COMMISSION OF THE EUROPEAN COMMUNITIES

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Part 1

COMMISSION STAFF WORKING DOCUMENT

**Follow-up of the Recommendations of the
Task Force on ICT Sector Competitiveness and ICT Uptake**

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CONTENTS

1. INTRODUCTION

The purpose of this paper is to describe how the Commission is acting with regards to the key recommendations of the Task Force on ICT Sector Competitiveness and ICT Uptake and to outline other relevant EU activities in this area. A technical annex looks at each of the Task Force's recommendations in detail.

The ICT Task Force, established in June 2006, was one of several sector-specific initiatives announced in the 2005 Communication on industrial policy[1,] which aims to help create a more favourable environment for business in the EU. The Task Force complements i2010[2,] the EU information society strategy for growth and jobs launched in June 2005 and designed to boost the digital economy by combining research, regulatory tools and policy initiatives. The mandate of the Task Force was to identify major obstacles to the sector's competitiveness and the uptake of ICTs, help mobilise the sector, and recommend possible policy responses. The membership[3] comprised high-level representatives of the ICT industry and civil society. Industry members came from across the ICT sector and included incumbents, new entrants, and both large and medium-sized firms. Non-industry members represented trade unions, SMEs, chambers of commerce, consumers, investors and academia.

The Task Force produced a report[4] last November that delivers a clear picture of where effort should be concentrated in order to boost the competitiveness of the ICT sector[5.] Overall, the report's recommendations confirm that the Commission's ICT policy is on the right track. They endorse the good work already taking place to promote ICT uptake and entrepreneurship, strengthen the internal market and create a single regulatory environment, boost innovation, improve access to finance, match standardisation policy to current industry dynamics, and develop a long-term e-skills strategy.

The mid-term review of the Commission's industrial policy later this year will provide for a further follow-up on the conclusions of the ICT Task Force.

2. KEY RECOMMENDATIONS AND FOLLOW-UP

2.1. ICT Uptake

Key Recommendations of Task Force: **Make structural reforms for more flexible product and labour markets, create an environment favourable to investment in next-generation**

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1   COM(2005) 474, 5.10.2005

2   For full information on the i2010 initiative, see

     http://ec.europa.eu/information_society/eeurope/i2010/index_en.htm

3   Task Force membership: http://ec.europa.eu/enterprise/ict/policy/doc/icttfm.pdf

4   For the full report of the Task Force, a list of members and details of working arrangements, see

     http://ec.europa.eu/enterprise/ict/taskforce.htm

5   The Commission's 2006 European Competitiveness Report, COM(2006) 697, includes a section analysing the competitiveness of the ICT sector.

networks and services and online public services, and create a charter of consumer rights in the digital environment.

The revised Lisbon Strategy for Growth and Jobs provides an all-encompassing economic reform agenda, and its micro-economic pillar focuses on creating a business-friendly environment. In February 2007, the Commission proposed a broad package of measures[6] to help ensure a smoother functioning of the **internal market for goods**. This will make it easier for companies, particularly for SMEs, to market products in the EU, while assuring high levels of quality and safety.

The transposition by the Member States of the **Services Directive**[7,] adopted in December 2006, will remove discriminatory and unjustified barriers, cut red tape, and modernise and simplify the legal and administrative framework, notably by the obligation to put in place, by 2009, electronic procedures for formalities and procedures relating to access to and the exercise of a service activity. It will also improve administrative cooperation between Member States and put in place an internal market information (IMI) system for that purpose. The Services Directive will have to be transposed by Member States by the end of 2009, and the Commission will support and assist them in the implementation process. The Directive complements the Internal Market regulatory framework for information society services that was established by the eCommerce Directive[8]. Furthermore, based on the completion in 2005 of the legislative phase of an action plan[9] aimed at developing a true European-wide market in **financial services,** the Commission is now implementing a new strategy[10] to deepen financial integration and deliver further benefits to industry and consumers alike.

Policy support for the development of next-generation networks and services is primarily assured through the **ongoing review of the regulatory framework for electronic communications**[11], as well as through other measures in the **first pillar of the i2010 initiative**[12], which aims to create a Single European Information Space by combining regulatory and other instruments at the Commission's disposal to create a modern, market-oriented regulatory framework for the digital economy. Widening the availability of public online services has been a key priority, in particular through the **eGovernment Action Plan**[13]

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6   See press-release IP/07/181 of 14.02.2007. The package notably includes "Proposal for a Regulation laying down procedures relating to the application of certain national technical rules to products lawfully marketed in another Member State", COM(2007) 36, 14.02.2007

7   Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market, OJ L 376, 27.12.2006, pp. 36–68.

8   Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market.

9   The Financial Services Action Plan (FSAP), http://ec.europa.eu/internal_market/finances/actionplan/index_en.htm

10   Financial Services Policy 2005-2010 (White Paper), COM(2005) 629, 05.12.2005

11   See http://ec.europa.eu/information_society/policy/ecomm/tomorrow/index_en.htm. Legislative proposals will be tabled by the end of 2007.

12   http://ec.europa.eu/information_society/eeurope/i2010/single_infor_space/index_en.htm

13   i2010 eGovernment Action Plan: accelerating eGovernment in Europe for the benefit of all, COM(2006) 173, 25.04.2006

and the development of the European interoperability framework for pan-European eGovernment services[14].

In addition, the December 2006 European Council pledged to **review the challenges facing and posed by the next generation of the Internet and networks** within the framework of the Lisbon Strategy at the 2008 Spring European Council. **Future trends in networks and the Internet**, as well as foreseeable obstacles to their development, will also be addressed in 2007 in the reflection process paving the way for a mid-term review of i2010 in 2008.

In March 2007, the Commission adopted a consumer policy strategy for the years 2007-2013[15]. It stresses that a lack of consumer confidence, together with regulatory obstacles, are still hampering a fully fledged internal market, and aims at tackling the challenges of the digital environment in order to ensure that consumers are able to shop from anywhere in the EU, from corner-shop to website, confident that they are equally effectively protected. A **major consultation exercise on EU consumer rules** was launched early in 2007 with the adoption of a Commission Green Paper[16] reviewing existing legislation. One of the purposes of this initiative is to adapt the existing consumer rules to the digital world. With the help of the feedback from the Green Paper, the Commission aims to boost consumer confidence in the Single Market by developing a single, simple set of rules that will enable consumers to know their rights, make sound choices and enjoy adequate protection if things go wrong. Proposals for specific initiatives — regulatory or otherwise — to remedy existing problems and shortcomings will be brought forward after the consultation. Furthermore, by eliminating the current minimal harmonisation clauses in this field, the positive effects on the internal market of the eCommerce Directive will be consolidated.

Universal Service, an important element of the e-communications regulatory framework, aims to grant an affordable and high-quality service to all, regardless of geographical location, and has provided the possibility for everyone to get a phone or Internet connection at a reasonable price. In this sense, it is an enabler of ICT usage. There is a need to review the principle and the scope of Universal Service for electronic communication in the 21st century, and the Commission will publish a Green Paper on this issue at the end of 2007 and launch a wide-ranging debate.

2.2. SMEs and entrepreneurship

> *Key Recommendations of Task Force:* **More training in entrepreneurship skills, and raise firms' awareness of the benefits of ICTs.**

Promoting entrepreneurship and skills is one of the five specific action lines of the Commission' SME policy[17]. The Commission recognises the increasingly important role of

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[14]   See http://ec.europa.eu/idabc/en/document/2319/5644
[15]   "EU Consumer Policy Strategy 2007-2013", COM(2007) 99, available via:
         http://ec.europa.eu/consumers/overview/cons_policy/index_en.htm
[16]   Green Paper on the review of the consumer *acquis*, COM(2007) 744, 08.02.2007
[17]   Laid down in "Implementing the Community Lisbon Programme: Modern SME Policy for Growth and Employment", COM (2005), 10.11.2005

entrepreneurship education and, more specifically, the key role of schools and universities in fostering an entrepreneurial mindset. Furthermore, the Spring European Summit in March 2006 invited Member States to encourage entrepreneurship, including via entrepreneurship education and training. The Communication "Fostering entrepreneurial mindsets through education and learning"[18] has contributed towards formulating **more systematic approaches to entrepreneurship education** and enhancing the role of education and training in creating a more entrepreneurial culture in Europe. It brings together examples of good practice, focuses on supportive policy measures, and proposes a set of recommendations for action that could be taken at national or regional level.

Many information society actions are supported by the structural funds, which include components on e-business and SMEs.

The **eBSN (European eBusiness Support Network)**[19] provides a policy coordination platform for national and regional initiatives promoting the uptake of eBusiness practices by SMEs, and fosters the exchange of information and case-studies on eBusiness-related issues. The eBSN has surveyed national awareness-raising campaigns and confirmed a policy shift in all Member States away from sponsoring and co-financing ICT investment and internet connectivity and towards coaching SMEs to innovate through using ICTs. More recently, the eBSN has observed a further shift towards sector-specific policies[20], i.e., policies supporting SMEs in adopting ICTs taking into account their particular business environment (business partners, suppliers, customers, etc.). The eBSN will continue to bring Member State representatives together in order to learn and gain inspiration from each other and help stimulate a more dynamic approach to awareness-raising.

2.3.   Single regulatory environment

Key Recommendations of Task Force: **Deliver a regulatory environment that facilitates convergence and an inclusive information society, foster the creation of an internal market for knowledge-intensive services, and review copyright levies.**

Convergence is one of the three priorities of the i2010 initiative "Creating an Information Space". This initiative foresees an adjustment in legislation involving the review of the electronic communications regulatory framework and the adoption of the Directive on Audiovisual and Media Services, and involves a number of initiatives to encourage the emergence of new audiovisual services, such as the Charter on Film Online and forthcoming communications on online content and mobile broadcasting. Convergence involves other challenges in the area of IPR, security and consumer protection[21]. These issues will be addressed in the reflection process leading to the mid-term review of the i2010 strategy in 2008.

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[18]   COM(2006) 33, 13.02.2006

[19]   See the eBSN portal: http://ec.europa.eu/enterprise/e-bsn/index_en.html

[20]   Observations drawn from recent eBSN workshops and the eBSN database of national projects

[21]   http://ec.europa.eu/information_society/eeurope/i2010/docs/
           i2010_high_level_group/i2010_hlg_convergence_paper_final.pdf

The i2010 mid-term review, due in 2008, will address the internal market dimension of ICT services, including knowledge-intensive ones, and is synchronised with the **overall review of the Single Market strategy**[22]. This latter review will result in a **report on the Single Market in the 21st century**, including concrete proposals for future action, to be presented by the Commission to the European Council in 2007.

