COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 17.5.2004
SEC(2004) 608

COMMISSION STAFF WORKING PAPER

COMMUNICATION FROM THE COMMISSION

"eEurope 2005 Action Plan: Update"

EXTENDED IMPACT ASSESSMENT

{COM(2004) 380 final}

Executive Summary

The *e*Europe Action Plan is part of the strategy set out at the Lisbon European Council to modernise the European economy and to build a knowledge based economy in Europe. The central goal of the current Action Plan, *e*Europe 2005, is to stimulate the creation and use of on-line services. The aim is that, by the end of 2005, Europe should have modern online public services (e-government, e-learning, e-health) and a dynamic e-business environment, based on widespread availability of broadband access at competitive prices and a secure information infrastructure.

When *e*Europe 2005 was launched the Commission committed to a mid-term review in the context of the enlargement. The mid-term review was published in February 2004. It gave the Commission's analysis of the political and concrete developments, responses by EU Member States, accession and candidate countries to a survey in autumn 2003 and inputs to an on-line questionnaire and a public hearing held in October 2003.

The current Communication, which makes proposals for revisions to the Action Plan completes, this cycle of review and revision launched in 2003. The revision communication itself lays out a series of specific targets under the main fields of action of *e*Europe: broadband, public services on-line, a secure and dynamic framework for e-business and benchmarking. It also introduces developmental actions in two areas needed to strengthen the link between *e*Europe and the Lisbon Strategy. These actions are on e-inclusion and the launch of an explicit process of review and reflection in order to contribute to new frameworks for ICT policy.

The current document describes the main options for the mid-term revision of *e*Europe and how they were assessed. In short there were three choices: 1) business as usual and no change to the Action Plan, 2) minor modifications to improve the Action Plan in line with the results of the stakeholder enquiry, or 3) a full revision of the Action Plan.

The line proposed tends towards Option 2, which is for readjusting rather than revising *e*Europe 2005, given that it has a well established and accepted structure, that continuity of effort is needed to achieve the existing agreed targets, and that there is little time left to implement radical changes, with only 18 months left to run. In addition, given that *e*Europe is part of the package of Lisbon initiatives, and that the Lisbon Strategy itself is entering a mid-term review, any reorientation at this point would be premature. Rather, recognising that there may be reorientations of the policy framework in the near future a significant part of the effort in the revision will be dedicated to strengthening the connection between the Lisbon Strategy and ICT policy.

At this point it is too early to deliver a detailed analysis of impacts of the three options. This will be one of the outcomes of the period of reflection which is being launched on the back of this revision. In particular, extra effort will be given the analysis of the connections between *e*Europe and key Lisbon targets such as growth, social cohesion and environmental sustainability. Nevertheless, this document does consider as far as possible the impacts of the Options in terms of the cost of pursuing the business as usual option and the price of moving towards a much more ambitious revamp of the initiative.

Finally the document provides a detailed description of the consultation phase undertaken for the review of the Action Plan and consideration of the evaluation and monitoring measures that will be implemented during the last phase of *e*Europe 2005.

TABLE OF CONTENTS

1. INTRODUCTION

The subject of this extended impact assessment is the mid-term update of the *e*Europe 2005 Action Plan[1]. *e*Europe 2005 is the successor of the *e*Europe 2002 Action Plan which was launched in June 2000 to support the Lisbon Strategy, to make the European Union the most competitive and dynamic knowledge-based economy in the world by 2010. A parallel initiative, *e*Europe+ 2003, was adopted by the Acceding and Candidate Countries with the encouragement of the European Council. Then in 2002, building on the success of the first action plan[2] in meeting most of its 65 targets, the *e*Europe 2005 Action Plan was launched.

Whereas the first Action Plan targeted Internet connectivity, *e*Europe 2005 aims to support economic growth and social cohesion through the take up of on-line services and e-business based on a secure broadband infrastructure. The importance of Information and Communication Technology (ICT) is well recognised as a source of productivity growth and as a means of increasing the quality of private and public services. In the context of the Lisbon Strategy, therefore, *e*Europe has a central contribution to make.

In its conception, *e*Europe is intended to catalyse actions within Member States. It is based upon the Open Method of Co-ordination in which benchmarking of targets agreed by Member States and exchanges of good practice form the key supports for policy delivery. As such, *e*Europe is of itself an evaluative activity providing an informed and consultative basis for action.

This impact assessment document sets out the context, objectives, options and their impacts - for the updating of the *e*Europe 2005 Action Plan. It is based upon extensive consultation and empirical evidence. Of particular importance in this respect is the mid-term review of the *e*Europe 2005 Action Plan which was welcomed by the Member States and is a product of the lessons drawn from *e*Europe 2002. Indeed this current document forms part of the mid-term review of *e*Europe 2005 which has been conducted in light of the expansion of the Union to 25 Member States.

The need for this mid-term review of *e*Europe was driven by 3 factors that called for a reassessment of the objectives:

- **Enlargement:** As from May 2004, the EU has 25 Member States. This mid-term review was seen as necessary to check that the targets and actions of *e*Europe 2005 are appropriate for the enlarged EU and updated where needed.

- **New Developments:** information and communication technology is developing rapidly and innovation can quickly transform markets, create new ones and outdate current policies. The mid-term review was necessary to check its continued relevance in the face of such new developments, especially the fast developments in the take-up of broadband and the impact of the new Regulatory Framework on electronic communications.

---

[1]   *e*Europe 2005: an Information Society for All. COM (2002)263
[2]   See: *e*Europe 2002 Final Report. COM(2003) 66 and *e*Europe 2002: Progress made in Achieving the Targets SEC(2003)407

- **Implementation**: *e*Europe is implemented along the lines of the open method of co-ordination. This method provides national policy makers with a mechanism to compare progress and to take action if necessary. *e*Europe objectives depend upon action at European, national and local levels. A key element of the mid-term review was to ensure that the action plan is implemented effectively and to identify where stakeholders are calling for improvements

The review was undertaken in three steps. First, during the second half of 2003, there was a wide consultation with stakeholders, including a survey of stakeholders in EU Member States, Accession Countries and Candidate Countries in autumn 2003 and inputs from an on-line questionnaire and a public hearing held in October 2003. Second, in February 2004, the Commission published a Communication on the mid-term review summarizing the Commission's analysis of the consultation.[3] The review stressed that overall the *e*Europe 2005 targets are still valid in a Union of 25, but that certain adjustments are needed to respond to new developments and to speed up progress. Third, the Commission committed to the publication of a revision of the Action Plan in time for the June 2004 Telecom Council. The present Extended Impact Assessment provides a further opportunity to deepen analysis on progress and options for improvements and is presented here as a supporting document to the Communication '*e*Europe 2005 Action Plan: An Update' (forthcoming).

In essence, the present Extended Impact Assessment is made up not only of the current document and its associated Communication, but also the summary of the consultation on *e*Europe that was published in the mid-term review communication and the working paper that accompanied it.[4]

Moreover, in reading this document it should be borne in mind that the proposals are modifications of an existing policy framework that has been running for 4 years and which has a relatively limited time left to run (around 18 months). In addition, the revisions take place at a time when the Lisbon Strategy is entering its own mid-term review. The review of Lisbon will undoubtedly lead to re-orientations of policy, to which any successor to *e*Europe would have to contribute. Therefore, the current exercise is constructed to make progress on the existing targets whilst preparing for the second phase of the Lisbon Strategy beyond 2005. The time is not right for a major revision of *e*Europe, rather the emphasis is on review, consolidation and evaluation in order to build the basis for future policy frameworks. For these reasons, under the principle of proportionality, this Extended Impact Assessment takes a light form, notwithstanding the significant efforts that have gone into the consultation and review phase. Indeed, a substantial part of the effort proposed in the revision will contribute to the much more extensive ex-ante assessment that will be needed before a new policy framework is launched following the review of Lisbon and the termination of the current *e*Europe Action Plan. It is intended therefore in the next and final 18 months of the current Action Plan to mobilise a full review and assessment of options for post 2005.

The document is organised in the following manner. Section 2 provides an overview of the main policy issues to which *e*Europe aims to contribute and the way it tries to achieve these aims. Section 3 examines the particular objectives of the current process of revision. Section 4 summarises the main options. Section 5 provides justification for the selection of the options in relation to there potential impact. Section 6 gives more details of the extensive process of

---

[3]   *e*Europe 2005 Mid Term Review. COM(2004) 108
[4]   eEurope 2005 mid term review Background Paper SEC(2004)278

consultation that produced the mid-term review and revision Communications. Section 7 outlines the procedures for monitoring, follow-up and evaluation that have been put in place for *e*Europe 2005. Finally, Section 8 gives a short summary and justification of the overall package of options proposed by the Commission.

2.   THE ISSUE

The Information Society has great potential to improve both productivity and the quality of life in Europe. New services, applications and content make it possible to increase productivity and hence growth, employment, cohesion and sustainable development, all of these are objectives identified within the Lisbon strategy. ICT will also provide citizens with more convenient access to information and communication tools.

*e*Europe 2005 aims to realize these possibilities through stimulating the roll-out and take-up of ICT-based systems and services. In particular, it aims to set short term targets in a limited number of areas in order to stimulate progress in a practical and visible manner. The first action plan targeted internet connectivity in Europe, the promotion of on-line public services and the growth of e-commerce. By the end of *e*Europe 2002, nearly all enterprises and schools were connected to the Internet, the number of households connected has tripled and Europe had the most rapid research network in the world.

The second Action Plan, *e*Europe 2005, looked towards the pay-offs of achieving connectivity in terms of the delivery of on-line services, applications and content. As a result, it proposed that Europe should have modern on-line public services (e-government, e-learning, e-health) and a dynamic environment for e-business, based on the availability of broadband access at a competitive price and a secure infrastructure. A review of the various fields of *e*Europe is provided in annex II-A at the end of this document to illustrate the state of play on the issues covered. The annex identifies main challenges and improvements or adaptations to be made.

*e*Europe 2005 aims to meet its goals through progress towards a set of 37 well defined actions, that call for far-reaching commitments from the Commission, Member States and the private sector. The targets are being achieved via the open method of co-ordination mainly through benchmarking and the exchange of good practice. Overall the action plan sets the scene for a co-ordinated European policy approach on information society issues. The *e*Europe action plan has been confirmed as a key element in the Lisbon strategy. If successful, the plan should have a significant impact on growth and productivity, employment and social cohesion in Europe.

The main intended areas of focus of *e*Europe are economic and social. First, we can look at the outcomes of *e*Europe for contributions to the key economic factors such as increases in labour productivity, job creation and the emergence of new markets for European goods and services. Second, on-line public services have important potential to increase welfare by improving the efficiency and cost-effectiveness of public service delivery, encouraging the introduction of new services and in some areas by increasing the services available to citizens and communities that have problems of access. Although not currently within the scope of *e*Europe, ICT also has capacity to contribute sustainable development.

In the context of a revision of *e*Europe, therefore, it is worth reviewing the scope for such contributions of ICT policy to these three main policy pillars of the Lisbon process.

2.1. ICT and increases in growth and productivity

In Lisbon 2000, the fifteen Member States of the EU agreed on a strategy to boost growth, improve welfare and create more and better jobs. It was however pointed out that welfare, competitiveness and employment can only be sustained in the long run if they are based on productivity growth and innovation. In this light, economists pointed to the difficulty in sustaining the European model with no significant increases in both productivity growth and innovation.

This last observation was highlighted by the fact that GDP in the EU lagged behind that of the US between 1996-2002. Although labour participation was on the increase in the EU, labour productivity was not. Indeed, Europe's output per hour, which was already low, has declined further relative to that of the US.

