and desires. It is easier to describe what it should be, than what it actually is. The Information Society should be inclusive and benefiting to all, with universal access to all means of communication and thus to information. This brave new global world is built on the pillars of information, communication and knowledge, which reshape human relations across borders, literally worldwide. Modern technologies enable people to communicate differently, be it at home, at work, in school, trade, finance, or politics.

Big words, but try to imagine a life without the gadgets of modern technology. It's almost impossible. Just check your wallet, filled with credit cards, pay cards, membership cards and the likes. And much of our kitchen utensils are also depending on ICTs. Getting organised has become a lot easier. With a computer and an Internet connection you can work at home or in the train. Your office is just a mouse click away, just like business contacts and government services. With all the information flows beaming from far-off villages to metropolises on the other side of the globe one can check the price of tomatoes in Oddanchatram, order books from New York, google through the world archives in search for medical information or apply for a passport.

Beyond Borders

This information exchange also has immense political implications. The virtual global world of the Internet allows people to communicate, work or trade across national borders, calling for more international regulation. The substantial increase in international government institutions and NGOs underlines the trend. On the one hand national governments need to share responsibilities through international cooperation. At the same time governments need to redefine their relationship with their electorates. The more transparent and increased flow of information creates space for political action and networking outside the traditional structures of representative democracies. Civil society gets hooked to the net, taking advantage of its links with like-minded groups and exploring new means of advocacy by initiating global lobby campaigns or pushing for local policy changes through email bombardments.

Digital Global Villages

Individuals, companies, organizations and governments around the globe have started preparing themselves for the digital age. Nobody wants to be left out and miss the numerous opportunities on offer. For the North it's easier than for the South. Infrastructure and basic skills are readily available. In the Netherlands and the other countries of the European Union adding the '*e*' is often a question of some extra computers, programmes and training. Access for all is within reach, with 93% of Europe's schools, 90% of the mid-sized companies and 40% or 150 million EU citizens connected to the Internet.

For a country like India, where illiteracy is still common and electricity and phone connections in short supply, it is certainly more complicated and costly to achieve access for all. In spite of this, the country does offer some inspiring examples of digital villages. In the sugarcane belt of Maharastra a digital network of 80 villages helps the sugar factory cooperative to coordinate the work with its thousands of member farmers, also facilitating online banking and government services through its village computer booths. In the southern state of Pondicherry the Swaminathan Foundation set up a network of 20 digital villages, run by local volunteers. It provides fishermen with a daily weather update, plucked from the web and broadcasted on the beach via loudspeakers. It offers farmers a link to the market as well as to agricultural

researchers, which help them develop their own localized databank on crop cultivation, plant diseases and market prices, all in their own language. It prepares the children for the Information Society and proves that ICT is a valuable development instrument that helps to bridge the global divide.

Digital Dilemmas

However empowering ICT can be, barriers remain. The unequal playing field between North and South is still in place. International trade relations and direct market access through the Internet can be restricted by health and safety regulations. In the same manner, global access to information can be blocked by expensive property rights, or undermined by security or privacy issues. The information society itself has thrown up a host of so-called digital dilemmas that dominate national but also global discussions on the present and future use of ICT.

National laws are easily circumvented. One can order blacklisted medicines from abroad, access forbidden child pornography, download discriminating publications or chat with the most wanted terrorists. What is allowed in one country can lead to prosecution in another, so where does one draw the line? Can the American police arrest a Russian upon entry in the United States because the latter cracked an encrypted message back home? Various unresolved issues stem from deep gaps between different countries' national legislation and touch upon differences in priority accorded to basic rights. Many are linked to the digital dilemmas of privacy and property and freedom of expression.

Privacy and Security

Internet has a lot to offer to the user, especially if you speak English. But Internet allows for two-way traffic: users also offer a lot of information and insights. Consider the 'cookies' being planted on your computer while surfing the Internet. Educational institutes and governments often use individual IDs to open all the involved personal archive gates to ensure a client-tailored service, but at the same time encroach privacy by precisely these measures.

European governments are regarded as keen defenders of privacy. However, its EU Data Protection Directive, requiring client consent to process data, is seriously hampered by lack of agreement with the United States. Furthermore, with increased data storage capacity and linkages it becomes almost impossible to keep track of and protect all the information flows being processed by governments, public institutes and private companies. Insurance companies compile profiles of individual clients to provide them with tailor-made policies, ensuring better services, but also serving as a warning and selection system of insurance hazards. Telephone companies on the other hand are nowadays compelled to retain data for security reasons in support of police and intelligence work.

Property and Access

New technologies open gateways of information and knowledge, which can easily be copied and distributed. This offers untold rewards in education, health and development. However, less so for the creative inventors and their businesses, argue staunch supporters of copyrights and intellectual property rights like the United States. They demand more safeguards. But enforcing stricter protection, preventing universal access by law and with price tags, is often at loggerheads with the right to information and education. The ones affected the most are the intended beneficiaries, namely developing countries.

Wandering through the immense archives of the Internet, one encounters a growing number of locked doors, which demand an entry fee. Commercials don't generate enough income anymore to maintain newspaper websites. Public information services are taken over by the private sector, radio and television channels become increasingly privatised. Copyright for standard Microsoft programmes cost more than most citizens of developing countries can earn in a year's time.

Open source software offers an alternative. One has to look at other options as well: community access via public places like libraries, cheap Simputers running on batteries and smart cards for shared usage, and public broadcasting. The experience of the Indian Digital Villages shows that modern and more traditional technologies can be fruitfully combined. The principal message is that the North is not necessarily the ultimate role model. In our global Information Society, the South has a lot to contribute.

Freedom and Control

Freedom of expression is one of the treasured fundamental human rights. But the degree of freedom differs from country to country. Repressive governments consider it a threat as it undermines their control of selected, 'acceptable' flows of information. China managed to cut off the tentacles of the Internet, blocking search machines and websites. Falun Gong members who once used email and websites to successfully reach out, nowadays prefer payphones as they are harder to trace. Democratic governments, however, are becoming more transparent using a combination of communication technologies. The Netherlands and other Western governments have legally enshrined the right to information. Citizens are better informed through brochures, broadcasting and websites about policies, procedures and regulations and are more easily involved in decision-making processes. Websites disclose opportunities for direct interaction: sending emails, joining opinion polls or online debates.

However, even democratic countries tend to intervene and interfere with the content of information transmitted via the Internet, or via TV or phone, for that matter. Governments, companies and also parents try to filter 'unwanted' pornography or nazi sites just like viruses. Modern technology offers such a bewildering amount of information and business opportunities that not all users are able to judge the content on its real value. Fraud and manipulation are real dangers. Some call for governmental guidance, especially when it involves trade, education and medical advice. But awareness training can also help people to make their own judgement; control concerning the Internet is limited, as the steady stream of new viruses shows.

World Summit: A Balancing Act

This evolving global information society calls for a worldwide discussion on the direction in which we are heading, addressing shared ideals and practical considerations. The United Nations took the initiative to organize a World Summit on the Information Society (WSIS), involving all stakeholders: governments, the business community, civil society and the UN family. Its focus is to draft a Declaration of Principles as a statement of political will to support more concrete plans of action to achieve the agreed upon goals of the Information Society. Preparations started more than a year ago. The first formal meeting will be in December 2003 in Geneva, followed in 2005 by a second meeting in Tunis.

The World Summit offers a platform to engage a variety of stakeholders in shaping the Information Society. As argued above: the Information Society is everybody's concern and a common responsibility. Governments cannot handle it on their own, and existing legislation falls short. Business interests dominate market regulation mechanisms. Consumers do not always have the power, the money or the knowledge to safeguard their own interests. Bringing together

different stakeholders helps to overcome their separate limitations. But one has to keep an eye on the power equations.

The unequal playing field between North and South is a reality that needs to be seriously addressed to prevent a deepening of the global divide. The World Summit should not become a trade-off where access to information becomes a commodity with a price tag just like copyrights. The future of our Information Society is not about an equal exchange, an ounce of privacy for an ounce of security. The focal point is people, not technology. Therefore the World Summit should be a search for fair balances that safeguard fundamental human rights, foremost the universal rights to information and education.

The World Summit can set parameters and offer pre-conditions for universal access. It can for example support open source initiatives, strengthen capacity building in the South and promote awareness of ICTs. However, international cooperation and responsibilities do not end with the World Summit.