Regarding **copyright levies**, in December 2006, after extensive consultations[23] involving stakeholders and the Member States, the Commission decided that more reflection is required on this complex issue.

2.4. Intellectual property

Key Recommendations of Task Force: **Given the diversity of IPR strategies in the ICT sector, wide consultation should take place before changing EU legislation. Also, limit criminalisation for IPR infringement to wilful counterfeiting of trademarks, copyright infringement and design piracy. Promote the adoption of the London Protocol, and reduce patent costs.**

The Commission has proposed a directive[24] on criminal measures to ensure the enforcement of IPRs. This proposal does not contain a limitation only to trademarks, copyright and design rights. The European Parliament and the Council are currently discussing the Commission's proposal.

Following the conclusions of the December 2006 European Council and the broad consultation of interested parties carried out in 2006, the Commission adopted, in April 2007, a Communication on **enhancing the patent system in Europe**[25]. While reducing patent costs is one of the main objectives, it should be borne in mind that the ratification of the London Agreement is in the hands of the Member States. Furthermore, in 2008 the Commission intends to present a comprehensive IPR strategy in order to provide the EU with an appropriate framework for encouraging and protecting innovation.

2.5. Innovation, research, investment and finance

Key Recommendations of Task Force: **Exchange best innovation practices, stimulate research through tax credit schemes, support collaborative research via European Technology Platforms and Joint Technology Initiatives, support the development of lead markets through public procurement, secure a level playing-field for the European semiconductor industry, create a venture-capital friendly environment, and further reform State aid policy.**

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[22]   See the portal on http://ec.europa.eu/internal_market/strategy/index_en.htm

[23]   Accessible via http://ec.europa.eu/internal_market/copyright/levy_reform/index_en.htm

[24]   Amended proposal for a Directive of the European Parliament and of the Council on criminal measures aimed at ensuring the enforcement of intellectual property rights, COM(2006) 168, 26.04.2006

[25]   COM(2007) 165, 03.04.2007

The Member States have earmarked €9.1 billion for funding ICT research during the Seventh Framework Programme (FP7), making it the largest research theme in the Cooperation Programme, which is itself the largest specific programme of FP7.

All 31 **European Technology Platforms**[26] have now published a "Vision" document, and the majority have also completed or developed an advanced draft of their Strategic Research Agenda (SRA). These platforms are now preparing to move to the implementation stage. The Commission has taken account of the outputs of their work when developing its research policy, notably when drawing up FP7. This has been a valuable way of ensuring their industrial relevance. Analysis shows that 15 SRAs will be covered under a single FP7 research theme (demonstrating the close cooperation with the formulation of FP7), and that the remaining 16 SRAs will address several research themes. The first **Joint Technology Initiative,** ARTEMIS[27], covering R&D in embedded computing systems, is expected to start during the first half of 2007, with ENIAC[28] (European Nanoelectronics Advisory Council) following after.

The Commission has recently launched **PRO INNO Europe**[29], which brings together over 200 innovation policy-makers and stakeholders from 33 countries, including the Member States It combines analysis and benchmarking of national and regional innovation policy performance with support for cooperation between national and regional innovation programmes and incentives for joint actions involving innovation agencies and innovation stakeholders, such as transnational cooperation in cluster policy development[30].

In a its recent Communication "Towards a more effective use of tax incentives in favour of R&D"[31], the Commission outlines the existing legal framework (with particular reference to compatibility with fundamental freedoms and the recently amended **State aid rules for research, development and innovation**[32]**)**, and encourages Member States to improve the use and coordination of tax incentives with respect to R&D activities. The Communication also provides guidance on tax treatment, notably with respect to large-scale transnational R&D projects, the growth of young innovative enterprises, cross-border mobility of researchers, VAT and R&D tax treatment in the common consolidated corporate tax base, and philanthropic funding. The Commission will keep the situation under review.

The Commission is conducting a detailed analysis with stakeholders, including consultations of the European Technology Platforms and the Europe INNOVA Innovation Panels[33], to identify possible areas where a combination of supply and demand measures could help the **emergence of lead markets**. This is consistent with the broad-based innovation strategy

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26   For a list of European Technology Platforms, see
        http://cordis.europa.eu/technology-platforms/individual_en.html
27   For more details on ARTEMIS, see http://cordis.europa.eu/technology-platforms/individual_en.html
28   For more details on ENIAC, see http://cordis.europa.eu/ist/eniac/home.html
29   See http://www.proinno-europe.eu
30   See http://www.proinno-europe.eu/eca.html
31   COM(2006) 728, 22.11.2006
32   OJ C 323, 30.12.2006, pp. 1-26
33   Sector-based panels of innovation experts, which suggest sector-specific priorities for action and formulate questions and issues to be tackled, are a central part the Europe INNOVA initiative

outlined in 2006[34]. Based on the outcome, the Commission will prepare a policy paper in the second half of 2007.

The semiconductor industry is clearly of strategic importance for the EU. As for all branches of European industry, the establishment of a level playing-field worldwide remains the overall objective. **Improving framework conditions in order to stimulate more investment in R&D and develop high-level skills is also of key importance.**

The recently adopted **Community framework for State aid for research and development and innovation**[35] defines several categories of aid for fundamental research, industrial research and experimental development. The allowable aid intensity for industrial research is a maximum 50%.

In its June 2006 Communication "Financing SME Growth — Adding European Value"[36], the Commission unveiled a set of initiatives to **help SMEs get easier access to finance for start-ups and growth**. It includes measures to generate more risk capital investments, develop bank finance for innovation, and make existing financing systems more SME friendly. As a follow-up, the Commission has established expert groups on **removing obstacles to cross-border investment by venture capital funds**[37], on **seed finance**, and on **good practices in risk capital investment at regional level**. The new **Competitiveness and Innovation framework Programme (CIP)**[38] will provide further incentives for private equity investors to invest in firms with growth potential, with the European Investment Fund (EIF) operating or helping to operate **several financial instruments for SMEs** on behalf of the Commission: the High-Growth and Innovative SME facility (GIF), the SME Guarantee facility (SMEG), and the Capacity-Building Scheme (CBS). In cooperation with the European Investment bank (EIB), the Commission will launch a **Risk-Sharing Finance Facility (RSFF)**[39] to support investment in high-risk RTD projects through loans and guarantees, with the EU contributing up to €1 billion from the Seventh Framework Programme (FP7) and a matching allocation from EIB.

2.6. Standards and interoperability

Key Recommendations of Task Force: **As industry is primarily responsible for technical interoperability, continue support for efforts to address legal and semantic interoperability, promote effective conformance systems, and develop procurement policies that promote interoperability.**

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[34] COM(2006) 502, Putting knowledge into practice: A broad-based innovation strategy for the EU.

[35] OJ C 323, 30.12.2006, pp. 1-26

[36] COM(2006) 349, 29.06.2006

[37] The main aim of this group is to identify, for each participating country, the regulatory framework affecting domiciled and non-domiciled venture capital funds, and in cases where existing regulations hinder cross-border activities of venture capital funds, to find ways to overcome these obstacles. See http://ec.europa.eu/enterprise/library/enterprise-europe/news-updates/2006/2006-11-29.htm

[38] CIP: http://ec.europa.eu/enterprise/enterprise_policy/cip/index_en.htm

[39] See http://www.eib.org/site/index.asp?designation=rsff

The European Standardisation Organisations (ESOs) have developed and continue to develop **guidelines to help ensure that interoperability is taken into account when preparing standards**. Some standards are currently being updated in order to increase their interoperability features. In terms of **policy priorities**, interoperability is already at the centre of standardisation objectives, and is considered as a critical issue to be closely monitored under the forthcoming **review of ICT standardisation policy**. Various specific standardisation actions are addressing interoperability issues in specific domains such as eHealth[40], the Single European Payment Area (SEPA), e-invoicing, etc. In addition, in 2006 the Commission launched a **study**[41] to prepare recommendations to help ensure the EU's standardisation policy for the ICT sector matches the changes to the sector brought about by liberalisation, globalisation and convergence.

The ICT theme in FP7 includes **pre-normative and co-normative research relevant to improving interoperability and the quality of standards and their implementation.** Industry leads most pre-normative research activities. The FP7 ICT work-programme already includes actions aiming at improving cooperation in the development of standards and interoperable solutions.

The work-programmes of the European Standards Organisations (ESOs) focus on **technical interoperability**, especially within ETSI, while **semantic interoperability** has been integrated in the work-programmes of sectoral standardisation groups such as eHealth[42] and eBIF[43]. Other aspects of interoperability — legal aspects, for example — are not within their remit, though some of those are covered in FP7's ICT theme work-programme. As a starting point for identifying the **key enablers of interoperability**, the ESOs' work-programmes include activities on identifying problems and requirements. The overall ICT interoperability framework will be examined under the "internal market" heading of the i2010 mid-term review. Experience in implementing the legislation governing the free movement of goods has shown that some risk of distortion to competition exists because practices in designating and accrediting **conformity assessment bodies and systems** by national authorities vary widely. For this reason, and as part of the Commission's proposal for a new internal market package for goods[44], the Commission recently adopted a proposal for a Regulation[45] introducing strengthened rules on market surveillance.

The **eProcurement Action Plan**[46] has interoperability as an essential requirement, and the **eGovernment Action Plan**[47] has explicit targets in this respect. Studies and consultations are

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[40]   The i2010 eHealth sub-group is currently discussing a Commission Recommendation addressing guidelines and good practices in the field of interoperability for electronic health records and cards.

[41]   "EU study on the specific policy needs for ICT standardisation", http://www.ictstandardisation.eu

[42]   CEN's TC 251

[43]   CEN's e-Business Interoperability Forum.

[44]   For details, see http://ec.europa.eu/enterprise/regulation/internal_market_package/index_en.htm

[45]   Proposal for a Regulation of the European Parliament and of the Council setting out the requirements for accreditation and market surveillance relating to the marketing of products, COM(2007) 37, 14.02.2007

[46]   Action plan for the implementation of the legal framework for electronic public procurement, COM(2004) 841, 13.12.2004

[47]   COM(2006) 173, 25.04.2006

underway for the revision of the **European interoperability framework for pan-European eGovernment services**[48], and proposals for a revision will be made in due course.