One of the main sources of labour productivity is technological innovation. And here the Commission's Innovation Scoreboard shows that the EU lags behind the US. Indeed, the filing of high-tech patents in Europe is 45% below the US level and R&D expenditure is 1.94% of GDP in the EU-compared to 2.8% in the US.

Although some European countries (i.e. the Nordic ones) do score higher than the US in various innovation indicators, it seems that innovation in the high-tech manufacturing sectors and investment in high-tech products can be safely pointed to as the ones responsible for the overall rising productivity gap in manufacturing with the US.

ICT is the main generic technology here. It is the critical enabler of productivity growth and innovation. However, the key question these days is not so much one of technology as such, but one of how technology is used, and of how it is affecting GDP growth through improved productivity.

To reap the productivity benefits of ICT investments are needed in the reorganization of companies and administrations and in skills. Recent economic literature[5] shows that European economies have invested less and later in ICT than the US. The diffusion of new technologies is often slow. Firms can take a long time to adopt them, changing organisational arrangements and implementing effective business processes.

As regards *e*Europe the main policy instruments available to promote a high performance in the fields of economic growth and productivity are based on the open method of coordination. This means that the main efforts have to be directed towards measuring progress towards commonly agreed goals. In this case the tools are:

- Supporting the adoption of ICT in enterprises through benchmarking of use and provoking wide debate and action on the results of these exercises. The *e*Europe benchmarking results provide data and comparisons that otherwise would not be available.

- Creating an appropriate institutional context for the development of e-business. This includes not just work on the legal framework for e-commerce but support to the effective re-organisation of business through the take up of innovative business models that combine organisational change with the adoption of ICT. These efforts are particularly aimed at

---

[5] The EU Economy: 2003 Review (ECFIN\391\03)

Small and Medium Sized Enterprises (SMEs) which represent a very large proportion of the European business sector.

- Stimulating the roll-out of on-line public services to contribute to the efficiency of the public sector, which is a very significant share of the total European economy, and which provide more flexible services to enterprises.

- Encouraging a more stable environment for the adoption of ICT in business through steps to support standardisation, interoperability and exchange of good practice.

- Promotion of a secure broadband infrastructure that will permit European firms to operate at the frontier of innovation, and in particular to implement high performance corporate and inter-firm networks across the entire European territory.

It is of course difficult to isolate the specific contribution of these actions, taken under *e*Europe, to the overall process of economic growth and development. However, in light of the widening of the productivity gap between the EU and the USA, which is certainly related to differing rates of innovation and penetration of technology, *e*Europe provides a necessary part of the package needed for a strong European economy. In a revision it is important to gauge these contributions in more detail in order to tease out the specific impacts of *e*Europe in order to set the frame for any major overhaul of ICT policy frameworks for the future.

2.2. Social cohesion

The 3rd Report on cohesion showed the strong contribution that on-line public services can make to raise the access and availability of services and to give training possibilities and employment.

On-line provision can be a catalyst for e-inclusion by offering new and better services. For example, ICT support can lead to the offer of 'one-stop shops', where citizens can leave behind the frustrating pilgrimages from one public office to another. Avoiding queues in administrations is particularly useful for people who are restricted in their mobility, because they are child carers, elderly, or disabled. On-line provision can also raise the quality of a public service and make it more attractive for disadvantaged people**.**

- On-line health services, which are targeted by a specific eEurope Action line, can provide particular benefits for disadvantaged people, like the chronically ill or those with a restricted mobility, or for those living in remote or deprived areas, where some medical specialities or services may not be readily available. Survey results underline that health is the most attractive on-line service for non-users.

- A further important dimension concerns the potential of on-line services for fostering cultural identities and, hence, social integration. Specifically, ICT may activate the cultural contributions of persons with disabilities.

- ICT can also help to overcome linguistic barriers, by on-line translation or new electronic tools for learning foreign languages. On-line facilities for immigrants, asylum seekers and refugees to receive public information in their native languages can assist them to get accustomed in their new environment.

The changing status of women in society and in the family means that the interface between women and men is also an important element of social cohesion. In this context it is important to bear the gender dimension in mind, both in terms of women as ICT users or providers generally and as a specific sub-group within the various target groups, such as the employed or the elderly.

A critical element of e-inclusion concerns training and employment. The "Strategies for Jobs in the Information Society" set-out key areas of progress to realise the ICT job potential. This fed into a reinforced emphasis on ICT and digital skills within the European Employment Strategy, in particular particularly Guidelines 5 and 15. Tapping the ICT potential for employment is essential for meeting the targets set by the Strategy adopted by the European Council in Lisbon, in particular the increase in employment rate up to 70% by 2010. ICT opens new job opportunities for employed, unemployed and also for people currently out of the labour market.

More than half of all jobs already require digital skills. For new jobs this proportion is much higher. Digital literacy (word processing, spreadsheet operations, Internet usage and basic database management) is becoming a *sine qua non* condition for entering and increasingly for retaining employment. However, only 31 % of the unemployed say that they have "any kind" of computer training (not specifying whether this would be sufficient for a job).

This highlights the need for enhancing ICT user skills for disadvantaged people. Social partners and employers have an important responsibility in providing these skills as set-out in the Employment Guidelines. Obtaining a recognised ICT and ICT-related Skills certificates will be particularly important for people that have to prove their employability after longer periods out of work.[6]

At a higher technical level, (conversion) courses in ICT or e-business skills offer promising job profiles on the basis of relatively short training periods. However, disadvantaged people often need to be specifically encouraged to take up this opportunity. Industry involvement frequently enhances the chance of participants to get employed at the end of the training.

As regards *e*Europe, the main avenues of development on social cohesion have been threefold. First, progress in the take up of internet systems and services in Member States is measured through the benchmarking efforts. Second, there has been a strong emphasis on getting public services on line. In particular, 12 of the 20 e-government services identified as priorities for interactivity are citizen orientated. Public internet access points have been targeted as particular areas to be benchmarked as have policies to get e-health services up and running. Third, the development of the knowledge society through e-learning occupies a central role in *e*Europe with stimulation measures on digital skills, virtual campuses and support to university and research use of ICT.

The increased social diversity of the European Union following enlargement will certainly make the issue of e-inclusion a high priority. However, this does not mean that new goals should be introduced. Rather new efforts may be focused more directly on refining the areas in which progress is needed and therefore should be monitored.

---

[6]   In addition to the European Computer Driving Licence (ECDL**)**, which is used in most Member States, a number of similar Europe-wide accreditation schemes have developed on the market.

2.3. Environmental sustainability

The third pillar of Lisbon is to achieve growth in an environmental sustainable manner. ICT can make a valuable contribution here through processes of efficiency increases, dematerialisation by substituting resource intensive processes and products.

For example, sustainable environmental management can improve monitoring and response systems to facilitate environmental performance and more efficient resource use. ICT applications can be used to reduce the consumption of energy, water and other essential natural resources through more efficient agriculture and industrial procedures. For example, precision agriculture techniques using Geographic Information Systems and Global Positioning by Satellite systems can facilitate weather and soil monitoring, crop forecasting and the ability to optimize farm return on investment, ensuring more efficient use of scarce resources. In the future, ICT may also play an important role in the fight against pollution— not only by providing more useful metrics and information, but also by enabling population decentralization and more efficient patterns of transport mobility.

On the other hand there are concerns that ICT through its very dynamism is contributing to a high waste society. In particular, the fast obsolescence of computer equipment leads to problems of waste disposal of electronic components. This problem looks set to get worse as such devices become increasingly embedded into everyday objects.

The issue of environmental impact of ICT is not developed within the current *e*Europe Action Plan. Moreover, given that the current Action Plan is a minor revision to an already existing policy framework it the mid-term review is not an appropriate moment to introduce such considerations, even though they are clearly of high importance. Rather, it is proposed that the environmental aspect should be addressed as part of the review on the future of *e*Europe and the reflections on future policy frameworks in this area.

The Lisbon Strategy is a commitment to bring about economic, social and environmental renewal in the EU, making it the world's most dynamic and competitive economy. Under the strategy, a stronger economy will drive job creation alongside social and environmental policies that ensure sustainable development and social inclusion.

3. OBJECTIVES

As noted above, the overall objectives of eEurope are to support economic growth and social cohesion through the take up of on-line services and e-business based on a secure broadband infrastructure. In February 2004, the Commission published a Communication (supported by a more detailed background paper) which analysed the concrete progress achieved to date.

A consultation was carried out during summer 2003, which confirmed that the *e*Europe 2005 objectives and targets remain valid, in the context of the enlargement of the EU to 25 members and that *e*Europe has stimulated many national and regional efforts identified through a wide stakeholder consultation (see section 6 for details). Progress in rolling out broadband and getting e-government services on line has been accelerated by increased political support at the national and EU levels.

The consultation revealed a consensus on the need to focus the mid-term review on updating and fine-tuning the initiatives and strengthening the implementation mechanisms. Moreover

the conclusions of March 2004 Telecommunications Council proposed that any changes should take the form of fine-tuning rather than major revisions[7].

The Communication provides a detailed exposition of the range of actions where improvements can be made, but in summary the conclusions were that the revision at mid term should aim at:

- A better balance between supply and demand-side approaches. The factors that drive demand need to be better understood, in order to pave the way towards really attractive on-line services,

- Enhancing the pan-European dimension; initiatives mostly remain nationally or regionally focused and opportunities for more effective exchanges of practice are missed,

- Tackling the barriers to the further rollout and take-up of broadband. This depends in part on making content more attractive and abundant. Content markets in turn will benefit from workable approaches to the protection of copyrighted content and the implementation of interoperable DRM solutions. Of course, considering the devastating effects of illegal copying and piracy on the audiovisual industry, the need for interoperability of DRM solutions should be weighed against the urgent need for legitimate alternatives to illegal downloading and copying of music and films,

- Addressing interoperability and standards, especially to permit widespread access that is technology-neutral,

- Realising the pay-offs from ICT investments in terms of productivity growth, job creation, higher efficiency and service quality. Steps could include: support for experimentation with new business and service delivery models to get more value out of the shift to e-services and learning from experiences of productivity and efficiency gains through effective integration of front and back offices,

- Making a stronger link between benchmarking efforts and policy outcomes, the measurement of demand and evaluation of impact of e-Europe, and

- Reinforcing the social cohesion aspects of *e*Europe, particularly as regards regional imbalances and the potential for multiplatform delivery of e-services to widen accessibility.

Following on from the analysis of the issue and the needs in the previous section, the main objectives of the update of the action plan are:

- To further encourage a wider development of broadband through attention to issues of territorial coverage and the conditions for a wider adoption.

- To support e-business adoption through increased efforts on the framework for e-business and updating of targets in relation to SMEs and interoperability.

---

[7]   SI(2004) 201

- To encourage a more effective deployment of on-line public services through measures to overcome fragmentation of efforts and to stimulate greater pan-European efforts, including more effective exchanges of good practice.

- To respond to calls in the consultation for a higher profile to issues of e-inclusion by the introduction of a new chapter dealing with issues of social cohesion in the Information Society.

- To increase the effectiveness of eEurope by giving the benchmarking activities a more consistent image and higher profile and by increasing the policy relevance of indicators and statistics.

A further reason that the time is not right for major changes in the eEurope Action Plan is that a mid-term review of Lisbon is being launched and any major reorientations of ICT policy should not prejudge the outcomes of this more general policy review process. Thus, a clear additional objective of the current revision is to launch a process of reflection on how the *e*Europe instrument and ICT policy more generally can be mobilized to support to objectives of sustainable development that are embedded in the Lisbon Strategy.

