This summary and position papers received in reply to the consultation (unless the contributor specifically requested otherwise) are available at:


Disclaimer: This analysis was compiled by the Commission services, DG Information Society and Media. It does not necessarily reflect the opinion or position of the European Commission.
Table of contents

Executive summary: Digital Agenda is a Priority .................................................. 2
1. Introduction ........................................................................................................ 5
2. Overall Visionary Focus .................................................................................. 7
3. Key Outcomes ................................................................................................... 10
   3.1. High Speed Internet .................................................................................... 10
   3.2. Digital User Rights ..................................................................................... 11
   3.3. ICT for Research and Innovation ................................................................. 15
   3.4. Digital Single Market .................................................................................. 18
   3.5. Digital Citizenship and Quality of Life ........................................................ 20
   3.6. ICT for a Sustainable Low-carbon Economy ............................................... 24
   3.7. EU on the International ICT Arena ............................................................... 26
4. Next steps .......................................................................................................... 28
EXECUTIVE SUMMARY: DIGITAL AGENDA IS A PRIORITY

As part of the preparations for a new information society strategy to follow i2010, DG INFSO of the European Commission launched a broad public consultation on nine strategic priorities for the future. The consultation raised considerable interest among a wide range of stakeholders, generating 843 responses to the online public consultation and 123 position papers by stakeholders.

92% of respondents considered that ICT should remain a key element in the next Commission's policy priorities.

Figure 1: Need for an ICT strategy in the EU strategic framework

The main ICT policy priorities emerging from the public consultation were: high speed and open internet; ICT research and innovation and ICT for growth and jobs. The majority of respondents (59%) selected consumers as the most important group of stakeholders to improve the take-up and active use of internet-based services.

High Speed Internet

There was a very high level of support for public sector investment in passive telecom infrastructures (88%), complemented by stimulation of private sector action in developing new network services through market opening and transparency.

Digital User Rights

There was very strong support for the fundamental openness of the internet (90%) with network neutrality, open standards and interoperability being the top three areas of policy action. Consumers should play a key role in stimulating demand for services and thus reinforcing business models and investment plans.

With regard to the European right of access to the internet respondents consider the most useful targets to be non-discrimination of services, transparency and speed.

Regulatory measures at EU or national level were seen as essential to buttress digital user rights (75%) with emphasis on online privacy, net neutrality and universal access.

A majority (52%) consider EU level rules as the most important way to guarantee rights such as accessibility, affordability and capacity.
ICT for Research and Innovation

The three most important measures to reduce the fragmentation of ICT research and innovation efforts in Europe are: the setting of EU-wide ICT priorities for key technology sectors, policy coordination to share visions, strategies and policies, and political commitment to a fully integrated European innovation ecosystem. More funding for ICT research and innovation were considered the top priorities alongside the need for more incentives for private research funding.

The three most strategic areas for ICT research chosen were energy & environment, software & services and education & culture. Of these, Europe was considered to be a world leader in energy & environment and education & culture, whereas Europe's position in software & services is at risk. Other top areas of risk were network technologies and web services.

Greater coherence of policy at EU level was widely supported through: joint priority setting, shared vision and commitment to ERA. Open, collaborative and bottom-up models of innovation were heavily cited as important pre-conditions for new poles of excellence to emerge in Europe, by attracting talent, promoting peer to peer innovation, stimulating SMEs, incubators/innovation hothouses and promotion of knowledge hubs.

Digital Single Market

Although not heavily cited on the overall rankings, the digital single market was seen as important for consumers and citizens, with more harmonisation seen as particularly needed for consumer protection, payment systems and VAT.

The problems for SMEs in exploiting the single market were considered as being addressable through greater harmonisation of market access rules and by increased legal support.

Access to digital content was seen as best promoted by stepping up digitisation programmes, facilitation of rights clearance and adaptation of the copyright regime. A special rights regime for disabled people also received support.

As regards the simplification of copyright regimes, the priorities were more flexibility especially for non-commercial uses, alternative open licences and less overall complexity.

Digital Citizenship and Quality of Life

E-Participation was seen as an opportunity for increased social engagement by offering new services, transparency and efficiency and as an area where policy action at EU level is desirable to stimulate change.

The quality of ICT-enabled public services would be best assured through common standards (88%) either by direct regulation (55%), guidelines (25%) or user charters (8%).

Digital divides should be overcome through promoting common standards, giving incentives to promote take-up or supporting research. For example, digital skills require the consolidation of best practices (41%) and common assessment measures (28%).

Privacy issues were heavily cited overall in respect of Web 2.0 type services (96%) notably in respect of how such information might be used in sensitive areas such as health records, where 66% respondents saw a need for further legal clarification or new EU level rules.

ICT for a Sustainable Low Carbon Economy

Generally the full impact of ICT on the transition to the low carbon economy is under-exploited due to lack of awareness and problems to adapt business models. Four key policy steps were equally cited as important: raising awareness, provision of fiscal incentives, research and support for investments in infrastructures.
At the same time ICT sector should consider its own impact on the environment. Forming partnerships (cities / regions / other sectors), changing business models, and committing to reporting indirect and/or direct greenhouse gas emissions could turn ICT companies into the most energy-efficient industrial sectors.