2.7. Skills and employability

Key Recommendations of Task Force: **As growing e-skills gaps limit innovation and ICT uptake, increase investment in teachers' professional development and support mechanisms, increase collaboration between industry, governments, employers and education institutions, and continue efforts in incorporating entrepreneurship into curricula.**

Education, training and support actions are mainly the responsibility of the Member States. The Commission will support such initiatives by organising studies, events, cooperation projects and exchanges of best practice via existing EU programmes, and notably under the new **Lifelong Learning Programme**[49]. Support will cover a broad range of skills for employability, ranging from e-skills and entrepreneurship[50] to communication skills and teamwork and problem-solving skills.

Moreover, the Commission will take the recommendations of the Task Force and the declaration of the recent European e-Skills Conference[51] into account when preparing the **Communication on a long-term e-skills strategy planned for adoption in 2007**.

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[48]   See http://ec.europa.eu/idabc/en/document/2319/5644
[49]   See http://ec.europa.eu/education/programmes/newprog/index_en.html
[50]   The Commission has recently presented an "Oslo Agenda for Entrepreneurship Education in Europe" as part of its drive to promote entrepreneurial mindsets in society. See:
http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/index.htm
[51]   For the Conference Declaration, see
http://eskills.cedefop.europa.eu/conference2006/Thessaloniki_Declaration_2006.pdf

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TECHNICAL ANNEX

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CONTENTS OF TECHNICAL ANNEX

1. INTRODUCTION

The Task Force grouped its recommendations[1] under the headings of ICT uptake, SMEs and entrepreneurship, single regulatory environment, intellectual property, innovation, investment and finance, standards, and skills and employability. Each recommendation is reproduced below and is followed by a brief description of what the Commission is doing in terms of actions underway, planned or already undertaken.

2. RECOMMENDATIONS AND FOLLOW-UP

2.1. ICT Uptake

Task Force Recommendation 1: Ensure a more flexible production environment by: implementing a package of reform measures including liberalisation of product, service and financial markets; fostering entrepreneurship and experimentation with low barriers to entry and exit enabling firms to experiment and test new business models; and promoting greater adaptability of firms and improve adaptability of the workforce through strategies to secure access to education and lifelong learning, in particular e-skills training and workforce development while adapting overly strict employment legislation that impacts firms' abilities to respond quickly to changing market conditions.

The revised Lisbon Strategy for Growth and Jobs provides an all-encompassing economic reform agenda, and its micro-economic pillar focuses on creating a business-friendly environment. In February 2007, the Commission proposed a broad package of measures[2] to help ensure a smoother functioning of the **internal market for goods**. This will make it easier for companies, particularly for SMEs, to market products in the EU, while assuring high levels of quality and safety. For industrial goods already subject to EU legislation, it is suggested to establish a system of market surveillance that builds on the existing system for consumer products. Furthermore, cooperation between national accreditation bodies should be reinforced, and new rules to enhance confidence and trust in the CE mark are proposed.

The transposition by the Member States of the **Services Directive**[3], adopted in December 2006, will remove discriminatory and unjustified barriers, cut red tape, and modernise and simplify the legal and administrative framework. The Directive aims to eliminate obstacles to trade in services and thus allow the development of cross-border operations, and is intended to improve the competitiveness not just of service enterprises, but also of European industry as a whole. An essential element of the administrative simplification is the obligation for Member

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[1]　For the full report of the Task-Force, a list of members and details of working arrangements, see http://ec.europa.eu/enterprise/ict/taskforce.htm

[2]　See press-release IP/07/181 of 14.02.2007. The package notably includes "Proposal for a Regulation laying down procedures relating to the application of certain national technical rules to products lawfully marketed in another Member State", COM(2007) 36, 14.02.2007

[3]　Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market, OJ L 376, 27.12.2006, p. 36–68

States to allow service providers to complete all formalities and procedures relating to the access to and exercise of a service activity at a distance and by electronic means. The Directive also improves administrative cooperation between Member States and provides for a tool (the IMI, or Internal Market Information system) for fast, secure data exchange between European authorities, allowing effective communication despite barriers due to different languages and administrative structures. The Services Directive will have to be transposed by Member States by the end of 2009, and the Commission will support and assist them in the implementation process. The Directive complements the Internal Market regulatory framework for information society services that was established by the eCommerce Directive[4].

Based on the completion in 2005 of the legislative phase of an action plan[5] aimed at developing a true European-wide market in **financial services,** the Commission is now implementing a new strategy[6] to deepen financial integration and deliver further benefits to industry and consumers alike. A more developed Single Market in financial services will not only provide consumers with a wider choice of financial products, but also make it easier and cheaper for companies to borrow money, bringing down the cost of capital, goods and services.

The **European Network of Living Labs**[7], with 20 members from 15 EU countries, launched in November 2006, provides a platform where firms, public authorities and citizens can work together on developing and testing new technologies, business models and services in real-life contexts. Such research infrastructure will support the involvement of users and citizens in innovation processes throughout Europe.

Also in November 2006, the Commission launched a broad **public debate on reviewing labour law and its adaptation to the modern world of work**. A green paper[8] asks Member States, social partners and other stakeholders how labour law at EU and national level can help the job market become more flexible while maximising security for workers (the "flexicurity" approach). The consultation will run over a period of four months and its contributions will feed into in the upcoming Commission Communication on flexicurity later this year.

Projects on e-skills training will be supported by the EU's Lifelong Learning (LLL), Competitiveness & Innovation (CIP) and Framework (FP7) programmes, which were launched at the beginning of 2007.

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[4]   Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market.

[5]   The Financial Services Action Plan (FSAP), http://ec.europa.eu/internal_market/finances/actionplan/index_en.htm

[6]   Financial Services Policy 2005-2010 (White Paper), COM(2005) 629, 05.12.2005

[7]   http://www.cdt.ltu.se/~zcorelabs

[8]   Modernising labour law to meet the challenges of the 21st century (Green Paper), COM(2006) 708, 22.11.2006

> ***Task Force Recommendation 2:*** Closely follow and support the development of next generation networks and services at the highest policy level. The conditions to achieve the objectives will continue to be discussed in the context of the review of the EU regulatory framework for eCommunications services. Investment in the roll-out of new broadband infrastructure and networks must remain market driven. The use of public funds to bridge the digital gap should be limited to those cases where private investment is not economically viable and under clear conditions to avoid distortion of competition.

Policy support for the development of next-generation networks and services is primarily assured through the **ongoing review of the regulatory framework for electronic communications**[9], as well as through other measures in the **first pillar of the i2010 initiative**[10], which aims to create a Single European Information Space by combining regulatory and other instruments at the Commission's disposal to create a modern, market-oriented regulatory framework for the digital economy.

In addition, the December 2006 European Council pledged to **review the challenges facing and posed by the next generation of the Internet and networks** within the framework of the Lisbon Strategy at the 2008 Spring European Council. **Future trends in networks and the Internet**, as well as foreseeable obstacles to their development, will also be addressed in 2007 in the reflection process paving the way for a mid-term review of i2010 in 2008.

Regarding investment, the Commission encourages the deployment of broadband in remote and rural areas[11]. Public funding can be used if compliant with **State aid rules**. Guidelines on the use of Structural Funds in respect of competition rules are available[12]. A Commission-sponsored conference[13] in May 2007 will follow up this issue, amongst others (see follow-up to Recommendation 3, below).

> ***Task Force Recommendation 3:*** Consumer demand and skills should be increased by: encouraging public administrations to make eGovernment services widely available in order to stimulate citizens and businesses to embrace broadband and to commit themselves to specify a date by when all relations with citizens could be carried out by electronic means; organising campaigns to raise awareness among end users of the benefits that broadband can bring to their everyday life; making ICT more affordable and accessible to all people including those with low incomes or special needs; implementing programmes (such as tax incentives) to promote the purchase of broadband enabled PCs and training packages; setting an objective of 100% European schools connected to broadband Internet.

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[9]   See http://ec.europa.eu/information_society/policy/ecomm/tomorrow/index_en.htm.
        Legislative proposals will be tabled by the end of 2007.
[10]   http://ec.europa.eu/information_society/eeurope/i2010/single_infor_space/index_en.htm
[11]   http://ec.europa.eu/information_society/eeurope/i2010/docs/
        digital_divide/communication/com_bridging_bb_gap_2006_en.pdf
[12]   Guidelines on criteria and modalities of implementation of structural funds in support of electronic communications, SEC(2003) 895, 28.07.2003
[13]   See http://ec.europa.eu/information_society/events/broadband_gap_2007/index_en.htm

Widening the availability of eGovernment services has been a key priority under the two eEurope Action Plans and is also one of i2010's, in particular through the eGovernment Action Plan (see below) and discussions with Member States in the i2010 High-Level Group. Furthermore, the Commission has been measuring the availability, efficiency and user-centeredness of eGovernment services in an annual survey since 2001, and has determined that there has been steady, constant growth in the availability and sophistication of the services offered online[14]. Eurostat also measures the take-up of eGovernment services by households and businesses in its EU surveys of ICT usage[15]. In April 2006, the Commission adopted an **eGovernment Action Plan**[16], which sets ambitious targets for the development of electronic procurement, electronic identity management and electronic documents in order to facilitate the provision of many more government services online.

The Commission's 2006 Communication[17] "Bridging the broadband gap" aimed to **raise awareness of the potential benefits of broadband**. As a follow-up, in May 2007, Commissioners Reding, Fischer Boel, Hübner and Kroes will launch a major conference and exhibition on "Bridging the broadband gap" to investigate how the strategic use of ICT can support regional and local development, ease infrastructure and geographical handicaps and make these areas more attractive to business and individuals alike[18].

Regarding the **affordability and accessibility of ICT**, in 2006[19] the Member States, together with other European countries, set targets and committed themselves to address the needs of older people, reduce geographical digital divides, enhance accessibility to electronic government and other online services, improve digital literacy, and promote cultural diversity. A Commission Communication on eAccessibility in 2005[20] had previously defined a set of actions at EU level and opened the debate on the need to legislate in this area. A major initiative on eInclusion is planned for 2008.

Establishing incentive schemes for **purchasing broadband-enabled PCs** and **ICT training packages** is the prerogative of the Member States, and many national broadband strategies and Lisbon National Reform Programmes for Growth and Jobs make reference to such measures.

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[14] See, for example, the 2006 e-Government Benchmarking Report:
http://ec.europa.eu/information_society/eeurope/i2010/docs/benchmarking/online_availability_2006.pdf

[15] Accessible via the EUROSTAT portal http://ec.europa.eu/eurostat. eGovernment indicators are linked from the data navigation tree reached from the "Science and technology" theme and then under "Long-term indicators / Information society".