This in fact is one of the key contributions that the current revision makes to increase the policy impact of *e*Europe. To this end a specific new chapter is proposed in the Communication and in the Options section of this report. *e*Europe, as an Open Method of Coordination Instrument, can even be seen as a policy monitoring and evaluation tool. Thus this chapter of the revision takes the form of a virtual Extended Impact Assessment exercise orientated towards the future options in the area of ICT policy and the Lisbon Strategy. Much effort over the next 18 months will be focused on such evaluation supportive activities. Examples include the benchmarking of progress towards *e*Europe, the codification and exchange of good practice, analyses of the impact of *e*Europe actions in e-business, e-health and e-government and not least the consultation processes that take place in the *e*Europe Advisory Group[8].

4.   OPTIONS

The consultation launched for the review confirmed the relevance of *e*Europe objectives and their adequacy to the challenges of information society in EU25. Therefore, proposals focused on updating and fine-tuning the initiatives and strengthening the implementation mechanisms.

Those proposals do not cover the whole field of *e*Europe, but concentrate on areas where there is a need to further stimulate action where new targets should be introduced in response to emerging policy or technology trends.

This calls for a review which will address certain areas identified as important fields of action during the consultation period: broadband, e-services, e-business, security, e-inclusion and benchmarking.

In that perspective, the review can be seen as a preparatory step towards the establishment of a new policy framework for ICT policy in Europe. To this end it emphasises stakeholder

---

[8]   "eEurope Advisory Group" is the new denomination of the "eEurope Steering Group" mentioned in the MODINIS Decision N°2256/2003/CE.

dialogue and exchange of good practice in order to identify pathways towards progress rather than the specification of new targets.

In addition, it emphases the importance of undertaking a phase of review and evaluation before any new phase of *e*Europe is proposed or launched. This overall evaluation is already planned for 2005 in order to highlight the main policy targets to be achieved by 2010 and to make increasingly explicit the role of ICT in achieving the Lisbon Targets of growth, cohesion and sustainability.

Three broad options for the revision of the Action Plan can be discerned: business as usual, minor changes to update the AP and full revision. These options can be seen in relation to the main drivers to this revision: enlargement; the emergence of important new trends such as the recent rapid adoption of broadband and increased trust and confidence concerns about the internet.

The main reason for having a mid-term review of what is in fact quite a short term Action Plan was the recognition of the necessity to take account of enlargement. However, the consultation for the mid-term review indicated that no new actions should be taken beyond absorbing *e*Europe+ into *e*Europe 2005. In particular, the message was passed that the existing targets should stand. The main work therefore becomes to widen actions on benchmarking and exchange of good practice from the EU15 to the EU25.

Nevertheless, as noted in the mid-term review Communication, enlargement does introduce a greater diversity of levels of development in the EU Information Society. This affects in particular the coverage and quality of information infrastructures, the sophistication of e-services on offer and the capacity of European citizens and firms to benefit from the availability of ICT. These factors have to be reflected in the revision of the AP and in the reflections on the future orientations of Information Society Strategies. For this reason new emphasis is placed in this revision on the impact of the greater diversity in the European Information Society post-enlargement.

Finally, this review must be used as a preparatory step towards the establishment of a new policy framework for ICT policy in Europe which needs a proper overall evaluation before any other initiative is launched. This wide evaluation is already planned for 2005.

Table 4.1 Options for the Revision of *e*Europe 2005

Domain	Option 1: Business as usual	Option 2: Essential changes	Option 3: Full revision
Broadband	Finalise work on national broadband strategies and extend to EU25	Extend National Broadband Strategies to EU25. Tackle Digital Divide in territorial coverage	Extend National Broadband Strategies to EU25. Tackle Digital Divide in territorial coverage. Develop strategy for a high speed multiplatform EU.
e-Services	Check track towards targets and launch remedial steps where needed	Targeted exchanges on best practice in e-learning; e-health and e-government	Set up 'deployment platforms' aiming at the transfer of research results in e-learning; e-health and e-government into action through structured best practice dialogues; and scaleable interoperability initiatives.
e-Business	Ensure that targets are on track and identify remedial steps	Up-date actions to reflect emergence of new issues such as spam, consumer confidence and mobile payments	Major revision of actions to increase the scope of *e*Europe to Lisbon through e.g. flexible frameworks for e-business, e-services stimulation through e-procurement, and SME-skill programmes.
Benchmarking	Raise visibility through increased web presence; re-discussion of indicators in *e*Europe Advisory Group	Target a high profile public image for *e*Europe by repositioning the benchmarking exercise as the one-stop reference portal on the Information Society in Europe	Root and branch revision of the indicators in order to provide the basis for evidence based policy. As in option 2 implementation of a one-stop portal on the Information Society in Europe
Security	No new actions until the new security agency is operational.	Mainstream security actions into all action lines	Launch major new security activities in particular in response to rising concerns such as identity management, spam and terrorist threats.

e-Inclusion	Concentrate on territorial coverage of broadband	Raise profile of e-inclusion as an issue in both Information Society and Social Inclusion policy	Develop and launch an e-inclusion agenda which has explicit targets on which MS agree and for which new indicators are established
Review and reflection on mid-term of Lisbon	Evaluation of *e*Europe 2005 during its last year of operation	Evaluation and impact assessment of *e*Europe in light of Lisbon process	Evaluation, impact analysis and launch of major prospective debate on the European Information Society

In summary of the discussion in previous sections, the main guide to identifying and selecting options for the mid-term review of the *e*Europe AP were, the need for:

1. Consolidation and reinforcement rather than new directions: with only 18 months left to run to the end of the Action Plan, major new initiatives are unlikely to deliver significant successes. Rather the emphasis should be on achieving the targets already set

2. Impact: the tools used by *e*Europe are based on the Open Method of Co-ordination. Exchange of good practice aims to build stakeholder commitment to agree common targets. To complement this, benchmarking aims to provide a picture of the progress towards these commonly agreed targets. This revision should seek ways to increase the performance of these tools in meeting the goals of *e*Europe.

3. A Clear Focus: the *e*Europe Action Plan should restrict emphasis to its main lines of action which are: 1) to bring benefits by getting public services on-line; 2) to create a dynamic framework for e-business adoption; 3) to promote a high speed Information Society by stimulating the roll-out of broadband; 4) to take steps to encourage trust and confidence in the information society.

4. Relevance: effort should be focused on bringing the contribution of *e*Europe to the Lisbon Strategy into the centre of the Action Plan's activities. In particular, preparing for the outcome of the mid-term review of the Lisbon Strategy should absorb a major part of the efforts of the last year and one half of the Action Plan.

5. Respecting subsidiarity: as an OMC instrument the *e*Europe Action Plan has subsidiarity built-in, through bottom-up engagement of stakeholders in defining good practice frameworks and common targets for the benchmarking framework.

The proposed line to take is generally in Option 2, which is the option most consistent with the message from the consultation to adjust rather than to revise *e*Europe, to bring *e*Europe 2005 to a satisfactory conclusion and to make more explicit the contribution of *e*Europe to the Lisbon Strategy. It also the most proportionate option in light of the level of effort needed to achieve results and the time remaining to achieve them before the end of 2005.

5. IMPACTS

This section looks at each of the areas identified in the Table 5 on Options above and discusses the implications of choosing one way forward rather than another.

5.1. Broadband

Broadband is clearly an important part of *e*Europe because it is the central infrastructure for the delivery of information services. At the moment the main barriers to its further development are coverage (not all places are served); cost (prices have been falling but connection charges still seem high enough to discourage to many potential users), quality (the e-services on offer still lack the professional finish and ease of use needed to achieve a mass market appeal) and content (digital content markets are not yet mature, still lacking frameworks to stimulate the offer of services such as agreed rights management regimes and secure payment systems).

Business as usual - option 1

In examining the options for broadband, **the basic 'no change' option is to extend the process of adopting national broadband strategies (NBS) to the EU25**. This is consistent with the OMC style of *e*Europe. The NBS statements are in effect benchmarks for one Member State to calibrate its policy programmes and performance against the others. Moreover, the take-up of broadband continues to climb rapidly. Prices continue to fall. A do-nothing strategy could be appropriate given that any public intervention may either be distorting (the key role of public sector is to make sure that market forces operate effectively and openly), redundant (rollout seems to be happening quite fast even if it is not evenly distributed), inefficient (subsidies to promote communication coverage for example are known to be ineffective in driving take-up). Thus a do-nothing scenario is likely to result in largely positive impacts.

Full revision – option 3

Comparing the NBS statements is a valuable contribution to guiding policy. It would however have considerably greater impact if the strategy documents were produced to a common format and if policy impact indicators were to be agreed to measure the effectiveness of broadband actions. Such an approach however would require a process of dialogue between Member States in order to establish **a common strategy for broadband in Europe utilising all appropriate technological opportunities**. Such a common strategy would require a better analytical understanding of the main ways in which broadband has an economic impact, in order to set valid common targets. This ambition is certainly beyond the current political reality of broadband policy. In addition it may, for the reasons given above, be premature. The high growth rates of broadband markets and the very different levels of development of Member States, make it impossible to imagine a sufficiently stable base for an international strategy.

Essential changes - Option 2

However, the current uncertainty regarding the immediate development path of broadband does not mean that policy makers can assume that all will be for the best if we just wait and see. In particular, it is necessary to explore in more detail the different scenarios along which broadband coverage and use might develop. First, **it seems probable that broadband**

services will not reach out to all European citizens and firms on commercial grounds alone, at least not within a reasonable timeframe. The most effective ways to overcome this problem need to be explored, in particular, in order to avoid further disadvantaging remote and rural regions. Such an investigation and an associated strategy paper is the object of **the proposal in Option 2 to launch a digital divide forum to look into the territorial divide issue**.

Second, the patterns of demand for broadband are still unclear. What users do on-line and why they do or do not subscribe to broadband are only partially understood. Moreover, the implications of this differential interest in broadband are important in the context of *e*Europe. For example, getting public services on-line will not deliver high efficiency gains unless eventually the services go fully on-line. This raises questions about e-inclusion and the right of access to services on multiple platforms including off-line delivery. **From the point of view of the Lisbon objectives such as the competitiveness of European service industries and social cohesion it is necessary to understand how broadband use is developing**.

Option 2 seems to offer the best balance of effort to results given the time available. The impacts of Option 2 are likely to be largely positive: increased information and analysis made available to Member States; increased consultation and exchange supporting more coherent policy planning; establishment of a high level advisory service providing practical advice to Member States on how to reduce digital exclusion. This option is also likely to reduce the risk of over-simplification of the multi-layered problems associated with digital exclusion and support analyses at the appropriately granular levels of regions/sub regions on the one hand, and social groups and conditions on the other. It risks, however, making more visible the gaps in broadband access and exposing certain regions or Member States to moral pressure. In the transition period of an enlarged EU this could discourage further progress among 'poor performers'.

5.2.   e-Services

Getting public services on-line is arguably the centrepiece the *e*Europe Action Plan. It is the field in which the public sector has a clear role of leadership. It is also, given the weight of such services in the economy, an area where efficiency gains can make substantial contributions to achieving the Lisbon objectives.

Business as usual - Option 1

The business as usual option is not feasible in this area. One of the main aims of the Action Plan is to promote e-service take-up and interoperability through exchanges of good practice. This is enshrined in the MODINIS programme, which attributes 40% of its resources to such actions. Yet, the targets in the best practice section of *e*Europe 2005 are not specified enough to permit verification that they have been met. Adopting a 'do-nothing' option would prejudice already agreed efforts to improve e-service take-up.