This is just the beginning. For one, the Information Society is still evolving. Technologies continue to develop at breakneck speed, giving rise to new opportunities and dilemmas. ICT helps to keep track of its own new developments, to speedily transmit information from one person to another, from one group to another, from one country to the next. It is the process that counts. ICT is an empowering tool with great potential to spread awareness, to lobby, and to advocate the right to universal access to the Information Society. It is a precious stepping-stone for the North and the South: enabling people to keep on talking about the information revolution.

[i] *Moore's Law: Gordon Moore, co-founder of Intel, observed in 1965 that the number of transistors per square inch on integrated circuits had doubled every year since the integrated circuit was invented. Moore predicted that this trend would continue for the foreseeable future. In subsequent years, the pace slowed down a bit, but data density has doubled approximately every 18 months, and this is the current definition of Moore's Law. (Editor)*

CYBER RIGHTS: PROPERTY, PRIVACY & FREEDOM OF EXPRESSION [1]

The discussion on cyber rights often includes such topics as privacy, property and freedom of expression. If one discusses an information society, one should also discuss the entities it consist of, which at basic level are the people of the world. In the real world, these individuals have broadly acknowledged human rights, which are captured in both national and international law.

How are these rights affected and protected in the digital era? Which problems are encountered? Are human rights not the basis for cyber rights? Setting human rights at the centre of an information society means working across a spectrum of inter-related areas at an international level: in a true information society, there is no national level, and there are no frontiers.

Interestingly, the subjects of privacy, property and freedom of expression not only interact, but also conflict.

Balancing citizens right to privacy on the one hand and law enforcement's need for interception on the other. Retention of traffic data can transform the communications infrastructure into a surveillance infrastructure that records intimate details of the personal life of all citizens. Another interesting question is whether privacy issues are universal. Large parts of the world are less individualist-oriented than the West, and thus may result in a different view on privacy.

Earlier this year, the American Customs Authority requested the EU to provide online access to the Passenger Name Record (PNR) of all passengers on flight, from, to or through the USA. The PNR contains data such as name, date of birth, date of reservation, credit card number and phone number. Furthermore the USA use the Advanced Passenger Information System (APIS) of the airlines for additional information such as sex, passport number and nationality.

The transfer of this data is regulated and protected by the European privacy law. But American force puts aside any complaints. The USA has threatened with high penalties and even with withdrawing landing rights.

In answer to Parliament questions, Dutch Minister Donner of Justice replied that this data is used to "be able to fight terrorism and other serious crime", and "The Netherlands support this".

The USA authorities use the information to perform a risk analysis on passengers. For flights within the USA they already use the Computer Assisted Passenger Pre-screening System (CAPPS). After this analysis passengers are given a green (not dangerous), yellow (extra check) or red flag (refuse). But in practise it means that passengers are checked repeatedly and extensively for reasons unclear to them, if they are admitted at all).

www.bof.nl/nieuwsbriefl

Member of European Parliament Buitenweg protesting at Schiphol Airport against EU-USA deal on travel data.

Balancing the free flow of information and the protection of intellectual property. One of the main priorities for the information society should be to strengthen the public domain, ensuring that information and knowledge are readily available for human development, and not locked up in private hands, whilst at the same time protecting Intellectual Property Rights[i].

Balancing the freedom of opinion and expression and protection from harmful content. Article 19 of the Universal Declaration of Human Rights states that: "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers." But at the same there should be mechanisms in the public domain to challenge the publication of content that is harmful or content that can incite violence and hatred.

However, there is a thin line between protecting and censoring, as has become apparent in the media debate following 11 September.

[1] *Compiled by Paul Maassen, Hivos*

Debates: Reflections on Property, Privacy & Freedom of Expression [ii]

Discussants widely acknowledged that human rights should be the basis for cyber rights, as humans should be the basis for the information society, resulting in a *people-centred information society*. What is valid for the real world should be valid for the 'virtual world'. It was argued that all parts of the Declaration and Action Plan resulting out of the WSIS should be placed in the context of the protection of fundamental – and non-negotiable – human rights.

Privacy is one of those rights, with aspects such as security, trust and confidentiality. Already in 1970 the discussion on large data collection and storage started in The Netherlands and in 1980 the EU defined fundamental principles on privacy[iii]. In relation to the information society, privacy is often primarily linked to data protection. But the scope is wider. One of the key concepts is the right of self-determination of personal information. This right is never absolute, but must always be considered in relation to other interests such as national security, or economic interest ("information is power and money"), thus making it a more political than juridical subject.

Dutch citizens have always valued their privacy highly and are generally not in favour of having to be able to prove their identity, or be subject to intense government control ('big brother'). This cultural tendency was strongly reflected when discussing the contradictions between on the one hand the need for privacy, and on the other the need for governments to collect data or monitor the Internet, for example in order to protect network or even for state security (thus protecting its citizens against cyber- or physical terrorism). Complicating factor with this discussion is the international aspect of protection of persons and data: combined with the lack of boundaries on the world wide web it is necessary to make international agreements on this issue.

Other priorities identified were the importance of free and independent media 'in accordance with *international* law', the importance of open standards so everyone can participate in and add to the Information Society, the difficult balance between state interests and the freedom of expression and the balance between access to information and intellectual property rights. On a more philosophical level it was proposed that we should discuss the "communication society" (and the right to communicate), rather than the information society.

WSIS, Position of the Theme in the Concept Declaration [iv]

In the discussions on the WSIS Declaration the European Union has constantly accorded a particularly high priority to human rights and to a people-centric approach, reflecting the shared values of the EU. The information society should 'respect all human rights and fundamental freedoms'. However, in the documents resulting from the Prepcoms one reads the compromises between this point of view and the more conservative or protective point of view of for example the US delegation. The Dutch government stresses the importance of human rights in the information society with even more emphasis than expressed by the EU. This is reflected in, amongst others, the importance of safeguarding freedom of expression and information as a basic right[v] and as the essence of a democratic society. From this perspective, human rights should be protected in the digital era in the same way as they are in the 'paper' era. Other points articulated are the protection of the personal sphere of life (privacy/data protection) and the right to confidential communication.

Building the Information Society: a new global challenge in the new Millennium [vi]

The reaffirmation of the indivisibility and interdependence of all human rights is identified as a priority but still open for negotiation,[vii] as is any reference to Article 19[v]. Also still pending is whether and how to include freedom of communication and information, and the freedom to access information and utilise it. [viii] On the other hand, the 'common resolve' of the Millennium

Declaration is to 'promote respect for all internationally recognised human rights and fundamental freedoms'.[ix]

Our common vision of the Information Society [x]

The draft Declaration refers to the aim to 'build an Information Society that is inclusive, where all persons (…) exercise their right to freedom of expression and their access to and use of information in order to create, receive, (…), utilise information and knowledge, in any media and regardless of frontiers'[xi]. This is a key principal, reflecting the before mentioned Article 19[v], the texts of the EU, and our debates. The EU proposed adding the sentence 'and where privacy is respected'.[xii] Further on it is stated that the information society should be based on either ethics and moral values or on human rights (which of the two is open to negotiation), and that one of the essential requirements is respect for internationally recognised human rights and fundamental freedoms.[xiii] "Essential requirements" pertaining to the common vision of the Information Society are still to be negotiated.

An Information Society for all: key principles [xiv]

In a people-centred information society human rights should be the basis. The second principle for example states that 'everyone has the right to freedom of opinion and expression, including the freedom to seek, receive and impart information and ideas.' The eighth principle[xv] stresses that 'free and independent (communication) media, *in accordance with the legal system of each country,* is an essential requirement for freedom of expression and a guarantee of the plurality of information'.

A key point of discussion is the delicate balance between human rights (consumer protection, privacy) on the one hand and "cyber security" on the other (network and information security, international stability[xvi] and the integrity of State infrastructures[xvii]). Although regarded as a priority, there is as of yet no common vision on this key principle, illustrating the complexity of this issue.

Ethical dimensions of the Information Society are in the Declaration not more than a basket with ubiquitous terms such as: fundamental freedoms, personal privacy, human rights, human dignity, tolerance, shared responsibility, transparency etc. The text is almost completely in line with the EU contribution, although slightly stronger on privacy protection.[xviii]

The importance of a vibrant and rich public domain for the growth of the information society, whereby information is easily accessible, is emphasised.[xix] As a means to remove barriers for equitable access, the advantages of open standards and open source are mentioned.[xx] The EU text states that the use of open standards and open source software should be promoted[xxi], but the USA does not want to favour open source software over proprietary software.[xxii] Market concentration should be limited and unhindered access by individuals and media to information sources should be ensured and strengthened, thus 'promoting the existence of vigorous public opinion'. Lastly, traditional media continue to play an important role in the information society.[xv]

Dutch Perspectives for the WSIS, Recommendations for the Theme

The texts up for negotiation for the declaration of principles more or less deals with all identified issues concerning cyber rights, specifically with freedom of expression and privacy, and the delicate balance between cyber rights and cyber security. Intellectual property rights are another albeit less emphatic topic of discussion.