[16] i2010 eGovernment Action Plan: accelerating eGovernment in Europe for the benefit of all, COM(2006) 173, 25.04.2006

[17] COM(2006) 129, 20.03.2006

[18] See http://ec.europa.eu/information_society/events/broadband_gap_2007/index_en.htm

[19] Riga Ministerial Declaration, 11 June 2006

[20] eAccessibility, COM(2005) 425, 13.09.2005

The issue of **connecting schools to the internet** has been widely addressed by national broadband strategies. Statistics refer to 2006 and confirm[21] the wide and rising availability of broadband connections in schools, with the exception of a small number of Member States.

Task Force Recommendation 4: Adopt a European public procurement policy in key areas such as health, mobility, and security. A significant amount of European public procurement should be dedicated to innovative products and services and to underpinning R&D in the ICT domain while fully incorporating SMEs in government procurement programmes. The ability to specify and purchase these innovations requires "intelligent customers" with technical capability and a shared forward vision with their suppliers.

The Commission has previously highlighted the great potential of public procurement for stimulating demand for new technologies[22]. In February 2007 the Commission services organised a multistakeholder workshop on facilitating SMEs' access to public procurement[23] and published a guide on promoting innovation through public procurement[24]. **A Communication promoting pre-commercial procurement is planned during 2007.** It will outline the opportunities for pre-commercial procurement in Europe available under existing legislation but currently under-exploited. It will also develop the concept, drawing on the experience of other regions, and propose ways of implementing pre-commercial procurement at EU level.

Task Force Recommendation 5: Public authorities should take a simple and direct measure in the short-term by working with stakeholders on possible measures that could readily facilitate that new housing and new business sites in Europe have access to innovative broadband technologies, applications, and services.

The Commission encourages public authorities to take appropriate measures in line with State aid rules (see follow-up to Recommendation 2 in section 2.1, ICT uptake, above).

Task Force Recommendation 6: Foster consumer confidence by developing a charter of consumer rights in the digital environment including the development of labelling schemes designed to inform consumers about playability features in Digital Rights Management (DRM) protected content.

In March 2007, the Commission adopted a consumer policy strategy for the years 2007-2013[25]. It stresses that a lack of consumer confidence, together with regulatory obstacles, are

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[21]   *Benchmarking Access and Use of ICT in European Schools 2006*, European Commission: http://ec.europa.eu/information_society/eeurope/i2010/docs/studies/final_report_3.pdf

[22]   For example, in "Putting knowledge into practice: A broad-based innovation strategy for the EU", COM(2006) 502, 13.09.2006

[23]   A "compendium of good practices", based on workshop contributions and a survey carried out in 2006 / 2007, will be issued during 2007.

[24]   "Guide on dealing with innovative solutions in public procurement: 10 elements of good practice", SEC(2007) 280, http://www.proinno-europe.eu/doc/procurement_manuscript.pdf

[25]   "EU Consumer Policy Strategy 2007-2013", COM(2007) 99, available via: http://ec.europa.eu/consumers/overview/cons_policy/index_en.htm

still hampering a fully fledged internal market, and aims at tackling the challenges of the digital environment in order to ensure that consumers are able to shop from anywhere in the EU, from corner-shop to website, confident that they are equally effectively protected. A **major consultation exercise on EU consumer rules** was launched early in 2007 with the adoption of a Commission Green Paper[26] reviewing existing legislation. One of the purposes of this initiative is to adapt the existing consumer rules to the digital world. With the help of the feedback from the Green Paper, the Commission aims to boost consumer confidence in the Single Market by developing a single, simple set of rules that will enable consumers to know their rights, make sound choices and enjoy adequate protection if things go wrong. Proposals for specific initiatives — regulatory or otherwise — to remedy existing problems and shortcomings will be brought forward after the consultation. Furthermore, by eliminating the current minimal harmonisation clauses in this field, the positive effects on the internal market of the eCommerce Directive will be consolidated[27].

Universal Service is an important element of the e-communications regulatory framework. It aims to grant an affordable and high-quality service to everyone, regardless of their geographical location. So far, it has provided the possibility for everyone to get a phone or Internet connection at an affordable price. In this sense, it may also be seen as an enabler of ICT usage. There is a need to review the principle and the scope of Universal Service for electronic communication in the 21st century. For this reason, the Commission will publish a Green Paper on this issue at the end of 2007, which will in turn launch a wide-ranging debate.

2.2. SMEs and entrepreneurship

> ***Task Force Recommendation 1:*** Entrepreneurship should be encouraged throughout the EU by ensuring that training on entrepreneurial skills are taught to students in the technical and scientific fields and that training in entrepreneurship skills is provided to start-up ICT SMEs. Business Angels type of financing should be supported by tax incentives as it helps "would-be entrepreneurs" with the support of experienced entrepreneurs.

Promoting entrepreneurship and skills is one of the five specific action lines of the Commission' SME policy[28]. The Commission recognises the increasingly important role of entrepreneurship education and, more specifically, the key role of schools and universities in fostering an entrepreneurial mindset. Furthermore, the Spring European Summit in March 2006 invited Member States to encourage entrepreneurship, including through entrepreneurship education and training. The Communication "Fostering entrepreneurial mindsets through education and learning"[29] has contributed towards formulating **more systematic approaches to entrepreneurship education** and enhancing the role of education and training in creating a more entrepreneurial culture in Europe. It brings together examples

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[26] Green Paper on the review of the consumer *acquis*, COM(2007) 744, 08.02.2007
[27] The Directive was obliged to have a derogation to its "Internal Market" clause due to the presence of minimal harmonisation clauses in the current consumer protection legislation.
[28] Laid down in "Implementing the Community Lisbon Programme: Modern SME Policy for Growth and Employment", COM (2005), 10.11.2005
[29] COM(2006) 33, 13.02.2006

of good practice, focuses on supportive policy measures, and proposes a set of recommendations for action that could be taken at national or regional level. The Commission has recently presented an "Oslo Agenda for Entrepreneurship Education in Europe" as part of its drive to promote entrepreneurial mindsets in society.

In addition, the Commission launched the "**Mini-companies in secondary education initiative**"[30], which was developed with the Member States. The new EU **Lifelong Learning Programme**[31] will support integrating an entrepreneurial mindset into education programmes across Europe.

A more entrepreneurial attitude to financing and financing mechanisms is clearly needed, and the Commission encourages Member States to develop **tax incentive schemes** that support the role of business angels and are compatible with the Community framework for State aid for research, development and innovation. For more on **tax incentives**, see the follow-up to recommendation 2 in section 2.5, Innovation, below.

Task Force Recommendation 2: SMEs should be encouraged to take-up and use ICTs, for example, through awareness raising programmes, conducted by Member State government bodies as well as the European institutions in collaboration with chambers of commerce, industry, and trade associations. Further steps can include the provision of financial incentives like consultancy vouchers, and the creation of one-stop shops to provide information on the benefits of ICT usage and case studies.

The **eBSN (European eBusiness Support Network)**[32] provides a policy coordination platform for national and regional initiatives promoting the uptake of eBusiness practices by SMEs and fosters the exchange of information and case-studies on eBusiness-related issues. The eBSN has surveyed national awareness-raising campaigns and confirmed a policy shift in all Member States away from sponsoring and co-financing ICT investment and internet connectivity and towards coaching SMEs to innovate through using ICTs. More recently, the eBSN has observed a further shift towards sector-specific policies[33], i.e., policies supporting SMEs in adopting ICTs taking into account their particular business environment (business partners, suppliers, customers, etc.). The eBSN will continue to bring Member State representatives together in order to learn and gain inspiration from each and help stimulate a more dynamic approach to awareness-raising.

The Commission encourages appropriate **financial incentives** that are compatible with the Community framework for State aid for research and development and innovation (see the follow-up to recommendation 2 in section 2.5, Innovation, below). Many information society actions are supported by the structural funds, which include components on e-business and SMEs.

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[30]   See
        http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/minicomp.htm
[31]   See http://ec.europa.eu/education/programmes/newprog/index_en.html
[32]   See the eBSN portal: http://ec.europa.eu/enterprise/e-bsn/index_en.html
[33]   Observations drawn from recent eBSN workshops and the eBSN database of national projects.

Regarding a **one-stop shop**, the Commission recently issued a call for proposals[34] that aims to implement a single network providing integrated services in support of business and innovation in Europe. Building on the strengths and achievements of the current Euro Info Centres and Innovation Relay Centres, the objective of the new network will be to enhance the competitiveness and innovation capacity of European companies, in particular SMEs.

Task Force Recommendation 3: Member State governments should encourage European ICT SMEs by simplifying public procurement requirements and by making payment and selection procedures more efficient. Some preference should be given to ICT SMEs in public procurement.

The **public procurement Directives**[35] adopted in 2004 aim at increasing procurement opportunities and transparency, reducing red tape, bringing transaction costs down and reducing entry barriers to the market, as well as ensuring that contracting authorities and bidders can save time and money by using new technology to manage the tendering process. **If transposed correctly and effectively by the Member States,** a number of measures enshrined in the new Directives, such as the possibility to use framework agreements or the introduction of e-procurement, could contribute to ensuring SMEs obtain easier and simpler access to public procurement contracts. With this legislative framework in place, **the Commission is concentrating its efforts on the implementation stage.** It strives to encourage Member States to work together, share their experiences and best practices and learn from each other.

The majority of firms awarded a contract where the value is above the procurement thresholds are SMEs. This highlights the fact that **SMEs are well placed to compete by themselves,** and for obvious reasons, SME participation is believed to be even higher with regard to smaller contracts below the thresholds, which constitute the bulk of public contracts. In 2006 the Commission published **guidance on how public authorities should award such smaller contracts fairly**. Although they are not covered by the Directives on public procurement, it is well established that their award should nevertheless comply with the internal market principles of transparency and non-discrimination. The Commission's guidance, which is in the form of an "Interpretative Communication"[36], contains suggestions on how public authorities should comply with these principles, together with examples of innovative ways to award contracts in a modern, transparent and cost-efficient manner. The guidance also applies to certain services not fully covered by the Directives. SMEs, in particular, should benefit from this initiative.

