

# **ETNO Reflection Document in reply to EC “Questionnaire for an EU Strategy for International Co-operation on ICT”**

## **Introduction**

This questionnaire, which launches a public consultation, follows the Commission i2010 pattern. It is structured around three broad areas of the Commission activities which are included in the i2010 Annual Information Society Report of 2007. These are 1) overall rules (regulatory framework for electronic communications), 2) challenges in the area of research and innovation and 3) social aspects (here under the chapter "Global Issues"). A fourth part ("Tools") has been added to reflect on possible ways of the Commission's action in the future.

Results of this public consultation, in particular contributions from stakeholders focused on fostering global competitiveness of European ICT industries, will help the Commission and the Member States to better define aims and objectives of an EU external strategy for the Information Society and its contribution to existing external policies. On the basis of answers, the Commission will focus on the Community Interest that should be applied to ICT policies, having in mind citizens' and consumers' interests and interests of EU companies producing goods and services inside the EU, as well as outside the EU. The Commission will carefully examine proposals for new and more effective initiatives compared to the existing policies carried out at the EU Member State level and aiming increasing European competitiveness in ICTs.

The public consultation will run until 17 September 2007. In November 2007 a stocktaking workshop will be organized in Brussels to evaluate the results of the consultation. A further workshop could be organised in a country outside the EU in order to give to European and third country players an additional opportunity to express their view. The new EU Strategy for International Co-operation on ICT will be reflected in a Communication expected to be adopted by the European Commission in the first half of 2008.

## **Respondent profile**

This section includes questions which help us to build the profile of respondents, e.g. their background, affiliation.

If you do not wish your contribution to be made public, please indicate this by answering the corresponding question accordingly. In that case, your reply will also not be mentioned in future documents which may refer to this consultation.

If you are replying on behalf of an organisation, please state your name, address and official title in your reply. Any reply on behalf of an organisation which does not state the interests which it represents or the extent to which it is representative of the sector (number of members, size of organisation in relation to the sector to which its members belong) will be regarded as an individual reply and not a collective one.

Do you wish your contribution to be made public? (please answer with **yes** or **no**)

Are you replying on behalf of yourself or on behalf of an organisation (company, trade group, public body, interest group, consumer association, academic/research institution, etc.) :

**1. If you reply on behalf of yourself, please:**

- state your name
  
- indicate your postal address, telephone and fax numbers
  
- indicate an email address for correspondence

**2. If you are replying on behalf of a government, academic/research organisation, industry association, non governmental organisation or any other type of organisation, please:**

- state the name: **ETNO**
  
- specify the type of organisation: (private company, industry, government/public body/international organisation, academic/research institution, non governmental organisation, other): **European trade association incorporated under the laws of Belgium as an International Non-profit Association (AISBL).**
  
- briefly describe your organisation, including geographical profile, size, affiliation, scope and field of activity:  
**The European Telecommunications Network Operators' Association was established in May 1992 and is the principal policy group for European major electronic communications network operators. ETNO's 41 member companies from 34 European countries represent a significant part of total ICT activity in Europe. They account for an aggregate annual turnover of more than €210 billion and employ over one million people across Europe. It is ETNO's mission to promote its members' common interests vis-a-vis institutions of the European Union and other**

European organisations; contribute to the development of policies leading to an efficient and fair regulatory and trading environment for the European telecommunications marketplace, and for its members when operating outside Europe.

See: [www.etno.eu](http://www.etno.eu)

- indicate the name of contact person, postal address of organisation, telephone and fax numbers:

Michael Bartholomew, Director

Avenue Louise 54, B-1050 Brussels, Belgium

Phone: + 32 2 219 32 42

Fax: + 32 2 219 64 12

- email address for correspondence:

[bartholomew@etno.be](mailto:bartholomew@etno.be)

Please send your contributions to the International Relations Unit of the Information Society & Media Directorate General of the European Commission (DG INFSO) at e-mail: [info-international-strategy@ec.europa.eu](mailto:info-international-strategy@ec.europa.eu)

## Part I

### Objectives

This questionnaire, which launches a public consultation, follows the Commission i2010 pattern. It is structured around three broad areas of the Commission activities which are included in the i2010 Annual Information Society Report of 2007. These are 1) overall rules (regulatory framework for electronic communications), 2) challenges in the area of research and innovation and 3) social aspects (here under the chapter "Global Issues"). A fourth part ("Tools") has been added to reflect on possible ways of the Commission's action in the future.

Results of this public consultation, in particular contributions from stakeholders focused on fostering global competitiveness of European ICT industries, will help the Commission and the Member States to better define aims and objectives of an EU external strategy for the Information Society and its contribution to existing external policies. On the basis of answers, the Commission will focus on the *Community Interest* that should be applied to ICT policies, having in mind citizens' and consumers' interests and interests of EU companies producing goods and services inside the EU, as well as outside the EU. The Commission will carefully examine proposals for new and more effective initiatives compared to the existing policies carried out at the EU Member State level and aiming increasing European competitiveness in ICTs.

The global economy is witnessing a process of profound transformations<sup>1</sup>, led notably by marked acceleration in the pace of technological progress, fall of international barriers to material and immaterial exchanges, and reduction in the cost of transport and communications. International trade is expanding especially in the emerging and developing world<sup>2</sup>, where several economies posted double digit growth in export, and where new actors and powerful negotiating groups are emerging.

Information society technologies are at the core of this changing environment. The world's ICT market is expanding rapidly, and it is increasingly competitive with new players entering the market.

The EU has a concrete economic interest in the international dimension of the Information Society. Promoting the European ICT industry as a key driver of socio-economic growth is an integral part of the EU's Lisbon agenda. This is why the European Commission and the Member States are working on ways to ensure its ICT sector has access to global markets and can compete effectively.

Internationally, the stakes are high for Europe's ICT industry: In 2006, the global telecom service market was worth €71 billion. The EU share was about €30 billion, compared to the US' €45 billion and Japan's €10 billion. The 2006 worldwide telecom equipment market was worth €16 billion. The EU share was €9 billion, compared to the US' €2 billion and Japan's €6 billion. At 45 billion Euros in 2005, European investment in the sector has overtaken investment in the US and the Asia Pacific Region.

Electronic communications embedded computing, micro- and nano-electronics, micro-systems and 'smart' integrated systems are Europe's main industrial and technological

---

<sup>1</sup> Global competitiveness report 2006 World Economic Forum

<sup>2</sup> WTO 2006 Report

strengths. Europe also has 6 of the world's top 10 telecommunications providers and 4 of the top 10 equipment manufacturers.

Trans-national challenges make internal and external aspects of ICT policies interrelated. ICT is a sector which, for technological reasons, transcends borders, whether this is about radio spectrum, the internet or satellite communications. For the ICT sector, it is therefore even more important than for other sectors that political and economic borders disappear progressively.

The European Commission believes in the benefits of open markets and of free trade for the global ICT sector, and in the need for making further progress in multilateral trade relations in the context of the WTO, especially as regards trade in services. It also believes that non-discriminatory market access must become the rule of the game in the globalised world.

The EU is contributing to the development of favourable conditions at international level for electronic communications. The EU policy, based on the conviction that the Information Society has a global dimension, has all the potential to make a positive contribution to the shaping of this new environment, while ensuring that Europe can reap from its benefits. As a result, in light of the changes and new competitive reality, the international dimension of Information Society policy needs to be redefined and strengthened so that EU interests can be better safeguarded, new markets explored for our industries, and human rights and democratic principles promoted.

Questions:

a) In which geographic country/region(s) is your organisation particularly involved as regards the deployment or the production of ICTs?

ETNO has 41 European members, many of which have international operations around the world, some with global reach. Please see answers in Part II

b) What are the main activities and areas of expertise of your organisation as regards the ICT sector?

Electronic Communications services and ICT solutions; related R&D.

c) What should be the EU broad priorities regarding international co-operation on ICTs (research topics, policies, regulatory, etc) and for which countries/regions?

Please see our answers in the relevant sections.

## **Part II**

### **Regulatory Issues, Market Access, Trade issues**

#### **2.1 Regulatory Cooperation for Electronic Communications**

The availability of information and communication technologies is a major driver of growth and innovation in modern economies having a major social impact. Policy makers around the world increasingly understand the benefits of the information society and engage in regulatory dialogues. Many EU companies are directly involved in the provision of electronic communication services and equipment all over the world and are confronted with different regulatory and policy environments.

The European Commission discusses, on a regular basis, with third countries the best framework for a competitive ICT sector and for the development of innovative advanced services. Often, at the heart of these discussions are common challenges deriving from convergence and quick technological evolution, but many also focus on how to tackle the digital divide and the contribution of ICTs to economic and social development. In all cases, the importance of liberalization and a competitive framework with adequate safeguards are highlighted.

Most of these exchanges take place in specific bilateral or regional dialogues with national regulators. In addition, ICTs are often part of political summits and senior official meetings, as well as several business and consumer dialogues.

