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<u>Annex to the</u>

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

i2010 eGovernment Action Plan: Accelerating eGovernment in Europe for the Benefit of All

{COM(2006) 173 final}

• Lead DG:

Information Society and Media

• Other involved services

Relevant services have been consulted in the process of the preparation of the Communication.

In the preparatory work with the Member States the services involved were DG ENTR, MARKT, JLS, DIGIT, ADMIN.

Pre-interservice meetings have been held involving SG, DGs JLS, ENTR, EMPL, RTD, MARKT, TAXUD, ADMIN, DIGIT, JRC, COMP, and REGIO.

• Communication Legislative Workprogramme reference

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1. EXECUTIVE SUMMARY

The Communication on "i2010 eGovernment Action Plan", together with this impact assessment is the result of nearly three years of common and cumulative effort by Member States, the Commission and other stakeholders to define a strategy for eGovernment. It has its origins in the commitments made in the Ministerial Declaration of Como in July 2003, the eGovernment Communication of Sept 2003, and the Council Conclusions on eGovernment of Nov 2003¹. All these were firmly linked to eEurope 2005, are reflected in agreed strategic common orientations for eGovernment under i2010, and respond to the renewed Lisbon Agenda which views progress in eGovernment as important to deliver the desired economic and social benefits for Europe. The preparation of the impact assessment was preceded by extensive consultation with Member States and stakeholders² through the eGovernment subgroup and through *Your Voice in Europe*. Alongside with Inter-Service meetings, several studies have been conducted in order to collect the evidence base on the nature, size and scope of European action.

*e*Government is the use of information and communication technology in public administrations for the sake of better serving citizen and businesses. This means online front office services that render communication and increasingly also transactions between clients and administration easier, faster and less costly. It also means rethinking organisational processes that have to be supported by the ICT systems, which results in endeavours to increase efficiency and where necessary, entails institutional change. eGovernment requires that civil servants be trained and acquire new skills. eGovernment applications can also strengthen democratic processes and support public policies by offering citizen the opportunity to get connected with policy makers, discuss and express opinions. eGovernment solutions can also help disadvantaged people in their contacts with administrations.

The impact on economy and society is estimated to be considerable in financial terms (e.g. tens of billions of euros potential savings for taxpayers) as well as in non-financial terms (e.g. higher public service quality, more transparency, increased user satisfaction, inclusion and involvement) and relevant for virtually all in society and economy. After all, public services concern 470 million citizens, 20 million private businesses and several 10,000s administrations in Europe. Governments in the EU25 spent on average 45% of GDP in 2004 and procured about 16%.

There is an urgent need for more modernisation and innovation in government. Member States are recognising this and are committed to develop eGovernment.

The European Commission has several roles in this modernisation. First, it has to be seen to that national eGovernment initiatives are designed and implemented such that they do not add

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Resp. Ministerial Declaration, Como, 7 July 2003, http://europa.eu.int/information_society/activities/egovernment_research/archives/events/egovconf/doc/ ministerial_declaration.pdf; The Role of eGovernment for Europe's Future, COM(2003)567, http://europa.eu.int/information_society/eeurope/2005/doc/all_about/egov_communication_en.pdf; Council Conclusions, Nov 2003, http://register.consilium.eu.int/pdf/en/03/st14/st14487.en03.pdf.

² The consultation process was guided by COM(2002)704 "Towards a reinforced culture of consultation and dialogue - General principles and minimum standards for consultation of interested parties by the Commission", e.g., the report on the public on-line consultation done through "Your Voice" was made available to the public in that same website (as well as in the eGovernment-specific pages of CORDIS).

barriers to the functioning of the Internal Market but facilitate interoperability. Second, under European Commission leadership, Member States are working together, realise synergies and reduce risks and development costs. The European Commission is also supporting Member States through various programmes: IST for research, eTEN for market validation and trans-European pilots, IDABC for services implementation and specification. Structural Funds support implementation related to regional development and cohesion. MODINIS is providing support for policy-related studies, good practice and award schemes and benchmarking to measure and profile success and analyse progress.

Progress has been significant in recent years: nearly 90% of the 20 basic public services are available online³, and they are increasingly moving to become more sophisticated (transaction-handling). Take-up is increasing with citizens' visits to government websites doubling from 2002 to 2003 and from 2003 to 2004, reaching a level of nearly 50% amongst those with Internet access. Evidence that sizable benefits are delivered indeed is built up from hundreds of good practice cases, benchmarking, and macro-economic studies. Although there are strong differences between Member States, especially between the EU15 and EU10, several European countries are among the world's best.