There are many things that Member States could do to encourage ICT and other SMEs to increase their participation in public contracts. It would be helpful, for example, to issue guidance to assist SMEs in drawing up tenders; encourage wider use of prior

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[34]   Call for Proposals ENT/CIP/07/0001, Services in support of business and innovation:
       http://ec.europa.eu/enterprise/funding/grants/themes_2006/eic_irc/calls_prop_2006_eic_irc_d2.htm
[35]   The legislative framework is described on
       http://ec.europa.eu/internal_market/publicprocurement/legislation_en.htm
[36]   C(2006) 3158, 24.07.2006

information notices to give more time to SMEs to prepare tenders; to use multi-supplier procurement techniques such as dynamic purchasing systems and framework agreements; and to divide contracts into lots appropriate for SMEs.

See also the follow-up to Recommendation 4 in section 2.1, ICT take-up, above, and to Recommendation 5 in section 2.6, below.

Task Force Recommendation 4: The framework for fostering the development of Europe-wide electronic signatures and e-Identity should be improved to facilitate more electronic transactions and build confidence in ICT services.

In 2006 the Commission adopted a report[37] on the electronic signatures Directive[38] that identified applications in public services as likely drivers of the market for electronic signatures. A study[39] under the IDABC Programme aims to analyse the interoperability issues involved in the mutual recognition of electronic signatures for eGovernment applications. In parallel, a **study to analyse the standardisation aspects of e-signatures** is underway, with results expected during 2007. Furthermore, a number of initiatives have been launched in the field of eProcurement and identity management under the i2010 eGovernment Action Plan, with roadmaps agreed with the Member States for addressing interoperability requirements by 2010.

2.3. Single regulatory environment

Task Force Recommendation 1: Deliver a regulatory environment in order to benefit from ICT development and digital convergence, which facilitates convergence, improves the European knowledge base, and builds conditions for an inclusive information society in an increasingly competitive global environment.

Convergence is one of the three priorities of the i2010 initiative "Creating an Information Space". This initiative foresees an adjustment in legislation involving the review of the electronic communications regulatory framework and the adoption of the Directive on Audiovisual and Media Services, and involves a number of initiatives to encourage the emergence of new audiovisual services, such as the Charter on Film Online, and forthcoming communications on online content and mobile broadcasting. Convergence involves other challenges in the area of IPR, security and consumer protection[40]. These issues will be addressed in the reflection process leading to the mid-term review of the i2010 strategy in 2008.

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[37] Report on the operation of Directive 1999/93/EC on a Community framework for electronic signatures, COM(2006) 120, 15.03.2006

[38] A Community framework for electronic signatures, Directive 1999/93/EC, 13.12.1999

[39] See http://ec.europa.eu/idabc/en/document/6485/5938

[40] http://ec.europa.eu/information_society/eeurope/i2010/docs/ i2010_high_level_group/i2010_hlg_convergence_paper_final.pdf

> *Task Force Recommendation 2:* In the context of the 2007 Reviews of the Copyright and Consumer Acquis, take the opportunity to review the balance between the interests of the public and that of right holders, and strengthen and clarify consumer rights in the digital environment.

The issue of **balancing the interests of the public and rights-holders** is part of the convergence debate, and the challenges involved have been identified as part of the reflection process referred to in the follow-up to Recommendation 1 above. A Commission Communication on online content[41], foreseen during 2007, will address this issue.

Regarding **consumer rights in the digital environment**, see the follow-up to Recommendation 6 in section 2.1, ICT uptake, above.

> *Task Force Recommendation 3:* Regulatory authorities should ensure competition in ICT markets ensuring consumer welfare and encouraging investments.

The regulatory framework for electronic communications markets is currently under review[42], and the European Commission is closely cooperating with the European Regulators Group for Electronic Communications Networks and Services (ERG[43]) in completing Europe's internal market for electronic communications in regulatory terms. For recent developments in competition policy with a bearing on investment (such as the new State aid framework for R&D and innovation, new principles and guidance for the design of tax incentives for R&D, and new financial instruments for providing risk capital), see the follow-ups to Recommendations 1 and 2 in section 2.5, Innovation, below. Regarding consumer welfare, see the follow-up to Recommendation 6 in section 2.1, ICT uptake, above.

> *Task Force Recommendation 4:* Foster the creation of an Internal Market for knowledge-intensive services beyond the provisions currently discussed in the Services Directive.

The i2010 mid-term review, due in 2008, will address the internal market dimension of ICT services, including knowledge-intensive ones, and is synchronised with the **overall review of the Single Market strategy**[44]. This latter review will result in a **report on the Single Market in the 21st century**, including concrete proposals for future action, to be presented by the Commission to the European Council in 2007.

> *Task Force Recommendation 5:* The establishment of the European Forum on Services in the Internal Market (EFOSIM) is welcomed and the ICT Task Force encourages Directorate-

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[41]   For the state of play, see http://ec.europa.eu/comm/avpolicy/other_actions/content_online/index_en.htm

[42]   See http://ec.europa.eu/information_society/policy/ecomm/tomorrow/index_en.htm

[43]   The ERG brings together the heads of the national regulators for electronic communications from all 27 Member States. The regulators from the accession countries and EFTA states attend as observers. The ERG was established by a decision of the European Commission (2002/627/EC, 29.07.2002).

[44]   See the portal on http://ec.europa.eu/internal_market/strategy/index_en.htm

General Internal Market to continue this effort as a sounding board and forward-looking "think-tank" on the service economy in Europe.

The European Forum on Services in the Internal Market (EFOSIM), which held its first meeting in March 2006, replaced the European Forum on Business-Related Services (EFBRS). Its four working groups are developing reflection papers covering service standards, economic analysis, services statistics and service sector performance.

Task Force Recommendation 6: Lift regulatory barriers to the delivery of quality digital content through new online distribution channels in order to benefit fully from the potential offered by electronic business.

A Commission Communication on online content[45], foreseen during 2007, will address this issue.

Task Force Recommendation 7: Create a tax environment to support the service sector. Where appropriate, an R&D tax credit that includes R&D in services and business processes should be implemented. The EU must ensure that tax laws do not hinder the development of an efficient domestic service sector or discourage service exports.

See follow-ups to Recommendations 2 and 6 in section 2.5, Innovation, below.

Task Force Recommendation 8: Secure an ambitious outcome in the WTO Doha Round, including significant market-opening commitments in services from as many countries as possible.

During 2007, a key goal of the Commission is to overcome the obstacles to an agreement in the Doha Development Round. On services, the main objective is to consolidate existing levels of liberalisation and create a degree of new market access in a number of key sectors.

Task Force Recommendation 9: Support the European Commission in its initiative to reform the copyright levies system in the EU and issue additional guidance for Member States on the determination and application of fair compensation for private copying in the digital environment to address the ICT uptake barrier they create, particularly given the fact that levies can create significant trade distortions and obstruct the free flow of goods within the Community. While the Community has established rules in this area in recent copyright legislation (Directive 2001/29/EC), these mandates have not been implemented at a national level and further guidance is needed.

In December 2006, after extensive consultations[46] involving stakeholders and the Member States, the Commission decided that more reflection is required on this complex issue.

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[45] For the state of play, see http://ec.europa.eu/comm/avpolicy/other_actions/content_online/index_en.htm
[46] Accessible via http://ec.europa.eu/internal_market/copyright/levy_reform/index_en.htm

2.4. Intellectual property

Task Force Recommendation 1: Criminalization of Patent Infringements – IPR Directive. Ensure that the scope of any Directive on criminal sanctions for IPR infringements should be limited to wilful trademark counterfeiting, copyright, or design piracy.

The Commission has proposed a directive[47] on criminal measures to ensure the enforcement of IPRs. This proposal does not contain a limitation to only trademarks, copyrights and designs. The proposal is currently under discussion by the European Parliament and the Council.

Task Force Recommendation 2: EU Patent Reform: Enable enhanced access – for all players – to the European patent system by the accelerated implementation of the London protocol and careful progress on the European patent litigation agreement. Create a new, specialised European Court system for patent validity and patent infringement cases, which would develop a uniform interpretation of patent issues and replace the diverging national case laws, and especially by making some careful progress on the European patent litigation agreement. The costs of patents, and in particular the translation costs, should be reduced substantially by promoting the adoption of the London protocol and the quality of the patent system should be improved.

Following the conclusions of the December 2006 European Council and the broad consultation of interested parties carried out in 2006, the Commission adopted, in April 2007, a Communication on **enhancing the patent system in Europe**[48]. While reducing patent costs is one of the main objectives, it should be borne in mind that the ratification of the London Agreement is in the hands of the Member States. The Communication also addresses patent quality issues. Regarding jurisdictional arrangements, the Communication favours the creation of a unified and specialised patent judiciary with litigation on European patents and future Community patents. Such a judicial system could be inspired by the EPLA model but could also allow for harmonised integration in the Community jurisdiction. Furthermore, in 2008 the Commission intends to present a comprehensive IPR strategy in order to provide the EU with an appropriate legal framework for encouraging and protecting innovation.

Task Force Recommendation 3: Fighting counterfeiting and raising awareness on the value of IPR. Continue to improve and extend enforcement of existing customs and border rules while ensuring that public authorities have adequate resources and are fully committed to fighting piracy and counterfeiting. In doing so, work toward a meaningful implementation of EU and international enforcement obligations, develop collaboration with industry to tackle specific cases of counterfeiting and piracy, and continue efforts to address piracy and counterfeiting problems in third countries. Raise public awareness for the value of IP and the scope and impact of piracy and counterfeiting, in particular for SMEs, the media and policy

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[47] Amended proposal for a Directive of the European Parliament and of the Council on criminal measures aimed at ensuring the enforcement of intellectual property rights, COM(2006) 168, 26.04.2006

[48] COM(2007) 165, 03.04.2007

makers, by encouraging the creation of an ICT industry platform that supports and pursues the above objectives.

The Commission continues to work to ensure that third countries back the commitments undertaken, at both multilateral and bilateral level, to protect and enforce IPR, by a willingness to tackle the problem at their borders, in their courts and in their streets. The Commission's objective is to guarantee that EU rights-holders are protected against the misappropriation of their property and that EU citizens in general are protected against the dangers of piracy and counterfeiting.

The results of the **IPR Enforcement Survey**[49], delivered in October 2006, constitute a valuable tool for businesses, particularly SMEs, by making them aware of the solutions available to protect their intellectual property outside the EU and of the risks they face when dealing with certain third countries. In addition, this detailed assessment by the parties most concerned by the problem was a key element for the Commission in defining a **list of priority countries and regions**[50] on which to focus its activities and resources.