The World Trade Organization has attributed considerable importance to electronic communications during negotiations related to the General Agreement on Trade in Services (GATS) and during the discussions with new WTO members. This field also attracts considerable attention under the Trade Policy Review Mechanism and is covered by most Free Trade and Economic Partnership Agreements.

The contribution of stakeholders is essential to ensure that in all these for the real challenges in this sector are addressed. In addition, if it is important to preserve the openness of European markets to stimulate competition and innovation, ensuring a smooth access to markets outside the EU is also a priority for the European Commission. While Europe remains committed to the multilateral trading system built around the WTO, it also addresses the barriers to trade and investment identified in specific countries. However, the cooperation of the business community is essential to reach all sectors of economic activity and regions. The information society field is no exception. As a result and in the line of the new Market Access Partnership proposed by the European Commission, there could be a case for a specific and annual review of the main obstacles faced by EU providers of electronic communication services in third countries. The findings of such an exercise would provide guidance to the European Commission in relevant discussions and contribute to its Market Access Strategy.

Furthermore, as non-EU countries look for models for opening up their markets, attracting private investments and offering better access to e-communication services for their citizens,

the need for technical assistance increases. While bilateral sectoral dialogues co-organized by the European Commission contribute to achieve this aim, European national regulators have played an essential role in these dialogues. However, as the interest in further exchanges of experience from regulators outside the EU increases, so does the financial and human resource burden placed on them. Several European Commission initiatives already offer or have the potential to foster such cooperation.

Questions:

a) Which regulatory issues should be prioritized in the EC-lead regulatory and technical dialogue with non-EU countries, especially with those looking for models to review their regulatory frameworks?

In the area of electronic communications services the regulatory framework is key to ensuring open access to third country markets. Issues can be addressed at multi-lateral, plurilateral, regional and bilateral level – whether in the form of concrete trade commitments or of political and regulatory dialogue with the respective authorities.

At the core of any regulatory talks has to be the effective application of the principles on the regulatory framework for the Basic Telecommunications services as outlined in the Reference Paper annexed to the WTO Telecommunications Agreement. These are in particular:

- Prevention of anti-competitive practices and access to essential facilities of the major supplier through interconnection under non-discriminatory and transparent terms and in a timely, cost-orientated and reasonable fashion;
- Recourse to independent dispute settlement within a reasonable period of time;
- Publicly available licensing criteria;
- Establishment of an independent and impartial regulator;
- Objective, transparent and non-discriminatory allocation of scarce resources, including frequencies, numbers and rights of way.

In many third country markets these rules still lack proper enforcement even where the Reference Paper has been adopted as part of the WTO Telecommunications Agreement. However, there are also other crucial aspects to ensure market access in electronic communications, which go beyond the Reference Paper:

- Where possible, elimination of all foreign equity limits on International Basic telecom services and value added services. Such limitations remain the single most significant market entry barrier for our sector in many countries;
- Unduly restrictive market access conditions should be removed to facilitate foreign participation in Basic and value added Telecoms Services ;
- There should be a transparent and streamlined application and granting processes for all types of licences;
- Rigorous accounting transparency requirements should be applied to services in which the legacy operator retains market dominance;
- Where competition law is in place also the telecommunications sector should be subjected to it;

- Harmonization of regulatory frameworks for electronic communications across specific regions (like Latin America or ASEAN) is desirable in areas such as access regulation, spectrum policy, universal service or license regime.
- National Treatment across the ICT sector would be optimal;
- Promotion of better regulation through open consultations prior to the enactment of new law;
- A general strengthening of transparency, non-discrimination and the rule of law in general should be promoted. Regulatory predictability and legal certainty are a vital pre-condition to stimulate investments in this sector.

Also ETNO sees a need to consider market access issues in converged market segments. Convergence is increasingly blurring the boundaries between telecommunications and audiovisual services. Some European operators may become also content providers in third country markets, such as for mobile TV, IPTV or VOD, developing quadruple play strategies and new and innovative services that are critical for the global competitiveness of the EU industry. In this sense current restrictions on foreign capital for companies not only in the telecommunications sector but also in broadcasting should be reviewed.

b) Which countries/regions should be given priority for such discussion?

While ETNO Member companies as a whole have global presence, individual members of ETNO pursue different business strategies. Some ETNO members operate only in domestic or European markets, some only in specific regions and others have a global presence. Some have invested in new entrant operations and some in incumbents and some in both. Each case depends on the markets in question and the chosen company strategy.

ETNO therefore is not in a position to specify particular regions and countries to be given priority. However, ETNO believes that those countries and regions which are already listed in the “plurilateral requests” put forward last year by the “Friends of Telecoms Group” during the ongoing WTO negotiations as well as those countries and regions which are subject of bilateral FTA negotiations with the EU reflect very well the markets with the highest potential for those European telecommunications operators, which are expanding their businesses abroad.

c) On which subjects should the share of experience between the regulators of the EU Member States' and non-EU regulators be focussed?

In general, focus should be on the proper interpretation, application and enforcement of the principles of the Reference Paper. More specifically:

- Preventing major suppliers from engaging in anti competitive practices
- Independent regulatory agencies;
- Cooperation between competition and regulatory authorities to ensure that competitive safeguards are effectively put in place;

- Transparent applications of the rules;
- Where appropriate, lifting of any unnecessary ex-ante regulation, i.e. where application of ex-post competition law is sufficient to ensure well functioning markets;
- Effective dispute resolution.

Specifically, when dealing with convergence, in a first step, the following subjects could be considered for wider global dialogue:

- Limits to foreign investment. (including where an entry barrier to the audiovisual sector)
- VoIP and broader Web based services
- Bundling of services
- Fixed Mobile Convergence (FMC)
- Adoption of pro Digital and ICT based Public Sector Applications- these could include for example eHealth, Transport telematics, Energy and the environment, ICT based education
- Regulation of the audiovisual services, including IPTV

With regards to less developed countries the European Commission should - while promoting the principles of the WTO Reference Paper on Basic Telecommunications services - take into account differences in ICT sector development and market realities rather than looking for a direct transposition of the principles of the EU regulatory framework.

When sharing experiences with OECD countries and other developed markets outside the EU, an approach based on common challenges would be advisable. The EU and the US for instance face a common challenge to increase the up-take, range, usage and value propositions derived from new services over broadband. This requires a substantial investment effort from private companies in order to upgrade and develop the networks necessary to enable the provision of these new and innovative services and an adequate regulatory framework to stimulate it. Adequate models to foster investment in NGNs and the uptake of new services over NGNs should be a topic for discussion within the EU-US dialogue on Information Society.

## 2.2 Standards

Standards are an important issue in the global context of trade and competitiveness. The EU recognizes the value of open standards which have the advantage of facilitating interoperability and preserving the interest of consumers. Though standards are firstly the issue for industry to address, the European Commission and Member States can play a role notably in encouraging third countries' governments to facilitate international cooperation at an early stage between industries for developing new standards. Active participation of European Small and Medium Enterprises in processes leading to agreed standards could also bring added value.

On EU side, an instrument for such cooperation is the 7<sup>th</sup> Framework Programme (FP7). Associating third countries in research activities from the outset (i.e. at the pre-competitive stage, when standards are not yet developed), seems the most straightforward approach to guarantee interoperability at later stages. Early co-operation and international partnerships on novel technologies may be indeed a key to facilitate broader consensus. Early agreements on standards by key players could alleviate subsequent IPR disputes. This requires, however, pro-active industrial involvement from the outset, in defining the regional partnership approach.

Questions:

a) Do you support the Commission view that the issue of divergent standards could be alleviated if more emphasis was put on international pre-competitive industrial research collaboration? What concrete actions could help in encouraging third countries' decision makers to facilitate their industries' international cooperation in view of developing new standards?

ETNO shares the Commission's view on this point. The probability of having diverging standards is greater if the different proposals meet very late in the amalgamated development-standardisation process. So, the sooner there is a common approach amongst the different lines of research, the more opportunities there are for avoiding divergence. EU research funds could be a useful tool to facilitate this process.

Cooperation for applied research, encouraged by EC initiatives, at an early stage could help to focus the work on different but complementary areas, rather than on duplication of efforts. However, if the objective of such research is the development of new standards care should be taken over the way success of the project is measured. A drive to develop and protect intellectual property within the project could generate barriers that make the standardisation of the results significantly more difficult.

It should also be noted that divergent standards are due to several factors in which those involving competition amongst researchers and manufacturers, historic factors (eg. Installed based, backward compatibility, etc.), socio-cultural (eg in Japanese culture, talking on the phone while in the train is impolite) and, of course, regulatory conditions (eg. location technologies) are the most important. The Commission's proposal could help to alleviate the situation of final divergent standards as it would act as an incentive to cooperation at an early stage, but will not completely resolve the issue since wider interests are involved. In addition to encouraging wider participation in research, the commission might also care to consider wider options that may include (but are not necessarily limited to):

- Sponsoring "a la ISOC", where travel expenses for corresponding delegates could be funded by EU, based upon some kind of selection process,
- Standardization activities relying upon efficient communication facilities that include web conferencing, high-speed Internet access, etc. EU could be involved in programs for Internet development in third countries to make sure logistics are not an issue anymore,

- To consider ETSI's Industry-driven Special Interest Groups as a means to facilitate the contribution effort from third countries, alleviating the risk of poor participation because of financial or IPR issues,
- To encourage the organization of standardization meetings in third countries.

