

PRESIDENCY CONCLUSIONS

The European Information Society Conference "i2010-Towards a Ubiquitous European Information Society", held in Espoo, Finland, on 27-28 September 2006, arranged by the Finnish Presidency of the European Council and the European Commission in collaboration with the European Network and Information Security Agency (ENISA), European Union (EU) Member States and Candidate Countries, European Free Trade Area (EFTA) countries, industry and relevant stakeholders, and chaired by Finland's Minister of Transport and Communications, Susanna Huovinen, representing the Finnish Presidency, in the presence of the European Commissioner for Information Society and Media, Viviane Reding,

RECOGNISES THAT:

1. The challenges identified in the Commission's initiative "i2010 - A European Information Society for growth and employment" remain valid and need to be addressed more vigorously.
2. Information and communication technologies (ICT) have a key role in realising the Lisbon objectives of competitiveness and growth. ICT is the most innovative and research-intensive sector in the EU, representing 25% of the total research efforts. A quarter of EU gross domestic product (GDP) growth and around 40% of productivity growth are due to ICT. But the impact of ICT on productivity in the EU has consistently been only half of the impact in the United States over the last ten years.
3. Digital convergence has already become a reality leading to the emergence of new products, services, business models and patterns of use. It is benefiting creative industries and promoting the wider circulation of European content - also often produced by the end-users themselves. Consumers will increasingly have access to a variety of content and services using a range of delivery channels and terminals.
4. The information society is becoming a "ubiquitous" information society - more and more a part of our everyday lives where everyone can be connected with everything, whenever and wherever. Traditional telecommunications networks are being developed into IP-based networks. Services will include not only personal communications but also machine-to-machine communications, the "Internet of Things". Terminals will be multipurpose and intelligent devices which connect automatically to the network most suitable for the required purpose. Sensor technology, Radio Frequency Identification Device (RFID) systems and wireless networks will be common parts of the infrastructure.
5. This evolution creates new opportunities for European competitiveness and growth by encouraging innovations. It will improve the quality of the everyday life of citizens and will provide new means for businesses and public administration to be more efficient. It will also have a great potential to improve citizens' trust in the development of the European information society. However, the ubiquitous information society also raises challenges relating to security, interoperability, user-friendliness, privacy, copyright issues, consumer policy and various forms of exclusion.

6. A specific challenge at the EU level is to tap into the greater benefits that will be generated by having an efficient internal market for innovative products and services. Competitive markets and a level playing field for all service providers must be pursued through effective, flexible and future-proof regulation and public policy principles. A more innovative and comprehensive take-up and utilisation of ICT in all sectors of society and the economy is needed.
7. The nature of the communications markets is increasingly global. The development of the ubiquitous information society requires the participation of all the relevant stakeholders, including civil society, national governments, industry and academia.

SHARES THE VIEW THAT IT IS IMPORTANT TO COMMIT TO THE FOLLOWING POLICY GOALS:

Infrastructure

8. Affordable, high-quality and high-speed broadband connections – fixed or wireless - should be easily available for all European Union citizens by 2010. The development of interoperable IP-based networks and wireless networks should be promoted. The new European regulatory framework for the communications market should be light, effective, flexible and technology-neutral, whilst supporting an evolutionary approach. It is crucial that the new regulatory framework enables the market to evolve rapidly. It should encourage competition, innovations, investments and high-speed broadband competition, and ensure access to networks for all service providers on equal terms in order to provide all users the greatest possible benefit. It is essential that the EU legislation, including the market reviews, is implemented rapidly and at the same time in all of the Member States.
9. The adoption of open and interoperable standards in ICT systems, products and services should be actively supported, whilst ensuring that the market remains open and competitive.
10. New and flexible European spectrum allocation models should be adopted in order to make spectrum available for the new and converging wireless technologies, and for the internet of things.
11. The effective use of the digital dividend clears the way for innovations and new services. EU level discussions should address all the economic, technical, social, political and cultural aspects of the use of available spectrum.
12. In the longer term, the appropriate conditions to allow migration towards the “Internet of Things” and a gradual and effective migration from IPv4 to IPv6 should be promoted together with effective Internet governance models and mechanisms.

Innovative services and digital content

13. Forward-looking policies should examine the opportunities for new services presented by new technologies, such as RFID systems and biometrics, and analyse their possible consequences for existing legal frameworks. Existing services, such as mobile and micro payment, and e-invoicing and e-procurement, could be more widely deployed. Interoperable identification methods should be elaborated to increase the use and efficiency of such services, improving in particular the quality, transparency and productivity of public services.