Full revision – Option 3

In principal, **it would be desirable to design new European level policy instruments to support this process of deployment from drawing board to operation**. Given the vast range of services at stake and the complex range of stakeholders engaged however, **it is not likely that over the 18 month timeframe of *e*Europe that the exercise could move beyond**

a general setting of prioritises and the launch of multi-stakeholder platforms to examine the issues in more detail.

Essential changes – Option 2

Therefore, **it is proposed that a series of actions targeted on each e-service domain are introduced** with the aim to create the basic conditions for exploitation of the vast efforts and resources currently being expended in innovations in public service delivery, but which are only slowly bearing fruit in terms of higher quality more efficient public services.

Actions are proposed at two different levels. **The first target is to promote the wide deployment of research results and technological innovations in e-services to overcome the** breaks in the chain from research results to deployment. Successful research projects need access to suitable resources to bring the pilot from prototype to 'market readiness.' Efforts are duplicated across different countries leading to incompatibilities of scope and approach that are costly to fix retrospectively and reduce economies of scale. **Agreed priorities for deployment would facilitate public administrations to cooperate on a multilateral basis and voluntarily in the deployment of innovations in public service delivery**. This could also permit the targeting of a critical mass of resources on a rolling agenda of issues, thus avoiding the current problem of diluting the resources so thinly that outcomes are late and disappointing.

The second level of action is targeted towards each main e-service domain. Here, the aim is to create a series of platforms for best-practice exchange in order to share lessons, to define user needs, to identify barriers and to spot opportunities for effective e-service delivery. This level of action would be complementary to the deployment platform level, because it would aim to catalogue and codify experience, and then use that as a basis for dialogue between all stakeholders to set out roadmaps for the effective modernisation of these services.

Bearing in mind the short time left for *e*Europe and the resulting need proportionality, the proposals are limited to updating the Action Plan in line with existing policy frameworks. In e-Government, the Action Plan is merely updated to reflect the Council Conclusions of 2003, which call in particular for the launch in 2004 of a set of pan-European e-Government pilot projects with benefits to citizens and companies throughout the European Union, with a view to evaluating needs, obstacles and solutions. In e-health the proposals reflect those in the forthcoming Action Plan on e-health. In both these cases, additional actions are not proposed in order to avoid further burdening the policy agenda and stretching still further the efforts of actors in these fields. Only in e-learning is an additional action proposed, and this is in order to bring the e-learning into line with the other domains. Arguably, e-learning is the most important domain in which to make progress given its centrality to the Lisbon objective of sustainable development towards a knowledge economy. As the recent Kok Report points out e-learning is essential for the Knowledge Society and for the Lisbon Strategy. It is therefore not an optional extra for *e*Europe. In the case of e-learning, however, in order to make maximal synergies with existing efforts it is proposed that the best-practice framework is implemented within the context of the ICT group of the Ministries of Education, but with an expanded brief to look at life-long learning. This option is most likely to result in positive impacts: it offers good potential to grapple with the organisational and cultural change issues associated with effective use of ICT in education. It also is likely to better support the aims of European cohesion through supporting greater compatibilities of educational provision across Member States.

5.3. e-Business

As noted above, ICT is the motor of growth in labour productivity, in delivery of high quality, of competitiveness, of the generation of new markets and eventually of job creation. It is therefore difficult to overplay the importance of business innovation in respect of ICT in the Lisbon Strategy.

As a result, the area of e-business is a crucial but difficult part of the portfolio of *e*Europe Actions. Although the private sector is a partner in *e*Europe, e-Business is difficult to embed within a public policy initiative like *e*Europe precisely because the public sector is not the lead player. With the business downturn in the early 2000s business commitment to *e*Europe fell and the targets were down played in relation to more immediate issues of business survival.

Business as usual - Option 1

There is no business as usual in this field. As reflected in the mid-term review communication some targeted updates of the action plan are more than desirable given issues that have entered the policy arena since 2002.

In a dynamic field such as e-business, even in the short period that *e*Europe 2005 has been active many things have changed. Thus although a simple reaffirmation of the existing targets is specified here as Option 1, it is not adequate. It would imply the need to reinforce efforts to stimulate business dialogue on standardisation and interoperability in order to make sure that targets in these areas are met. In essence, this is rather similar to the actions on exchanges of best practice and dialogues on interoperability in the section on public services.

Full revision – Option 3

Therefore the main actions that are currently proposed for e-business under *e*Europe aim at creating a fertile environment for e-business rather than engaging direct measures. The most ambitious approach to e-business (**Option 3) would include the introduction of a systematic policy framework aiming at 1) establishing for e-business in Europe an environment that is reliable but flexible, 2) stimulating e-business growth through a decisive move to e-government and e-procurement, 3) an action programme to develop e-skills development, 4) reinforcing SME take-up through business dialogue and best practice frameworks.**

All these elements are already to some degree reflected in the existing Action Plan, but they do not yet take the form of a balanced framework of actions, but rather they are a loosely connected set of policy initiatives. Again, in the short run probably such an ambitious revision is not feasible. However, the right time may come soon as business confidence appears to be rising. Such a revision of e-business policy strategy could be important in the run up to the Lisbon mid-term review given the very high importance of business use of ICT to economic growth. Thus **Option 3 might be retained for a follow up to *e*Europe 2005 more explicitly targeted on delivering Lisbon Strategy than the current Action Plans.** Meanwhile, this option can be more fully analysed in terms of its likely social, economic and environmental impacts over the remaining period of the current Action Plan.

Essential Changes – Option 2

Taking therefore a more modest approach, in **Option 2 the requirement for policy innovation is in the first line of policy action on e-business, which is to make the framework conditions as conducive as possible for e-business**. In particular, and to follow up the discussion above of broadband take-up, the issue of digital rights management (DRM) has emerged as a defining feature of the debate on the delivery of both public and private information. Amongst the concerns are that the legal status of DRM needs a clearer definition and that there the risk of proliferation of potentially incompatible DRM solutions. Better definition of both these areas is needed in order to create the context for e-business as both a supplier and user of e-content.

Issues such as security and trust and confidence are already prominent in *e*Europe, but certain new issues have emerged that are of particular concern, in particular the problem of unsolicited commercial electronic mail otherwise known as spam (subject of the recent Communication COM(2004)28). In addition, secure and flexible payment systems are in continual evolution, such as the requirement for micro-payments (in order to encourage e-content demand) and mobile-payments (in order to encourage mobile commerce). Finally, an Interoperability Framework for e-Business is targeted for the coming years, in particular though an e-Business Interoperability Forum launched with the support of the European Commission in 2004.

Strengthening e-business in Europe would result in significantly improved opportunities for economic growth. However, the enabling conditions are multifarious and crude policy intervention could risk prejudicing business confidence over a long term. Proportionality dictates that the most effective balance of impacts is likely to be associated with close monitoring and analysis of the e-business environment which build on policy interventions already underway. In this way new policy formulation can proceed through an informed, collaborative and consensual strategy.

5.4.   Benchmarking

One of the identified weaknesses of the Lisbon Process so far has been that it has not sufficiently communicated itself to society and business[9]. This communication deficit also applies to *e*Europe as it reaches its mid-term. The set of indicators does not provide a coherent or integrated picture of *e*Europe. Insufficient linkage is made to complementary data from other sources. The value of the data for guiding policy is weak. There is still no place to go for an authoritative picture of the state of play of *e*Europe, and how it compares to other major economies.

Business as usual - Option 1

On this basis, the most positive impacts are likely to be realised through more effective collaboration and communication efforts. For these reasons, the revision of the Action Plan places a heavy emphasis on communicating *e*Europe. As a bare minimum, **Option 1 aims for a reformulated web and that the benchmarks should be re-discussed with Member States in the *e*Europe Advisory Group, with a view to a possible redefinition in any follow up to *e*Europe**.

---

[9]   European Policy Centre, Lisbon Revisited – Finding a new path to European growth, March 2004, Working Paper – 08.

Full revision – Option 3

Option 3, a root and branch revision of the indicators in order to provide the basis for evidence based policy, is excluded because of the Member States reluctance to engage in new indicator development at this stage. This is in any case a rather long term option given the gestation times of new statistical series. However, such a revision of the statistics that are still relevant and useful is a necessary part of any consideration of follow-up to *e*Europe.

Essential Changes - Option 2

More proactively, **in Option 2 the benchmarking activities in *e*Europe Action Plan would be repositioned as a one-stop reference point for Information Society Policy in Europe**. This would require continuation of existing data collection efforts (as requested by Member States). But the Action Plan would integrate data from other sources in order to get a more complete picture of the status of *e*Europe. Complementary analytical studies would be launched to increase the policy salience of the information available. In addition, the development of new indicators in order to make them policy relevant would be launched in discussion with Member States through the advisory group. This is the preferred option as it meets the needs 1) to demonstrate the contribution of *e*Europe to Lisbon more effectively, 2) to communicate *e*Europe more effectively by presenting it in a more coherent package as the reference site for the state IS in Europe and 3) to move into a development phase for the future in which the indicators guide policy.

5.5. Security

As the mid-term review communication noted, security is essential to the wider development of the Information Society. The key elements of policy in this field are to establish formal security strategies that clarify legal responsibilities, awareness campaigns, management, and technical standards, improvement of incident and cybercrime responses. The EU legislative framework, including the electronic signature directive and secure electronic communications are also important contributions.

However, all new activities with the *e*Europe Action Plan have to take place in the context of the establishment of the European Network and Information Security Agency (ENISA), which will provide assistance and advice on network and information security, increase co-ordination and information exchange between stakeholders and provide the mechanism for the development of a culture of security. These in fact are the major requirements anticipated on security in the *e*Europe 2005 Action Plan.

Business as usual - Option 1

In practice, in the run up to the launch of the Agency, which is imminent, the launch of major new initiatives could have the negative impact of introducing greater instability and detract from the important role which the Agency will play. **A further option, therefore is to do nothing further until the new Agency is operational (Option 1)**, which in any case will be soon.

Full revision – Option 3

The question is whether more is needed. **The very high profile of security incidents could lead to a call for a programmatic response to topical information security issues such as**

denial of service attacks, identity theft, the scourge of spam and the very dramatic concerns about use of information networks for purposes of terrorism (option 3). However, such calls for action have to be placed in the context of what can be practically achieved. In practice, most of the steps which would achieve results have been implemented such as the action on 'spam'[10].

Essential changes – Option 2

However, the proposal in the Communication is not to counsel inactivity in the run up to the launch of ENISA. Rather, **the mid-way path is to mainstream information and network security into all action lines (Option 2)**. In practice this means that issues such as technologically neutral implementation of the e-signatures directives or increasing the use of standards and certification in creating trust are taken up in the good-practice exchanges suggested above for e-business, e-government, e-health and e-learning. This is in fact already underway. For example, actions have been launched on identity management in e-government. In parallel, when ENISA starts up it will be handed a package of initiatives that will help it to become operational very quickly. These include actions to support public private partnership at the EU level, an inventory of activities and organisations in the Member States and an analysis of best practices in the field of awareness raising and risk assessment.

5.6.   e-Inclusion

During the consultation on the mid-term review, e-inclusion was one of the areas that was most cited as necessary for new developments. Tackling e-inclusion is necessary primarily on the grounds of citizenship and cohesion. No European concept of the Information Society can be imagined unless all Europeans have a chance to participate. Moreover, the economic loss of not bringing everybody along would be considerable. Unless the Information Society reaches out as widely as possible, the markets will be smaller and the services more expensive to deliver.