Which countries/regions should be given priority and which areas of standardisation should be addressed?

The regions to be given priority will depend upon the objectives being addressed. If the issue is to reduce regional variations in global standards then collaboration should be cultivated with the most active regions in standards creation, such as North America and Asia. However, if the EU is trying to address the requirements and conditions for standard deployment in developing countries, in order to facilitate their application to third countries, and to open the door to expand EU influence and business with them than other regions like Africa, Middle-East, and South America will be a natural focus. Given their huge impact on global ICT markets (particularly in the areas of broadband, web and mobile) particular attention should also be given to China, Korea and India.

b) The Commission is undertaking initiatives for proactive standard marketing promotion in third countries. What would be your priorities related to standards promotion? On which countries/regions these initiatives should be focused?

ETNO considers that the priorities would be to assess the need for international standards (for the sake of interoperability and business development), to make sure such standards can be easily accessed from anywhere in the world (adequate communication infrastructures), to encourage development of local bureaus for strengthening the links between international standardization activities and country-specific involvement.

Diversity of standards leads to a weaker EU position when entering in competition with Japan or the US. We should try to align their views with European concerns. We need a European view not 27 individual member state views if we are to have an effective voice/leverage globally.

What would be the respective responsibilities of the Commission and the Member States in this field?

Standards marketing should be supported by proof of need, and may be best led by industry, but within an EU framework It should also be selective and take account of local market conditions. The EU could, for example, sponsor communication events, to encourage/sponsor the organization of standardization meetings in these regions, to communicate on research programs that may facilitate the development of standardization activities and the integration of third countries in the standardization process, to make sure developed countries are adequately represented by inviting relevant experts as moderators.

c) Has your organisation been involved in processes which resulted in adopting common standards? How could the Commission support the participation of European industry in these processes?

The members of ETNO all play very proactive roles in terms of standards creation, adoption and promotion at international, regional and national levels. Between us we have extensive experience in standards participation, development, and exploitation.

BT is extensively involved in the development of International Standards and participates in a wide range of standards bodies and fora developing standards essential to the deployment of the NGN which is necessary to maintain European competitiveness.

The European Commission could support the participation of European industry in the Standards process in a number of ways including:

- a) supporting the participation of SMEs in the standards process (financially and otherwise),
- b) changing the membership of CEN and CENELEC to enable direct participation by industry in the committees of these SDOs (financial support should be withheld unless they change their rules).
- c) ensuring that regulation is not a brake on standardization and standardization-inferred innovation
- d) strengthening Europe's contribution in some key global standard bodies (IETF, IEEE, ISO)
- e) sponsoring standardization initiatives to address new opportunities (by organizing relevant workshops with top European experts, for example)
- f) ensuring that the standardisation agenda is driven by the needs of standards user not those of standards publishers.

d) How would you assess the impact of those EU research projects whose objective was to “disseminate” an EU standard?

Rather poor so far, fewer than half of those FP6 projects relevant to standards actually contribute effectively to the standards process. A major problem here is the absence of a channel through which the results can be effectively transferred to the standardisation arena. In many cases the work is not sufficiently mature until the project is nearly complete which means that the standardisation activity is only just starting as the project is closed. This means that standardisation, when it occurs, is mainly undertaken by individual partners at their own cost without reference to the consortium, which has ceased to exist with the closure of the project (although there may be informal dialogues with certain ex partners). If more effective dissemination is to be achieved through the development of standards, there must be an option to extend the project in order to effectively achieve a viable standard.

One reservation with the question is that in our global industry an EU standard cannot be the end goal. It is important to ensure that EU research projects also have an impact on standards and markets outside the EU.

## 2.3 Intellectual Property Rights

Technological changes in the field of ICT, as well as the convergence between networks, devices and services, have a major impact on technical innovation and content creation. In particular, this leads to a globalisation of the market for innovative and creative products, where access to technology and interoperability between existing technologies is becoming crucial to make the most of the network effect and create a competitive environment. In this context, IPR protecting key technologies and standards are becoming strategic assets that can be used to negotiate or prevent access to specific technological environments or geographical markets.

From the point of view of European competition law, the European Commission has powers to intervene *ex post*, with documented cases of dominant positions. At the same time, however, the European Commission considers that *ex ante* IPR licensing price cap (as requested by some emerging countries) is a clearly anti competitive practice.

Lack of fair and equitable IPR licensing schemes on key technologies, discriminating competition and export regulation rules are hampering EU industry's ICT technological activities in some developed, but also emerging countries. At the same time, lack of proper protection or enforcement of EU companies' IPR on key technologies in third countries, may also affect the interest of these companies and their faculty to develop activities in those countries.

Globally, the WTO Committee on Technical Barriers to Trade (TBT) provides for discussing standardization-related IPR issues. This public consultation aims to provide an opportunity to better clarify expectations of sector actors in the field of IPR, especially in the context of international co-operation. This concerns also the participation in FP7 which could pave the way for better IPR protection under research actions.

In addition, with IPR the issue of policies favouring creativity and open innovation as means to foster growth, need to be taken into account. Increasingly, more of the economic value is in intangibles (services and content), their development and deployment processes. Europe needs to take a strong foothold in new approaches for innovation in the knowledge economy, and this is reflected also in the understanding of IPR development.

### Questions:

a) What should be the modalities for an EU action in IPRs licensing of key technologies in the context of international co-operation?

IPR is facing some issues that run the risk of having a severe impact on the industry. IPR laws need to be more balanced and uniform across borders and the EU could encourage this. However, such issues are very complex and to a large extent should be regulated by the market. Never the less there are a number of areas such as balancing the use of IPR to generate return on research investment with the timely dissemination of results (e.g. through standardisation) that may benefit from further study. The EU may wish to consider a new 21st century study on the current status of

ICT patenting, how the processes work and suitable mechanisms for ensuring as return on research investment that meets future needs.

b) What are the incentives that should be put in place and/or supported at EU-level, in order to facilitate IPR patenting and licensing efforts, particularly from SMEs and start-ups?

- Maintain the current practice of the European Patent Office regarding patenting of computer implemented inventions. Most inventions in the ICT arena are implemented by software. It is important that inventions that fulfil traditional criteria for patentability remain patentable, whatever their type of implementation (software or hardware).

- Adapt the European patent system (legal framework, European Patent Office) to reduce the cost for filing a patent with European coverage and for enforcing the patent. This would be especially beneficial to SMEs and start-ups.

- Promote information on patents in the education system of EU countries.

However, a concern with the question is the assumption that patenting remains the best way of achieving a return on research investment in the future.

c) According to your experience, which technologies suffer the most from the lack of fair and equitable IPR regimes, discriminating fair competition at international level?

The IPR impact is much smaller in those areas with strong competition and it benefits most in those areas where regulation prevents the free market forces from acting. In some cases, IPRs owned by individual companies could lead to a technology monopolistic situation that could pose a potential threat to evolution.

However, it is quite clear that key growth markets in large countries such as South Korea, and more recently China, are taking a more rigorous approach to IPR policy when deciding on longer term investment decisions and the adoption of standards (eg mobile and mobile TV).

## 2.4 Access to Radio Spectrum

Applications and services using radio spectrum generally have an international dimension because radio waves don't recognise borders. Services are also generally provided across borders. The significant economies of scale which can be achieved by bringing requirements for radio equipment and services closer should be promoted. Aligning approaches on radio spectrum is a potential enabler to open market and business perspectives at global level. Europe as a primary market place for wireless services and equipment has a weight which should be reflected in the relations with third countries or regions. The common strategy on spectrum usage, as recommended in the Commissions' radio spectrum policy, reinforces this position.

The European Community participates in activities of the International Telecommunications Union, in particular its World Radiocommunications Conferences (WRC), which is the mechanism to update the Radio Regulations, the international treaty on how the airways are to be used without harmful interference between wireless services of different countries. The Commission participates in WRC formally as an observing delegation of ITU. In the current scheme, the European Conference of Postal and Telecommunications Administrations

(CEPT) is essentially the leader negotiator for Europe, while the Commission provides input to the European preparations by pointing out the Community policies affected by the negotiations, by involving more closely industry in the process and by assisting CEPT during the conference itself in holding a common negotiating front.

Questions:

a) What parts of the regulatory reform on spectrum management undertaken in Europe could serve as a reference for other countries?