Despite progress there are significant challenges in making eGovernment benefits widely available and reaching all citizens.

Increasing the sophistication of eGovernment services is often more investment intensive, requires more significant organisational change, and makes the question of interoperability between administrations more and more pertinent. More sophisticated services are necessary to increase take-up and achieve the full benefits e.g. in simplification and cost savings.

Although usage is increasing, users are typically aged 25-44 with tertiary education. Digital divide issues - individual, social/cultural and geographic - seem to be present in eGovernment as well (as also observed in access to ICT infrastructure and in the initial take-up of electronic commerce). Moreover, presently, most government websites do not comply with the basic accessibility guidelines. Accessibility and usability⁴ issues have to be addressed in order to prevent the widening of the gap.

While ICT also has considerable potential to make government more transparent and to open new channels for participation, as revealed by several success stories in Europe, there is still much uncertainty about how technology can increase the engagement and interactivity of citizens towards civil participation throughout Europe.

The overall policy objective is to main-stream eGovernment as an approach to modernising administrations, shifting to large-scale take-up, in a way that national eGovernment solutions support the further development of the Internal Market and other European policies, contribute to an inclusive economy and society, and address democratic deficits.

³ European Commission / Capgemini benchmark of online availability of public services, 3 Mar 2005, http://europa.eu.int/information_society/soccul/egov/egov_benchmarking_2005.pdf

⁴ The International Standards Organization (ISO) defines <u>usability</u> as the "effectiveness, efficiency and satisfaction with which a specified set of users can achieve a specified set of tasks in a particular environment."

Three options have been considered to contribute to this policy objective: a scenario with restricted financial resources, a focussed action plan and an extensive action plan; a legislative option was also considered but was deemed neither desirable nor feasible at present.

Option 1, identifying eGovernment as a 'negative priority' with a cut in financial resources at European level (of probably less than \notin 25 million p.a.) would mean the loss of Commission leadership role in accelerating progress. There would be a high risk that Internal Market objectives, through incompatible eGovernment solutions, cannot be met. Even if strongly engaged to advance eGovernment, Member States would very likely spend more on solutions (less re-use, duplication, fragmentation costs) and would face higher risk of failure without benefiting from synergies on a European level. This option is less realistic, as there is already a strong engagement for joint action in eGovernment at European level, notably as expressed in the i2010 initiative. In terms of cost/benefits ratio this is an overall unfavourable option, as it leads to higher total costs in Europe and significantly less benefits than the other options.

Option 2 focuses on actions focused on a limited number of selected areas, which are considered to deliver maximum impact with current, unchanged resources⁵. The focus areas have been identified based on extensive research and stakeholder consultation in collaboration with the Member States and actions have been chosen such that they mutually reinforce each other. In this option the European Commission takes the role of the leader, motivator and mediator. Consequently, success depends to a great part on the commitment of Member States and other stakeholders to these areas and actions. In terms of cost/benefits ratio this is - with option 3 - much more attractive than option 1. Overall costs at Commission and Member States stay at current levels (estimated at the European Commission to be about \in 75 million p.a.), but the proposed focusing of efforts will advance the delivery of major eGovernment benefits. While it is hard to estimate these benefits, economic modelling indicates that advancing eGovernment impact by one year over the period 2006-2010 could bring additional benefits of \in 10 billion. In terms of risk this option is more manageable than option 3.

Option 3 represents a more accelerated approach, where a broader range of areas can be taken on board. The cost of this option increases proportionally with the number of additional activities. Albeit that the additional costs on EU level (possibly in the order of \notin 75-150 million p.a., while it is not clear at all where such additional funding might come from) might be offset by the potential impact, there is a considerable risk connected to this option in the sense that Member States would not be able to allocate the appropriate corresponding resources to each area. That would lead to differential development in Member States and to a higher risk of failure, with even the possibility that the core priority set of objectives (those of option 2) would not be realised, thus to the discredit of the EU action overall. Therefore, although in terms of cost/benefit this option might be comparable to option 2, it is considered to be less preferred.