Business as usual – Option 1

A low profile approach to this issue would assume that market pressures will resolve the problem as communication and computing costs continue to fall and services become easier to use (Option 1). This 'business as usual' approach would involve simply concentrating on creating the right conditions for communication system roll out where there is no connectivity to address the problem of territorial coverage. However, this is unlikely to be adequate – certainly not in the context of the possibilities for *e*Europe to contribute to social cohesion. In particular, the problem of e-inclusion is dynamic. As the use of on-line services and applications develop, the minimum necessary level of access needed to participate will increase. Also, enlargement will introduce a greater diversity of coverage and access to the Information Society across the EU, which makes the issue more pressing. The problem is unlikely to go away by itself. Rather, the gap between on-line society and those that are off-line will tend to increase social disparities.

---

[10]   See: On unsolicited commercial communications or 'spam' COM(2004)28

Full revision - Option 3

It could be imagined that a clear set of policy objectives on e-inclusion could be introduced into Commission guidelines for use by Member States in the operational plans for the structural funds. However, such **an e-inclusion agenda with explicit targets and indicators will only come at the end of a process of political consensus building (option 3)**. At the moment, however, the analytical basis for launching such a process remains weak. Despite calls for action on e-inclusion the absence of comprehensive information on the nature and the complexity of the issues at stake prevent the immediate launch of agendas for action.

Essential changes – Option 2

With the roll out of broadband and mobile communications and with the increased supply of public services on-line, it becomes pressing to launch the agenda in a way that produces a practical commitment to targets. The midway option therefore responds to the calls during the mid-term consultation through two **preparatory steps towards an action agenda on e-inclusion. These are to furnish better data and analysis on imbalances in ICT diffusion and to launch a stakeholder discussion on practical actions that can be taken to tackle the problem.** The Commission aims to launch major enquiries into e-inclusion in order to develop the analytical basis for a policy dialogue. To make this process as efficient as possible, the analytical work will be supported throughout established forums ESDIS and the *e*Europe Advisory Group. The likely impact of this strategy would be to feed a wide stakeholder debate leading to the specification of a set of realisable targets.

5.7.   Review and reflection on future options

The final action introduced into the plan reflects the need to establish a process of review and reflection on the achievements during the 5 year life of *e*Europe.

Option 1

As in all major activities **an ex-post evaluation of *e*Europe will be needed to assess its success in meeting its own targets**.

Full revision Option 3

A much more ambitious approach to consider future options could be based not only on an evaluation, but also **the launch of a major prospective debate on how to achieve a European Information Society, based on the values targeted by European Union in Lisbon in 2000**. This exercise requires in parallel to assess the contribution of each action to the Lisbon targets and by doing so, to define new actions regards their ability to increase growth, productivity and employment, to strengthen social cohesion and to reinforce sustainability. Studies, benchmarking exercises, exchange of best practise and all kind of expert groups could provide support to this evaluation in order to make next actions have greater impact and visibility than can be achieved within the framework of the current Action Plan.

The limited life expectancy of the current *e*Europe Action Plan and the high probability that some reorientation of the Lisbon Strategy will follow from its own mid-term review in 2005 militate against implementing any major changes at the current time. Moreover, a major foresight exercise may be attractive but it would entail a very long (12-18 month) process and

will not necessarily yield an action orientated agenda. Thus, the full revision option is not well timed against the political timetable of EU-level ICT policy.

Necessary changes – Option 2

A straightforward ex-post evaluation (as in Option 1) would come too late to make a contribution to setting up the new ICT policy framework to follow-up *e*Europe. Thus **it will be necessary to launch some earlier assessments of the relevance of the Action Plan in particular in relation to its success in contributing to the Lisbon Strategy**. This requires analysis of all three pillars of the Lisbon strategy.

The most reasonable way forward, taking into account all constraints expressed here, is a compromise between Option 2 and Option 3: it involves the launch of a strategic analysis of the contribution of *e*Europe to Lisbon Strategy during the second half of 2004. Then, and in parallel, a process of reflection on options for the future will be launched during 2004 and completed in early 2005, with the assistance of the *e*Europe Advisory Group. Thirdly, in order to help put these ideas into practice a replacement of the Modinis programme will be proposed with the aim to launch it in early 2006.

6. CONSULTATION

As part of the open method of coordination between Member States and the European Commission, *e*Europe is driven by an ongoing exchange of information about how to fine-tune objectives and strengthen the implementation process. This process is embedded in the *e*Europe 2005 process through the establishment of the *e*Europe Advisory Group, and its first chamber of Member State representatives and second chamber of 40 expert stakeholders.

However, for the mid-term review the scope of this method of coordination was broadened to allow all stakeholders to express their views. In fact, the mid-term review was organised around a wide consultation which took place between June 2003 and November 2003.

The different steps followed to collect all views provided many proposals not only to improve policy guidance but also to launch new initiatives. In addition, many responses emphasised the value and relevance of the *e*Europe 2005 Action Plan and its objectives. This justifies not only the continuation of the Action Plan but some targeted improvements in areas where significant gains might be expected over the short term.

6.1. The consultation process

The consultation for the mid-term review took place through the following steps:

<u>Step 1:</u> a government questionnaire

A questionnaire was developed by the Commission and forwarded to all Member States, accession and candidate countries for completion. The analysis also relied on the results of a benchmarking exercise. All governments responded and their answers were used heavily to draw up the mid-term review Communication and its supporting working paper.

<u>**Step 2: an on-line public consultation**</u>

A public on-line consultation was launched on 30th of July 2003 which received about 30 contributions from various Information Society sectors. Responses to the public consultation came from industry, civil society (largely organisations representing people with disabilities) and from individuals. All of these contributions provided spontaneous support for the *e*Europe 2005 Action Plan, considering it a driver for building a knowledge-based society.

<u>**Step 3: a public hearing**</u>

A public hearing took place on 6th of October which welcomed about 150 people. This hearing helped to focus on specific issues that had arisen in the public consultation, especially regarding objectives and instruments of implementation.

<u>**Step 4: discussions within the *e*Europe Advisory Group**</u>

Formal discussions were undertaken with government representatives within the *e*Europe Advisory Group, during meetings on the 17th June and 10th October 2003.

<u>**Step 5: European Ministerial Conference**</u>

The European Ministerial Conference in Budapest on 26th -27th February 2004 also offered a political platform to discuss the visions and goals of an "Action Plan for the EU-25.

6.2.   Main issues brought out by the Consultation

The following provides a short summary of the main issues that emerged from the consultation exercise:

*1.   There is a consensus on the relevance of the *e*Europe objectives and priorities*

The various consultations launched for the *e*Europe 2005 mid-term review have all pointed to the relevance of the *e*Europe 2005 Action Plan objectives. As a result, Member States and Acceding and Candidate Countries agreed that there is no need for complete revision, but that there was a need for an update. This is demonstrated in the area of broadband where there have been a number of policy developments in Member States since the launch of *e*Europe 2005, most importantly though it was their initiative to develop national broadband strategies by the end of this year and to include this within *e*Europe.

*2.   e*Europe is fulfilling its role as a catalyst*

Several Member States have pointed out that the collaborative implementation process has led to success beyond the objectives defined in the Action Plan. All have recognised that the Action Plan played the role of a catalyst.

At the EU level, *e*Europe has created a clear framework for policy, which has improved the synergy with other pillars of EU policy, such as the integration of policy priorities into research activities and the provision of a policy dimension for innovative actions such as eTEN.

3. ***Success is not uniform across all e****Europe and a dynamic perspective is needed*

The Action Plan is not a static document but an ongoing process which has already included some new initiatives and thus has been twice updated.

From the results of the questionnaire, strong progress is visible in the areas of broadband and e-government. These are areas of great political momentum. Both objectives are high priorities on the national policy agenda. The Commission has launched new initiatives since the adoption of the Action Plan. In particular, there have been communications on the state of the sector and on the national broadband strategies and the e-government Communication focussing on strategic challenges for the future. The revision of the Action Plan takes account of these developments and embraces them into the broad policy scope of *e*Europe.

Other areas did not show the same degree of political momentum. For instance in the areas of e-health and e-learning, in spite of good pilot projects and many research and development results effective deployment of new services is still disappointing. Political support was seen as necessary for product and service markets to develop, and for these products and services to be adopted by the public sector.

A particular effort was called for in the revision of the Action Plan to identify more strategic actions at the EU level, to broaden the scope of the Action Plan and to improve the consistency of objectives and actions at EU level, and also between the EU and national levels. Several areas requiring revision were acknowledged:

- Identifying more strategic actions at the EU level. For instance, e-learning only refers to four specific actions with too strong a focus on universities and technology issues. Also the health card, though an achievement has no digital features.

- Broadening the scope: attention to security is limited to the setting up of ENISA and the creation of a culture of security. Other actions were highlighted as important such as e-Signatures, biometrics, and critical infrastructure dependencies.
- Improving the consistency of objectives and actions at EU level and also between the EU and national levels. For example, EU actions in e-learning focus on use of ICT in education and training while Member States policies are more oriented towards distance learning and the development of digital content.

4. ***Implementation mechanisms are effective but more is needed from benchmarking****.*

The implementation process at the EU level revolves around three complementary activities: benchmarking exercises, the exchange of best practices and open co-ordination between stakeholders.

Workshops on broadband and digital rights management have already contributed to ensure the exchange of best practices at the European level. Their usefulness was welcomed several times by public and private stakeholders, in particular in response to the public and Member State questionnaires. Most of the time, these initiatives were relayed at national level, or even at local level, by seminars or conferences, and have often mobilised services of the Commission.

Benchmarking is a central exercise for policy implementation in order to evaluate progress and to give an opportunity for peer review. Extending benchmarking to qualitative studies in order to identify and better analyse the objectives of Member States was also suggested by

stakeholders at the Public Hearing of 6 October. Member State responses to the mid-term review questionnaire provided useful information about national strategies and progress assessments. Member States also called for the use of national data as an additional contribution.

6.3.   Summary

In summary a number of key conclusions emerged from the consultation process and these provided the main orientation of the revisions proposed in the Communication. These are:

- The need to be flexible in the face of events in such an Action Plan and in the revision to extend the scope of *e*Europe to reflect new initiatives that have emerged since *e*Europe 2005 was drafted.

- Increase the effort within the Action Plan on the wide deployment of research results and lessons from pilot initiatives in order to promote a wider take-up of on-line services.

- Increase the consistency of strategic European level actions so that efforts are applied in line with priorities and so that synergies are identified and exploited.

- The process of wider dissemination of *e*Europe through conferences, workshops and stakeholder forums is seen as particularly useful for the exchange of good practice.

- Widen the benchmarking exercise to make it more analytical and so that qualitative aspects of the development of *e*Europe are addressed. In particular the analysis of impacts should be enhanced. Also, more use should be made of existing complementary studies and data.

7.   PLANS FOR MONITORING, FOLLOW-UP AND EVALUATION

Monitoring and evaluation are conceived at two levels in relation to the *e*Europe Action Plan. The first level is the Action Plan itself. The organisational logic of the Action Plan rests on continuous monitoring of progress to stimulate informed action towards meeting agreed targets. Monitoring is effected principally through measuring performance in relation to benchmarks, review of best practices and is supported by a range of statistical surveys, studies and other empirical analyses. *e*Europe has a strong element of built-in evaluative activity.