ETNO believes that national administrations will remain the focus of spectrum policy and management for the future and, although recognising the benefits that a flexible use of spectrum can bring, they should have to carefully consider any reduction of constraints on harmonised spectrum bands as these could lead to fragmentation of spectrum resource and a decrease of efficiency. In this context the work on WAPECS, which started from an EC initiative, can be a good example of regulatory reform which may serve as a reference for other countries.

b) Border countries of the EU often face difficulties in implementing common EU spectrum measures because their non-EU neighbours have different uses for their spectrum. The EC is of the opinion that these border countries need support at the EU level, to assist them in resolving their bilateral negotiations with their non-EU neighbours. Would you agree with this approach? Can you provide specific examples of current/potential difficulties?

Although EU support may be very precious ETNO believes that the proposed approach should not be mandatory but applied only if requested by the involved administration(s). As an example there are potential cases where the EU could support and assist on a political level in resolving cross border radio interference problems caused by emissions from non-EU neighbouring countries this causing to GSM users lower QoS, call drop-outs and higher bills due to unnecessary roaming.

c) Should the Community seek to enhance its role in ITU? How could this be achieved, given that EC only has the status of "sector member" (i.e. non-voting observer)? Are current European coordination mechanisms based on CEPT sufficient? Please give examples.

ETNO believes that the current European coordination mechanisms have proven to work very well (preparation of ECP and organization of work during WRCs).

d) Should the Commission take the lead in seeking to harmonise spectrum rules with the EU's main commercial partners, in particular for mass-market equipment typically not addressed at ITU level?

ETNO believes that harmonisation of spectrum rules brings benefits to consumers and has been a significant factor in the success of the fixed wireless and mobile industry. Global spectrum planning, led by the International Telecommunication Union (ITU), is of crucial importance and is the best way to secure the cooperation of national governments and industry in developing harmonised frequency bands. Furthermore, due to commercial pressures and consumer demand, there may be also interest in using new mass market equipment within Europe, once their compatibility with existing services/systems has been proved. Therefore, ETNO is of the view that the Commission could be actively looking out for the appearance of such devices, to anticipate their use, and task CEPT to determine whether they really present interference, or whether the rules could be changed in Europe to permit them. The Commission should also be active in removing regulatory barriers to European products.

## 2.5 RFID

The Commission is continuing a wide-ranging public debate on the opportunities and challenges posed by Radio Frequency Identification Devices (RFID) technology for government, industry and society at large. RFID is of policy concern because of its potential to become a new motor of growth and jobs, and thus a powerful contributor to the Lisbon Strategy, if the barriers to innovation can be overcome. A key challenge for decision-makers is to devise a common vision and set of goals of how RFID can keep Europe more innovative and competitive in the world economy while at the same time giving citizens the tools and choices they need to ensure privacy and security.

Realising the potential of RFID technology requires addressing a number of interrelated issues pertaining inter alia to security and privacy, governance.

There are concerns that this enabling technology might become an intrusive one, endangering privacy: RFID technology may be used to collect information that is directly or indirectly linked to an identifiable or identified person and is therefore deemed to be personal data. In the EU the protection of personal data is an important principle and is covered by the general Data Protection Directive.

Concerns related to the governance of resources touch upon such issues the openness and neutrality of the databases that will register the unique identifiers that lie at the heart of the RFID system, and the storage and handling of the collected data, including its use by third parties.

These are important issues in view of the RFID's role as the carrier of a new wave of development of the Internet which will eventually interconnect billions of smart devices and sophisticated sensor technologies into a global networked communication infrastructure.

Questions:
------------

a) Given that the protection of personal data is an important principle in the EU and is seen as a pre-condition for wide public acceptance of RFID, what privacy safeguards should be envisaged at an international level?

- Protection of personal data
- Safeguarding against identity theft
- Conformance with European and other standards
- Safeguarding single-purpose use (e.g. tag-expiration at points-of-sale)
- Safeguarding against unauthorized use

b) The Commission will support the development of a set of application-specific guidelines within the EU (code of conduct, good practices) by a core group of experts representing all stakeholders. Should there be, in parallel, international guidance on practical implementation of new technologies, such as RFID? If so, what should such guidance consist of?

- Guidelines should be developed on the basis of feedback, provided by existing RFID-implementations, pilot projects, etc..

c) How to ensure, at international level, that the system for registering and naming of identities in the future "Internet of Things" is interoperable, open, non-discriminatory and does not fall into the hands of interested parties that could use these databases and naming systems for illicit ends, whether they relate to commercial, security or political aspects of governance? What concrete actions should the European Union take at international level?

Europe faces the challenge to maintain its innovative and competitive dynamics in the world economy with the advancement of new technology related services, while at the same time giving citizens the tools and choices they need to ensure privacy and security.

- The European Commission could play an active role in the harmonisation of EU open standards (e.g.: ETSI) and non-EU standards (e.g.: IEEE).
- Governance activities at EU and international level should not hamper innovation in the RFID area.

ETNO believes that in relation to RFIDs there is a demand for specific resources for registering and naming of identities different from Internet resources (e.g. public Internet names and addresses), the policies for managing these identities should be defined in an open cross-industry body to make sure all stakeholders can participate

in defining allocation and management rules and procedures. The role of the EU in this global networked communication infrastructure is to ensure that the following rules are satisfied when relevant procedures are put in place:

- EU should support the process of the selection of the organisation chosen to assign universal identities to communication devices. This organisation should be open, non discriminatory and more over distinct from any commercial or political bodies, having no commercial activity using these identities;
- EU should support the setup of allocation mechanisms for universal identification on an open and non discriminatory basis;
- EU should support a worldwide standardisation of the identity data format;
- Finally EU could make use of European Research Programs, standardization activities and European administrations in order to support the development of such a solution.

It should be emphasised that when new technology related architectures and services reuse Internet resources, such as public Internet names and addresses, relevant Internet organisations are the only organisations qualified for reviewing the current assignment procedures, if such a requirement was to appear. EU should continue to participate in the activities of all advisory committees already in place.

## **Part III**

### **Innovation and Research in ICT**

#### **3.1 ICT Research Collaboration**

Faced with increased internationalisation of ICT research, researchers and industrialists need access to Information and Communication Technologies (ICT) knowledge and skills from around the world. This is in particular the case for the European research community to which the Seventh Framework Programme (7<sup>th</sup> FP) provides the following opportunities for international activities:

- The opening of all ICT programme objectives to the participation of third country organisations, including emerging and developing countries (International Cooperation Partner Countries/ICPC), as well as industrialised countries. Successful organisations from ICPC are eligible to receive funding in the same way as European organisations, while project partners from industrialised countries normally have to provide their own funding.
- Specific International Cooperation Actions (SICA) dedicated to partnerships with third countries (developing countries and emerging economies) in areas of mutual interest and cooperation on topics selected on the basis of their scientific and technological competences and needs.

In addition, the EU supports international research co-operation through the establishment of high-speed research networks interconnected with the rest of the world.

Finally, several partner countries have signed Science and Technology Cooperation Agreements with the EU on specific research priorities.

The cooperation with industrialised partner countries is mainly driven by the participants, as it is up to the members of a consortium to decide on the partners. In some cases, non-EU governments set up specific funding mechanisms to cover the costs of participation.

For emerging economies, in particular China, India, South-East Asia and Brazil, the concept of mutual interest should be carefully assessed over time. A "win-win" approach should take into account that the wins for the EU in specific fields of co-operation may be only temporary, at the early stages of such cooperation if other countries move faster than the EU in terms of exploitation.

For developing countries classified as ICPCs, our main objective could be to support other Community policies and in particular the development policy. Particular attention could be given to address development challenges in relation to the millennium development goals and global challenges.

Questions:

a) Which areas of ICT research should have priority for international cooperation, and with which countries/regions? Are there areas of ICT research, or countries/regions in which such cooperation should be restricted? If so, why?

ICT is a global business providing services that can deliver benefits irrespective of geographical location and often with a reach that transcends national boundaries. It is also necessary to note that the supply chain for these services is almost invariably multi-national with equipment suppliers, service suppliers and users spread around the globe. In order to move the industry forward effectively it is necessary to engage a significant proportion of the whole industry. Research driven from a regional subset in isolation cannot have the same impact as a globally based initiative.

However, there are not enough resources to cover all areas. The criteria for prioritising areas in ICT research should be related to the needs of industry and EU competitiveness (the promotion of sustainable investment, skills and employment in Europe). Those objectives are the reason for the research performed by the EU and should take precedence over the rest. This means that particular attention should be given to the Strategic Agendas put forward by the different European Technology Platforms. Those organizations should be promoted and their advice followed.

There may well be cases for restricting specific countries/regions from participating in specific projects but such issues will be very specific to the subject matter being researched and hence need to be addressed on a case-by-case basis. It is unclear how top down restrictions can be effective and at the same time lead to the best use of the research results.

b) What are for your organisation the main expected benefits of collaboration with non-EU partners in the context of a European R&D project (e.g. access to knowledge, market access, building prestige)?