2007 will see further **close cooperation between the EU and the US** in implementing the **Action Strategy to combat piracy and counterfeiting in third countries**[51] launched in 2006, and the Commission services will hold seminars and establish a helpline / helpdesk to support EU companies regarding issues of **registration and the enforcement of IPR in China.**

Reflections are underway on possible initiatives to **raise the awareness of the general public**.

2.5. Innovation

Task Force Recommendation 1: The EC must play a key federating role in fostering better exchanges of "innovation best practices" between Member States and regions. This includes: Any Member State that wishes to replicate innovation best practices in other European regions should be encouraged to do so. In the long term, the EC could consider a "light" and flexible European Innovation Agency, which would have the main objective of making regional best practices known, and federating stronger links between regions, with the overall objective of pushing large-scale European projects with global leadership ambitions in key ICT sectors (eHealth, eMedia, Mobile TV…). The EU should push existing funding mechanisms (cohesion and structural funds, state aid, tax incentives, EIB loans) across European regions for innovation initiatives.

The Commission has recently launched **PRO INNO Europe**[52], which brings together over 200 innovation policy-makers and stakeholders from 33 countries, including the Member

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[49]   For the results of the survey, see
        http://ec.europa.eu/trade/issues/sectoral/intell_property/survey2006_en.htm
[50]   See list at http://ec.europa.eu/trade/issues/sectoral/intell_property/ipr_epc_countries_en.htm
[51]   See Commission press-release IP/07/123, 01.02.2007
[52]   See http://www.proinno-europe.eu

States It combines analysis and benchmarking of national and regional innovation policy performance with support for cooperation between national and regional innovation programmes and incentives for joint actions involving innovation agencies and innovation stakeholders. PRO-INNO complements the sectoral focus of **Europe INNOVA**[53], which is forging links between financing networks and between industrial clusters, including six in the ICT sector. eBSN, the **eBusiness Support Network for SMEs**[54], promotes the uptake of innovative e-business solutions by SMEs (for details, see follow-up to Recommendation 2 in section 2.2, SMEs and entrepreneurship, above).

Regarding an **Agency**, the Commission has taken note of this idea.

On the **regional** front, the recent Communication "Putting knowledge into practice: A broad-based innovation strategy for the EU"[55] covers a number of relevant issues. The EU's **cohesion policy** for 2007-2013[56] will be mobilised in support of regional innovation, with the Commission calling on Member States to earmark a significant proportion of the available €308 billion funds for investment in knowledge and innovation. Regarding **structural funds**, the Commission, European Investment Bank (EIB) and European Investment Fund (EIF) have launched JEREMIE (Joint European Resources for Micro- to-Medium-Sized Enterprises)[57], an initiative to develop financial instruments for providing risk capital for SMEs. The €1.1 billion reserved for the financial instruments of the Competitiveness and Innovation Framework Programme (CIP)[58] will provide increased venture capital investments and loan guarantees for innovative SMEs across the Union. For **tax incentives**, see the follow-up to Recommendation 2 in this section, below. The recently adopted **Community guidelines on State aid to promote risk capital investments in SMEs**[59] and **Community framework for State aid for research and development and innovation**[60] together indicate to Member States how, in conformity with State aid rules, they can provide aid for industrial property rights costs for SMEs, young innovative enterprises, process and organisational innovation in services, innovation advisory services, innovation support services, the loan of highly qualified personnel for SMEs, and innovation clusters. In cooperation with the EIB, the Commission will launch a **Risk-Sharing Finance Facility (RSFF)**[61] to support investment in high-risk RTD projects through loans and guarantees, with the EU contributing up to €1 billion from the Seventh Framework Programme (FP7) and a matching allocation from EIB.

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[53]   See http://www.europe-innova.org
[54]   See http://www.e-bsn.org
[55]   COM(2006) 502
[56]   Described on http://ec.europa.eu/regional_policy/sources/docoffic/2007/osc/index_en.htm
[57]   See http://www.eif.europa.eu/jeremie/
[58]   On the CIP, see http://ec.europa.eu/enterprise/enterprise_policy/cip/index_en.htm
[59]   OJ C 194, 18.08.2006, pp. 2-21
[60]   OJ C 323, 30.12.2006, pp. 1-26
[61]   See http://www.eib.org/site/index.asp?designation=rsff

Task Force Recommendation 2: Ensure that innovation in R&D is rewarded through appropriate means such as tax credit schemes for R&D and support for technology clusters as global poles of competitiveness.

In a its recent Communication "Towards a more effective use of tax incentives in favour of R&D"[62], the Commission sets out **basic principles and good practices for the design of tax incentives for R&D**, and encourages Member States to improve the use and coordination of tax incentives with respect to R&D activities. The Communication also provides guidance on tax treatment, notably with respect to large-scale transnational R&D projects, the growth of young innovative enterprises, cross-border mobility of researchers, and philanthropic funding. The Commission underlines that tax incentive schemes for R&D must be compatible with the **Community framework for State aid for research and development and innovation**[63], adopted in parallel. The Commission will keep the situation under review: currently 15 of the 27 Member States have tax incentives for business research and development in place: Austria, Belgium, Denmark, France, Hungary, Ireland, Italy, Malta, Netherlands, Poland, Czech Republic, Portugal, Slovenia, Spain and UK.

Cluster policy has become an important element of Member States' innovation policies, as reflected in their National Reform Programmes (NRPs). Cluster policies are supported by many Community instruments, and the new generation of European regional policy programmes for 2007-2013 promote an approach based on regional clusters in both urban and rural regions. Four INNO-Net cluster projects funded under PRO INNO Europe[64] together form the **European Cluster Alliance (ECA)**[65], which aims to further promote transnational cooperation in cluster policy development. ECA is supported by the newly established **High-Level Advisory Group on Clusters**[66], which met for the first time in January 2007. The Group has a mandate to steer the preparation of a **European Cluster Memorandum** that will be signed at the **European Cluster Conference** in January 2008, organised by the Swedish government. The Memorandum will define the key objectives for cluster policies in Europe and set out a roadmap for future transnational cooperation.

Task Force Recommendation 3: Prioritize and support effective collaborative R&D partnerships by strengthening European Technology Platforms (eMobility, NEM, NESSI…) that are currently being developed and new Joint Technology Initiatives (Artemis and ENIAC) and ensuring the funding for projects in the upcoming EC Seventh Framework Programme for R&D.

The Member States have earmarked €9.1 billion for funding ICT research during the Seventh Framework Programme (FP7), making it the largest research theme in the Cooperation Programme, which is itself the largest specific programme of FP7.

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[62]   COM(2006) 728, 22.11.2006
[63]   OJ C 323, 30.12.2006, pp. 1-26
[64]   See http://www.proinno-europe.eu
[65]   For details of the ECA and component projects, see http://www.proinno-europe.eu/eca.html
[66]   The Group comprises 20 representatives from politics, business and administration, and is chaired by the French Senator Pierre Laffite, the founder of Sophia-Antipolis.

All 31 **European Technology Platforms**[67] have now published a "Vision" document, and the majority have also completed or developed an advanced draft of their Strategic Research Agenda (SRA). These platforms are now preparing to move to the implementation stage. The Commission has taken account of the outputs of their work when developing its research policy, notably when drawing up the Seventh Framework Programme (FP7). This has been a valuable way of ensuring their industrial relevance. Analysis shows that 15 SRAs will be covered under a single FP7 research theme (demonstrating the close cooperation with the formulation of FP7), and that the remaining 16 SRAs will address several research themes. The first **Joint Technology Initiative,** ARTEMIS[68], covering R&D in embedded computing systems, is expected to start during the first half of 2007, with ENIAC[69] (European Nanoelectronics Advisory Council) following after.

Task Force Recommendation 4: Prioritize leading edge markets and a European public procurement policy. With Europe's current enormous social and economic challenges (ageing population, rural isolation, transportation, environment, security…), public authorities must play a leading role by launching innovative markets with important growth potential. Current initiatives are fragmented across Europe and need to be leveraged on a pan-European scale in order to respond to increased European large-scale private investment and citizens' demand for these services.

The Commission is conducting a detailed analysis of stakeholders, including consultations of the European Technology Platforms and the Europe Innova Innovation Panels[70], to identify possible areas where a combination of supply and demand measures could help the **emergence of lead markets**. This is consistent with the broad-based innovation strategy outlined in 2006[71]. Based on the outcome, the Commission will prepare a policy paper in the second half of 2007. This policy paper will cover relevant procurement issues. In addition, the Commission has prepared a handbook on the possibilities that the public procurement Directives[72] offer for innovation-oriented tendering. The Commission will also support networks of clusters with the aim of developing lead markets through market-pull activities derived from analyses of users' needs.

Task Force Recommendation 5: The semiconductor industry is a key industry in Europe for the entire ICT innovation cycle, with a major enabling role and specific R&D, manufacturing situation. Specific measures are needed to securing a global level playing field with other industrialized regions in the world, to ensure stronger support for manufacturing and strengthen ICT clustering potentials.

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[67] For a list of European Technology Platforms, see
http://cordis.europa.eu/technology-platforms/individual_en.html

[68] For more details on ARTEMIS, see http://cordis.europa.eu/technology-platforms/individual_en.html

[69] For more details on ENIAC, see http://cordis.europa.eu/ist/eniac/home.html

[70] Sector-based panels of innovation experts, which suggest sector-specific priorities for action and formulate questions and issues to be tackled, are a central part the Europe INNOVA initiative

[71] COM(2006) 502, Putting knowledge into practice: A broad-based innovation strategy for the EU.

[72] The legislative framework is described on
http://ec.europa.eu/internal_market/publicprocurement/legislation_en.htm

The semiconductor industry is clearly of strategic importance for the EU. Although the industry is currently in a strong position, two indicators give cause for concern: Europe has become a net importer of semiconductors, and the proportion (some 10%) of global capital expenditure on semiconductor manufacturing facilities in Europe is low. As for all branches of European industry, the establishment of a level playing-field worldwide remains the overall objective. **Improving framework conditions in order to stimulate more investment in R&D and develop high-level skills are further issues of key importance:** the former point is developed the follow-ups to Recommendations 1 and 2 in this section, above, and the latter in section 2.8, skills and employability, below. On **clustering**, see the follow-up to Recommendation 2 above.

Task Force Recommendation 6: Launch a specific action to develop ICT services for innovation in Europe. This includes providing research funding for innovation in services at all levels (European and Member State), create an academic discipline and research area aimed at improving the teaching of services innovation, create measures to promote entrepreneurship and learn from best practices in other Member States.