Regulatory action such as new laws, formal guidelines and target setting were less commonly cited as key measures, but regulatory steps were seen as crucial for specific actions such as the promotion of new energy efficient infrastructures.

The three most preferred ways of stimulating investments in low-carbon infrastructure are regulatory changes, EU funding, and market mechanisms. A clear case of cost/benefit analysis is demanded.

**EU in the International ICT Arena**

The role of Europe in international bodies in promoting an open and multilaterally governed internet came out as the key issue for ICT international policy (72%) i.e. fears of censorship traffic restrictions and critical information infrastructure protection.

However, as regards the top priorities for strengthening the EU’s international policy role, respondents identified international research cooperation and competitiveness more frequently than internet governance or representation in international bodies.

Europe should take a leadership position in developing ICT solutions for global challenges such as environmental issues (75.7%), ageing society (48.8%) and cyber security (46.0%).

Overall Europe’s voice in international ICT affairs could best be strengthened through a direct mandate (36%), clearer EU representation (35%) or strengthened representation (23%).
1. **INTRODUCTION**

The i2010 strategy was presented in June 2005 as the framework for European information society and media policies to boost Europe's lead in ICT and to unlock the benefits of the information society for European growth and jobs. It outlined concrete policy measures in three key areas: to boost the digital single market for businesses and users; to stimulate innovation and ICT research in Europe; and to ensure that all Europeans benefit from Europe's lead in ICT through first class public services and applications that improve the quality of life of citizens.

The success of European information society and media policies was confirmed in the 2009 Europe's Digital Competitiveness Report, which outlined the results of five years of EU policy under the Barroso I Commission promoting the latest communication technologies, new networks and services and creative media content. However, the success of the EU ICT strategy since 2005 must be put in a global perspective. Today it is becoming apparent that even in areas where it has global leadership Europe is at risk of losing its competitive edge when it comes to new, innovative developments.

As part of the preparation of a European ICT strategy beyond 2010, the Commission launched on 4 August 2009 a broad online consultation on the most important future policy priorities. The consultation was open until 12 October 2009 and available in six languages (EN, FR, DE, IT, ES, PL).

Respondents were asked to submit their views on the basis of an online questionnaire structured into nine different themes, which were deliberately cast very broad to give the full picture of all aspects of today's information society: 1) ICT for a growth and jobs agenda, 2) ICT for a sustainable 'low carbon' economy; 3) Improving Europe's performance in ICT research and innovation; 4) Creating a 100% connected society and economy through a high-speed and open internet for all; 5) Consolidating the online Single Market; 6) Promoting access to creativity at all levels; 7) Strengthening EU’s role in the international ICT arena; 8) Making modern and efficient public services available and accessible to all; 9) Using ICT to improve the quality of life of EU citizens.

**Typology of respondents**

The online consultation was intended to reach the wider public and – quite successfully – to reflect the views of individual citizens. A total of 834 responses were received to the online public consultation: 65% of the respondents were individual citizens; 35% of the respondents replied on behalf of an organisation. Among the organisations were industry associations, non-governmental organisations (NGOs), large private companies, public authorities or governments, small- and medium-sized corporations (SMEs), academic institutions, and others. Out of the 290 responses which were made on behalf of organisations, the majority of respondents replied on behalf of an industry association (20%), the second largest group was from NGOs (18%) and the third largest group were large private companies, and public authorities or governments (both 17%).

---

A high number of position papers² (121) came from the telecommunications and audiovisual industries with a strong consensus on the key role of ICT in economic recovery, long-term competitiveness and innovation. Clearly, the position papers reflect the respondents’ stakeholder positions in the supply chain.

The majority of responses came from Germany (around 180), Belgium (around 115), France (around 90), The Netherlands (around 70), Italy and United Kingdom (around 70), Italy and Finland (around 40-50), standing for 67% of the responses. There was a low level of response from new Member States and from Greece, Portugal and Spain. The consultation was also answered by residents of countries outside the European Union (4% of the total respondents).

The countries with the highest number of respondents tend to be the ones where there are many resident ICT stakeholders (i.e. Belgium), or countries with a large ICT industry (i.e. Finland, France, Germany, Netherlands, and the UK). Member States’ governments mostly chose not to answer the questionnaire but to submit position papers.

---

2. Overall Visionary Focus

The most chosen overall visionary focus for the post-i2010 strategy was a **stronger focus on user rights or user empowerment**. Furthermore, 24% of the respondents chose a vision with a focus on concrete and measurable targets for desired end results. And 20% would rather see a focus on desired end results in terms of economic growth, productivity gains from ICT usage, and innovation. An overall focus on the continuous creation of a **coherent and holistic approach** is considered a priority by 14% of respondents.

**Figure 4: Overall visionary focus for the post-i2010 strategy**
Main ICT policy priorities

In terms of ICT policy priorities, the respondents consider *high-speed and open Internet for all* (51%), *ICT research and innovation* (47%) and *ICT for growth and jobs* (37%) as the most important three out of the nine proposed.