Collaboration with non-EU partners in the context of European R&D projects allows close contacts with partners from highly innovative areas over the world which facilitates:

- i) Access to scarce expertise – research projects that are truly breaking new ground will, by definition, be moving beyond recent knowledge. Researchers with expertise in such recent developments are naturally very scarce and, given the global nature of the industry, not necessarily based in the EU.
- ii) Engaging with the whole supply chain – if the innovations being developed are to be delivered effectively to the end-user, the innovation needs to address the whole supply chain for the service. In some cases, one part of this chain exists outside EU and hence non EU partners are required in order to engage the whole supply chain.
- iii) Improved exploitation – for example the exploitation route for certain results may be through an internationally recognised standard. In some cases,

involving an influential participant in the relevant standards body will facilitate this exploitation route.

- iv) Access to regional requirements – if the research is addressing issues that exist outside the EU it is essential to include a partner that can contribute to a better understanding of the requirements and dynamics of the region within which the end results are expected to be applied.

c) In which geographic country/region(s) is your organisation/ particularly involved as regards ICT research? Is outsourcing an issue for your organisation? Which are the main elements your organisation takes into account when taking the decision of outsourcing some research activities outside the EU?

Whilst the focus of the research undertaken by ETNO members remains located in Europe they also undertake significant parts of their research at locations outside the EU. The spread of these locations is global and expanding, reflecting the global nature of our industry.

d) The EC advocates for reciprocal participation of EU organisations in non-EU R&D programmes, in particular those of the emerging economies. Is your organisation interested in such foreign programmes? What are the barriers to participation for EU organisations? What measures could be taken at EU and national levels to enable reciprocity between respective EU and non-EU programs, wherever required?

ETNO members are interested in participating in such foreign programmes provided that the attached conditions for participation are not too restrictive and that proposal matches our interest in the research area and provides an opportunity to work with good partners to address the research challenges. The barriers that hinder this participation usually involve bureaucratic problems, management overhead, over restrictive rules regarding the exploitation of the research results (e.g. IPR) and lack of access to information sources about the programmes.

Simplification of the procedures, easy access to information sources, legal guarantees and capability to have some influence in defining the thematic priorities are measures that need to be taken in order to make the participation of the EU companies in the non-EU R&D programmes more viable.

e) Do you consider the existing rules and modalities for non-EU participation to R&D projects adequate? If not, what should be modified? Are the existing instruments (such as Specific International Cooperation Actions, Collaborative Projects, Coordination and Support Actions) adequate or should new ones be developed specifically for international collaboration? Do the existing proposal evaluation processes adequately take into account the specificities of international collaboration with non-EU countries? What could be improved in order to guarantee adequate treatment of proposals that include non EU partners?

The general rules of participation are acceptable. However, the rigid application of a top down approach to international participation is unlikely to achieve the best results and may result in the wrong behaviour. The key issue is whether a partner is contributing value to the results of the project being proposed or not. The evaluation processes needs to reflect this need for flexibility in addressing the need of individual research topics. In some cases this may also lead to the EU looking at the terms of

the consortium agreement in order to ensure that the research results can be exploited effectively for the benefit of Europe.

### 3.2 Research Infrastructures

As regards research infrastructures, Europe has consolidated world leadership on e-Infrastructures (GÉANT and Grids for science) thus favouring interconnection of similar infrastructures in other regions to the European continent. The actors on the communications market have opened up to new ways of operation developed by the e-Infrastructure community and consequently new and cheaper services have been made available to the consumer (e.g. EduRoam used by commercial Internet service providers).

However, in some cases, namely in developing regions, access to underlying commercial infrastructures implies very high costs (e.g. linking GEANT to ERNET in India or the inclusion of some Mediterranean countries in EUMEDCONNECT). Therefore, within the international cooperation (namely in cooperation with developing countries) it is necessary to follow the path-finding role of e.g. GEANT extensions with adequate policy discussions and concrete actions to push down prices, should the beneficiary countries be really interested in collaborating with Europe.

#### Questions:

a) What should be the priority objectives of Europe regarding international cooperation in the domain of e-Infrastructures (e.g. supporting global science, favouring the interconnection, making Europe a cross-road for e-Infrastructures, support critical applications and endeavours of global interest, e.g. early warning systems, civil protection)?

Generation, diffusion and exploitation of knowledge are at the core of the research system. State-of-the-art knowledge is crucial for successful research in any scientific discipline. In particular, the system by which scientific information is published is pivotal for its validation and dissemination, and thus has a major impact on the excellence of European research. The EU should focus on defining goals and funding objectives in advanced communications infrastructures together with other non-EU countries. Consideration should be given to sharing costly infrastructure and facilities for testing, thus reducing costs. However, care should be taken not to distort the communications market. A clear distinction should be made between research and commercial usage of such infrastructure.

b) What should be the role of specific research cooperation with developing regions when building upon the underlying infrastructures (as is the case currently with GÉANT extension to Mediterranean – EUMEDCONNECT and the EUMEDGRID cooperation on Grids), knowing that in any case national infrastructures should be out of the scope of funding from EU, being a national responsibility and their existence a precondition for cooperation?

c) As collaboration in the field of e-infrastructures exhibits 'positive externalities' (the more are connected the higher are the gains on every side) would you be in favour of a principle

that when collaborating with emerging economies reciprocity and respect of contractual agreements should be a condition for collaboration?

### 3.3 ICTs vis-à-vis Global Challenges

There are several selected areas of cooperation which, due to the new global challenges, deserve special attention. These include climate change and sound environmental management, energy efficiency, aging population (e-Inclusion), chronic diseases and public health (eHealth), security, disaster risk reduction and emergency management.

The international strategy could, therefore, focus on selected areas to establish a research collaboration priority e.g. in the form of establishing research agreements or setting up joint research programmes or projects. In all cases it means that the strategic selection of the themes would be of crucial importance for Europe. Other than humanitarian actions and those on truly global challenges (e.g. climate change), the target for international collaboration should be to ensure: the further promotion of fundamental rights and democratic principles (e.g. access to information), market openness, and encouragement to the exchange of intellectual capital in selected strategic areas.

#### Questions:

a) What role should international research collaboration play in addressing global challenges of the 21<sup>st</sup> century such as environmental management, energy efficiency, aging population, eInclusion, chronic diseases and public health, or security, disaster risk reduction and emergency management?

As is widely recognized, the solution to these problems mainly comes from the application of new and better technologies. ICT can play a major role. This includes, but is not limited to, environmental preservation, energy efficiency, social care, caring for the elderly, health, security, disaster risk reduction, emergency management and many more areas. This has been recognized in the present version of ICT cooperation programs but should be enhanced and further expanded to include areas such as reducing the environmental impact of ICT.

b) With which countries and on what topics should the EC promote strategic collaboration aiming at the further research and take-up of ICTs related to energy, environment, climate and human-induced disasters, health/well-being and inclusion?

Work with partners on a worldwide basis can bring significant benefits to the research being undertaken. For a few areas, collaboration with specific countries on specific topics (e.g. Israel and Canada for e-health or China, India, or Russia for energy management) can provide a useful guide on where to seek useful partners.

However, the choice of organisation to partner with is unlikely to make any sense outside of the context of the specific project. The benefits that the non EU partnership can bring, including access to information, market openness, and the exchange of intellectual capital, can only be assessed within the scope of the project proposal.

## **Part IV**

### **Global Issues**

#### **4.1 Network and Information Security, Spam, Spyware, and Malware**

The 2005 World Summit on the Information Society (WSIS) reaffirmed that a global culture of cyber-security requires national action and international cooperation. It underlined the importance of the availability and security of the Internet, and the need for further international cooperation to facilitate outreach, the collection and dissemination of security related information and exchange of good practice among all stakeholders on measures to combat security threats. As a follow-up to WSIS, the Internet Governance Forum (IGF) whose inaugural meeting was held in 2006, focused among others on issues of security.

Network and Information Security are far-reaching and global issues. As ICT infrastructures are geographically distributed beyond any jurisdictional or governmental boundary, they become ever more open, interconnected and interdependent. As a consequence, they become more prone to malfunctions and failures and highly vulnerable to an ever increasing number of threats, including attacks. These issues require thus cross-border actions and concerted international efforts to establish a global culture of network and information security. The EU sees the promotion of a global cooperation on network and information security as a key instrument to boost trust in the ubiquitous Information Society.

However, the global quest for increased network and information security should not hinder fundamental rights (including privacy, freedom of expression, freedom of choice, access to data and knowledge etc.). Security considerations should not also constitute a disguise non-tariff barrier against EU products and services by third countries and be used as instruments to reinforce dominant position, establish any single product's dominance, or support unfair competition or unfair commercial practices resulting in a loss of consumer choice.

Network and information security, including protection against spyware and other malicious software (malware) which is increasingly used for criminal profit, is gaining in importance. Threats like spam and malware are harming consumer confidence in the information society.