- *Human rights central*

  All parts of the Declaration and Action Plan resulting out of the WSIS should be placed in the context of the protection of fundamental – and non-negotiable – human rights. What is valid for the real world should be valid for the 'virtual world'.

- *Human rights preferable over ethics and moral values*

  The Information Society should be based on the clearly defined and ratified human rights[xxiii] rather than on "ethics and moral values" which could contradict with human rights and are not always clearly defined.

- *Governments should protect freedom of expression*

  Governments are instrumental in protecting freedom of expression on the Internet, in line with the Universal Declaration of Human Rights, refraining from censorship. This should be reflected in the Declaration adopted by the WSIS.

- *Privacy rights versus public interest*

  Personal information held by private or public bodies should be protected from any unauthorised disclosure. The EU should guard the balance of citizens' right to personal privacy and freedom of expression on the one hand and law enforcement's need for interception on the other. The WSIS should define clear indicators (such as proportionality and effectiveness) on the rules and boundaries of using personal information.

- *Fair use of information*

  International agreements should be made respecting and articulating the balance between fair use of information for non-commercial purposes versus the interests of those holding Intellectual Property Rights and copyright. The Action Plan should stipulate how this fair use is guaranteed.

- *Stimulate open source software*

  The production and use of free and open software and content should be encouraged and reflected in public policy. Working with open source options can be empowering, can help build skills, can be more sustainable, and encourages market competition and innovation at the local level.

- *Freedom of expression and opinion*

  Independent media and citizens, expressing opinions and ideas on the Internet, are subject to national law where this is in accordance with international law and agreements such as the Universal Declaration of Human Rights. One cannot be prosecuted for his or her communications in other countries that have alternatives laws.

- *Access to public information*

  Free access to data in the public domain is a necessary condition for people to exercise their citizenship. Governments should facilitate a rich public domain.

- *Right to secure communication*

  People communicating via the Internet should have the right to ensure secure communication through tools such as encryption.

---

[i] *This is also reflected in Article 27 of the International Declaration of Human Rights: 1. Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and share in scientific advancement and its benefits. 2. Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.*

[ii] *Debates were moderated by Cees Hamelink and Jan Holvast.*

[iii] *OECD Guidelines on privacy, adopted by the Council on 23 September 1980.*

[iv] *WSIS03/PCIP/DT/4(Rev.3)-E, result of the WSIS intersessional in Paris, 15-18 July 2003*

[v] *Article 19 of the Universal Declaration of Human Rights*

[vi] *WSIS03/PCIP/DT/4(Rev.3)-E, A*

[vii] *[WSIS03/PCIP/DT/4(Rev.3)-E, A-1*]

[viii] *[WSIS03/PCIP/DT/4(Rev.3)-E, A-1A]*

[ix] *WSIS03/PCIP/DT/4(Rev.3)-E, A-3*
[x] *WSIS03/PCIP/DT/4(Rev.3)-E, B*
[xi] *WSIS03/PCIP/DT/4(Rev.3)-E, B-7-8*
[xii] *WSIS/PC-3/CONTR/74-E, B*
[xiii] *WSIS03/PCIP/DT/4(Rev.3)-E, B-7B and [B-10]*
[xiv] *WSIS/PC-3/CONTR/74-E, C*
[xv] *[WSIS03/PCIP/DT/4(Rev.3)-E, C-51]*
[xvi] *[WSIS03/PCIP/DT/4(Rev.3)-E, C-34]*
[xvii] *[WSIS03/PCIP/DT/4(Rev.3)-E, C-35C]*
[xviii] *[WSIS03/PCIP/DT/4(Rev.3)-E, C-52] and WSIS/PC-3/CONTR/74-E, C-principle 9*
[xix] *WSIS03/PCIP/DT/4(Rev.3)-E, C-23*
[xx] *WSIS03/PCIP/DT/4(Rev.3)-E, C-21-22*
[xxi] *WSIS/PC-3/CONTR/74-E, C-13*
[xxii] *Mr D. Gross, US coordinator for international communications and information policy of the State Department in an article of the Telecom Daily, 25 July 2003*
[xxiii] *Universal Declaration of Human Rights (1948*)

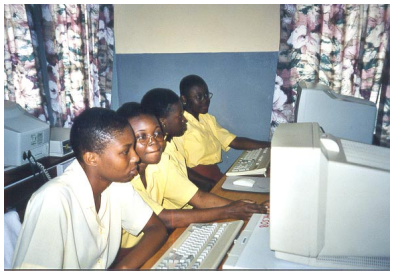
ICT & EDUCATION: THE GLOCAL PERSPECTIVE [2]

Priorities pertaining to ICTs and Education in the Information Society include such topics as:

- Intellectual Property Rights (IPR) and their effect on educational content,
- using ICTs in the classroom and curriculum integration, and interrelated to that,
- the issue of "Glocal Content", or the globalisation of knowledge.

Article 26 of the Universal Declaration of Human Rights states that everyone has the right to free education. Access to relevant public data without charge is a necessary condition for everyone to be able to exercise their right to education. From that perspective, *fair use* policies rather than strict IPR should determine how content is used for educational purposes.

This brings us to the point of relevant content and educational reform. In the current situation, Anglophone, Western content dominates the educational circuit and the Internet. Education in the Information Society is influenced by the exchange and flow of global knowledge, constantly developing around the globe. Continual replenishing of information or *life-long learning* has become a requisite for full-fledged participation in the Information Society. Information and communication skills now determine an individual's social position, whereby cultural heritage and context should not be neglected, to ensure empowerment and self-actualisation is optimised.



Global Teenagers at work, Ghana

In this context, educational platforms are slowly shifting their focus to include *community contextualised learning*[i], promoting the integration of local content. Community contextualised learning helps people to build a sense of self-esteem about their heritage and environment, within the international community where Western content up until now is predominant. Reciprocity of content helps generate an international perspective within one's own environment, whilst at the same time sustaining valuable local information within the education forum.

ICTs introduce a transformation process into educational fundaments: because of the abundance of information available through digital means we need no longer depend on time and place, teachers or textbooks. In other words, we need to search for new ways in which to combine *global* knowledge with *local* knowledge, creating a "*glocal"* perspective. ICTs such as Internet, email and chat provide the tools to do so.

Imagine how lively lessons would be if pupils and teachers regularly went online to discuss issues such as the rainforest with pupils in Bolivia or the impact of globalisation or HIV/AIDS with pupils in Ghana and Surinam. The Global Teenager Project (GTP) has already turned this vision into an everyday reality for 3500 pupils from 26 countries, and new schools are asking to join constantly. Since it was first launched in 1999, the GTP has grown from 3 schools to 120. The result is a rapidly expanding virtual network of secondary schools in both the developing and developed world and an upcoming generation of information-literate, knowledge-oriented, culturally-aware individuals.

In short, GTP's aim is to enhance secondary pupils' ICT skills and learning skills while increasing their understanding of other cultures by staging lively, global classroom debates in cyberspace. GTP unites secondary school pupils from all over the world in a safe, structured virtual environment, thereby helping to bridge the cultural and digital divide between the developing and developed world.

Twice a year, clusters of 8-12 classes from different schools link up via email to form 'virtual Learning Circles, the main activity of the Global Teenager Project. They discuss a theme of their choice for the next 10 weeks and the outcomes of their discussions are posted real-time on the Virtual Campus.

The autumn 2003 Learning Circles will include the "Information Society" as a topic for discussion, to enhance understanding of what this means for students around the world and as input to the upcoming WSIS.

www.iicd.org/globalteenager

[2] *Compiled by Julie Ferguson, IICD*

Generating ICT-enabled content is however more than digitising "regular" content. The challenge is to restructure existing content and curricula to optimise use of the means available, in order to achieve the goal of education for all set by Article 26 of the Universal Declaration of Human Rights.

Debates: Reflections on Education

Learning, not teaching – an educational priority

The debates reflected a semantic shift, namely to focus on *learning* rather than teaching, and on the *knowledge* society rather than the information society, ICTs being positioned as a (learning) tool. Challenges included the philosophical issues of determining the role of education, but also the very real issue of reaching 'marginal' children, excluded from formal education. Furthermore questions of didactics were addressed, amongst others, how to link the local to the international context and vice versa, and how to optimise integration of the tools provided by ICTs into "traditional" curricula, maximising the potential benefits provided by the Information Society in the educational context.