**Figure 5: Most important ICT policy priorities**

| 1.3. What do you consider to be the 3 most important ICT policy priorities for the next 5 to 10 years? |
|---|---|---|---|---|---|---|---|---|---|---|---|
| High-speed and open internet for all | 392 | 358 | 322 | 281 | 259 | 250 | 200 | 191 | 106 | 84 | Other |
| ICT research and innovation | | | | | | | | | | | 97 |
| ICT for growth and jobs | | | | | | | | | | | 281 |
| Quality of life of EU citizens | | | | | | | | | | | 259 |
| Sustainable low-carbon economy | | | | | | | | | | | 250 |
| Public services | | | | | | | | | | | 200 |
| Users' creativity | | | | | | | | | | | 191 |
| Online single market | | | | | | | | | | | 106 |
| The international dimension | | | | | | | | | | | 97 |
| Other | | | | | | | | | | | 84 |

There is a clear differentiation between industry and the citizens' responses:

- For the users, empowerment, high-speed and open internet for all, user creativity and quality of life are the most important issues.
- For the supply side, the new information society strategy should support economic growth, productivity, innovation and low-carbon economy.
The ranking differs slightly among individuals and organisations:

### As an individual

**What do you consider to be the 3 most important ICT policy priorities for the next 5 to 10 years?**

<table>
<thead>
<tr>
<th>Priority</th>
<th>Number of answers</th>
<th>% of answers to this question</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-speed and open internet for all</td>
<td>211</td>
<td>(54.2%)</td>
</tr>
<tr>
<td>ICT research and innovation</td>
<td>187</td>
<td>(48.1%)</td>
</tr>
<tr>
<td>Quality of life of EU citizens</td>
<td>142</td>
<td>(36.5%)</td>
</tr>
<tr>
<td>Public services</td>
<td>125</td>
<td>(32.1%)</td>
</tr>
<tr>
<td>Sustainable low-carbon economy</td>
<td>115</td>
<td>(29.6%)</td>
</tr>
<tr>
<td>ICT for growth and jobs</td>
<td>113</td>
<td>(29%)</td>
</tr>
<tr>
<td>Users' creativity</td>
<td>109</td>
<td>(28%)</td>
</tr>
<tr>
<td>The international dimension</td>
<td>57</td>
<td>(14.7%)</td>
</tr>
<tr>
<td>Online single market</td>
<td>49</td>
<td>(12.6%)</td>
</tr>
<tr>
<td>Other</td>
<td>26</td>
<td>(6.7%)</td>
</tr>
</tbody>
</table>

### On behalf of an organisation

**What do you consider to be the 3 most important ICT policy priorities for the next 5 to 10 years?**

<table>
<thead>
<tr>
<th>Priority</th>
<th>Number of answers</th>
<th>% of answers to this question</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT for growth and jobs</td>
<td>96</td>
<td>(56.5%)</td>
</tr>
<tr>
<td>ICT research and innovation</td>
<td>79</td>
<td>(46.5%)</td>
</tr>
<tr>
<td>High-speed and open internet for all</td>
<td>64</td>
<td>(37.6%)</td>
</tr>
<tr>
<td>Sustainable low-carbon economy</td>
<td>62</td>
<td>(36.5%)</td>
</tr>
<tr>
<td>Quality of life of EU citizens</td>
<td>55</td>
<td>(32.4%)</td>
</tr>
<tr>
<td>Public services</td>
<td>36</td>
<td>(21.2%)</td>
</tr>
<tr>
<td>Other</td>
<td>33</td>
<td>(19.4%)</td>
</tr>
<tr>
<td>Online single market</td>
<td>30</td>
<td>(17.6%)</td>
</tr>
<tr>
<td>Users' creativity</td>
<td>23</td>
<td>(13.5%)</td>
</tr>
<tr>
<td>The international dimension</td>
<td>21</td>
<td>(12.4%)</td>
</tr>
</tbody>
</table>

Also, depending on the visionary focus chosen, the choices for the most important policy priorities tend to differ:
Among those who chose ‘other’ in the visionary approach many called for increased competitiveness (particularly for empowering SMEs), open internet, tackling societal challenges and also more easy enforcement of the rule of law online.

The position papers also show a variety of perspectives in the organisations’ responses, with respective positions of the stakeholders reflecting their position in the ICT supply chain. The position papers mostly focused on a number of key priorities, such as next generation access (NGA), net neutrality, copyright and digital literacy. The positions of the stakeholders were diverging on the issue of further openness, which tended to be demanded for segments of the supply chain different from own fields of activities.

A strong consensus emerged about the key role of ICT for a strong recovery as well as long-term competitiveness and innovation, with stakeholders pointing to their own industry- or sector-specific contribution to growth. Stakeholders emphasized the need for reflecting the general-purpose nature of ICT in the policy approach, by reinforcing the cross-cutting nature of policies and embedding it in different policy areas, such as health, transport or culture. All stakeholders call for an increased stakeholders’ role in the development of EU policies.