In the Council Conclusions on "A broad-based innovation strategy: strategic priorities for innovation action at EU level", of 4 December 2006, the Council invites the Commission *"to prepare by April 2007 an overall assessment on innovation in services evaluating e.g. the related needs for policy adjustments, where appropriate. The Commission is also invited to take into account the various forms of non-technological innovation."* To respond to the request of the Council, the Commission will prepare by May 2007 a staff working paper setting out the first elements of a policy framework aiming at **better support for innovation in services**. This paper will take into account the work and recommendations of an **expert group**[73] set up as part of its preparation. In addition, a call for proposals will be published in April 2007 to establish one or more **European Innovation Platforms** bringing together skills and know-how in knowledge transfer, incubation and finance and aiming to foster innovative companies in knowledge-intensive services, including ICT services. This action will be implemented under Europe INNOVA[74] with a budget of €5 million. On **measures to promote entrepreneurship**, see the follow-up to Recommendation 1 in section 2.2, SMEs and entrepreneurship, above.

Task Force Recommendation 7: Focus on the Human Dimension of ICT by developing a shared vision with all stakeholders regarding the human factor impact on the innovation process. This includes promoting schemes for lifelong education and training, establishing IT councils between industry and higher education institutes, and creating specific education initiatives aimed at attracting postdoctoral experts in Europe.

See follow-ups in section 2.8, skills and employability, below. Schemes to **attract postdoctoral scholars to Europe** are active under the Tempus[75] and Erasmus Mundus[76]

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[73]   For the report of the group, "Fostering Innovation in Services", see
http://www.europe-innova.org/servlet/Doc?cid=7550&lg=EN
[74]   See http://www.europe-innova.org
[75]   Tempus: http://ec.europa.eu/education/programmes/tempus/index_en.html

programmes, the EU-Canada[77] and EU-US[78] Cooperation programmes, and the Marie Curie Fellowships[79] initiative.

> ***Task Force Recommendation 8:*** Firms and universities should be encouraged to form longer-term R&D partnerships, which reduce the transaction costs of negotiating individual collaborative projects and foster the building up of mutual trust. These should seek to ensure academic freedom and creativity and provide a more professional interface from universities to industry that respects agreed goals and deadlines.

The Communication **"Delivering on the Modernisation Agenda for Universities"**[80] already pointed to a number of important steps that could enable European universities to make a greater and more efficient contribution to the innovation process. Key to this is granting universities sufficient autonomy to develop their own strategies. In addition, **structured, strategic partnerships between business and universities need to be strengthened.** This requires more possibilities for exchanging of staff, the encouragement of entrepreneurship within universities, and the establishment of science parks in their vicinity together with making adequate finance available to support research spin-offs. This will help bridge the cultural gap that so often separates university research from business needs. Development of links between universities and local civil society would also be conducive to a better uptake of innovation at local and regional levels.

In November last year, the Commission put forward a proposal[81] to establish a **European Institute of Technology (EIT)** as a partnership between science, business and education. The EIT will bring the best European students and researchers to work together with business in developing and exploiting knowledge and research and enhancing research and innovation management skills. Businesses will be fully integrated in the EIT, from membership of its governing board to involvement in all aspects of research and education, and from the definition and implementation of training measures to active participation in research. At the operational level, the EIT will function through long-term joint ventures of universities, research organisations, public or private companies, financial institutions, and regional or local authorities — so-called Knowledge and Innovation Communities — established for between 7 and 15 years.

The many forms of knowledge transfer between industry and universities — contract research, collaborative and cooperative research, licensing, publications and exchanges of skilled researchers between the public and private sectors — all need to be further developed and better managed. Drawing on recent consultations[82], the Commission has recently adopted

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[76]   Erasmus Mundus: http://ec.europa.eu/education/programmes/mundus/index_en.html
[77]   EU-Canada Cooperation: http://ec.europa.eu/education/programmes/eu-canada/index_en.html
[78]   EU-US: http://ec.europa.eu/education/programmes/eu-usa/index_en.html
[79]   Marie Curie Fellowships: http://cordis.europa.eu/improving/fellowships/home.htm
[80]   COM(2006) 208, 10.5.2006
[81]   COM(2006) 604, 13.11.2006
[82]   Draft report on the outcomes of the public consultation on transnational research cooperation and knowledge transfer between public research organisations and industry, 01.09.2006, http://ec.europa.eu/invest-in-research/pdf/download_en/consult_report.pdf

a Communication on knowledge transfer[83] accompanied by voluntary **guidelines**[84] **on collaboration between industry and public research organisations** (PROs) covering how public authorities can address the main barriers to knowledge transfer, and how the ownership and exploitation of R&D results and associated intellectual property rights can best be combined with PROs' missions.

2.6.   Investment and finance

> ***Task Force Recommendation 1:*** Reform EU state aid policy to create a global level playing field. A single category "industrial R&D" with allowable aid intensity of at least 50% should be created. This category should speed up the innovation process to face global competition and should include the development of commercially usable prototypes, pilot projects, experimental production, and product testing.

The recently adopted **Community framework for State aid for research and development and innovation**[85] defines several categories of aid for fundamental research, industrial research and experimental development. The allowable aid intensity for industrial research is a maximum 50%.

> ***Task Force Recommendation 2:*** Use trade associations, chambers of commerce and local banks by making them prime actors in the dissemination of information on finance to all companies whether small or large.

The Commission's focus is on streamlining its **business support and information networks**, and it recently issued a call for proposals[86] that aims to implement a single network that builds on the strengths and achievements of the current Euro Info Centres and Innovation Relay Centres. In addition, the Commission disseminates information about access to finance to intermediaries such as **trade associations, chambers of commerce and regional or local banks** via workshops and conferences, the distribution of studies, reports, guides and newsletters, and through its EUROPA and CORDIS websites.

> ***Task Force Recommendation 3:*** Promote investment in broadband infrastructure and services throughout the EU, in rural and urban areas: competing fixed and wireless access networks and services to ensure availability, capacity, and choice for European citizens and businesses.

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[83]   Improving knowledge transfer between research institutions and industry across Europe: embracing open innovation, COM(2007) 182, 04.04.2007

[84]   Voluntary guidelines for universities and other research institutions to improve their links with industry across Europe, SEC(2007) 449, 04.04.2007

[85]   OJ C 323, 30.12.2006, pp. 1-26

[86]   Call for Proposals ENT/CIP/07/0001, Services in support of business and innovation:
http://ec.europa.eu/enterprise/funding/grants/themes_2006/eic_irc/calls_prop_2006_eic_irc_d2.htm

The Commission's 2006 Communication[87] "Bridging the broadband gap" aimed to **raise awareness of the potential benefits of broadband**. As a follow-up, in May 2007, Commissioners Reding, Fischer Boel, Hübner and Kroes will launch a major conference and exhibition on "Bridging the broadband gap" to investigate how the strategic use of ICT can support regional and local development, ease infrastructure and geographical handicaps and make these areas more attractive to business and individuals alike[88].

Task Force Recommendation 4: Ensure a global level playing field for ICT investments, including R&D and manufacturing investments, in particular in the case of the semiconductor industry by creating a specific Sectoral Framework for the Industry. This should implement policies that facilitate access to, and availability of, short and long-term risk capital able to attract new and ongoing investments in strategic electronic manufacturing and counterbalance advantages that other world regions provide.

See the follow-up to Recommendation 5 in section 2.5, Innovation, above.

Task Force Recommendation 5: Create a venture capital friendly environment to support the entry and growth of new entrepreneurial firms. The Aho Group Report suggests the creation of a "Single Fund" structure.

In its June 2006 Communication "Financing SME Growth — Adding European Value"[89], the Commission unveiled a set of initiatives to **help SMEs get easier access to finance for start-ups and growth**. It includes measures to generate more risk capital investments, develop bank finance for innovation, and make existing financing systems more SME friendly. As a follow-up, the Commission has established expert groups on **removing obstacles to cross-border investment by venture capital funds**[90], on **seed finance**, and on **good practices in risk capital investment at regional level**. The new **Competitiveness and Innovation framework Programme (CIP)**[91] will provide further incentives for private equity investors to invest in firms with growth potential, with the European Investment Fund (EIF) operating or helping to operate **several financial instruments for SMEs** on behalf of the Commission: the High-Growth and Innovative SME facility (GIF), the SME Guarantee facility (SMEG), and the Capacity-Building Scheme (CBS).

Task Force Recommendation 6: Encourage the larger ICT corporations willing to act as partners with VC to boost ICT/SMEs.

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[87] COM(2006) 129, 20.03.2006

[88] See http://ec.europa.eu/information_society/events/broadband_gap_2007/index_en.htm

[89] COM(2006) 349, 29.06.2006

[90] The main aim of this group is to identify, for each participating country, the regulatory framework affecting domiciled and non-domiciled venture capital funds, and in cases where existing regulations hinder cross-border activities of venture capital funds, to find ways to overcome these obstacles. See http://ec.europa.eu/enterprise/library/enterprise-europe/news-updates/2006/2006-11-29.htm

[91] CIP: http://ec.europa.eu/enterprise/enterprise_policy/cip/index_en.htm

The Commission encourages larger ICT firms to take advantage of the improving venture capital environment (see follow-up to Recommendation 5, above).

2.7. Standards and interoperability

> ***Task Force Recommendation 1:*** Ensure that any policy effort relating to technical interoperability should encourage broad stakeholder cooperation and voluntary market-oriented solutions to achieve the goal of interoperability rather than implement legislation defining the specific means to achieve it. In support of industry-led efforts, the EU and the Member States should maintain a policy priority for interoperability along with other key objectives such as innovation and security, support industry-led standardisation, and promote the widespread adoption of standards in products and service implementations.

The European Standardisation Organisations (ESOs) have developed and continue to develop **guidelines to help ensure that interoperability is taken into account when preparing standards**. The guidelines include various practical interoperability verification points with feedback to the standards maintenance process. Some standards are currently being updated in order to increase their interoperability features. ETSI, in particular, provides services supporting interoperability testing between different standards implemented in the market.

In terms of **policy priorities**, interoperability is already at the centre of standardisation objectives, and is considered as a critical issue to be closely monitored under the forthcoming **review of ICT standardisation policy**. Various specific standardisation actions are addressing interoperability issues in specific domains such as eHealth, the Single European Payments Area (SEPA), e-invoicing, etc. In addition, in 2006 the Commission launched a **study**[92] to prepare recommendations to help ensure the EU's standardisation policy for the ICT sector matches the changes to the sector brought about by liberalisation, globalisation and convergence.