Curriculum integration

A point of interest is that in the discourse on ICTs and Education, the emphasis often lies on teaching *ICT skills*. In fact the priority lies on mainstreaming ICTs, allowing learners to reap the benefits of the *information* and *communication* opportunities provided by the technology, for educational purposes (acquiring ICT skills along the way). For example, using a multimedia CD to illustrate a mathematical model, or chatting with students in other countries to learn English. A recommendation ensuing from this discussion is that the term *Knowledge Society* is preferable to the Information Society, emphasising that the importance of information is that it can lead to knowledge, and a knowledge-based society is the key to human development.

The conditions for global learning[ii]

The justification for integrating ICTs into curriculum lies in the 'seven C's', being: community based learning, contextual learning, collaborative learning, competence based learning, creative learning connected learning (in which learners are connected in a network of individuals and groups willing to share and respect one another's differences in order to enrich their own lives and learn together), and care (investing in care in education will make today's learners into tomorrow's caring leaders). These create the conditions for global learning.

WSIS: Position of the Theme in Concept Declaration[iii]

Education does not seem an explicit priority in the WSIS negotiations so far. However, implicitly the concept Declaration does make several references to illustrate the importance of ICTs for the development of the *Knowledge Society*. For example, Article 2 of the Declaration emphasises that "knowledge, information and communication are at the core of human progress", which implicitly acknowledges the importance of education and learning for one's well-being. "The Information Society can help to respond to the additional development challenges posed by the digital divide and help to achieve the MDGs"[iv], which include universal primary education. Other references to ICTs and education can be divided into three topics:

- *Education & human development*

  The "Common Vision of the Information Society" refers to the priority that should be accorded to young people as our future workforce, and the ensuing importance of making sure "particular attention (is) paid to marginalised and vulnerable groups, including … children"[v]. "The usage and deployment of ICTs should seek to create benefits in all aspects of our daily life including… education…, and for alleviating poverty"[vi]. As mentioned above,

the text is full of implicit allusions to the contribution which ICTs can make to a knowledge society where self-actualisation of individuals is paramount. All in all, the statements made in the declaration seem primarily to strengthen the commitments which the international community has made pertaining to education in more general treaties such as the Millennium Declaration.

- *ICT skills*

  The most explicit reference to ICTs and Education can be found under the heading "Capacity Building", which addresses the necessity for each human being to be equipped with a number of skills in order to participate fully in the Information Society and the knowledge economy. Governments are acknowledged as having the main responsibility in developing strategies and policies in order to realise this. The text does not consistently differentiate between the necessity to focus on ICTs as a tool to support education, and education as a means to promote ICT skills. And although schools have proven in some cases to be sustainable locations for an access point[vii], the purpose for ICTs in schools goes beyond this, providing tools to enhance learning processes.

  The World Federation of Teachers provides their input in stating that "the use of ICTs for education and human resource development, *in both formal and informal learning environments*, should be promoted"[viii], which acknowledges the potential of the Information Society to reach those excluded by formal education, and acknowledges the educational reform which ICTs can encourage. If such key stakeholders as teachers acknowledge the opportunities of the Information Society in the educational realm, as supported by this contribution, the potential for this to be realised is encouraging.

- *IPR, local content & cultural identify*

  The declaration devotes an entire chapter to "Cultural [identity] and linguistic diversity, local content", a big step forward in addressing or at least acknowledging the challenges faced by so many developing nations in playing a significant part in the Information Society. Cultural diversity and local language can enhance the participation of people often excluded from formal education because they do not command the language most used on the Internet. Furthermore, encouraging linguistic diversity on the Internet, for example, contributes to a more valuable, because more diverse, Information Society, including as many people as possible and encouraging them to feel comfortable in their own cultural setting, regardless of which language is their mother tongue or which cultural heritage they have.

  In both clause 48 and 49, the declaration emphasises the potential of ICTs to stimulate *multilingualism*. Multilingualism does not address the issue of local content but rather translates what is already there and thus the creation of local content and knowledge is not stimulated. If the priority is to safeguard cultural identify, "linguistic diversity" or stimulating "local content" has more effect than mere translation of foreign content into local languages. A digital community in which students and learners feel comfortable to express themselves in their own language and with full respect of their cultural heritage enables them to maximise use of the tools available to them in the Information Society.

Dutch Perspectives for the WSIS, Recommendations for the Theme

- *Education – a priority*

  The key to an inclusive Information Society is equitable access to information and knowledge, encouraging people to navigate information in the best possible way to develop themselves and their community. *Knowledge* is the key ingredient for a worthwhile Information Society, and education (both formal and informal) is the means by which children primarily gain access to knowledge and are provided with the tools to navigate information.

In the Declaration, education is mentioned only implicitly as a vehicle for the realisation of the Information Society. Education should be explicitly awarded priority, and emphasis put on the development of a new generation of information-savvy world citizens. The Dutch delegation should include an education specialist in order to articulate this.

- *Curriculum integration*

  ICT-enabled learning should be integrated into curriculum – not through IT-education but by using ICT-tools in "regular" classes. For example, projects whereby students learn to navigate the Information Society and make optimal use of the tools it offers can enhance inquisitiveness, language and communication skills, and creativity, thus contributing to the self-actualisation of the individual in the Information or *Knowledge* Society.

- *Local content, not just multilingual content*

  The Information Society is based on respect for cultural diversity and an environment where knowledge can be freely acquired where necessary. Self-actualisation of citizens is based on a knowledge society which caters to their needs, and reflects their culture and heritage. Therefore the Information Society should reflect the diversity of the members, including room for local content, to counter the overwhelming majority of Anglophone, western content currently dominating the web. Only in a society where people can learn, communicate, contribute and retrieve content in the language and context most familiar to them can we speak of an equitable, fair and inclusive Information Society.

- *Semantic differentiation of ICT & Education*

  The term ICT & Education is an umbrella of a number of interrelated issues. Clarifying different aspects of learning might elucidate these:

  - ICT training: the primary goal is to obtain ICT basic skills and knowledge
  - Learning with ICTs: ICT becomes a powerful tool in learning
  - ICT-enabled learning: interactivity and communication between learners, educational content respecting learners' individuality
  - ICT-supported educational processes: planning and administrative processes facilitated by ICTs

- *Glocal content*

  Learning in a local community should be enriched with global elements and vice versa. Regional or national "Schoolnets" can be of support to protect diversity and local inclusion.

- *Local solutions for local needs*

  Support to developing countries and communities should always facilitate local solutions that match the needs in a local community. This includes the development or support of educational content and/or tools in local languages and addresses the issue of community contextualised learning.

- *ICTs and quality assurance*

  The primary motivation for ICT-enabled education should be to improve the quality of educational processes and content, not just to make education more efficient and reap savings. ICTs can provide an added value to education, but are not an excuse to cut corners elsewhere.

- *Fair use of information*

  International agreements should be made respecting and articulating the balance between fair use of information non-commercial purposes versus the interests of those holding Intellectual Property Rights and copyright. The Action Plan should stipulate how this fair use is guaranteed for educational and scientific purposes.

[i] *" Transformation Management: Developing Communities of Practice", from "Reflective Learning in Practice", ed. Brockbank A., Gower, 2002; and Ronnie Lessem, (with Palsule S.) Managing in Four Worlds, Blackwell, 1997*

[ii] *Bob Hofman 2003, Seven Conditions for Global Learning*

[iii] WSIS03/PCIP/DT/4(Rev.3)-E, result of the WSIS intersessional in Paris, 15-18 July 2003

[iv] [*WSIS03/PCIP/DT/4(Rev.3)-E, B-11]*

[v] *WSIS03/PCIP/DT/4(Rev.3)-E, A- 14 & 16*

[vi] *WSIS03/PCIP/DT/4(Rev.3)-E, C-46*

[vii] [*WSIS03/PCIP/DT/4(Rev.3)-E, C-19]*

[viii] *WSIS03/PCIP/DT/4(Rev.3)-E, C- 31*

CIVIL SOCIETY & EMPOWERMENT [3]

E-government, e-governance and e-democracy have been popular themes for years, raising hopes and expectations: widely available information and ease of communication would strengthen democracy and empower civilians. The European Union (EU) made e-government one of the priorities of the *e*Europe programme and several, most western, governments have started to use Internet as a tool for citizen participation. Bottom-up, civilians discovered the net as a way to inform and organize themselves (for lobby and networking purposes). One example is the hybrid cluster of individuals and organisations known as the "anti-globalist movement", which became a powerful block through their extensive communications on the web.