At a more 'meta' level the effectiveness of the Action Plan depends upon regular evaluation of its overall performance in relation to objectives, impacts, relevance, utility and lessons learned. The *e*Europe Mid Term Review contributes to such evaluation (as does this extended impact assessment) and is informed by evidence from a range of studies, surveys and consultations. Clearly both levels are inter-linked. However, in view of the need to prepare a thorough and rigorous impact assessment of policy options for a new successor policy initiative post 2005, there is now a need to plan for the evidence base that will be needed for such new policy formulation. The following section sets out the activities being conducted or planned for each of the two levels of *e*Europe evaluation.

7.1. Monitoring and Evaluation of the *e*Europe Action Plan – the Meta level.

As noted, regular evaluation of the Action Plan as a whole is an essential component of its effective delivery. As the current Action Plan will close at the end of 2005, an overall evaluation will be launched in 2005 in order to draw up a final progress report in time for the Spring Council 2006. This evaluation will form the basis of an impact assessment of options for the future and their impacts. Clearly this evaluation will draw upon the very large evidence base accruing through the monitoring activities of the Action Plan itself.

However, it is also clear from conducting this present extended impact assessment that data on impacts of potential options is not sufficiently comprehensive. **In particular, there is a need for more thorough assessment of environmental impacts.** Further, whilst there is a growing literature on progress towards the knowledge economy in general and towards meeting the Lisbon Agenda targets, there is an ongoing need for review and syntheses of relevant reports and studies. In certain areas, new or recently commissioned studies will also contribute to the evidence base.

Specifically these will include: studies on the overall effect of *e*Europe in achieving Lisbon goals; the productivity effects of ICT; the contribution of Information Society initiatives to achieving Lisbon goals (underway); the analysis of the Open Method of Co-ordination in respect of *e*Europe actions. Sector specific analyses are also planned or underway including studies commissioned under the Modinis Programme on e-health and e-government.

The analyses will be supported by an internal 'Reflection Group' of largely Commission Services staff who will meet to discuss progress and develop option possibilities for the future. This activity will be supported by a range of workshops including a workshop on ICT and sustainability.

The overall evaluation will also draw on the ongoing monitoring activities within the action plan as detailed below.

7.2. Monitoring, review and development of Indicators within *e*Europe

One of the principal objectives of monitoring *e*Europe is to measure progress towards key targets of the Action Plan. This is done according to a common framework and thus enables remedial action to be taken where required. The Council in its *e*Europe 2005 Resolution defined a set of 15 policy indicators and 22 supplementary benchmarking indicators.

In order to meet the priorities of the *e*Europe 2005 Action Plan and monitor progress towards its objectives, measurements need to be taken as agreed by the Council. Relevant information will be collected by a common methodology for all countries. This will be guaranteed by the fact that most of the data will be developed by Eurostat. The MODINIS programme will help to fill the gaps where official data is not available. This is being done through surveys and the use of methodologies (in co-operation with Eurostat) adapted to the specific needs of an *e*Europe benchmarking exercises.

The results of this exercise will be presented on the *e*Europe 2005 website under "benchmarking"[11]. Data will be updated on a regular basis. The Commission shall also report regularly to the Council and European Parliament on the latest results.

- In particular: specific surveys and studies will be launched in order to update information and respond to any new requirements. This will build a complete map of the comparative evolution of the European Union and EFTA countries. Examples of the kind of surveys and studies that will constitute the data are: households and enterprise surveys implemented by Eurostat, the surveys on e-learning (in schools) and e-health, a study on the indicator of broadband access of public administrations and on the availability of basic public services on-line, supplementary data on on-line public procurement and Internet Access Cost.

- Workshops will be organised in order to bring together all stakeholders involved in the *e*Europe benchmarking indicators, with the view to accelerate the collection of data and improve the quality. In addition, other initiatives in the field of information society statistics, like SIBIS, Eurostat, or e-business watch should be fully associated to these workshops in order to validate their findings and to improve cross-fertilisation between such initiatives and the European Statistical System.

Exchange of good practice and benchmarking together form the open method co-ordination, which is the method chosen by the Lisbon Council to undertake *e*Europe. Providing a forum for exchange of good practice is one of the most important contributions of the Commission to policy development in Member States.

An important milestone in the development of exchange of best practice was the e-government conference and Ministerial Declaration during the Belgian Presidency in 2001. This set the precedent for a series of events that have included a second e-government conference in 2003, organised with the Italian Presidency, and an e-health conference during the Greek Presidency. The forthcoming Irish Presidency plans to hold a second e-health conference as well as Broadband and e-government events.

Exchange of best practice through conferences has been enhanced by practices such as making outcomes available on websites, by mounting exhibitions to accompany the conferences and by the establishment of *e*Europe awards to the most successful applications. Awards are judged by an independent agency, which publishes an analysis of all received applications[12]. Furthermore, actions like the European e-Business Support Network (eBSN) have been implemented in order to institutionalise the dialog between stakeholders thus creating a channel for the exchange of good practices in a specific domain i.e. e-business policies in favour of SMEs in this case.

The exchange of good practices is complementary to the efforts on benchmarking and is an underlying principle of the Open Method of Co-ordination. It emerged from the consultation on the mid-term review as one of the main demands of Member States and stakeholders.

---

[11]   http://europa.eu.int/information_society/eeurope/2005/all_about/benchmarking/index_en.htm
[12]   European Institute of Public Administration, Maastricht

More could be done in this area within *e*Europe by using the instruments available at regional, national and European level not only to support good practice but also to support emergent behaviour and practices. There are a range of instruments available to support good practice.

- Forums and conferences to present best practice, giving greater awareness of various experiences. Examples of this are the on-going series of Ministerial conferences on e-government and the e-health conference in 2004.

- Competitions and quality awards that put good practices in the spotlights. This method is well-developed in e-health and e-government.

- Support networks to promote mutual learning such as the e-Business Support Network (eBSN) and European Schoolnet in the area of e-learning[13].

- The codification of lessons into the form of guidelines, checklists, roadmaps or technical working documents such as the structured analysis of best practice and transferability conditions proposed in the e-government section.

- The development of complementary quantitative and qualitative indicators that track important developments, which are not captured by the benchmarking indicators, such as growth of e-content, or patterns of use of broadband.

- Agreement on voluntary codes of good practice and open standards based upon codification of practices.

As we have noted throughout this paper, these instruments are used to different degrees in all areas of *e*Europe. However, in order to facilitate a more effective exchange of experiences more thought is needed on how to use them to ensure a greater joint impact. There is a need to balance the mix of these policy instruments to optimise exchange, taking into account the level of consensus, experience and maturity in the field.

To ensure regular and comparable data provision in Member States and to enable greater use of official statistics on the information society on benchmarking of the *e*Europe Action Plan 2005, in August 2003 the Commission proposed a European Parliament and Council Regulation concerning statistics in the Information Society.

Both the mid-term review survey responses and discussions in statistical working groups have stressed the need to review the indicators. The issues raised were:

- The current indicators focus too much on readiness and not enough on intensity and impact[14].

- Indicators do not show to what extent the targets of *e*Europe have been achieved.

---

[13]   http://community.eun.org/
[14]   The categories of readiness, intensity and impact were defined by the OECD in 'Defining and Measuring e-Commerce: A Status Report' OECD-DSTI 08/10/1999.

- There is a need to provide comparative figures for third countries; *e*Europe should be benchmarked against the best in the world.

It is too early to provide a full assessment of the *e*Europe 2005 benchmarking exercise. A detailed benchmarking report with all available data for 2003 will be presented in June 2004.

Moreover, Commission services will launch a study on the impact of ICT applications on productivity and competitiveness based on micro-economic empirical evidence which will examine qualitative and quantitative links between ICT and productivity as well as obstacles to ICT diffusion at company level. A study on the **contribution of the *e*Europe Action Plan to the Lisbon Strategy** is also foreseen. The study will be based on a sound methodological framework which will be specified as part of the study. The study has to take into account other evaluative activities results such as the mid-term review and the evaluation of Promise Programme.

There is also a need to analyse the economic and social consequences of the Information Society with a view to facilitating policy discussions. This will allow Member States to exploit better the economic and industrial potential of technological development, in particular in the area of the Information Society. For these reasons the Council decision established the *e*Europe Advisory Group.

This Group aims to provide a strategic overview of implementation of the *e*Europe 2005 Action Plan and to offer a forum to exchange experiences. It will also permit early participation of Acceding countries. The Group will invite stakeholders to express their views within the Second Section. The Group and its Second Section will meet regularly and will provide advice and suggestions to improve the implementation of *e*Europe throughout regular reports to the European Commission and Member States.

Commission services are currently evaluating the open method of co-ordination in the framework of *e*Europe. This study is taking into account all aspects of co-ordination, both internal and external, to give a better view of its effectiveness and how it is perceived by our partners. A report should be presented mid-2004. Other studies will also form part of the overall monitoring of *e*Europe such as the eTEN programme's evaluation.

The **e***Europe co-ordination process**

The implementation of the *e*Europe 2005 Action Plan is based on a structured process mobilising about twenty Units of the Commission, Member States and all the stakeholders through various Working Groups. This process creates a constructive dialogue between all partners which will have to be intensified to make progress in the implementation of the Action Plan. The process of regular updates on the achievement of milestones in the Action Plan is a process understood and shared both internally and with all our external partners.

Preparing each stage, e.g. creating the Roadmap, preparing for Advisory Group meetings and updating the website, requires interservice co-ordination managed by Commission services.

External co-ordination of the *e*Europe programme is primarily carried out through public events (workshops, conferences...) and by Committees[15] and Joint Working Parties managed

---

[15]   See list in annex

by the Commission. Some are directly linked with *e*Europe, e.g. the Health Telematics Group, the e-Learning Management Committee, the e-Business Expert Forum and e-Government Advisory Group[16]

Chaired by the European Commission, the *e*Europe Advisory Group, an EU 25 Member State Section plus the three candidate countries, has a major co-ordinating role. The first meetings demonstrated the co-operative climate among Member States and Accession and Candidate Countries for this dialogue process with the Commission. They consequently gave their commitment and support for the creation of a sub-Group on broadband issues; an idea that could in future be pursued in other areas.

In addition, Member States have expressed their interest in the Second Section of the Advisory Group, which will have the role of advising the Commission and the first Section on improving the implementation of the Action Plan. The 323 applications received demonstrate the interest of all stakeholders in this initiative. The introductory meeting of the Second Section held on 17th of February 2004 and has started its work within two Working Groups: one devoted to broadband territorial coverage and the other one on e-inclusion.

Convergence between the *e*Europe+ and *e*Europe 2005 programmes and EU enlargement are already being taken into account within the co-ordination process. The Budapest European Ministerial Conference on 26th February 2004 was an important event with the conclusion of the *e*Europe+ Action Plan and political inputs to support the *e*Europe 2005 Mid-term Review process.

7.3.   Presentation and communication

*e*Europe communication is mainly channelled via the website of the Directorate-General. This website has recently been redesigned to incorporate all the mechanisms of the *e*Europe 2005 Action Plan. The Information Society website has proven very successful as shown in the following table:

	2002	**2003**	**Increase**
Page views	281.705	354.479	+ 26%
Page views/day	9.430	11.965	+ 27%
Visits	84.902	134.711	+ 59%
Visits/day	2.839	4.545	+ 60%

Source: General statistics from DG INFSO / Monthly average / First quarter 2003

The *e*Europe pages are the second most requested pages of the DG INFSO website, which rewards the regular efforts made to update the *e*Europe homepage.

The Second Section of the *e*Europe Advisory Group, based on a geographical balance, acts as a relay ensuring the co-ordination and spreading of information regarding the Action Plan's

---

[16]   To be created

initiatives at national, regional and local level. Experts should be able to contribute to increasing interest in *e*Europe among the media and academics.