In considering legislation, account has to be taken of the fact that there is no mandate in the Treaty for EC-level legislation exclusively addressing the organisation of administrations at national or sub-national level. Nevertheless, based on the Internal Market mandate, legislation could become a realistic option in the longer-run as it is the option that likely most guarantees the achievement of the Internal Market objective connected to eGovernment solutions. There

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In view of the current status of the discussion on financial perspectives, putting forward at this stage as the preferred scenario such a "resources continuing unchanged" option, cannot in any way prejudge any other future allocation decision on resources being decided at the proper level.

are indeed signs that current under-specification or non-existence of EC eGovernment-related legislation leads to incompatible solutions in Europe. In addition, the development of eGovernment is arriving at a stage where, with the rise of sophistication, compatibility issues become more and more pertinent. However, at this stage legislation is believed to be premature: there is not enough evidence that these compatibility issues cannot be tackled without legislation and by coordination only.

2. **PROCEDURAL ISSUES**

The eGovernment Action plan and the impact assessment are the culmination of lengthy and rigorous consultation with all key stakeholders, a series of supporting studies, case histories, accumulated good practice actions and inter-service meetings to identify the most appropriate response and its impacts to pursuing eGovernment as a strategic European Objective to 2010.

2.1. Strategic relevance.

Setting up an Action Plan has its origins in the Ministerial Declaration of Como in July 2003, the eGovernment Communication of September 2003, and the Council Conclusions on eGovernment of November 2003⁶. All these were firmly linked to eEurope 2005. Subsequently the Kok Report emphasised the importance of eGovernment and urged for action⁷ and the Lisbon report of the Commission⁸ called for more use of eGovernment.

At the 3rd eGovernment Ministerial Conference, "Transforming Public Services", from 24-25 November, a focused and clear Ministerial Declaration with concrete, measurable and major objectives by 2010 was presented. The Declaration, firmly linked to the revised Lisbon strategy⁹, also explicitly called for strong involvement of European Commission. EICTA issued an Industry Declaration at the Ministerial Conference, which explicitly supported the objectives of the Ministerial Declaration and offered an open partnership for the further development of eGovernment towards 2010.

2.2. Key Contributors.

The development of an Action Plan and the assessment of possible options have been conducted with significant involvement and contribution from the eGovernment subgroup. This group of leaders and representatives of national eGovernment initiatives was mandated by the eEurope Advisory Group to assess the state of play of eGovernment in eEurope 2005 (see Bloomsday Recommendations¹⁰) and to explore directions for eGovernment beyond

⁶ Resp. Ministerial Declaration, Como, 7 July 2003,

http://europa.eu.int/information_society/activities/egovernment_research/archives/events/egovconf/doc/ ministerial_declaration.pdf; The Role of eGovernment for Europe's Future, COM(2003)567, http://europa.eu.int/information_society/eeurope/2005/doc/all_about/egov_communication_en.pdf; Council Conclusions, Nov 2003, http://register.consilium.eu.int/pdf/en/03/st14/st14487.en03.pdf.

Facing the Challenge, Report from the High-Level Group chaired by Wim Kok, Nov 2004, stated "Member States should give more and better follow-up to the eEurope 2005 action plan, in order to reap the full benefits of ICTs. In particular, more progress is required in the area of e-government."

⁸ Working together for jobs and growth, COM(2004)24, 2 Feb 2004 and

⁹ Presidency Conclusions, European Council 25-26 March 2004.

 ¹⁰ <u>http://europa.eu.int/information_society/activities/egovernment_research/doc/bloomsday_recommendations.pdf</u>

eEurope 2005 (resulting in the CoBrA Recommendations¹¹). Their work was accompanied by scenario-building and informal working papers from Commission Services. The DG INFSO eGovernment unit chaired the subgroup. The mandate of the subgroup was subsequently renewed to explore directions for future eGovernment policy under i2010. The subgroup was also requested by the UK Presidency to prepare the Ministerial Declaration for the third Ministerial eGovernment Conference. Results were "Signposts towards eGovernment 2010"¹² and a draft of the Ministerial Declaration of November 2005. The subgroup created ad-hoc groups led by a Member State and involving a subset of countries, to explore policy issues in Efficient and Effective eGovernment (led by the Netherlands), Inclusive eGovernment (led by Latvia), Public e-Procurement (led by France), and electronic identification (eID) and authentication management (eIDM, led by Austria). Other topics were also explored as recorded in the Signposts document.