Nonetheless, despite some sympathetic attempts and a few success stories, the potential of ICTs with regard to empowerment and civil society has not yet been used nor explored to its full potential. Reasons are the lack of Internet access, information literacy and support (both financial and capacity-wise).

In some countries sexuality is still a taboo issue. Where to go if you are a young gay African? Behind the Mask is a non-profit website magazine on lesbian and gay affairs in Africa. People visit the website to read news, gather information on their rights and on how to organise themselves and get in touch with like-minded people throughout Africa.

Behind the Mask, was launched at 8 May 2000.In its first 11 months Behind the Mask welcomed more than 300.000 visitors. These numbers have risen extremely since then, also due to the fact that the organisation broadened its horizon to (now) 36 African countries

Behind the Mask is an organisation that aims to empower and support lesbian, gay, bisexual and transgender (LGBT) people in Africa - politically, culturally, socially and economically, by the gathering of information. Therefore, the organisation publishes an independent website magazine on gay and lesbian affairs in Africa and explores opportunities offered by ICT (Information and communication Technology) as well as ways in which these opportunities can be made accessible to LGBT people in Africa.'

www.mask.co.za

In terms of this discussion, the potential of ICTs can be split into four categories:

- The potential of information: Information is widely distributed through the Internet and can help people to make informed decisions.
- The potential of communication: ICTs make communication possible over large distances, to multiple recipients and in real time.
- The potential of organisation: The organising power of groups and organisations has grown through the use of ICTs and has made them more professional.
- The potential of co-operation: The increased communication potential for organisations and their visibility on the Internet makes it easier to share information, coordinate activities and combine forces to achieve goals.

Debates: Reflections on Civil Society & Empowerment [i]

Early texts resulting from the Prepcoms triggered four points for discussion:

1. equal access and use of information, quoting the adage "access to information is access to power",
2. transparency in e-government,

[3] *Compiled by Paul Maassen, Hivos*

3. the “people centred information society” and
4. the role of civil society in building ICT capacity (both technical and human).

Other issues raised in this respect include equal access, the creation of local knowledge and ICTs for civil society building. The discussion indicated that most people agree on the positive relation between ICTs and civil society & empowerment, but it is an abstract relation and a very broad theme, ranging from universal access, to human capacity building, to democracy and governance. In addition to the broad range of interests represented by civil society representatives, materialising this into concrete recommendations and actions proved troublesome.

Nonetheless, the discussion resulted in three main recommendations:

- Access to information is access to power

  This translates into universal access to information, not necessarily by introducing broadband to every village by 2010, but by introducing a wide set of policies and measures such as community access points, and by removing barriers (juridical, economical, cultural, capacity-wise, infrastructural etc.) for participating in the information society. Access should be without interference (“cyber rights”), protecting one’s privacy and the right to communicate. Furthermore it was stated that the costs for access and use should be low and/or lowered, especially for users in the South, and that independent ICT platforms and Open Source Software should be promoted.

- North-South exchange

  Developing countries should take the initiative to construct a favourable environment for the information society, but could be helped by the north, for example in building capacity to make use of the information society and ICT.

- A people-centred approach

  The WSIS should strive for a multi-stakeholder approach, including the private sector, governments and civil society, in which the needs of people are at the centre of the information society, rather than a technology-driven approach.

The role of civil society is to safeguard the above-mentioned, but also to contribute actively in achieving the above, for example by participating in and contributing to policy debate.

WSIS, Position of the Theme in the Concept Declaration [ii]

´E-Government is about bringing administrations closer to citizens and businesses. The idea is for people to be online, not in line’. [iii] To a large extent the EU based its input for the WSIS on its *e*Europe initiative. For example, *e*Europe proposes online access to government and Commission services, fast-track procedures for entrepreneurs and wider use of electronic signatures and open source software.’ The EU identified 20 public services that need to be made available online, including income taxes, personal documents, customs declarations and VAT statements. The *e*Europe plans are supported by well-defined actions and targets, making it an example for the WSIS. At the same time experience gained by the EU in putting together the eEurope initiative should be an incentive for the member states to contribute actively to this discussion.

Building the Information Society: a new global challenge in the new Millennium[iv]

ICTs are acknowledged as an essential tool to enhance the services of all actors (governments, private sector and civil society), and no-one should be excluded from the benefits they can offer.[v] An inclusive information society is characterised by ‘universal access to and use of information for the creation, accumulation and dissemination of knowledge’.[vi]

Good, accountable and transparent governance is referred to, but in relation with the Millennium Declaration, not specifically in relation with the information society.[vii] The EU poses a stronger view, explicitly mentioning that there is commitment to a 'truly shared global information society, to the benefit of all, especially people in the less favoured parts of the world'.[viii]

Our common vision of the Information Society[ix]

The proposed Declaration text uses phrases such as 'an information society that is inclusive', 'at the service of humankind', 'full participation, empowerment and social inclusion are fundamental characteristics' and 'should serve the interest of all people.'[x] The EU-text phrases it more succinctly: 'the information society should be people-centred, with citizens and communities at its core and be at the service of all humans.'[xi]

An Information Society for all: key principles[xii]

'Universal, ubiquitous and affordable access (…) must be an objective to all stakeholders and should be a central element in all national e-strategies.[xiii] It is not defined who should pay the costs for this, but it is stated that governments should develop and implement pro-active polices to ensure universal access. Community access points are a means to achieve universal access in disadvantaged areas.'[xiv]

The text mentions that the right to freedom of opinion and expression includes the right to (…) information. To facilitate equitable access reference is made to the advantages of open standards and open source as a means to remove barriers (for example to access public domain information).[xv] The EU text states that the use of open standards and open source software should be promoted[xvi], but the USA does not want to favour open source software over proprietary software.[xvii]

To benefit from the information society, people should have the skills to participate and should be information and ICT literate. How to achieve this is not made explicit, it is only stated that governments should develop strategies to ensure it.[xviii] A suggestion is made to enhance the ICT capacities of developing countries by technology transfer, sharing of experiences, investment et cetera. [xix]

Clear reference is made to the theme of civic participation. 'The information society must support participative democracy, long-term transparency, efficiency and accountability' and 'ICTs should be used as an important and effective tool for good governance and more accessible government'.[xx]

The importance of a vibrant and rich public domain for the growth of the information society is also mentioned.[xxi] This information should be easily accessible and transparent. The eight principle[xxii] states that unhindered access by individuals and media to information sources should be ensured and strengthened, thus 'promoting the existence of vigorous public opinion.'

Dutch Perspectives for the WSIS, Recommendations for the Theme

The texts up for negotiation for the declaration of principles more or less deal with all identified issues concerning civil society and empowerment.

- *A people-centred information society*

  The WSIS should strive for a multi-stakeholder approach, including the private sector, governments and civil society, in which the needs of people are at the centre of the information society, rather than a technology-driven approach. The EU text for part B (common vision)[xi] on this issue should be incorporated verbatim in the Declaration.

- *Community access points*

  Community access points are an important way to achieve 'universal access'. The government has an important role in creating an enabling environment and should ensure access in urban, provincial and rural areas. This can be achieved by connecting libraries,

post offices, schools etc., although it also has been proven sustainable, for example, to run for-profit access points without structural subsidies in rural areas.

- *Access to information is access to power*

  The right to seek, receive and have access to [affordable/free] information should be made explicit under key principle 2 of the Declaration.

- *Universal access is more than infrastructure*

  Universal access does not only involve infrastructure but also issues such as ICT capacity building and information literacy. This should be emphasised in the declaration. The action plan should incorporate plans for all aspects of access, including roles and (financial) responsibilities of the stakeholders.

- *E-government and access to data in the public domain*

  Free access to data in the public domain is a necessary condition so that everyone has the means to exercise his citizenship. The EU, with its *e*Europe experience, should take the lead in the field of e-government, reflecting her position in the declaration by adopting article 39[xx] on participative democracy, long-term transparency etc and translating it into clear and measurable actions and targets in the Action plan.

- *Open standards and open source*

  Awareness of the possibilities of open standards and open source should be enhanced in order to stimulate affordable access and allow well-informed decision-making in terms of software infrastructure.

- *Civil society*

  The position and effectiveness of civil society can be strengthened by ICTs. Civil society should continue to be actively involved in building the Information Society.