As a complement to the Advisory Group, the MODINIS programme will finance the creation of **Information Services** with sufficient scope to provide an interactive forum for the exchange of information, experiences, strategies and problem solving (web site). The programme will also finance the publication expenses of the revised *e*Europe Action plan and its roadmaps.

8. COMMISSION DRAFT PROPOSAL AND JUSTIFICATION

The mid-term update to the *e*Europe Action Plan which the current document supports has the main ambition to bring the current Action Plan to a close and to respond to key changes such enlargement and technological developments. Thus the overall package of measures proposed here takes a mid-way path between business as usual and a full revision. Mostly, responding to the mid-term review, measures that are proposed are relatively modest in scope. In constructing the revision of the action plan, full account was also taken of subsidiarity issues. In this respect it is very important to recognise that, as an OMC instrument, the *e*Europe Action Plan has subsidiarity built-in, through bottom-up engagement of stakeholders in defining good practice frameworks and common targets for the benchmarking framework. Thus while the wide consultation launched to guide the mid-term review provided many proposals the overall spirit of the contributions was to concentrate on fine-tuning targets and better refining the existing Action Plan's targets.

Moreover, in keeping with the principle of proportionality, the modesty of the proposals also stems from the fact that there are only 18 months left for any new initiative to be designed and implemented. Overall, the limited life expectancy of the current *e*Europe Action Plan and the high probability that some reorientation of the Lisbon Strategy will follow from its own mid-term review in 2005 militated against major changes at the current time. Moreover, a major foresight exercise, while attractive, would entail a very long (12-18 month) process and will not necessarily yield an action orientated agenda.

Thus, as the action plan moves towards the proposals for revision focus on bringing the Action Plan to a close whilst building a bridge towards a new generation of ICT policy. This encourages the embedding into the final stage of the eEurope Action Plan of an explicit process of review and reflection on new actions that are needed in the area of ICT policy. This gives an opportunity to achieve a preliminary step towards an overall impact assessment of the *e*Europe 2005 Action Plan in the framework of the Lisbon Strategy.

In general, therefore there is a significant emphasis on the need for analysis of *e*Europe in terms of its success in meeting its own targets. In particular, despite we aim to assess whether *e*Europe, with its emphasis on connectivity, the readiness to adopt ICT and the delivery of services, is still relevant at a time when attention is shifting towards delivering solutions and measuring impact. Moreover, as mentioned time and again in this impact assessment, possibilities do exist for more ambitious actions in all of the key fields of *e*Europe, a detailed assessment of what remains to be done could be incorporated into such an assessment.

Over the next few months, assessments of the Action Plan to the Lisbon targets, in particular their ability to increase growth, productivity and employment, to strengthen social cohesion and to reinforce sustainability will be carried out as part of the contribution of eEurope to the

mid-term review of Lisbon. Studies, the benchmarking exercise, exchange of best practise and expert groups can provide support to this evaluation in order to make next actions have greater impact and visibility than can be achieved within the framework of the current Action Plan.

Overall, this revision faces the next key challenge which is to enhance the potential contributions of ICT to sustainable development, which is the concept that underpins the Lisbon Strategy and to operationalise these in the form of policy recommendations to the mid-term review of Lisbon and to use them in the construction of the next generation of ICT policy post-*e*Europe 2005.

9. ANNEX II-A: MAIN POLICY AREAS OF EEUROPE

e-Services

The mid-term review of the action plan noted considerable progress towards the targets, especially in e-government services, but also in e-health and e-learning. However, the review communication reiterated the well-known barriers to getting services on-line and in use. These are a lack of interoperability and agreed standards. Indeed, in some areas interoperability fails because of a proliferation of standards. Moreover, Europe is not benefiting from its size. Pan-European services are infrequent compounding problems of portability and restrictions on free movement and the operation of the Single Market. There is still little scalability of all the initiatives in public e-services, because frameworks for exchange experience and best practices are lacking.

e-Government

e-Government is the use of information and communication technology in public administrations combined with organisational change and new skills in order to improve public services and democratic processes and strengthen support to public policies.

It is now widely acknowledged that e-government is a key tool for public sector reforms towards better governance. Implementation requires not just ICT investment but also enhancement of skills and reorganisation of working processes.

This process can be especially helpful for institution building in the acceding countries and, in general, should contribute to improved transparency, inclusiveness and efficiency, in line with the objectives of *e*Europe and the Lisbon agenda.

Today, the concept of e-government is being managed at three distinct levels. First, at national level: e-government is at the core of national policies for the Information Society, and all Member States have e-government policies in place. Second, at European level: legislative measures, notably the Directive on the re-use of public sector information contribute to the e-government goal. Finally, at a more independent level: a series of Ministerial conferences have started to improve policy guidance and provide a forum for exchanges of good practices. These have included awards for successful e-government applications, and a communication setting out a road map for future work.

Although 80% of users are happy with the quality of public e-services, data on e-government demand are still insufficient. Moreover, from the evidence available, it seems that progress in e-government supply is not matched by proportional increase in demand. To address this

problem, two different strategies for improvement of services have been identified: *process integration* (back office) and *service delivery* (front office).

The concept of *process integration* refers to the degree to which the service is re-engineered by the responsible authority in the transformation from an off-line service to an e-service. The demand side benefits of process integration can found in further service improvements on top of the service improvements that automatically follow the channel improvement of going on-line. The concept of *service delivery* refers to the channel and distribution strategies in the provision of government services. The demand side benefits are that the website and the service become easier to find. Both strategies need to be further stressed to match the supply and demand of e-government.

e-Learning

The use of ICT in education and learning is increasingly important for human resource development in the global Information Society. Access to education and knowledge is essential for economic, social and cultural development. The use of ICT in education and learning has enormous potential. It offers new and more flexible ways of both teaching and learning, potentially better learning outcomes, and increased cost-efficiency in some circumstances. These possibilities are growing with the technological developments of the internet.

Furthermore it can help to meet the huge demand for post-secondary education, not least in developing countries. It is therefore a major policy concern that access to ICT is very unevenly distributed amongst people based on whether they are women or men, poor or rich, living in rural or urban areas, or in developing or developed countries. The Digital Divide cannot only be seen as a narrow technological problem about having access to a computer and the Internet. Its solutions go beyond the provision of the technological infrastructure to focus on people, skills, education and training.

The *e*Europe Action Plan and the *e*Learning Action Plan[17] are intended to support the reform of education and training systems in Europe to achieve the Lisbon objectives, through the extensive use of new ICT for learning and the availability of high quality educational multi-media content and services. The eLearning Initiative[18] gives e-learning a high priority and fixed ambitious objectives for infrastructure, equipment and basic training. The eLearning Programme[19] will help to implement these targets by making e-learning widely available throughout Europe, supporting the use of new multimedia and the internet to improve the quality of learning.

Concretely, the eEurope Action Plan set three objectives concerning e-learning. The first is to offer, by the end of 2005 virtual campuses for all students. Member States, supported by the *e*Learning and *e*TEN programmes, should ensure that all universities offer on-line access for students and researchers to maximise the quality and efficiency of learning processes and activities.

The second was to offer a university and research computer-supported co-operative system. The Commission has launched research and piloting actions to enable the deployment of

---

[17]   The eLearning Action Plan. Designing Tomorrow's Education COM (2001) 172 final
[18]   COM(2000) 318 final
[19]   COM (2002) 751 final 2002/0303(COD) www.elearningeuropa.info

Europe wide computer-supported networks and platforms, based on high performance computing infrastructures and GRID technologies. They will allow collaborative work addressed at solving complex problems and virtual access to, and sharing of learning resources, and computational power across Europe.

Finally, e-Learning can help in the re-skilling of individuals for the knowledge society; it provides essential support for the provision and implementation of lifelong learning. Member States, using structural funds and supported by the Commission, have launched actions to provide adults (e.g. the unemployed, women returning to the labour market, etc) with the key skills needed for the knowledge society, to improve their employability and overall quality of life. Examples of these actions include: support to teachers in the introduction of ICT based methods in subject-based learning,[20] designation of peripatetic teachers to support introduction of new methods, development of digital learning material, on-line platforms for collaborative learning, services for learners with 'special needs'.

e-Health

Health is an increasingly information intensive sector where ICT significantly contributes to improve service quality, efficiency and accessibility. Indeed, when coupled with enhancement of working processes and skills, ICT use can be instrumental in the reform of the health systems in Europe, allowing for improvements in productivity and social cohesion in line with the Lisbon agenda. e-Health describes the application of information and communication technologies across the whole range of functions that affect the health sector. The objective of e-health is to contribute to improvement in access, quality and efficiency of healthcare and in particular to be the enabling tool for reorganisation of citizen-centred health delivery systems.

As outlined in the Communication on e-health, the actions outlined below should allow the European Union to achieve the full potential of e-health systems and services within a European e-Health Area. There are two target areas:

- how to address common challenges and create the right framework to support e-Health,

- Pilot actions to jump start the delivery of e-Health.

Regarding the first area, Member States have expressed the need to support actions that cover the development of standards addressing the interoperability of diverse system. The need to develop standards for a common approach to patient identifiers and electronic health record architecture is therefore on the agenda for 2006. By the end of 2006, the need to achieve a seamless exchange of health information across Europe requiring common structures and ontologies[21] of the information transferred between health information systems was highlighted. During the period 2004-2008, Member States aim to support deployment of health information networks for e-health based on fixed and wireless broadband and mobile infrastructures and Grid technologies. Finally by end 2006, a collaborative approach should be undertaken among Member States to supporting and boosting investment in e-Health.

---

[20] http://www.canteach.gov.uk

[21] An ontology defines the terms used to describe and represent an area of knowledge, and are used by people, databases, and applications that need to share domain information (a domain is a specific subject area, such as health or medicine). See http://www.w3.org/TR/2002/WD-webont-req-20020307/

Regarding the second area, in the context of its Public Health Programme, the Commission is preparing the establishment of a European Union-wide public health portal that will provide a flexible information technology platform to disseminate evidence-based information on public health relevant to European citizens, and to provide a single point of access to information on health. Furthermore, by end 2005, a European Union public health portal will give access to European level public health information. Health portals shall offer dedicated information on safety at work and workplace health risks. By end 2005, there will also be a strengthening of early warning, detection, and surveillance of health threats through enhanced information and communication technologies tools. By end 2008, the majority of all European health organisations and health regions (communities, counties, districts) should be able to provide online services such as teleconsultation (second medical opinion), e-prescription, e-referral, telemonitoring and telecare. Finally, the promotion of the use of cards in the health care sector will be stressed. Indeed, the adoption of the implementation of an electronic health insurance card is planned for 2008.

e-Business

Interest in e-business is broadening from a concentration on e-commerce (buying and selling on-line) to wider concerns about the integration of ICT into business processes. Reflecting this change, the *e*Europe 2005 Action Plan proposed a comprehensive approach in order to tackle legal, skills, technology, and business challenges with a view to fostering the efficient use of ICT in European enterprises, notably amongst SMEs.

Policies are in place to ensure the development of e-business. Indeed, Member States have launched initiatives to stimulate the take-up of e-business by SMEs. These include training and assistance, pilot projects, programmes to increase ICT or stimulate ICT investment, promotion of e-commerce, encouragement of e-business readiness amongst SMEs, online information and guides, support to young entrepreneurs to create new e-business adapted enterprises, centres of excellence, courses for micro enterprises, awards, etc. Also, in a limited number of cases, new Member States have launched e-business initiatives for SMEs such as one-stop-shops for business-related administrative procedures, dedicated assistance to SMEs to take up e-business and the inclusion of e-business elements in technology venture funds.