Other important policy development groups have also been contributing to the current proposal, notably the European Network of Ministers of Public Administrations (EPAN). The eGovernment declaration by Regional organisations, adopted at the EISCO conference in June 2005, has also contributed.

2.3. Cross-Commission Engagement.

There is a history of Commission-wide cooperative work on eGovernment, involving several different services in bringing together their own specific knowledge and competencies.

Important outcomes where the resulting synergies are visible include the recently adopted Communication on Interoperability of pan-European eGovernment Services, the November 2005 eCommission Communication¹³ and e-Customs Initiative¹⁴ and the Public eProcurement Action Plan of December 2004¹⁵.

Such a Commission-wide involvement is embodied in the way the meetings of the eGovernment Subgroup of i2010 are planned, prepared and done.

2.4. Consultations

Extensive consultations with public administrations have been held in the eGovernment subgroup¹⁶. A well-attended public consultation meeting was held on 21 September 2005, the results of which were discussed with the eGovernment subgroup, in time for their drafting of the Ministerial Declaration. An online consultation was held using *Your Voice in Europe* in autumn 2005. Results from this form part of the evidence base for this impact assessment and are explicited in a report annexed.

¹¹ http://europa.eu.int/idabc/servlets/Doc?id=18465

¹² http://europa.eu.int/information_society/activities/egovernment_research/doc/minconf2005/ signposts2005.pdf

¹³ COM (2006) 45 final, http://europa.eu.int/idabc/servlets/Doc?id=24117

¹⁴ Proposal for a Decision on a paperless environment for customs and trade, Nov 2005, COM(2005)609, <u>http://europa.eu.int/comm/taxation_customs/resources/documents/common/legislation/proposals/customs/common/legislation/proposals/customs/common/legislation/proposals/customs/common/legislation/proposals/customs/common/legislation/proposals/customs/common/legislation/proposals/customs/common/legislation/proposals/customs/common/legislation/proposals/customs/common/legislation/proposals/customs/common/legislation/proposals/customs/common/legislation/proposals/customs/common/legislation/proposals/customs/common/legislation/proposals/customs/common/legislation/proposals/custom</u>

¹⁵ Action Plan for Public E-Procurement, 13 Dec 2004,

http://europa.eu.int/comm/internal_market/publicprocurement/docs/eprocurement/actionplan/actionplan_en.pdf
 Reports and papers can be found at http://europa.eu.int/comm/internal_market/publicprocurement/docs/eprocurement/actionplan/actionplan_en.pdf

Several discussions were held with the EPAN eGovernment and Innovative Public Services working groups during 2005 and numerous contacts were pursued with stakeholders from the private, public and civil sector.

2.5. Supporting studies and actions

The 2003 eGovernment Communication and Council Conclusions were followed up through a range of studies and actions, altogether addressing all the actions called for in those policy papers and providing important background for the proposed Action Plan and the impact assessment.

- Relevant policy/market studies and actions include: the eEurope (Modinis) studies¹⁷ on:
- Economics, financing and measurement framework;
- Electronic identification;
- Local and regional interoperability;
- Legal and organisational barriers studies;
- the eEurope online availability benchmarking and Top of the Web usage / take-up studies.
- the Eurostat adoption studies and the IDABC pan-European services demand and multiplatform studies.
- the eEurope "Good Practice exchange Framework" and "eGovernment Observatory"¹⁸
- the eGovernment eEurope award¹⁹
- the JRC/IPTS study "Towards the eGovernment vision for EU in 2010: Research Policy Challenges"²⁰
- The research and deployment projects from IST and eTEN programmes.

3. PROBLEM DEFINITION

3.1. What is eGovernment and why is it important?

There is an urgent need for modernisation and innovation in government. Europe's economy needs increased productivity and world-class quality in public services in order to keep up in global competition; governments face major challenges such as ageing, climate change or terrorism; and the continued pressure of budget deficits. Citizens demand better services, better democracy. Businesses demand less bureaucracy, more efficiency. New needs and demands arise as Europe continues to enlarge and embrace greater diversity.