---

[i] *Debates were moderated by Nederland Kennisland and Rutger Engelhard*
[ii] *WSIS03/PCIP/DT/4(Rev.3)-E, result of the WSIS intersessional in Paris, 15-18 July 2003*
[iii] *http://europa.eu.int/information_society/eeurope/action_plan/egov/index_en.htm*
[iv] *WSIS03/PCIP/DT/4(Rev.3)-E, A*
[v] [*WSIS03/PCIP/DT/4(Rev.3)-E, A-1 and A-1A, option 3*]
[vi] *[WSIS03/PCIP/DT/4(Rev.3)-E, A-1]*
[vii] *WSIS03/PCIP/DT/4(Rev.3)-E, A*-3
[viii] *WSIS/PC-3/CONTR/74-E, A*
[ix] *WSIS03/PCIP/DT/4(Rev.3)-E, B*
[x] *WSIS03/PCIP/DT/4(Rev.3)-E, B-7-8, 9 and 14*
[xi] *WSIS/PC-3/CONTR/74-E, B*
[xii] *WSIS03/PCIP/DT/4(Rev.3)-E, C*
[xiii] *WSIS03/PCIP/DT/4(Rev.3)-E, C-17 and 18*
[xiv] *[WSIS03/PCIP/DT/4(Rev.3)-E, C-19]*
[xv] *WSIS03/PCIP/DT/4(Rev.3)-E, C-21-22*
[xvi] *WSIS/PC-3/CONTR/74-E, C-13*
[xvii] *Mr D. Gross, US coordinator for international communications and information policy of the State Department in an article of the Telecom Daily, 25 July 2003*
[xviii] *WSIS03/PCIP/DT/4(Rev.3)-E, C-30*
[xix] *[WSIS03/PCIP/DT/4(Rev.3)-E, C-33B*]
[xx] *[WSIS03/PCIP/DT/4(Rev.3)-E, C-39]*
[xxi] *WSIS03/PCIP/DT/4(Rev.3)-E, C-23*
[xxii] [*WSIS03/PCIP/DT/4(Rev.3)-E, C-51*]

TRADE & ENTREPRENEURSHIP: A NEW BUSINESS PARADIGM [4]

The Internet offers tremendous opportunities for the further development of international trade. In theory, the world market can be reached without leaving one's home. Online trade, or e-business, almost makes it seem as if Internet can be a solution for world poverty. However, significant barriers have prevented this break-through from "reaching the unreached", and need to be addressed for the Information Society to be realised and provide the much-publicised benefits for the world's poor. Challenges include:

- Access, or the lack of infrastructure in many parts of the world.
- Changes in the supply chain.
- Trust as a condition for e-commerce, and the well known issue of
- Trade politics and ICTs.

In the emerging Information Society, information has become a marketable commodity. However, the majority of people in the world still do not have access to this information – mostly accessible through ICTs. An even larger gap (or "digital divide") is emerging between them and a privileged minority for whom the use of ICTs for (e-)business purposes is accessible, and becoming the new business norm. One of the Millennium Development Goals (MDGs) is to improve livelihoods opportunities; ICTs are an important tool to realise this. For an inclusive Information Society, access to infrastructure and ICTs for trade purposes is inevitable.

A small cocoa farmer from the heartlands of South America is miles away from the international market, both geographically and commercially. Nonetheless, his products are now finding their way to Europe through the Internet, providing new market opportunities and profitable livelihoods for farmers in Bolivia.

AOPEB, a national Bolivian association of ecological farmers, promotes agro-ecological products of its 41 member organisations, and markets these to national and international purchasers via the Internet.

AOPEB developed a dynamic, database-driven website with information on standards, certification, prices and volumes on the world market for ecological products. The member organisations gain access to price and product information through 6 regional information centres exploited by member organisations. In turn, product information is provided for potential buyers both from Bolivia as well as abroad. The member farmers can jointly produce the critical mass needed for export purposes, by combining forces and produce across the country.

AOPEB products include coffee, cocoa, and nuts, and the organisation boasts customers from not only the national market but includes fair trade organisations in Germany.

www.aopeb.org

Cooperative onion sellers, Uganda

The rise of the Internet has also created new export products and new business models. India, for example, has become the new haven for worldwide customer service, Mauritius provides administrative services outsourced by Western multinationals. (Online) databases hold all the information they need in order to be able to do their work. Another consequence of the use of ICTs in business, is that the role of intermediaries is changing: sellers and buyers can communicate with each other directly, so no longer depend on a middleman for marketing purposes. Knowledge can be exchanged with peers all over the world, and production can be tailored to fulfil demand. These are some of the factors which have induced changes into the supply chain.

As business is no longer always done face-to-face, risk of fraud increases. New verification models (encryption for sensitive information, registration or agents for transactions) contribute to trust between seller and buyer – a make-or-break factor for e-business transactions. Furthermore, there is a widespread awareness of the potential legal barriers arising from recourse to courts in disputes arising from cross-border online interactions[i]. Which laws apply in such a case? Which authority has jurisdiction? Which forum is competent to hear the dispute, and is the decision enforceable? The WSIS is the ideal forum to tackle these questions, working

[4] *Compiled by Julie Ferguson, IICD*

towards the creation of an environment of trust and sound legal rules creating a fair arena in which e-business can flourish.

International trade barriers are the main problem standing in the way of development through trade. Globalisation of the world economy should contribute to open and free markets, but this has not yet been realised. It is a well-known and much disputed fact that countries are throwing up all kinds of barriers to protect their market from foreign producers. This is done for real or artificial health or safety measures, or through tariffs, subsidies and quotas. E-commerce will not make any of these barriers disappear. However, the use of the Internet in international trade will allow producers in developing countries to gain knowledge of the rules and regulations. Furthermore, online forums provide the opportunity for communities to "meet", not only to organise themselves and lobby for better trade terms, but also to create a network of trading partners all over the world.

The WTO e-commerce work programme is addressing some of these questions, including: how do existing WTO agreements impact e-commerce? Are there any weaknesses or omissions in the law, which need to be remedied? Are there any new issues not covered by the WTO system for which members want to negotiate new disciplines? The issues being dealt with by the WTO go hand in hand with the issues of the Information Society: borders fading, markets broadening, and a new arena for entrepreneurship emerging.

Debates: Reflections on Trade, Entrepreneurship and ICTs

ICTs and the supply and value chain

ICTs play a significant role in developing a new business paradigm. Roles in the supply chain are altered when procurement is done directly through the Internet rather than through "middlemen". Besides this role of matchmaking between suppliers and the international market (through portals such as OneWorld Market[ii]), e-commerce can facilitate access to markets, tracking of manufacturing and transportation processes.

Nonetheless, there is still a long way to go before the challenges of the Information Society are overcome and the gates are opened for an environment of global (e-)trade. Strict international agreements or *tariff trade barriers* provide significant obstacles particularly to southern entrepreneurs in international trade; these are augmented by non-tariff or non-trade concerns. Tariff trade barriers ideally are an effect of supply and demand, and include restrictive legislation, health measures, lack of knowledge and/or access to relevant information, etc These can be enforced by both national policies and international trade agreements, but can have as a consequence that certain market players are disqualified from international trade. Non-trade concerns include such problems as lack of necessary knowledge and administrative skills for southern entrepreneurs to access the global market.

The latter are sometimes used to justify continuation of the former, in some cases even creating false market conditions (e.g. through subsidies provided to domestic manufacturers). In practice, unfair trade policies imposed predominantly by Western countries protecting their markets, have the effect of excluding developing nations from bringing their products onto the world market for fair prices. More transparency of the conditions, awareness programmes, training and capacity development in joint ownership between the public and private sectors, NGOs and the international community should address these issues.

Furthermore, (micro-)credit is difficult to obtain for aspiring entrepreneurs in many developing countries, not to mention sufficient information on trade conditions and capacity development on how to set up international commerce. ICTs can play a significant role in addressing these challenges, but physical barriers such as lack of reliable infrastructure frustrate access to information and to tools for communication, the core of business transactions.

Last but not least, awareness is needed in the West, to develop consumer awareness of the conditions under which certain products are produced, stimulating more supplier-sensitive consumer behaviour (e.g., towards fair-trade products). Funds for marketing or awareness campaigns lack, so obtaining a significant market position is very difficult for these idealistic, but commercial fair-trade suppliers.

Challenges for trade in the Information Society

Bottlenecks for ICT-enabled trade in the Information Society include the lack of e-strategies, lack of information on international trade law and requirements, and unreliable or lack of infrastructure in developing countries (whereby telephone lines, where these have been put in, are sometimes dug up by locals and the copper sold!), and conflicts of interest between the public and private sector (for example, government-owned, monopolistic telecommunication providers reaping profitable income and reluctant to let go of their strong market position).