The European Commission is actively involved in efforts to combat spam, spyware and malicious software (see COM (2006) 688 final) through its enforcement of EU legislation (e-Privacy Directive 2002/58/EC). This is also an issue of political and economic dialogues and cooperation with third countries (e.g. China, Japan, and Russia). The Commission also coordinates and actively participates in international fora that share information and best practices in the fight against spam and other on-line malpractices (CNSA, London Action Plan). Furthermore the Commission participates in a number of international committees and working groups (ex. CCP, ICCP, WPISP, Council of Europe). The entry into force of the Safe Web Act in the US will open a new window of cooperation between EU and US on this issue.

Questions:

a) In which areas and with which countries the European Commission should promote international cooperation activities for network and information security, and why?

- Reinforce the need for international cooperation in the area of NIS. As there is not a single solution to face all security threats, ETNO companies wish to stress the importance of a consistent and co-ordinated approach by all stakeholders involved (private and public) at the international level.
- The spam phenomenon has clearly cross-border implications, and spam sources are all over the world, including inside the EU. According to Sophos (<http://www.sophos.com/pressoffice/news/articles/2007/07/dirtydozjul07.html>), Europe emits 28,5% of the world spam, while North-America and Asia account for 24,2% and 35,2% respectively. 5 of the top 10 countries are in fact EU member states.
- Therefore a legislative framework forbidding unsolicited commercial communications like in Europe is only one element, but it is even more important that this regulatory framework encourages cooperation between various competent national authorities at the EU and international level.
- Furthermore, as technical solutions provided by vendors are, in principle, the same worldwide, there is a strong argument for a common approach internationally among law makers and regulatory authorities.
- An example of an area for further global cooperation is common guidance for ISPs on how to fight both inbound and outbound spam, including for example blacklist criteria, independent from market vendors and based on experience of European mail servers activity and services.

b) What should be the role of the European Commission, in coordination with Member States, in developing global cooperation on critical information infrastructure protection? Which trust infrastructure should be developed to support this endeavour and which incentives should be defined to support it?

Creation of procedures to operate and guarantee the security of the information stored on that network, based on best practices. Regulation on critical information infrastructure protection should not lead to a disproportional burden for network- and information service providers.

c) In which of the current activities / cooperation between the EU and third countries in the fight against spam, malware and spyware is your organization/company interested most? How could these activities / cooperation be improved according to your organisation? What other forms of activities should the EU envisage in order to reduce the amount of spam, spyware and malware coming from outside the EU?

Interest on:

- Establishment of a common SPAM database shared between EU mail servers (with convergence between initiatives existing across the EU)
- Development of coordinated public and private awareness campaigns (eg.: by the creation of a public accessible web site with information, free tools and advice of how to fight spam, mal-ware and spy-ware with the aim of supporting European end-users)
- Publication of common best practices or adoption of existing ones. This could also include reminding that a conformant implementation of available and relevant IETF RFCs by all technical stakeholders can often prevent a cyber-crime nursing ground from developing, and abuse like spam, spy-ware and mal-ware from proliferating.
- Setting the conditions for an active exchange of experience, knowledge and practices between the involved market parties

The current tri-partite cooperation between LAP (London Action Plan), CNSA (EU Contact Network of Spam Authorities) and the international messaging industry, and also the way in which ENISA has actively associated the industry in surveys and reports since 2006, are encouraging initiatives. In the case of anti-spam law enforcement, the benefits of this overall cooperation with industry should be allowed to trickle down, by the EC encouraging more coordination between national cyber-crime fighting national agencies within EU Member States.

## **4.2 Internet Governance and Multilingualism**

The development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programs that shape the evolution and use of the Internet, gains in importance in the globalised world. These issues, which all relate to Internet Governance, are subject of discussions at the international level in the context of the UN-lead World Summit on the Information Society (WSIS).

In order to enable discussions on public policy issues related to key elements of Internet Governance, WSIS agreed to set up a reinforced cooperation between governments, as well as an Internet Governance Forum (IGF) for multi-stakeholder dialogue. The recognition of the extent and value of cultural diversity within the global village created by the Internet was one of the main topics of this first IGF meeting in Athens in November 2006.

Multilingualism comes up in this context, as, by its very nature, it promotes culturally and linguistically diverse content on the Internet. Related is a question of different language scripts in the Internet and Internationalised Domain Names (IDN).

Questions:

a) Has your organisation been a participant in the Internet Governance Forum? What were in your view the strengths and weaknesses of the first IGF meeting? Does your organisation intend to participate actively in the forthcoming IGF meetings?

ETNO has been working for many years on a range of policy issues associated with the Internet. ETNO participated in the World Summit on Information Society and the first IGF in Athens and it is currently preparing to participate in the Rio IGF. The strengths and weaknesses of the first IGF meeting in Athens in our view are:

#### STRENGTHS

In ETNO's perspective the most important objective of the IGF is to create a forum for dialogue and exchange of information on Internet governance public policy issues, in order to foster the sustainability, robustness, security, stability and development of the Internet. Therefore, a challenging goal is to establish a reliable basis for a cooperative, pluralistic dialogue that spans across all stakeholders, without duplicating or competing with the work of existing organizations regarding technical management and coordination of the Internet or critical Internet resources. The Athens IGF succeeded to a great extent in this goal.

Crucial elements for this success were the open and inclusive character and the multistakeholder nature of the IGF - on an equal footing, recognizing the shared responsibility of all stakeholders, each within their respective roles and responsibilities. The non-decision-taking and non-binding character of the IGF, turned out to be the major factor for the success of the Athens Forum, with an informality that encouraged all parties to explore all issues, without negotiation pressure. Many governments and other decision makers had the unique opportunity to exchange views with other stakeholders and other government representatives in a non-negotiation setting.

#### WEAKNESSES

Time between the adoption of the Tunis Agenda and the first IGF was very limited. This did not allow to properly prepare the substantive analyses of issues to be considered in the IGF. Thus, participants did not have a clear vision about the Athens Forum, nor clear expectations of it. Also, relevant material and information became available at the very last minute, or in some cases was not available at all, thus affecting the participants' preparations.

Physical participation in the first IGF was not balanced among all stakeholders from all geographical areas and online participation was not always effectively possible, thus affecting the representation of all views and opinions. Regarding moderators, unfortunately not all of them were able to keep up with their duties and responsibilities in a complete manner. Regarding panellists, their great number in many panels and the lack of labels made difficult to understand clearly what or whom they represented. Regarding the workshops, the selection criteria could have been stricter and their focus less disperse. Too many events and sometimes similar ones were held in parallel thus affecting actual access and participation to them.

An important aspect of the IGF which was not exploited enough during the Athens IGF was the sharing of "best-practices" in the sense of an exchange of ideas about a practice that has worked well (or not) and why. As the IGF is the forum for dialogue

and exchange of information, and all stakeholders are present, sharing of lessons learned can truly promote the aims of IGF.

b) According to your organisation, what should be the main objectives of the EU policy related to Internet Governance? How could the massive deployment of the Internet impact on the existing governance mechanisms and rules?

The private sector has been successful in the development and in the management of the Internet so far. The governance of Internet should be performed through existing mechanisms of Internet self regulation, existing bodies and policy coordination, rather than through harder forms of governance. The fundamental principle that should underlie Internet Governance is the full and effective multi-stakeholder involvement in policy shaping, recognizing the shared responsibility of all stakeholders, each within their respective roles and responsibilities.

The IGF, as a non-decision- making body should:

- Address issues of international character for which multi-stakeholder dialogue and exchange of information is meaningful.
- Not duplicate or compete with the work of existing organizations, regarding technical management and coordination of the Internet or critical Internet resources.
- Develop an effective consultation and support cooperation and coordination amongst existing organizations and stakeholders;
- Maintain the focus on development oriented aspects of Internet governance, such as e-inclusion.

Cyberspace is one of the new legal frontiers of our time. Maintaining the security, integrity, and availability of the networks and of the data they carry is key to safeguard the trust of all users of information infrastructures and their possibility to take full advantage of services. User's trust is fundamental for encouraging stable development and innovation, both in traditional and in new services. Only through developing compatible standards and harmonized laws can innovation continue to grow. Standards and laws developed now must include great flexibility in order to account for innovation and new technologies.

ETNO recognizes that there should be an enhanced cooperation through a transparent process, amongst governments, Intergovernmental organizations and the private sector, in order to identify and take measures to ensure cybersecurity, promote more secure products and services and raise awareness, while at the same time take ensuring freedom of expression and protecting privacy.

In order for the Internet to be available and affordable, policies should encourage investment in capacity and growth. The rapid increase of broadband users and the development of new innovative services call for ever more performing access networks. This cannot be achieved without investments and requires long-term sustainable business models.

EU and its Institutions have a role to play there. Sustaining the spread of internet implies important private sector investments. It is therefore necessary to create suitable conditions, so that the private sector may undertake the necessary risks and invest in infrastructures and ICT, within a competitive environment. In other words, policies must provide regulatory and legal certainty, particularly in the long term, as this is a critical factor to attract private sector investment. These conditions are the fundamental pre-requisite for development.