¹⁷ http://europa.eu.int/information_society/activities/egovernment_research/projects/i2010_studies/index_en.htm

¹⁸ IDABC eGovernment Observatory and Open source Observatory at http://europa.eu.int/idabc/

¹⁹ www.e-europeawards.org

²⁰ Forthcoming in April 2006: <u>http://fiste.jrc.es</u>. The IPTS (based in Seville, Spain) is one of the seven institutes of the European Commission's Joint Research Centre.

eGovernment can help governments to meet these challenges and demands. eGovernment combines information and communication technology (ICT) with organisational change, new skills for users and civil servants, and, where needed, institutional change in order to improve governance, public services and democratic processes and strengthen support to public policies. The Annex contains examples from Member States highlighting how ICT can be leveraged for the sake of better public service in practice.

eGovernment aims to make public administrations more efficient, effective, inclusive, transparent, and accountable and to improve democracy. It is expected to impact a significant part of economic and societal life, where all 470 million citizens and 20 million companies in Europe engage several times per year with government across a wide range of life or business events. eGovernment also has an important cross-border dimension, making seamless and easy-to-use public services possible across Europe, offering citizens increased mobility and companies increased business opportunities.

Broader ICT-related trends that influence eGovernment include the convergence of technologies under the influence of the Internet (information – communication – audio-visual technologies) that challenge both regulators and industries; a persistent productivity gap with the USA, where a major factor is under-use of ICT in combination with organisational/institutional change; and digital divides that are not closing fast enough, while new divides are emerging based on skills, not on access alone.

3.2. Innovation and Competitiveness: Jobs and Growth.

Accelerating growth and employment lies at the heart of the renewed Lisbon strategy. Through i2010, the European Commission works with Member States to contribute to this vision with the help of ICT. eGovernment is a crucial part of the three policy dimensions of i2010: A Single European Information Space; Investment and Innovation in Research; and, Inclusion, Better Public Services and Quality of Life.

The potential of e-Government to significantly contribute to improving Europe's competitiveness, growth, innovation and employment is frequently referred to. Government is by far Europe's biggest economic sector (overall government spending across EU25 amounted to 45% of GDP in 2004²¹) and affects all other sectors of the economy. Government provision of major public services such as education, health, and public security, as well as investments in infrastructures (including ICT infrastructure) can be enhanced through the effective use of eGovernment: better information systems allow for better coordination, funding, resource allocation, and reduction of administrative burden.

Government performance as an employer can be improved by better coordination with labour markets, wages setting, training, etc., again enabled by ICT-supported systems. In 2003, government employment represented 16.7% of total employment in the EU15²².

It is in the efficiency and effectiveness of the provision of these services that significant gains are possible. At the **micro-level** of individual services real-life success stories from Europe illustrate both today's impact and the potential for the future if eGovernment was generally introduced (there are equally strong examples available from all over the world):

²¹ Eurostat Yearbook 2005.

²² European Commission, 2005, "The impact of eGovernment on competitiveness, growth and jobs", IDABC eGovernment Observatory, Background Research Paper, February 2005

- inside administrations: significant productivity improvements in the back-office are regularly reported from successful cases²³;
- for businesses as users of government services, e.g. a significant part of the 25% administrative burden reduction for businesses in Belgium from 2000-2004 was achieved with services such as electronic employment and social security registration²⁴; similar red tape reductions are aspired across Europe and a key part of the Lisbon reporting in 2006;
- for citizens, e.g. savings of millions of hours in those countries where online tax filing has a high take-up, even possible through confirmation of a pre-filled tax form by one-click (or one SMS as in Norway²⁵). The potential in Europe is much larger as in several large countries take-up is still low.

A particularly important role is attributed to eGovernment as a means to improve public procurement, because of the size of the public sector as a buyer: total public procurement in the EC – i.e. the purchases of goods, services and public works by governments and public utilities – is estimated at about 16% of the Union's GDP or \notin 1,500 billion in 2002. eProcurement can contribute to better government performance as a purchaser, as well as stimulating greater ICT uptake and use by businesses, and increasing access to new markets, thereby creating a more innovative overall economic environment. More specifically:

- Electronic public procurement enables up to 5% savings in total procurement costs (costs of goods and services purchased) and 10% in transaction cost (cost of the purchasing process). E.g. electronic procurement and auctions in Scotland and Romania achieved actual savings of over 20%²⁶. Potential savings for Europe, at 50% take-up, can be in the order of €40 billion annually.
- Electronic invoicing, which is part of the phase after public procurement, can be another cost saver: the Danish eGovernment Award Winner 2005 achieved cost savings of €120-150 million for the administrations resulting in tax reduction and €50 million for the companies. The potential savings, if this practice were introduced all over Europe, would be in the order to €15 billion annually, not counting improvement in terms of reduction of errors and time-savings.