Trade and entrepreneurship in the Information Society

Opportunities for stimulating trade and entrepreneurship in the Information Society include online product catalogues and e-commerce portals between co-operatives, bringing together supply and demand whilst at the same time bundling small and micro-enterprise production to reach critical mass for export, economies of scale (also for transportation, a.k.a. "containerisation") and a better position for price negotiations. At a more basic level, ICTs improve communication with the customer, as well as with peers, creating a lobby forum or professional network. Furthermore, automation of production and organisational processes can help streamline internal business mechanisms (e.g. through automated administration, production codes, etc). In the complex process of international trade, ICTs can disclose the rules and regulations for aspiring traders, and can fight corruption through enhanced transparency. Last but not least, ICTs are an attractive PR and marketing tool – after all, who would have heard of the successful Grameen[iii] initiatives or EcoSandals.com[iv], without the intervention of the Internet marketing mechanism[v]!

WSIS: Position of the Theme in Concept Declaration

The specific objective in terms of trade and entrepreneurship in the Information Society is to provide the tools to realise the Millennium Development Goals and general social and economic development goals. "[Economic and social development can best be advanced in the Information Society when ICT-related efforts are fully integrated in national and regional development strategies.]"[vi]

Nonetheless one can observe an interesting development since earlier versions of the Declaration. Whereas initially the private sector was deemed the primary actor in developing the Information Society (investment in infrastructure, international trade), and at the same time the primary beneficiary of the conditions (access to markets, a favourable investment climate), this has gradually shifted to emphasise an enabling environment primarily created by government, where the private sector is one of several important factors contributing to a *people-centred* Information Society. A favourable environment for entrepreneurship is just one of the benefits ensuing from open flow of information and knowledge, but entrepreneurship is not the sole condition for self-actualisation of a human being. In the latest draft version of the Declaration, *universal access to information* is the primary aim, and a favourable climate for entrepreneurs is one of the positive results, contributing to the realisation of the MDGs, ensuing from this.

Enabling Environment

A combined effort in terms of roles and responsibilities is acknowledged, underscoring the multi-faceted character of the Information Society. "Faced with complex… challenges, all of us –

governments, the private sector and civil society – have objectives that require new forms of solidarity, partnership and cooperation to assume our responsibilities… in adopting a plan of action to bring to reality the principles established."[vii] The explicit tendency heavily emphasising private sector involvement, which was apparent in earlier versions of the Declaration, has been weakened, to provide well-balanced inclusion of all stakeholders involved in the development of a favourable enabling environment and entrepreneurial climate. However, "(the) legal, regulatory and policy environment needs to be trustworthy, … transparent, inclusive and non-discriminatory as well as capable of promoting technological innovation and fair competition. …Governments need to foster a supportive… pro-competitive… policy, legal and regulatory framework – intervening… to correct market failures [as a subsidiary role]… to maximise economic and social benefits."[viii] This is motivated by the clause that "[(if) left strictly under the influence of market forces, ICTs may actually deepen social inequalities within countries, and widen the gap between developed and developing nations]"[ix]. The WSIS is an opportunity to develop regulations and a well-balanced understanding of the roles to implement this.

Infrastructure & Trade

The Declaration and the EU Contribution recognise that "Connectivity is a central enabling agent in building the Information Society. Universal, ubiquitous and affordable access to ICT infrastructure and services, [including access to power, broadcasting and postal services,] constitutes one of the primary challenges of the Information Society…"[x]. To this end, "(a) well-developed information and communication network infrastructure, adapted to local conditions, easily-accessible and affordable… is essential for the social and economic progress of countries"[xi]. This is the 'holy grail' of the ICT for development discussion: after all, without infrastructure or computers, the whole ICT for development strategy falls apart.

Nonetheless, in terms of trade and entrepreneurship, it is somewhat a "chicken-and-egg" story: reliable and well-developed infrastructure can enhance trade and economic activity, but a well-established economic climate will encourage the private sector to invest in the infrastructure from a commercial interest. Therefore, whilst acknowledging the role of the government to develop an enabling environment and favourable circumstances to boost access, at the same time the private sector is recognised as "taking the lead".[xii] "Governments should develop and implement pro-active policies in order to ensure Universal Access. The extent of such a national public service… should be defined and implemented transparently and in cooperation with private sector and civil society… Any such policy should not infringe on the principles of free competition and … should attract private investment in the emerging markets."[xiii] "While recognising that the private sector has an important role in the development of the Internet at a technical level, and will continue to take a lead role, the fast development of Internet as the basis of information society requires that governments take a lead role, in partnership with other stakeholders, in developing and coordinating policies of the public interests… through appropriate [intergovernmental/international] organisations"[xiv].

In terms of environmentally sustainable entrepreneurship the EU advocates, "ICTs can contribute to sustainable consumption and production patterns, through improved efficiency and sustainability in the use of resources and production processes".[xv]

Access to markets

The Declaration recognises the opportunities generated by ICTs to disclose market opportunities previously out of reach. "ICTs create new possibilities not only for traditional jobs but also for self-employment, circumventing traditional obstacles like distance and time"[xvi]. For these opportunities to be taken advantage of, a number of critical success factors need to be addressed. One of these is "*consumer confidence in electronic commerce* to ensure that consumer transactions occur within a sound legal framework. To this end, consumers using electronic commerce should be provided with protection that is at least equivalent to consumers using other forms of commerce"[xvii].

Another critical success factor is liberalisation and an open market environment: "Fair and effective liberalisation of trade in [ICT and related]/[goods and] services, together with domestic

regulatory reform, can promote more investment and innovation, thus making technology more readily available for use in the economy…" …"(Governments) should promote an open trade regime… and strive towards improving market access. ICTs play a key role in trade facilitation, with automation, e-customs and e-government tools reducing the costs and time associated with moving goods across borders and enhancing the efficiency and integrity of customs operations"[xviii].

Dutch Perspectives for the WSIS, Recommendations for the Theme

- *National e-strategies*

  All countries should develop national e-strategies to develop a competitive and liberalised trade environment, with national regulation to ensure transparency, open standards and fair trade.

- *Transparency in international trade*

  ICTs can play a role in addressing the adverse effects of tariff and non-trade concerns, for example by facilitating more transparency of rules and regulations. Examples of how to achieve this include an Internet portal providing information on global trade conditions and how entrepreneurs should deal with this; online consultations of stakeholders; online communities for lobbying fair trade; cooperative marketing for small farmers; awareness programmes, multi-stakeholder training and capacity development.

- *An environment of trust*

  The WSIS should strive towards creating more transparency of what regulation applies for e-commerce and ensure that transparent legislation is developed.

- *Stimulate entrepreneurship*

  For entrepreneurs to participate in the Information Society through international trade and e-commerce, a large effort should be made to develop the capacities of and inform entrepreneurs, as an integral part of achieving the Millennium Development Goals of economic and social development. The WSIS is a good opportunity to emphasise the enabling role which ICTs can have in realising these.

- *Respect for the environment*

  Respect for the environment should be emphasised in international trade. In terms of ICTs, only too often is the South considered a dumping ground for obsolete equipment or a way to disrespect environmental regulation.

- *Respect for human rights*

  In terms of human rights, labourers are often exploited in order to save money, and clarity lacks in terms of Internet workers rights. International guidelines or accreditation should be developed *and enforced* to avoid this exploitation.

- *Promotion of fair trade*

  Governments should make an effort to promote fair trade products and enhance consumer awareness of trade conditions. ICTs can be used to achieve this. (The Dutch "Max Havelaar" hallmark for coffee and now also bananas is an excellent example of this.)

- *Fair and open competition under international agreement*

  Prohibitive and unfair trade barriers (such as government subsidies on agricultural products) should either be revoked or more transparent guidelines provided to the international community to allow fair competition. ICTs can be instrumental in this, if portals are developed and made accessible in local languages under national or international auspices, providing guidelines how entrepreneurs can gain access to markets. This can be a first step in concretely addressing some of the challenges pertaining to trade in a global environment.