14. The creation and distribution of new content and services is a key to the ubiquitous information society. It is essential that the provisions for digital copyright match technological developments. Transparent and interoperable digital rights management (DRM) solutions, principles and practices should be further developed in close cooperation between all stakeholders. It is essential that they respect the balance between the rights of right holders and consumers. A coordinated European response to the illegal distribution and use of digital content is also needed. European cooperation to fight against illegal and harmful content such as child pornography and racism should be further strengthened.
15. The EU should promote and support new television formats (high-definition, mobile and interactive television) and the switchover from terrestrial analogue to digital broadcasting. The market-led development towards a common mobile television standard, used at least in one network, could foster the emergence of a mass consumer market.
16. New ubiquitous technologies should be fully utilised in all sectors of society. Major benefits could be achieved in numerous fields of society. For example ICT contributes to addressing the socio-economic challenges caused by traffic and transport, such as congestion, accidents and environmental impacts. ICT is a key factor in increasing safety and efficiency in the transport system and essential to maintain competitiveness of the industry. The coordinated efforts should continue to bring the users the benefits of research in intelligent vehicles and intelligent transport systems. Likewise, health-related ICT is the fastest growing industry within the health sector, and it will continue growing, notably due to ageing trends and medical progress. Interoperability as well as research and innovation in the area of ICT for health must be further improved.

Security and trust

17. Achieving the benefits from new technological development and gaining the trust of citizens will only be realised if network and information security (NIS) and the privacy of citizens is ensured. The problems that undermine confidence (phishing attacks, spam, malware and identity thefts etc.) are increasing in complexity and sophistication and are a threat to the development of the digital economy. It is therefore vital to develop a Europe-wide vision for a secure information society involving all relevant stakeholders, including ENISA.
18. The key to a more secure information society lies in making security “ubiquitous”, invisible and not a complex addition to life online. There needs to be a collective effort by all parties involved - including also hardware, software and service providers - who can improve usability of technology and reduce the risks faced by the users. Users of all ages should be trained in secure use of the Internet. Training and awareness raising regarding information security risks and solutions, including virus protection and firewalls, should be promoted throughout the EU and targeted at all citizens and sectors of society, especially small and medium-sized enterprises (SMEs).
19. Relevant indicators measuring success and failure in this area are still inadequate. Both the EU and the Member States should aim to develop new indicators and to enhance the measurement of NIS.
20. The establishment of ENISA has been a major step forward in the EU’s response to the problems of trust and confidence. It is important to use its expertise in further work in Europe.

Innovation, research and development

21. Investments in the ICT research and development (R&D) should be increased in all Member States, and public and private partnership in the ICT R&D field should be encouraged. The coordination of research programmes of the Member States and the EU should be strengthened. Europe should develop a world-class R&D infrastructure, and centres of excellence that collaborate across Member States and disciplines should be established. R&D activities should be targeted at new technologies, services and emerging application areas.
22. The long-term prospects of the ICT industry depend on more comprehensive innovation policies. The obstacles to EU competitiveness that were identified in the Aho Report, "Creating Innovative Europe" – concerning innovation culture, regulatory environment, intellectual property rights (IPR), standardisation, public procurement and the emergence of "lead markets" – should be adequately addressed, taking into account the innovation potential of ICT.
23. The private sector, and especially SMEs, should be encouraged to invest more in ICT and in ICT research. The EU should pay particular attention to the promotion of take-up and utilisation of ICT by the SMEs.

e-Inclusion

24. Fostering the broadband coverage of rural areas via the most appropriate platforms (e.g. WiMax, Flash-OFDM, satellite) is central to bridging the digital divide. Besides stimulating competition by implementing the regulatory framework, other means such as structural funds may be required to foster territorial cohesion.
25. Solid elementary education together with training to utilise ICT already at a young age is important for EU competitiveness and for the active participation of all in the ubiquitous information society. Information society skills and competences should be actively promoted for all citizens, especially in groups at risk of exclusion, such as the elderly, disabled, people with low educational levels, unemployed and ethnic minorities. Opportunities for lifelong learning and active use of ICT can significantly reduce the risk of exclusion and the digital divide. ICT-supported solutions for communication between public authorities and citizens, as well as social participation at large, must be further encouraged.
26. Accessibility, interoperability, "Design for All" principles and user-friendliness of information society products, content and services should be actively promoted. Special attention should be paid to the rights of consumers, particularly in legislation whenever appropriate. High-quality, safe and easily accessible electronic public services should be offered across Europe, without any national barriers.