As far as international connectivity is concerned, ETNO believes that the development of traffic exchanges should be mainly market driven and favours commercially negotiated arrangements.

c) How should the EU deal with censorship on the internet by third countries governments? Has your organisation been confronted to difficulties in that respect? What does your organisation think about the idea industry developing a specific code of conduct?

d) Does your organisation have activities promoting multilingualism on the internet?

### 4.3 IPv6

IPv6 (Internet Protocol, version 6) is the next version of the Internet Protocol, capable of better addressing the emerging needs of the information society than its predecessor, IPv4. IPv6 has many advantages including new built-in security mechanisms and the ability to significantly expand the address space so as to meet the increasing demand of new users, services and connected devices.

Many policy frameworks beyond Europe have identified the large scale deployment of IPv6 technology as a necessary condition to eliminate the risks and limitations associated with the current version of the IPv4 protocol. In a number of regions, this issue is receiving increased political attention.

The Commission is planning to raise the EU policy profile of IPv6, through an upcoming communication suggesting the way forward and the actions to be initiated by the various stake holders including ICT industries, end-uses, governments, regulators and standardisation bodies.

Questions:

a) Is your organisation interested in the deployment of IPv6 technologies, and if so why and in which countries?

ETNO is the trade association of 41 leading telecommunications operators from 34 European countries, with different level of involvement in IPv6 technologies, ranging from R&D purposes to actual deployment, in a large number of countries in Europe and worldwide. ETNO members are deeply involved in activities on the advancement of IPv6 technologies and addressing policy issues taking place in relevant Internet bodies, such as RIPE and ICANN.

Drivers for the deployment of IPv6 addresses include IPv4 public address exhaustion. IPv6 is an evolving customer requirement and some customers are requiring that this be part of their deployed networks. Within the context of this discussion it is important for ETNO to clarify the relationship of IPv6 deployment to IPv4 exhaustion. The remaining pool of unallocated IPv4 addresses at global level (IANA pool) is reduced to /46 blocks of 16 millions addresses while the annual consumption of IPv4 addresses during the last three years worldwide was around 10 blocks of 16 millions, and is increasing. It is clear that IPv4 addresses will not be available in the same way that today in the next few years, and the theoretical date for exhaustion of the IANA pool is now foreseen in 2010.

b) Do you identify a need for an EU initiative on this technology? Should such an initiative aim at allowing a world wide compatible deployment of IPv6?

Nowadays the only significant pool of available IPv4 addresses is the IANA pool, accessible to all local internet registries worldwide through Regional Internet Registries (RIRs). European actors are very large consumers of public IPv4 addresses therefore rely on this IANA pool, allocated through RIPE-NCC, the European RIR. Bearing in mind that the current allocation system prevents accumulation of internet addresses, while currently addresses are being absorbed by Local Internet Registries in countries with high development rate, there is a direct impact on the availability of public IPv4 addresses.

As already mentioned in previous sections the main drivers for IPv6 deployment include Customer requirements, lack of private address space and potentially IPv4 exhaustion. ETNO recognises that the deployment of IPv6 implies extra-costs, both CAPEX and OPEX that Operators will need to justify. These extra costs exist for operators or other entities in the deployment of IPv6 addresses. Therefore in today's competitive environment, the deployment of IPv6 technologies should be left to the market to decide, an in which the operator chooses as and when to deploy IP v6. It is important that such events take place within a level playing field.

In order for the European ICT industry, that represents an important economic sector as well as a tool for economical and social advancement, to remain competitive at a worldwide level, it is suggested that EU has a role in encouraging the level playing field for IPv6 deployment globally. This encouragement could include information sharing enhancing technical skills and improving communication between stakeholders who are implementing IPv6. Experience from other successful, market oriented models from outside Europe should be carefully studied.

#### 4.4 Digital Divide

The Information Society is a society through which human capacity is expanded, built up, nourished and liberated, by giving people access to the tools and technologies they need, with the education and training to use them effectively. With its emergence comes, however, the risk of widening the existing digital divide: the disparity in the access to digital communications between rich and poor, and between developed and developing countries.

Bridging the digital divide separating rich countries from poor countries was one of the chief aims of the World Summit on Information Society (WSIS). The EU has committed itself to support the WSIS initiative and its' follow-up. This is certainly the case with the recently adopted EU-Africa Partnership on Infrastructures. It includes as a key component the support to the deployment of communications backbones across the Continent that would facilitate interconnectivity at continental level. To safeguard the investments related to the rolling-out of such infrastructures, and to create the conditions of the development of local networks, the European Commission promotes the establishment of complementary accompanying programmes, including assistance to the necessary regulatory reform processes and support to the promotion of both content and e-services.

Capacity building initiatives are also fundamental in the scientific domain. In this context the Commission supports cooperation in the field of research and education networks and also the participation of African organisations in the newly launched ICT FP7 research programme.

##### Questions:

- a) What activities related to efforts addressing the digital divide has your organisation undertaken, or is planning to develop, as part of the follow-up to WSIS?
- b) What principles should guide the cooperation with developing countries and regions when addressing the digital divide? What elements should such guidelines include?
- c) Is your organisation involved in the development/deployment of ICT technologies for low income or developing regions? What role could the Commission play in a deployment of low-cost mobile communications?

## Part V

### Tools

#### 5.1. Cooperation Agreements

The Information Society and ICTs are part of EU bilateral agreements with third countries but the extent of cooperation and the type of agreement varies with countries and regions and the objective of the cooperation: e.g. Cooperation Agreements, Economic Partnership Agreements, Partnership and Cooperation Agreements, Stabilization and Association Agreements, Association Agreements.

In general, the parties of these agreements recognise that ICTs constitute a key element of modern society, vital to economic and social development. The cooperation activities between them aim at preparing society as a whole for the digital age, attracting investments and interoperability of networks and services. For furthermore, the agreements foresee dialogues on the Information Society, including electronic communications policies and technical assistance on regulatory matters, standardisation, conformity testing and certification in relation to information technologies and electronic communications. They have also as a target the wide spread use of new information and communications technologies and the introduction of new applications in these fields, and the implementation of joint projects for research, technical development or industrial applications in information technologies and electronic communications.

Some agreements (e.g. Stabilisation and Association Agreements) have a stated objective for the third country to align its own policies on those of the EU. The third country commits to establishing a plan for the adoption of Community legislation in the area of Information Society. The so called European Partnerships (e.g. with FYROM) go even further, by listing specific targets in the area of electronic communications (e.g. liberalising the electronic communications sector, assuring the independence of a national regulatory authority, etc.)

#### Questions:

- a) What should be the main objectives for including Information Society services and applications in the negotiations of bilateral agreements with specific third countries (Association Agreements, Partnership and Cooperation Agreements and Free Trade Agreements)?
- b) Should the EU focus more on issues of ICTs when concluding or reviewing bilateral agreements with third countries? If yes, what are the main elements that should be included in such agreements?

## 5.2 Dialogues

An important tool of international cooperation in the area of the Information Society is bilateral and regional dialogues. The Information Society dialogues address specific issues completing broader agenda of commerce, development and general policy. This form of cooperation contributes to confidence-building, and it allows an open exchange of views on issues such as diverging regulations and standards. These dialogues are built on the input from the European industry and chambers of commerce.

Dialogues increasingly focus on regulatory issues. Their objectives are multiple: building and maintaining a network of cooperation with governmental counterparts; updating information on developments regarding issues of respective interest; enlarging the footprint of European standards (or international standards); supporting European industry; creating links between different bodies and agencies; promoting the EU regulatory framework as a model; and reaching consensus on priorities of cooperation. As a results-oriented exercise, dialogues are an instrument of cooperation restricted to selected countries / regions and they should be carried out only where there are specific issues that need to be discussed.

Next to traditional contacts with governments and regulatory authorities, a new kind of dialogue involving local stakeholders has emerged. This is notably the case of dialogues designed to allow local business communities or consumers their input to policy makers. Such business dialogues (e.g. Business Round Tables) and consumer dialogues may give additional thrust to cooperation on specific areas identified as of common interest, provided the level of participation and the commitment is shared by the interested stakeholders in both the EU and the third country addressed. Furthermore, in the case of consumer's dialogues, they can contribute to export the high standards generally applied in Europe or at least narrow existing gaps.

### Questions:

a) How could the consultation mechanism with EU industries be reinforced to enhance the impact of Information Society dialogues? Would an annual review of the main obstacles faced in third countries by EU providers of e-communication services, usefully contribute/support the Commission in relevant discussions and fora?