[i] *From E-commerce and development, UNCTAD 2001*

[ii] *www.oneworldmarket.nl/*

[iii] *The Grameen Bank and Communications programme provides micro-credits, computer and Internet facilities using wireless technologies in Bengal rural areas. Local women now market their products using mobile telephones and rural villagers are ICT-literate.*

[iv] *An e-commerce venture selling sandals made with recycled products by shantytown inhabitants in Kenya*

[v] *See also http://www.iicd.org/stories/*

[vi] [*WSIS03/PCIP/DT/4(Rev.3)-E, C- 41]*

[vii] *WSIS03/PCIP/DT/4(Rev.3)-E, A-6*

[viii] [*WSIS03/PCIP/DT/4(Rev.3)-E, C-38 & 40]*

[ix] [*WSIS03/PCIP/DT/4(Rev.3)-E, A-4A*

[x] *WSIS03/PCIP/DT/4(Rev.3)-E, C-17 and WSIS/PC-3/CONTR/74-E, C-12*

[xi] *WSIS03/PCIP/DT/4(Rev.3)-E, C-18*

[xii] [*WSIS03/PCIP/DT/4(Rev.3)-E, C-44]*

[xiii] *[WSIS03/PCIP/DT/4(Rev.3)-E, C-19]*

[xiv] *[WSIS03/PCIP/DT/4(Rev.3)-E, C- 44]*

[xv] *WSIS/PC-3/CONTR/74-E, C-7*

[xvi] *[WSIS03/PCIP/DT/4(Rev.3)-E, C-33D]*

[xvii] *WSIS03/PCIP/DT/4(Rev.3)-E, C-44A*

[xviii] *[WSIS03/PCIP/DT/4(Rev.3)-E, C-41D, also alternative 41D]*

ACKNOWLEDGEMENTS AND RESOURCES

Acknowledgements

Hivos, IICD and OneWorld Nederland would like to thank Cees Hamelink, Jan Holvast, Rutger Engelhard, Joeri van den Steenhoven, Minouche Besters, Michiel Hillen and Bob Hofman for their moderation of (part of) the expert discussions. We would also like to thank Wim Rullens and Simone Meijer of the Ministry of Economic Affairs and Peggy Vissers of the Ministry of Foreign Affairs for sharing with us the Dutch and EU points of view on the WSIS and keeping us informed on the formal and informal progress during the Prepcoms.

Acknowledgements go to the Dutch National Youth Board (Nationale Jeugdraad) and the participants to the UN/ICT & Development workshop on 21 May. Their recommendations, ensuing from the WSIS simulation, have been included in this report. We hope the conviction, with which the Dutch youth negotiated their WSIS recommendations, will be equalled by "the real thing" in December!

Last but certainly not least, we particularly and emphatically thank the many participants of the online discussions and round table sessions who took the time and effort to share their views, expertise and opinions. The broad range of backgrounds and perspectives created an inclusive forum for Dutch perspectives on the Information Society. Their contributions are much appreciated.

Resources

Position paper Cyber Rights:

www.hivos.nl/downloads/cyberrights.doc

Position paper Education:

www.hivos.nl/ downloads/education.doc

Position paper Civil Society & empowerment:

www.hivos.nl/ downloads/civilsociety.doc

Position paper Trade & entrepreneurship:

www.hivos.nl/ downloads/trade.doc

Concept Declaration resulting from the intersessional meeting in Paris (July 2003):

www.itu.int/dms_pub/itu-s/md/03/wsispcip/td/030721/S03-WSISPCIP-030721-TD-GEN-0004!R3!MSW-E.doc

Latest document of the Action Plan:

www.itu.int/dms_pub/itu-s/md/03/wsispcip/td/030721/S03-WSISPCIP-030721-TD-GEN-0004!R3!MSW-E.doc

EU input for the intersessional meeting in Paris (July 2003):

www.itu.int/dms_pub/itu-s/md/03/wsispc3/c/S03-WSISPC3-C-0074!!MSW-E.doc

Hivos manifesto on the role of Open Source Software for Development Cooperation:

www.hivos.nl/downloads/oss.pdf

Partner websites:

www.iicd.org

www.hivos.nl

www.oneworld.nl

PROFILES OF PARTICIPATING ORGANISATIONS

Hivos

Hivos is a Dutch non-governmental organisation which operates on the basis of humanist values. Hivos aims to contribute towards a free, just and sustainable world. The organisation is committed to the poor and marginalised - and to the organisations which promote their interests - in countries in the South and in South-East Europe. Sustainable improvement of their situation is the ultimate benchmark for Hivos's work. An important cornerstone here is strengthening of the position of women in society.

Hivos's most important activity consists in providing financial and political support for local NGO's. Besides offering finance and advice, Hivos is also active in networking, lobbying and in exchanging knowledge and expertise, not only at international level, but also in the Netherlands. Civil society building, economic activity and sustainable production are Hivos's central policy areas.

IICD

The International Institute for Communication and Development (IICD) assists developing countries to realise locally owned sustainable development by harnessing the potential of information and communication technologies (ICTs).

IICD realises its mission through two strategic approaches. First, Country Programmes bring local organisations together and help them to formulate and execute ICT-supported development policies and projects. The approach aims to strengthen local institutional capacities to develop and manage Country Programmes, which are currently being implemented in Bolivia, Burkina Faso, Ecuador, Ghana, Jamaica, Mali, Tanzania, Uganda and Zambia. Second, Thematic Networking links local and international partners working in similar areas, connecting local knowledge with global knowledge and promoting South-South and South-North exchanges. Thematic Networking focuses on sectors and themes like education, health, governance, the environment, livelihood opportunities – especially agriculture – and training.

These efforts are supported by various information and communication activities provided by IICD or its partners. IICD is an independent non-profit foundation, established by the Netherlands Ministry for Development Cooperation in 1997. Its core funders include the Directorate-General for Development Cooperation (DGIS), the UK Department for International Development (DFID) and the Swiss Agency for Development and Cooperation (SDC).

OneWorld Nederland

OneWorld has a vision of equitable and sustainable distribution of wealth amongst the world's population, underpinned by global attainment and protection of human rights and by governance structures which permit local communities control over their own affairs. OneWorld is dedicated to harnessing the democratic potential of the Internet to promote human rights and sustainable development. OneWorld aims to be the online media gateway that most effectively informs a global audience about human rights and sustainable development. And OneWorld aims to bring together a global community working for sustainable development through interactive online partnerships of organisations and individuals sharing our vision. OneWorld offer a range of (technical) services to our partners and other organisations working to build a better world.

Access to information is access to power

Women should grasp the possibilities of the technology, and not be scared by it

Katerina Anfossi, Feminist Internet Radio Endeavour, Costa Rica

The cost of a software license for Microsoft XP in East-Africa ($360) is higher than the average income per capita ($250-$350)

Development support is not just a matter of charity. Diseases don't restrict themselves to geographical borders, nor do hurricanes, droughts or wars. They are the shared responsibility of a world in which everyone is increasingly dependent on one another.

UNDP

What is valid in the real world should be valid in the virtual world

Of the Dutch population with access to Internet, 80% percent uses it to get information

Of the Dutch population with access to Internet just under 25% shops online

Of the Dutch population with access to Internet, just under 20% visits government websites

Moore's Law: The number of transistors per square inch on integrated circuits doubles every year. This has proven true since the invention of the integrated circuit in the sixties.

A West-European cow receives more in financial support from the EU, than an inhabitant of the poorest countries in Africa earns per year. EU development expenditures amount to less than 1% per African, compared to what it spends on a cow. The USA provides three times more subsidy to its own textile farmers, than it spends in total on development support to all sub-Saharan countries put together.

UNDP

Recent estimates for the number of personal computers in Africa put the total at about 7.5 million – an average of about 1 per 100 people. But due to limited capacities for industry monitoring and the large numbers of machines smuggled to avoid duties, these figures may be an overestimate by 3 to 6 times, making the average closer to 1 per 500 people.

€275 billion is spent annually on agricultural subsidies by and to OECD-member states. As a result of this, farmers in sub-Saharan Africa miss €23 billion in income.

Approx. €50 billion, over twice this sum, is spent each year on bilateral development support.

Int'l Food Policy Research Institute

The average total cost of using a local dialup Internet account for 20 hours a month in Africa is about 60USD per month (excluding telephone line rental). ISP subscriptions vary between 10 and 80USD a month. In the USA, this would cost 22USD per month, and in the EU, 39USD, although the per capita income in these countries is at least 10 times greater than the African average.

ICT implementation into African schools is estimated to cost on average of US$ 40 per student per year, with a depreciation period of 6 years.

95% of the available bandwidth is used by 5% of Internet users. Analysing who these users are may allow for more effective bandwidth management and fair use. Numerous technology solutions are available to strengthen this process such as effective proxies, caching, spam regulation, etc.