While the previous analysis addresses the micro-level of individual services and individual economic actors, **macro-level** economic studies demonstrate that government investment in productivity increase through ICT has multiplier effects on GDP growth. An ongoing econometric study demonstrates²⁷, that eGovernment can contribute to 0.10% to GDP growth

²³ eGovernment Awards November 2005, see Award articles at <u>http://europa.eu.int/egovernment_research</u>, e.g. Falstaff e-customs in Italy achieved a 20% increase in productivity, Online Revenue System in Ireland achieved €6.2 million internal savings in 2004, Danish Commerce and Company Agency more than doubled productivity in company foundings between 2000 and 2003 (eGEP study).

²⁴ Agoria, ICT Flash February 2006, <u>http://www.agoria.be</u>.

²⁵ European Commission Top of the Web survey 2004, <u>http://europa.eu.int/egovernment_research</u>.

²⁶ eGovernment Awards November 2005, ibid.

²⁷ http://217.59.60.50/eGEP/Static/Contents/3rdWorkShop/Interim/ D.3.2 Economic Model for 3rd workshop.pdf The 0.10% contribution p.a. is an average of 2005-2010 figures

annually and positively impacts innovation. Empirical data show a strong correlation between eGovernment readiness and National Innovation Strength.²⁸

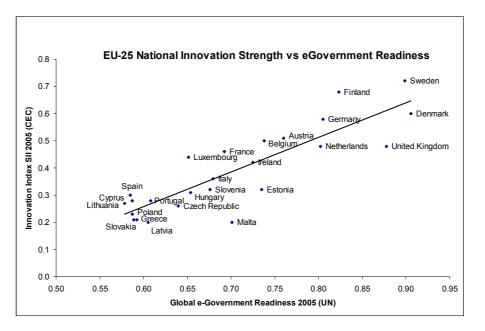


Figure 1 EU-25 National Innovation Strength vs eGovernment Readiness.

eGovernment also is likely to contribute to the whole economy becoming more competitive²⁹. Countries that score high in public sector openness and efficiency are also those that top economic performance and competitiveness scoreboards³⁰.

²⁸ Regression analysis conducted on the innovation indexes and the eGovernment readiness of 25 Member States shows 75% correlation-squared. а verv high Input data from http://unpan1.un.org/intradoc/groups/public/documents/un/unpan021888.pdf and http://www.trendchart.org/scoreboards/scoreboard2005/scoreboard_papers.cfm, 95% significance level 29

²⁹ European Commission, 2005, "The impact of eGovernment on competitiveness, growth and jobs", IDABC eGovernment Observatory, Background Research Paper, February 2005 http://europa.eu.int/idabc/servlets/Doc?id=19230

³⁰ World Economic Forum Global Competitiveness Reports, European Commission Innovation Trendcharts and Scoreboards, UN Global e-Government Readiness Reports (2003, 2004, 2005).

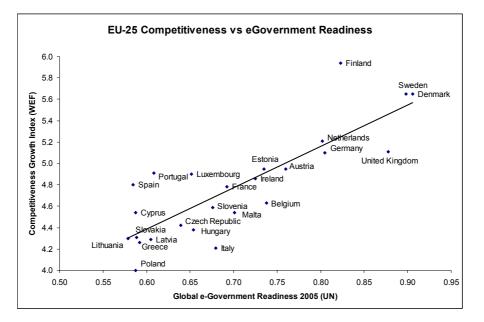


Figure 2 EU-25 Competitiveness vs eGovernment Readiness³¹

A high correlation is of course not the same as causality and if there is a causality, then correlation does not express the direction of it; if better eGovernment readiness results in higher competitiveness or is it higher competitiveness that creates improved eGovernment services. However, it is reasonable to assume that better government achieved through eGovernment will contribute to a stronger economy with a time-lag. That the direction of this effect is from readiness to competitiveness (rather than the other way around) is to some extent borne out by the fact that correlation between country-rankings in the Global Competitiveness Index versus rankings in UN eGovernment Readiness slightly increase when a time-lag is allowed for (Table 1). Such a time-lag is also part of the aforementioned economic modelling study.