### 3. **Key Outcomes**

The majority of submitted responses followed the online questionnaire, structuring their responses accordingly, although many answers were more open and interlinked, sometimes addressing multiple questions at the same time. Position papers also show a variety of perspectives in the stakeholder responses with homogeneity between competing companies, and strong controversy between companies in different segments of the supply chain.

This report has been structured in a way so as to allow readers to identify answers to the priority areas, rather than following the sequential order of questions in the questionnaire.

#### 3.1. High Speed Internet

‘High-speed and open internet for all’ is the most chosen policy priority (51.4%). Majority of the stakeholders emphasize the need to put NGA at the heart of the next strategy. From the consultation survey results it is clear (88%) that public authorities should continue to invest in passive infrastructures for NGA while conducting other civil engineering works such as facility deployment for transport, energy, and water (Figure 6).

Telecom operators, service providers and national governments emphasize the need to accelerate deployment of NGA network as Europe is lagging behind. On the other hand, content and application producers, and regulatory bodies dispute the necessity for such a large scale
investment, arguing that – at this stage – there is no clear evidence that NGA would play such a strategic role for Europe.

While all telecom operators (both incumbents and entrants) are in favour of public investment, the perception of the amount of investment needed varies. Emphasising the opening of markets to competition (55.1%), fostering a change in business models (57.9%) and relaxing access obligations are considered the main incentives to invest. Many stakeholders have also highlighted that wireless connections play a significant role in making broadband available to all.

Figure 6: Building high-speed broadband infrastructure, investments in networks

Consumers’ associations, NGOs and regulators support full transparency over actual connection speeds and network management practices by operators. Incumbent operators suggest targeted and thoughtful regulation with limited access obligations for NGA networks while at the same time challenger operators call for not phasing out sector competition regulation and more open business models as well as targeted state aid with effective competition policy to ensure widespread broadband coverage, minimum speeds and affordability. Citizens want more concrete targets whereas organisations consider that the focus should be on less concrete desired end-results (such as usage, innovation, new business models, and productivity).

3.2. Digital User Rights

The openness of the internet is considered to be the key policy priority for both citizens and organisations (90%) (Figure 7). In terms of the growth of Internet services, the respondents prefer a focus on open standards (77.8%), net neutrality (60.7%), and interoperability/portability of services (59.5%) (Figure 7). Whereas these are the top three priorities for citizens, organisations favour open standards first, but choose interoperability/portability of services second and end-to-end connectivity in third place. The respondents are stating that there is a clear need for stronger harmonisation at EU level. Public procurement should also play a key role in driving usable and interoperable ICT products that are scalable at a European level.
Respondents particularly envision a stronger visionary focus on user rights or user empowerment on the internet (35%). Consumers are considered by 59% of the respondents (majority of citizens (64%) and organisations (50%)) as the most important group of stakeholders to improve the take-up and active use of internet-based services.

The digital rights of both citizens and businesses in terms of Internet access, and also the right to certain services or portability of services are considered as very important aspects to be present in the next strategy. Here the three most important digital rights chosen by respondents are managing online privacy (61.1%), net neutrality (57.2%) and universal access to the Internet (52.5%). The top three most important user rights according to organisations are managing online privacy (59%), universal access to the Internet (53%), and the interoperability of services (48%). Citizens chose net neutrality (67%) as their most important right and managing online privacy (62%) and universal access to the Internet (52%) as second and third. Position papers also highlight in detail the fact that net neutrality and copyright are some of the key controversial issues dividing the organisations perspectives.

The different views on net neutrality relate to diverging interpretations of the notion of openness. Telecom operators are not in favour of European legislation on net neutrality that would restrict network management and would prohibit tiered transfer speeds. On the other hand, applications, hardware and content providers, and consumer associations call prominently for an open Internet and endorse the net neutrality concept as a necessary prerequisite for a rich democratic society and for an innovative economy. Nevertheless, they accept that some form of traffic management practice could be necessary in the course of “ordinary network management” in case of security problems for example.
Both for citizens and organisations, it is very important that users are aware of and understand their rights and obligations. Trust and confidence is best supported by transparency, clear communication of information on provision of services on the internet, and protection of the consumer. Many industry players emphasize the need to upscale the activities on cyber-security as a further element to increase users’ trust.

With regard to consumer rights, NGOs, consumer associations and new media services players call for a harmonisation of regulation on consumer protection with particular attention to the online consumers, focusing on better transparency of services, on information on privacy and information disclosure, and on stricter regulation of interactive advertising in order to increase trust.

With regard to privacy and users’ data, consumers associations, NGOs and open source organisations call for increased user control, ownership and transferability of personal data, which goes together with increased interoperability of cloud computing services. Telecom operators and Internet service providers (ISPs) also underline the need for the full respect of existing privacy and data protection legislation when enforcing copyright legislation.

Consent to the processing of personal data should meet higher requirements (in terms of transparency, and simpler/more understandable privacy notices), with options other than simply “take it or leave it” (according to 75% of the respondents). Clearer guidelines on how to apply the principle of user’s informed consent to already existing but also new services needs to be laid down.