However, one break to further take up and development of e-business seems to be the issue of confidence in e-commerce and business. The organisation of a Presidency conference in Dublin on the confidence of consumers in the online marketplace (Consumer Day, 15 March 2004) highlights the problem.

The legal framework for e-business is nevertheless consolidating itself with the transposition of e-Signature, e-Commerce, Copyright Directives and the adoption of the legislative package of procurement. Hopefully, this should increase the stability and the predictability of the e-business legal environment and boost consumer confidence in e-services.

Interestingly enough though, what was highlighted by an on-line consultation on 'legal problems for enterprises doing e-business', was not the lack of business confidence relative to legal problems (in contracts, e-signatures…) but the lack of confidence relative to feeling well informed on existing legislation in e-business. This confirms the need for initiatives such as the e-business legal portal.

Helping in this line is the European e-Business Support Network (eBSN). It brings together policy makers to foster co-operation and to exchange best practices between European

initiatives. Over 120 initiatives are members of the network and several concrete co-operation projects have started. Publications and online forums are showcasing SME take-up of research results. Also, under the auspices of eBSN, a training toolkit for SMEs will be implemented in 2004 bringing best practices in e-business coaching.

Broadband

Broadband is at the top of the political agenda. The broadband market is indeed expanding and while wider coverage and use is expected through a multi-platform approach, the EU remains technology neutral both in terms of regulation and policy as to the way it is developed.

This topicality is undoubtedly related to effects of the new regulatory framework, which is encouraging increased competition and market differentiation in electronic communication services. In parallel, the availability and very rapid rollout of xDSL technologies on telephony networks is rapidly bringing broadband coverage into a high proportion of firms and households. In addition, the prospect of 3G (broadband) mobile communication services coming on stream creates the basis for a full broadband information infrastructure in Europe permitting complete portability of services for people as they move to do business or to enjoy their family lives or leisure pursuits.

Although the rollout of broadband infrastructures is primarily a question for the market, the public sector plays an equally important role. In some cases it has leadership, such as the contribution the 6th Framework Programme made to the development of the GEANT project, concerning high-capacity and high-speed European communication infrastructure for research. More often its role is to stimulate supply and demand and to provide the right environment for the market to flourish.

It is in this light, that the Commission made the proposal that national broadband strategies should be developed. This initiative was further reinforced by the work of the *e*Europe Advisory Group to monitor the development of the national broadband strategies. An ad hoc subgroup has also been added to the *e*Europe Advisory Group to agree on statistical measurements of broadband roll out and to advise on emerging policy issues.

To properly launch these national strategies, other developments have been orchestrated. Most important of these, is the EU Electronic Communications Regulatory Package. However, the Commission's 9th report (Nov 2003) on the latter's implementation pointed out that competition in the broadband market is still weak and that Member States have not all enforced the framework.

Other supporting developments to broadband roll out have included the Digital Divide "quick-start projects" aimed at accelerating the provision of broadband access in under-served areas through a technology-neutral approach. Also notable is the Technology Platform on Mobile Communication and Technologies related to 3G mobile communications systems. Finally, a network infrastructure project focused on further upgrading of the GEANT network which currently connects universities, research and higher education centres across Europe.

Although data show that the broadband market is growing at significant pace, the difference between availability and effective take up in most Member States shows the importance of stimulating demand by removing barriers to the development of new innovative content. A

workshop was organised around this issue in July 2003, bringing together operators, content providers and Member States' representatives.

Widespread coverage and use are expected to be achieved through a multi-platform approach based on the coexistence and exploitation of a variety of technologies. Broadband access could therefore be delivered through a variety of networks (copper, wireless, satellite, fibre) and of platforms (PC, digital TV, 3rd generation mobile). Although personal computers remain the most widespread access device, enabling future users to access the same services in a variety of situations and locations, through different devices and access platforms could be a powerful stimulus to demand. To highlight the issue, the Commission adopted a Communication on open platforms addressing the need to promote interoperability, the development of attractive services, and the creation of a secure environment.

On the other hand, broadband take up in Europe is lagging behind that in Asia (e.g. Japan and Korea) and the USA. There is an argument that the global economy is entering the growth phase of a new business cycle. Moreover, the communications sector is one of the principal motors of productivity gains in the knowledge economy. Thus there is a risk that Europe (overall) misses a significant opportunity to benefit from the coming phase of development, because it lags behind in the introduction and use of innovative e-services and content. The winners will be those countries where the new services can be delivered over a high capacity network to smooth the rollout of new bandwidth hungry services.

Where private investment in the information infrastructure in less favoured areas is held back by fears for its profitability, there is a risk that eEurope will not meet its goal to develop an "information society for all". To this end, specific actions have been taken, articulated around the use of the Union's structural funds, to overcome shortfalls of demand in rural and remote regions and economically disadvantaged urban areas. Revised guidelines have been issued on the criteria and modalities to be met for implementation of structural funds in support of electronic communications so that it is compatible with state aid rules.[22] The European Initiative for Growth, endorsed by the European Council in December 2003, highlights the opportunity of using financial instruments, including the Structural Funds to ensure widespread availability of broadband as already proposed by *e*Europe 2005.[23] To give further impetus, new Digital Divide "Quick-start projects" will accelerate provision of broadband in under-served areas using a technology-neutral approach. Public intervention may complement commercial investment but should not pre-empt private initiatives nor distort competition, and should always be based on a technology-neutral approach.

---

[22] SEC (2003) 895
http://europa.eu.int/comm/regional_policy/sources/docoffic/working/doc/telecom_en.pdf

[23] See EC COM(2003) 65 'Road to the Knowledge Economy' and COM (2003) 690 A European Initiative for Growth.

e-Inclusion

There is evidence that ICT developments do not permeate uniformly across all regions and socio-demographic groups. This phenomenon commonly referred as the "e-inclusion" problem or the "digital divide" is a horizontal concern for all areas of the "Action Plan *e*Europe 2005: an information society for <u>all</u>", as well as a central issue from the view point of social inclusion.

As stated in the mid-term review, greater focus is necessary in *e*Europe on user adoption and ICT impact, especially concerning accessibility and regional issues. Member States are well aware of the digital divide problem and have adopted measures to address it, including e-inclusion plans for target groups or the population at large.

With regard to location difficulties, Member States have attempted to tackle ICT access through Public Internet Access Points (PIAPs) in relevant locations (libraries, local authorities, community centres…), where assistance and training is often provided. There are also schemes to connect disadvantaged homes to the internet, and to establish wireless internet connections in public places. Other initiatives facilitate the acquisition of PCs, which are loaned to disadvantaged individuals participating in ICT training or sold with tax discounts.

Also, the use of ICT tools and specific training is part of general education and adult life-long learning programmes. There are specific measures for target groups, such as women, immigrants, job seekers, users with disabilities or older persons, as well as training for remote areas including the use of e-learning tools. Moreover, many Member States have run awareness campaigns on the benefits of the Information Society.

Available evidence on e-inclusion is constrained by the complexity of the subject. The lack of any data as part of the benchmarking of *e*Europe also contributes to making accurate measures difficult. Also, we are still far from a system of indicators which could really allow monitoring of progress at national levels.

Nevertheless, it can be said that a) internet access has grown, but that b) it is nevertheless lagging amongst people who are tied at home (retired people, housewives) and in rural areas.

The white paper on space policy[24] requested the Commission to create in early 2004 a "digital divide forum" within the framework of the mid-term review of the *e*Europe 2005 Action Plan, and to report on the forum's outcome in the summer 2004.

The Commission will address this request by setting up an on-line public forum, rather than creating a new entity, which gathers inputs from existing committees and groups under the co-ordination of the *e*Europe Advisory Group. The work of the forum focuses on the possibilities of extending territorial coverage of broadband infrastructure in the EU, reaching hitherto under-served regions, thus contributing to bridge the digital divide.

An interim report will provide the basis for an on-line consultation in the summer 2004, followed by a final report in September providing an overview of barriers and potential solutions to the digital divide problem.

---

[24] COM(2003) 673 http://europa.eu.int/comm/space/whitepaper/whitepaper/whitepaper_en.html

Moreover, the ESDIS[25] High Level Group on "Employment and Social Dimension of the Information Society" will continue to analyse the e-Inclusion situation and to provide policy guidance (as it has been doing for over 5 years, now). In the enlarged Europe the exchange of information and of best practice will play an even greater role than it has done in the past.

Security

Network and information security is a prerequisite for the development of the information society. Recent figures show that almost 80% of the European citizens feel enough concern about data security to stop them from buying goods and services over the internet.[26] On the business side, only 54% of the companies surveyed had a formal security policy and over a quarter of organisations had been affected by security breaches.

National strategies on information security are being developed in some Member States. Elements of such strategies are the clarification of responsibilities, strategy for awareness campaigns, management and technical standards, improvement of incident response and cyber crime strategy.

More concretely, electronic signatures have been strongly emphasised. All Member States and Acceding Countries have now implemented the electronic signature directive. In addition, Member States are also in the midst of completing the transposition of the e-privacy Directive- notably the clauses relevant to the security of electronic communications.

Most important, the proposal to establish a European Network and Information Security Agency (ENISA) has been adopted. The Agency will become operational during 2004. It is to provide the mechanism for the development of a culture of security. Its main objective is to provide assistance and deliver advice to the Commission and Member States on issues related to network and information security in order to help ensure the smooth functioning of the internal market. It will also help to achieve an increased co-ordination and information exchange between stakeholders on information security. As a result, most of the issues related to security will be dealt with by ENISA

Benchmarking

The *e*Europe Action Plan is based on the open method coordination. It aims to set common targets and then to track progress towards them through an open process, especially by benchmarking. A set of 40 indicators was established to check the progress of *e*Europe. To make these indicators as reliable as possible the National Statistical Offices were given, under the coordination of Eurostat, the task of collecting 30 of the 40measures. The rest are generated from a series of sources including secondary analysis of existing data (e.g.; reusing ITU information or from dedicated surveys carried out by contractors reporting to the European Commission).

There are some question marks over the effectiveness of the indicators and the process used to collect them. There are some possible negative impacts in this respect. Firstly not all Member States have taken part in the exercise, so there is no authoritative picture of *e*Europe. The Commission has addressed these problems by initiating a European Parliament and Council

---

[25] Employment and Social Dimension of the Information Society, http://europa.eu.int/comm/employment_social/knowledge_society/esdis_en.htm

[26] SIBIS, Security and trust, Topic Report No. 3, March 2003.

Regulation concerning Community statistics on the Information Society on 25 August 2003. This regulation has recently been approved by the Council. That Regulation will ensure yearly updates for the majority of benchmarking indicators within the EU 25 on a timely basis. Secondly, the indicators either show global developments or policy inputs rather than the outcomes of policy efforts, i.e. the indicators measure supply and readiness rather than usage or impact. This is problematic because *e*Europe 2005 aims to contribute to the Lisbon Strategy in which case indicators should be sought which show direct outcomes in terms increased economic efficiency or higher quality service delivery. Meanwhile, the global developments are a useful track on progress, but do show whether the *e*Europe Action Plan is a driver of these changes.

Despite these concerns the Member States demand continuity, so that the indicators are unlikely to change. They were defined by a Council Resolution. There is a reluctance to increase the burden on respondents or statistical services themselves. In the recent Council Conclusions on the mid-term review Communication, Member States expressed their will to retain but not expand the current set of measures.