The ICT theme in the Seventh Framework Programme (FP7) includes **pre-normative and co-normative research relevant to improving interoperability and the quality of standards and their implementation.** The FP7 ICT work-programme already includes actions aiming at improving cooperation in the development of standards and interoperable solutions.

Regarding **industry**, current EU standardisation policy is built on a privileged relationship with the ESOs, which are obliged to ensure access by all stakeholders to the standardisation process. The standardisation work performed is, in general, proposed and executed as an industry-led activity. The Commission has welcomed and encouraged the further opening of the ICT Standards Board, ICTSB[93], to industry[94]. In the EU's research programmes, **industry is already leading most of the pre-normative research activities.**

On **services**, the 2007 ICT standardisation work-programme has identified service-related standardisation as a priority for Commission funding.

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[92] "EU study on the specific policy needs for ICT standardisation", http://www.ictstandardisation.eu
[93] An initiative of the standards bodies CEN, CENELEC and ETSI.
[94] For current list of members, see http://www.ictsb.org/members.htm

> ***Task Force Recommendation 2:*** Give greater priority to the current efforts underway in the Commission to address technical, legal, semantic, and organisational interoperability issues. This should include work to understand the requirements of interoperability. In order to support industry efforts towards interoperability, regulators should commission projects to identify the key enablers of interoperability in the converging networked marketplace, set targets in dialogue with service providers and ICT and software industry, and measure the achievement of interoperability in services and devices for those enablers over time, across delivery channels, service and device types and national borders.

The work-programmes of the European Standards Organisations (ESOs) focus on **technical interoperability**, especially within ETSI, while **semantic interoperability** has been integrated in the work-programmes of sectoral standardisation groups such as eHealth[95] and eBIF[96]. Other aspects of interoperability — legal aspects, for example — are not within their remit, though some of those are covered in FP7's ICT theme work-programme. As a starting point for identifying the **key enablers of interoperability**, the ESOs' work-programmes include activities on identifying problems and requirements. The overall ICT interoperability framework will be examined under the "internal market" heading of the i2010 mid-term review.

> ***Task Force Recommendation 3:*** Promote effective conformance systems, including an option for a Supplier's Declaration of Conformity, that account for and leverage existing best practices and take into account an understanding of the perspectives of the regional and global marketplace. In this respect, national regulators are encouraged to seek alignment of principles for product approvals and implement adequate market surveillance activities as a complementary tool to the Supplier's Declaration of Conformity instead of considering enforcement of certification schemes.

Experience in implementing the legislation governing the free movement of goods has shown that some risk of distortion to competition exists because practices in designating and accrediting conformity assessment bodies and systems by national authorities vary widely. For this reason, and as part of the Commission's proposal for a new internal market package for goods[97], the Commission recently adopted a proposal for a **Regulation[98] introducing strengthened rules on market surveillance.** The objective is also to enhance confidence in conformity assessments of products by strengthening the role of accreditation for conformity assessment bodies. Within this context, **the Supplier's Declaration of Conformity continues to be an option,** and in some cases is sufficient to demonstrate conformity with the relevant standards.

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[95]   CEN's TC 251

[96]   CEN's e-Business Interoperability Forum.

[97]   For details, see http://ec.europa.eu/enterprise/regulation/internal_market_package/index_en.htm

[98]   Proposal for a Regulation of the European Parliament and of the Council setting out the requirements for accreditation and market surveillance relating to the marketing of products, COM(2007) 37, 14.02.2007

> *Task Force Recommendation 4:* Support current efforts by the European Commission to stimulate a wide and harmonized application of eGovernment, as outlined in the European Commission's April 2006 Communication on an action plan for eGovernment for i2010, in particular by undertaking the announced revision of the European interoperability framework for pan-European eGovernment services including its proposed definition of open standards to contribute to the development of a technical framework that guarantees interoperability for eGovernment applications and permits the development of heterogeneous computing environments in which commercial and open source software based solutions have a role to play.

During 2007 the Commission will follow up the **i2010 eGovernment Action Plan**[99], which seeks to accelerate the implementation of eGovernment and hence enable innovation in and the modernisation of the EU's public administrations. Regarding the revision of the **European interoperability framework for pan-European eGovernment services (EIF)**[100], studies and consultations are underway, and proposals for a revision will be made in due course.

> *Task Force Recommendation 5:* Develop procurement policies that promote interoperability through purchasing solutions, focus on interoperability of IT systems, provide a variety of interoperable technology choices in eGovernment applications, and evaluate open source solutions on an equal footing with commercial software solutions in public sector procurement.

Regarding **procurement policies**, see the follow-up to Recommendation 4 in section 2.5, Innovation, above. The **eProcurement Action Plan**[101] has interoperability as an essential requirement, and the **eGovernment Action Plan**[102] has explicit targets in this respect.

2.8. Skills and employability

> *Task Force Recommendation 1:* The ICT Task Force calls upon the European Commission to present a policy communication in the near future addressed to EU Member States and designing a long-term e-skills strategy, and a corresponding e-skills action plan proposing targeted actions for the years ahead.

The Commission will take the recommendations of the Task Force and the declaration of the recent European e-Skills Conference[103] into account when preparing the **Communication on a long-term e-skills strategy planned for adoption in 2007**.

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[99] COM(2006) 173, 25.04.2006

[100] Adopted in November 2004, the EIF provides recommendations and defines generic standards for the organisational, semantic and technical aspects of interoperability, offering a comprehensive set of principles for European cooperation in eGovernment. See http://ec.europa.eu/idabc/en/document/2319/5644

[101] Action plan for the implementation of the legal framework for electronic public procurement, COM(2004) 841, 13.12.2004

[102] COM(2006) 173, 25.04.2006

> **Task Force Recommendation 2:** Encourage the ICT industry to create an Industry Leadership Group to facilitate e-skills information and co-operation and pool resources and establish closer collaboration between all stakeholders to develop reliable statistics and forecasting scenarios regarding e-skills requirements at the EU level and the impact of global sourcing to provide a reliable basis for policy decisions and to help labour market participants to take informed career decisions.

Earlier this year, the ICT industry took the initiative to establish an **e-Skills Industry Leadership Board** and has organised several preparatory meetings, with a formal launch planned for June 2007. The focus will be on the follow-up and implementation of the Task Force's recommendations, promoting multi-stakeholder partnerships, and on long-term e-skills strategy. The Commission services are in close liaison with the industry actors involved.

> **Task Force Recommendation 3:** Increase investment in the professional development of teachers and ongoing teacher support mechanisms. Member States and industry should work together to improve career advice in and around schools and provide better and more frequent training of career consultants. The content of consultations should be based on a more realistic understanding of future opportunities based on robust statistics and foresight scenarios and up-to-date job profiles and career paths. The transparency regarding different qualifications and ICT career paths should be increased by establishing and maintaining an e-skills and career portal to set out European job profiles, map industry-based ICT training and certifications to specific job roles, and integrate existing national ICT career portals.

These actions are mainly the responsibility of the Member States. The Commission will support such initiatives by organising studies, events, cooperation projects and exchanges of best practice, notably under the new **Lifelong Learning Programme**[104]. Regarding a **web portal**, during 2007 the Commission will launch a feasibility study followed by a workshop with stakeholders to discuss findings, conclusions and follow-up.

> **Task Force Recommendation 4:** Increase collaboration between industry, governments, employers, and education institutions via multi-stakeholder partnerships to address e-skills issues and with a view to reconciling the "parallel universes" between formal and non-formal education channels. Consider how to develop enhanced e-skills curricula, including via the integration of industry ICT curricula and certifications into formal education. Initiate further research and evaluate good practice in order to promote the development of European quality criteria for e-skills training and certificates in close co-operation with relevant stakeholders. CEN-ISSS should accelerate work towards the EU-wide eCompetence framework and maintain close cooperation with industry (user industries and certification providers) with a view to ensuring eventual compatibility of the framework with formal and non-formal ICT practitioner education and certifications, and to foster increased workforce mobility by facilitating Europe-wide recognition of qualifications. Establish multi-stakeholder

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[103]   For the Conference Declaration, see
         http://eskills.cedefop.europa.eu/conference2006/Thessaloniki_Declaration_2006.pdf
[104]   See http://ec.europa.eu/education/programmes/newprog/index_en.html

partnerships to train the workforce, especially disadvantaged groups (e.g. young underemployed and unemployed workers, older at-risk workers, and people with disabilities) and to help connect trainees to new jobs. These partnerships should also promote access for training participants to internships and work experience in local SMEs and larger businesses. Review how existing EU programmes might be used to fund and support actions related to skills and employability.

These aspects will be fully addressed in the forthcoming Communication on a long-term e-skills strategy.

Task Force Recommendation 5: Continue the efforts already started in incorporating entrepreneurship in educational curricula at all levels. Document best practices on multi-stakeholder partnerships that deliver entrepreneurial skills to individuals and SMEs. Together, governments, industry, and universities must enable the creation of a new academic discipline on Services sciences, Management and Engineering to bring together ongoing work in computer science, operations research, industrial engineering, business strategy, management sciences, social and cognitive sciences, and legal sciences to develop the skills required in a services-led economy. Schools should also be involved in this process.

Further pilots and exchanges of good practices will be supported via existing EU programmes, and notably under the new **Lifelong Learning Programme**[105]. Support will cover a broad range of skills for employability, ranging from e-skills and entrepreneurship[106] to communication skills and teamwork and problem-solving skills. See also the follow-up to Recommendation 1 in section 2.2, SMEs and entrepreneurship, above. Regarding **"services sciences"**, the Commission services will explore the concept further with the ICT industry.

Task Force Recommendation 6: To reduce the e-skills gap between larger organisations and SMEs, notably the smaller SMEs and the less IT-oriented SMEs, and prepare them for increasing use of eLearning, provide the resources to educate and coach SMEs in partnership with IT-SMEs and local support centres, and reinforce European best practice exchange on this.

These aspects will be fully addressed in the forthcoming Communication on a long-term e-skills strategy.

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[105]   See http://ec.europa.eu/education/programmes/newprog/index_en.html

[106]   The Commission has recently presented an "Oslo Agenda for Entrepreneurship Education in Europe" as part of its drive to promote entrepreneurial mindsets in society. See: http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/index.htm