Easily understandable information that summarises legal information for the consumer (64.8%) consumer feedback (web 2.0 style) (46.5%) and further standardisation of terms and conditions (45.7%) are thought to be the most important ways to increase transparency. According to 72.7% of the respondents, users could be empowered through the availability of transparent information provided by reshaping privacy rules and regulations that could guarantee that users have access to and can effectively control their personal data stored online (Figure 9). Furthermore, new forms of transparency obligations in the standard terms and conditions offered by Web 2.0 services (50.2%) could be used to ensure that users are aware and understand their privacy obligations.

**Figure 9: User empowerment through transparent information**
The right to access to internet is particularly important in terms of non-discrimination of services (69%), transparency (60.2%) and speed (52.3%) both for citizens and organisations (Figure 10). In the consultation papers, calls for a universal right of access to the Internet are voiced by some and contested by others.

**Figure 10: European right of access to the Internet**

The respondents clearly opted for stronger harmonisation at the European level (Figure 11). Enforcing these user rights would be done most importantly through EU regulation, according to the majority of respondents (61%). Also the majority of respondents selected “consumers” as the most important group of stakeholders to improve the take-up and active use of Internet-based services.
4.12. What is the most important way to enforce user rights, in general?

- EU regulation: 61%
- Other forms of legislation: e.g. constitutional law: 14%
- Self-regulation: 14%
- Soft law (Recommendations, guidelines): 11%

The majority of respondents (52%) favour granting rights at the European level as the most important way to guarantee rights of people to go online (60% of citizens and 34% of organisations). More organisations chose for tailored actions for specific users (38%).

3.3. ICT for Research and Innovation

“ICT research and innovation” was the second most chosen policy priority. Key messages emerging from the consultation are the need for more funding and to set EU-wide ICT priorities for key technology sectors, and policy coordination and commitment to a fully integrated European innovation eco-system.
According to the consultation survey, the three most important areas for this increased funding are European innovation funding (58.1%), European research budget for ICT (57.5%), and providing incentives to increase private research expenditure (55.5%). Individual citizens have mostly chosen for these top three sources of increased funding. For organisations however the top three most chosen sources of increased funding are the reverse, placing more emphasis on incentives to increase private research expenditure, and increase European innovation funding in third place (Figure 14).

The top three measures to promote innovation include Private Public Partnerships such as joint technology initiatives (50%), stimulating market forces through open competition (45%) and targeted innovation infrastructures (44%). Public procurement is also seen as an important measure to promote innovation.

The three most strategic areas for ICT research are energy & environment, software products and services and education and culture. Europe was considered to be a world leader in energy & environment and education & culture, whereas the main areas for further R&D investment where
Europe otherwise risks to lose its international competitiveness are related to: software products & services; network equipment and services and web-based services.

To reduce fragmentation, EU-wide ICT priorities for key tech sectors are needed, as well as policy coordination and policy commitment. Investment in R&D and innovation and placing the users at the centre of the innovation process remain an area of key importance. A pro-innovation legal and regulatory framework that could boost the scalability of projects in a Single market of 500 million consumers (41.9%) is considered the most important factor to trigger the take off of new market for R&D and innovation. Other key factors are establishment of key framework conditions for innovation by combining innovation and policy decisions to make the ERA possible and attractive (39.4 %) and support to interoperability through pilot actions, again to facilitate scalability of solutions and ease their commercialization (38.7%) (Figure 15).

Figure 15: Take-off factors for new markets

The policy steps most frequently chosen to create the appropriate conditions for these world-quality clusters to emerge are attracting talented researchers/entrepreneurs, addressing skill gaps, providing growth conditions for start-ups and SMEs (such as incubator sites, easier access to loans, and shared research facilities) and facilitating self-organising innovation through specialised knowledge hubs and facilities for open innovation communities. Emphasis on peer to peer/open innovation processes (50.4%) is the most chosen way to better encourage innovation. Other suggestions include simplifying the mechanism on intellectual property and on standardisation in order to lower the administrative burden for SMEs, using public procurement as a tool to stimulate innovation and promoting seed funding for innovative companies and initiatives.

Main recommendations made by stakeholders include, inter alia: place the user at the centre of innovation development through mechanisms like Living Labs; develop world-class excellence and innovation clusters, and in particular turn excellent regional clusters into world class innovation hotspots; focus on software industry as driver of innovation; use public procurement as a tool to stimulate innovation; promote seed funding for innovative companies and initiatives; simplify the mechanism on Intellectual Property and on Standardisation in order to lower the administrative burden for SMEs.

Europe should have a more important role in international research through international research cooperation (56%), ICT competitiveness (52%) and Internet Governance (46%) as well as a stronger representation in international ICT fora (45%).
3.4. Digital Single Market

Unlocking the economic potential of the digital single market requires a level playing field for businesses to deliver their services and products all over the EU. This area attracted many diverse opinions too with a wide disagreement on the need for further regulatory measures. Traditional content industries support the validity of the existing regulatory approach while new media, application and services players emphasize that the internal market for new media services is far from complete. *Consumer protection* (66.1% of respondents), *payment transaction costs* (43.3%) and *VAT, harmonisation among national regulations* (31.4%) are considered the main fields where further harmonisation of national regulations would be a way towards an easier access of consumers and businesses to a barrier-free European digital single market.