In the context of enforcement, ETNO would also very much welcome an annual review process on the compliance of third countries with existing trade commitments in the ICT field (WTO and FTAs) with particular focus on telecommunications services. This review should feed into the agenda of trade policy and regulatory dialogues with the respective countries and regions. But the process and the outputs of this kind of review must be considered carefully in order to really facilitate the dialogue with third countries. That means that it must be envisaged in a constructive spirit, avoiding an ill-controlled system of allegations that could be *in fine* counterproductive in the relationship with some countries.

Regarding coordination between DG INFSO and DG Trade, compliance with existing market access commitments and their enforcement are crucial. ETNO therefore welcomes Commissioner Mandelson's initiative for a new Market Access Strategy, which aims for a close partnership with industry and to create a locally based EU Market Access Teams drawn from Commission Delegations, Member State Embassies and business organisations.

ETNO would also urge, however, the dedication of sufficient resources for the enforcement of service commitments, including telecommunications services. So far the initiative appears to focus primarily on market access for goods

b) What additional measures could be taken to increase the pertinence and usefulness of bilateral, regional and multilateral dialogues? How could stakeholders be more closely associated to the setting up of international meeting agendas?

Coordination between DG INFSO, DG Trade, and DG RELEX is crucial to try to increase the impact of IS dialogues by linking them to the general External Relations agenda. In relation with the previous response, a yearly report on the results of the IS dialogues on the previous year could be presented in a public workshop that would allow stakeholders to present their views on future priority issues and contribute to the setting up of the meeting agendas. If organizing such a workshop on a yearly basis is considered too costly and time /resources consuming, this procedure could also be held on-line. This would require involvement of the whole ICT sector, especially major multinational companies for first-hand views of barriers to ICT take-up and to show case best practice. ICT user groups, especially those representing the business community could also be involved.

c) How do you assess ongoing dialogues involving the business community or the consumers of the EU and third countries? Are their structure and their focus the most suitable ones from your point of view?

In parallel of the EU-US Information Society Summit there is a Digital Economy Workshop held by transatlantic trade associations bringing together representatives from the administrations and industry. It could serve as a model for dialogue with other major EU trading partners to exchange experience and ideas on e.g. regulatory and policy developments in the ICT sector.

Business dialogues involving EU and third countries industry representatives may be a very useful tool to promote the interests of the European ICT sector in third markets. Whether running in parallel to FTA negotiations (MEBF) or feeding-up the debate for the improvement of bilateral relationships (TABD), these initiatives may become a reference of the topics of the highest concern for the private sector. However, in order for these initiatives to be successful in providing real value added to the public interlocutors, a clear support from the Commission and closer contact with the Commission officials is crucial.

d) Would you see benefits in bringing closer together some elements of dialogues on ICT and dialogues on science and technology? Which ones and with which countries/regions?

Bringing closer some elements of dialogues on ICT and dialogues on science and technology may be useful to obtain practical results out of the S&T agreements, that seem to lack so far from materialisation in concrete actions. In emerging economies, the policy dimension of the ICT dialogues (eHealth, eInclusion, eGovernment) could be linked in this sense to the S&T dialogues.

### **5.3 Bilateral and Regional Assistance Projects**

At the EU level, the external dimension of Information Society policies is being increasingly recognized in the EU's external action, trade relations, development policy, and enlargement policy. The EU policy builds on the existing contractual relations and brings added value both to partner countries and to the EU, by enhancing our partnership and bringing together the principal instruments at the disposal of the Union and its Member States.

This policy is supported by bilateral and regional assistance programmes and projects. Their implementation must ensure that money spent is also money well invested, in other words, that investments in services or infrastructures are accompanied by pro-competitive market conditions, which will contribute to sustainable social and economic development. This is why, for example, a synergy between EU development policy and regulatory cooperation is needed.

Several programmes with third countries already include regulatory policy and/or technical co-operation elements. For example, support is given to non EU partners for co-operation in IST projects in the different specific objectives, and in cross programme support measures. In addition, synergies are developed between IST activities and related economic co-operation programmes. The Commission is involved in many international information society co-operation programmes. For example, @LIS Programme aims to reinforce the partnership between the European Union and Latin America; Eumedis is a programme to contribute to the expansion and qualitative improvement of the Euro-Mediterranean Information Society; NAPT2 is a regional project aiming at the harmonisation of the Euro-Mediterranean regulation for electronic communications with the EU framework.; and EU-Asia IT&C aims to improve the quality of Europe-Asia partnerships and will link the two regions in the search for innovative and compatible solutions and standards in IT&C.

Technical cooperation is particularly important in the case of the European Neighbourhood Policy (ENP) which includes bilateral assistance projects on such subjects as the reform of the electronic communications sector, the restructuring of the incumbent operators, and the establishment or reinforcement of independent regulatory authorities. The implementation of the ENP itself brings with it the perspective of moving towards a significant degree of integration, including a stake for partner countries in the EU's Internal Market. It sets out the

ways and means by which partner countries can participate progressively in key aspects of EU policies and programs.

Major challenges in cooperation with the ENP countries are the following:

- Full market liberalization for electronic communications services
- Adoption of comprehensive regulatory frameworks
- Establishment of independent and efficient regulatory authorities
- Promoting the deployment of broadband infrastructure and the introduction of online services
- Encouraging the neighbouring countries' participation in the ICT Part of FP7.
- Ensuring high-level participation in ENP regional dialogues on the Information Society, in particular Euromed Ministerial Conferences and Senior Officials Forums

New possibilities of strengthening technical assistance to ENP countries could be envisaged, e.g. through a direct involvement of European Regulators' Group (ERG) which has the necessary expertise and know-how in the area.

Questions:

- a) How does your organisation evaluate the impact of linking assistance projects with regulatory cooperation?
- b) In the field of ICT the Commission is involved in dialogues with world's regions such as Latin America (@LIS) and the Mediterranean (EUMEDIS). How do you evaluate these programmes? What are their weaknesses and strengths?
- c) Does your organisation consider as satisfactory current EU initiatives to guarantee the independence and improve the efficiency of the regulatory authorities in the European Neighbourhood Policy (ENP) countries? Should the Commission and how aim to motivate regulatory authorities and relevant ministries of the EU Member States to cooperate more closely with the ENP countries? How could additional EU investment in the ICT sector in the ENP countries be encouraged by EU policies? What could the Commission do to increase the participation of the ENP countries' research communities in FP7?

## **5.4 Representation and Promotion**

Specific Support Actions, including local observatories to monitor the competitive environment and enhance the collaboration potential with selected countries / regions could be set up to accelerate collaboration and maximize mutual benefit. Such observatories could be of particular value in the main ICT innovation driver areas such as the USA, China, India, Brazil, ASEAN, Japan and Korea. Stronger presence in strategically important places would

allow the European Commission to better follow regulatory developments in third countries, especially in the context of ongoing technological convergence, and to enhance flow of information and possibilities of cooperation with third countries in the area of standardisation.

Placing ICT counsellors in key EC Delegations abroad should be determined by factors such as the size of potential ICT markets, the opportunities seen and difficulties faced by European players, the research potential available in the third country / region, the interest of this country / region to deepen the dialogue and cooperation with the EU and its Member States. The counsellors would work in close contact with EU chamber of commerce abroad.

ICT counsellors currently are seconded to the Commission's delegations in China and Brazil, whereas in the Commission's delegations in the USA and Japan a Commission official is in charge of several policy areas, including ICT.

New Commission ICT counsellors could also play a role in promoting EU offers in third markets. In picking up competing foreign offers in ICTs (e.g. in the area of standards) third countries are guided by the quality of offers but also by the way they are being presented. This is why combining efforts of all interested parties: industry clusters, EU Member States and the European Commission is becoming so important in building up strong EU offers that once agreed upon, could be promoted and backed with one voice.

EU Member States often dispose of various instruments to promote their economic interests in third markets: chambers of commerce, foreign investment agencies, special institutes, think-tanks, economic departments of embassies etc. However, European companies are often global players. Hence, a streamlined action supported by the Commission could bring an added value to raise chances of commercial offers and partnerships

In addition, many European SMEs suffer a structural problem to be present on third countries markets. As SMEs are keys for growth and jobs in the EU and are often the places where innovation takes place, it is worth considering the establishment of a separate means to support European SME's offers in third countries.

Questions:

- a) When investing in third (non-EU) markets or carrying out there your activities, does your organization frequently rely on information from EC delegations / Member States embassies?
- b) Do you see the need to increase EU offer on ICT in third countries? How information on such offers, notably on research, technologies and regulatory cooperation could be improved? Where efforts should be focused? What should be the role for the European Commission in that respect?
- c) According to your organization, what should be the role of the Commission ICT counsellors in third countries / regions? What are the priority countries / regions to which such counsellors should be posted?

d) How the promotion of industry-specific actions, in particular to reinforce the presence of European SMEs, on third markets can be improved? What should be the role for the European Commission in that respect?

Please send your contributions to the International Relations Unit of the Information Society & Media Directorate General of the European Commission by e-mail:  
[info-international-strategy@ec.europa.eu](mailto:info-international-strategy@ec.europa.eu)