Respondents to the consultation consider that users and SMEs should be placed at the centre of innovation development (Figure 16). 52% of respondents chose harmonisation of access conditions as the most preferred method to provide practical support to SMEs in the digital Single market. Providing legal (23%) and other support (13%), particularly education and training, raising awareness, technical and legal support, financial support and the right to broadband access are also stressed as very important.

**Figure 16: Digital Single Market: Practical support for SMEs**

A key barrier to the EU digital single market remains the fragmentation of the EU copyright landscape, which makes it very complex and costly to offer innovative pan-European digital content services. Increased access to content, through the encouragement of digitisation at national and local levels; more transparent copyrights, through the facilitation of rights clearance for in-copyright material, orphan works, and works that are either out of print or out of distribution; copyrights, through the further adaptation of copyright legislation to meet the digital reality/consumer demands are considered by the respondents as key to developing leading European online web services and software platforms and applications.

According to content industries, the existing copyright regime is effective in dealing with exception related to user-created content. These industries call for more effective enforcement, in particular in the fight against piracy. They also point to alternative measures in addition to stricter enforcement of copyright rules, such as: investment in orphan works such as the Arrow project, introduction of innovative solutions such as micropayments, reduction of VAT, increased public procurement, full interoperability of end-user devices for exploiting digital content and financial support to the experimentation of new business models.

On the other hand, consumers association, NGOs, new media services and telecom operators, call for more flexible copyright systems and for widening the exceptions to copyright cases, for example by providing a mandatory copyright exception for print disabled people. They emphasize the need to distinguish between commercial and non-commercial uses of copyrighted works, to ease the complexity of existing licensing schemes and for a consensual cross-industry solutions, for example through the exchange of good practice in fighting IPR infringement.
Content industries, in contrast to consumers association, new media and services, and telecom operators, are not in favour of multi-territorial licensing measures, claiming that they would reduce scope for those flexible negotiations that are the core component of the business model of the cultural industry. The only exception within the content industries is the live performance sector: it denounces the fragmentation of the copyright clearance system as an obstacle to creativity and free circulation of knowledge.

Nevertheless, all stakeholders are in favour of supporting and accelerating the identification of new business models for the industry as a whole, despite the differences in opinion on which business model is more suitable.

Both citizens and organisation find encouragement of access to content on national and local level important. EU-wide easily accessible mechanisms that allow users to clear rights and be free to work on existing content for non-commercial purposes could stimulate creativity by making copyright law more flexible as regards non-commercial uses (63.8%), promoting alternative open licensing schemes (62.7%) and easing the complexity of copyright management (52.3%) (Figure 17).

**Figure 17: User creativity, clear rights**

According to the respondents, equal access to content can be ensured by letting the rights to access of persons with disabilities prevail over the rights of the owner of content (48.4%) and/or a stronger exception in the Copyrights Directive for ensuring access by persons with disabilities (45.5%).

Content, once it is paid for, should be interoperable for a majority (79%) of respondents, and in this case users should have a clear statutory right to “play” (i.e., use, listen to, or access) this content anytime, anywhere, on any platform.

Digitisation of cultural resources is perceived as a key priority by most stakeholders (Figure 18). A majority (52%) of citizens however say that the digitisation of cultural resources should not be left in the hands of only private partners. Almost half of the organisations however would rather adapt copyright legislation.
3.5. Digital Citizenship and Quality of Life

All stakeholders recognize that a matter of urgent priority for an additional EU action in the field of digital and media literacy, is the need to promote eInclusion and to tackle the increasing second-level digital divide. Although different stakeholders emphasize specific implementation issues within their specific domain, most of the stakeholders underline the importance of investment in eGovernment, eHealth, eLearning, and digital libraries, the need to foster public procurement in innovative products and services; provide a forum for best practice exchange among Member States; and improve the acceptance of electronic systems generally with the public and specific stakeholders. Providing user-centric public services, strengthening the accessibility and usability of digital services, placing the consumer and consumer priorities at centre of their design are particularly emphasized by consumer organisations.

While public services availability online has increased substantially in the lifetime of i2010, the take-up of services has remain a key gap to bridge. Both the majority of organizations (84%) and citizens (83%) have selected strengthening accessibility and usability as a key way to increase take up of eGovernment services. Increasing overall awareness (41.4%), and strengthening security (36.9%) are also considered very important.
A common European understanding of the quality delivery of ICT-enabled public services is important by the setting of common minimum standards (55% of the respondents). Additional specific remarks include the importance of open standards and open source adoption in public services and the need to focus on activities undertaken at the local level. Web 2.0 is recognised as providing more opportunities than threats (70%), particularly in terms of its added value with regard to increased transparency (64.1%), the development of new services (55.0%), and reduction of costs (43.3%). The main risks of Web 2.0 in the delivery of public service are concerns about: the ownership of personal data (68.7%), the potential emergence of new digital divides (40.5%) and insufficiently clearly defined roles and responsibilities (36.7%). Europe’s role in the transition to Gov 2.0 should be to act as a catalyst (39%), leader (32%), and/or coordinator (16%) (Figure 20).

Tele-health (especially in terms of chronic diseases) is an area highly emphasized by the stakeholders. The majority of respondents would be most willing to use ICT-enabled medical services to make appointments online (45%) and for telemonitoring (26%). Privacy and security concerns in the area of eHealth can best be overcome by providing greater legal clarity on rights and duties within the existing legal framework (EU and national) (42% of respondents) or providing this through new EU legislation (24%). The focus as regards interoperability and standardisation should be on Electronic Healthcare Record Systems (47%) and telemonitoring and personal health systems (29%) (Figure 21).
All stakeholders agree on the need for the diffusion of digital literacy, integrating media literacy across education levels, and the raising of awareness about the benefits of ICT. There is a strong call on the need to develop creative skills and foster multidisciplinary approach, in particular to remove the barriers between technology policy and cultural policy. The transition from technical ICT skills development in education towards the mainstreaming of ICT across different learning disciplines is best achieved by making ICT skills a priority in teacher training (69.8%), promoting exchange of best practices (53.3%) and supporting research on the impact of ICT for learning (39.8%). ICT pedagogical tools are seen as scarce and inadequate and some stakeholders underline the inadequacy of the trainers and the need for train-the-trainer kind of programmes and a comprehensive e-skills strategy. Stakeholders also agree that better digital literacy and eSkills correlate to the increase in demand for NGA, better use of ICT for the low carbon economy, take up of ICT services such as eGovernment, eHealth, and better jobs and growth, and cohesion in Europe.

All stakeholders agree that there is a clear risk of a growing digital divide and a need for strong policy intervention at EU level. The three most effective ways of meeting the Riga targets chosen by the respondents are by: promoting standards (58.5%), providing more deployment (44.9%), and providing more funding for research (34.6%) (Figure 22). The fragmentation of national laws and a lack of economies of scale are considered by the stakeholders as the main barriers faced by businesses in providing inclusive ICT services. In this respect, respondents to the consultation acknowledge that use of tax incentives (32%) and standards (30%) are the most effective ways to achieve more investment in inclusive ICT services (Figure 23).
The most important steps towards better integration of digital inclusion into social inclusion policies are promoting exchange of good practices (59.2%) and using coherent policy tools to monitor and benchmark national actions at EU level (43.0%) (top priorities for both citizens and organisations) as well as restructuring and redistribution of competences within public authorities at European level (32.2%), and making clear the business case for more integrated policies (32.2%) (Figure 24). All stakeholders argue strongly for the need for the wide diffusion of digital literacy, integrating media literacy across education levels, and the raising of awareness about the benefits of ICT.

eAccessibility and eInclusion are recommended to be at the heart of the EU strategy and should be mainstreamed in all EU ICT-related policies, and not only under certain aspects or through social inclusion policies; thus a multi-channel approach is recommended. Specific open comments by the respondents have also emphasized the great role that ICT can play for elderly and to improve their life condition. For example, design end-user technology that recognizes reduced physical function/co-ordination amongst the elderly. The infrastructure necessary for application of such solutions has to be made available by government or local authorities.

Figure 24: Integration of digital inclusion into social inclusion
Security is seen as a pre-requisite for citizens to make use of e-Government service and e-payments. Openness of standards and e-procurement needs to be further developed. A lot of comments related to the scarce data availability, the lack of openness and the low level of interaction with citizens of the public administrations.

### 3.6. ICT for a Sustainable Low-carbon Economy

On ICT and energy efficiency, responses highlight that there is still a need for further evidence and strategic approach. The awareness of ICT-based solutions for a sustainable low-carbon economy is low. The main barriers perceived to making a transition to an ICT-enabled low-carbon economy are outdated business models, ignorance of ICT’s potential and a lack of accepted and transparent measurements.

**Figure 25: ICT enabled low-carbon economy, main barriers**

Solutions for more efficient energy use can be provided by the ICT sector. Whereas the greatest opportunities are seen as coming from the implementation of green ICT solutions in companies; the areas in which the ICT industry can contribute most rapidly to a reduction in energy use in the short-term are: electrical power grids (including smart metering) (52.2%), transport/logistics.
(47.8%), and process and behavioural change (42.3%). In the long term making alternatives to cars more attractive (71.8%), more efficient public service delivery (61.0%) and 'green' housing developments (52.0%) are considered the main areas where ICT can help most to reduce energy use is 'smart cities'.

In the area of transport, the reduction of emissions is best supported by ICT through combining various modes of transport (called multimodality) (36%), a rational rethinking of logistics (32%), and a reduction in the need for air travel (23%).

Nevertheless, the sector itself should take the lead to become one of the most energy-efficient industrial sectors. According to respondents to the respondents in the public consultation, the ICT sector can best lead by forming partnerships (e.g., with cities/regions/other sectors) (53.9%), changing business models (45.8%), and by committing to reporting indirect and/or direct greenhouse gas emissions from consumption of purchased energy (GHG Protocol scope 1 and 2 reporting) (46.7%), as well as by committing to reporting other indirect emissions, such as production of purchased materials and fuels, outsourced activities, waste disposal, etc. (GHG Protocol scope 3 reporting) (44.3%) of the respondents.

Raising awareness about efficiency-enabling ICT solutions (42.2%), setting fiscal incentives (39%), promoting research into green ICT solutions (41.8%) and supporting investments in key infrastructures (41.3%) are considered the most important measures to make swift improvements to stimulate the transition towards a low-carbon economy. Changing the regulatory environment (29.8%) and the key role of the public sector through green public procurement (27.8%) are clearly emphasised. A major opportunity to improve energy efficiency in Europe is the deployment of smart meters.

Citizens and organisation show clear difference in priorities: citizens prefer promotion of research into green ICT solutions (45%), supporting investments in key infrastructures (40%), setting fiscal incentives (39%), raising awareness about efficiency-enabling ICT solutions (37%) and changing the regulatory environment, while organisations consider the most important policy measures to be raising awareness about efficiency-enabling ICT solutions (55%), setting fiscal incentives (49%) and supporting investments in key infrastructures (43%) (Figure 26).

Figure 26: ICTs for a low-carbon economy, policy measures
Respondents to the consultation often call for the sharing of best practices and education (in line with the preferred measure to raise awareness) as two fundamental tools that can stimulate environmentally responsible behaviour by European industry. The adoption of interoperable standards is considered as a way to reduce the carbon footprint of ICT. Support to the deployment of broadband and high-speed network infrastructure is considered key to pursue the green economy goals, in particular smart grids. Respondents to the consultation consider regulatory changes (65.8%), EU funding (48.7%) and market mechanisms (44.4%) the best way to stimulate investments in infrastructure for the low carbon economy.

The respondents consider lack of knowledge and costs as main factors today which cause people to continue with unsustainable consumption patterns. A lack of visibility of the ecological footprint that daily consumption patterns have is observed and most respondents acknowledge that more information has to be provided to citizens on how to green their footprint. The importance of a mentality change in policy making is highlighted and ambitious actions are called for by the respondents.

Additionally, costs of new business models compared to the old ones are still perceived to be higher. Stakeholders to the consultation highlight that there is still a need further evidence and strategic approach. Some respondents highlight the positive effect linked to changing business models and the implementation of green ICT solutions in companies by promoting remote working, electronic communications and video conferences, and e-government and digital dialogue with the public administrations.

The need for an integrated approach is emphasized by all stakeholders. Several of the respondents feel the need for a sharp change in policy makers’ behaviour. In particular, a technological and political-economic breakthrough in favour of renewable energy is required. Policy makers should be promoting and demonstrating the effectiveness and advantages of behavioural changes in favour of sustainable alternatives. Stakeholders emphasize the areas of transport and logistics, telework and paperless office, smart energy grid and smart meters as specific areas of need for a further intervention.

### 3.7. EU on the International ICT Arena

Issues that are high on the international agenda are the openness of the internet that fosters ICT and internet development, governance models of the internet, as well as the European dimension in international research (Figure 27). At the international level there was a clear call to increase international coordination of R&D efforts (55.7%). The consultation also shows that particularly
an internet free of censorship (57%) and traffic restrictions (48%), global standards (47%), and security and protection of critical infrastructure (37%) are important issues for the EU on the global scene.

Figure 27: Global policy priorities

According to the respondents, Europe’s voice and presence in the international ICT arena is best strengthened by developing a clear mandate for the European Commission to coordinate the European voice on global issues (36%) as well as by establishing a clearer representation in international ICT and Internet fora would help to strengthen Europe’s voice (35%) (Figure 28). According to 23% of the respondents Europe should strengthen the Information Society representation in EU delegations across the world.

Many industrial stakeholders call for an EU intervention towards a further opening of the international markets. Stakeholders emphasized the need for an increased EU role in Internet governance. In this respect, the EU’s role should be focused on initiatives supporting the reform of international bodies (48%) and the promotion of multilateralism (29%). Environmental issues (75.7%), ageing society (48.8%) and cyber security (46.0%) are considered the three major areas in which the EU should lead with focus on sustainability, user empowerment and online safety (Figure 29).

Figure 28: Strengthening Europe’s voice Figure 29: EU to lead in developing ICT solutions for global challenges

Free trade, investment and operation of electronic communications services in third country markets (where proper enforcement is lacking) also attracted comments. In the light of growing
convergence, current restrictions on foreign capital for companies in the telecommunications and broadcasting sectors should be reviewed.

4. **NEXT STEPS**

The overall policy priorities that are emerging from the consultation show that the elements announced by President Barroso for the "Digital Agenda for Europe" are also concerns and needs of the wider ICT stakeholder community.

This consultation serves as an input for the preparation of a new European Digital Agenda, which is one of the seven flagship initiatives of the Europe 2020 strategy for smart, sustainable and inclusive growth\(^3\). It is due to be presented by the Commission in spring 2010.

---

\(^3\) EUROPE 2020 – A strategy for smart, sustainable and inclusive growth, COM (2010) 2020, 3.3.2010