Correlation increase from 2005 to 2003 suggests time-lagged effect of		Global e-Government Readiness		
eGovernment Readine Competitiveness		2005 2004		2003
Global Competitiveness Index	2005	78%	80%	81%
	2004	75%	78%	79%
	2003	80%	80%	78%

Table 1 Correlation between e-Government Readiness and Competitiveness increases over time

From the strong link between national competitiveness, innovation strength and the quality of public administrations increasingly the conclusion is drawn that better government and better governance through transformed public services is a competitive must in the global economy.

³¹ Input data from http://unpan1.un.org/intradoc/groups/public/documents/un/unpan021888.pdf and http://www.weforum.org/site/homepublic.nsf/Content/Growth+Competitiveness+Index+rankings+2005 +and+2004+comparisons, 95% significance level

3.3. Increasing efficiency, reducing administrative burdens, and improving quality of life

By increasing efficiency, eGovernment can help tackle the challenge of continued pressure and scrutiny of public budgets. A study measuring the direct costs and benefits of eGovernment³² concluded that, even though investments are considerable (about $\in 11.9$ B p.a.³³), they do indeed pay off. Benefits include reduction of process time and better design of processes, improved quality of information and information supply, reduction of administrative burdens, cost and error reduction, the reallocation of resources into improving service levels, improved revenue collection (e.g. tax-discovery systems), and increased customer satisfaction.

These benefits prove to be closely interconnected and strengthen one another. Although all stakeholders experience significant benefits through eGovernment, internal efficiency benefits appear to be higher than end user benefits, as the number of transactions is highest for administrations.³⁴ eGovernment, thus has the potential to significantly increase productivity in public administrations. Considerable progress has been made in exploiting these benefits, but there remains huge potential for further improvements in public sector internal efficiency.

eGovernment helps tackle budget pressures. In Germany, the costs of bureaucracy make up between 2 and 5 percent of the German Gross National Product and have risen more than 25% in the last eight years. However, investments in the German BundOnline 2005 initiative suggest that in some cases it will not take very long for investments in eGovernment to be amortised given that the investment costs of EUR 1.65 billion can be set against annual savings of EUR 400 million. For example, an official notice costs EUR 7.50 to process by conventional means, whereas it costs only EUR 0.17 when done electronically. Similarly, the use of electronic identity management, in this case a digital signature, by the Federal Insurance Institution for Salaried Employees saves EUR 1.90 in administrative costs on every document processed.³⁵

Benefits can be substantial for businesses. Transaction costs related to business interactions with Government directly affect profitability, which is especially important for the viability of SMEs. The "Top of the Web" survey on the quality and usage of public eService web-sites showed that the most important benefits reported by businesses are reduced process time, reduced costs in terms of reduction of administrative burdens, and gaining flexibility, whilst the most important accessibility factor is the usability of web-sites, particularly their speed.³⁶

Reducing Administrative Burden Evidence shows indeed that administrative costs, burdening businesses and thus reducing their competitiveness, make up significant amounts. In the Netherlands, for example, the total administrative cost is estimated at ϵ 16 billion per year, including 4 billion administrative costs for tax-related obligations (in 2002). The bureaucracy costs for small and medium size companies significantly reduce their profits. By reducing these costs, eGovernment can help companies keep up with global competition. The Top of the Web survey found that companies can save ϵ 10 per VAT declaration by making these online, which translates into a potential of hundreds of millions of euros savings across Europe.

³² Capgemini Netherlands and TNO under the authority of the Dutch Ministry of the Interior and Kingdom Relations <u>http://www.eupan.org/index.asp?option=documents§ion=details&id=19</u>

³³ European Commission eGEP study, ibid.

³⁴ CGEY (Cap Gemini Ernst & Young), 2004, "Does eGovernment pay off?", report for EXREXEMP under the Dutch Presidency, November 2004

³⁵ Deutsche Bank Research, 2002, E-government: large potential still to be tapped, October 31 2002, 'Economics - Internet revolution and new economy', No. 31: http://www.dbresearch.com.

³⁶ European Commission, 2004, Top of the web: user satisfaction and usage survey of eGovernment services, Brussels, December 2004.

These benefits are even higher when delivered to large groups of businesses, or with services delivered with a high frequency, and when public authorities also invest in other areas such as service level.³⁷There is also a strong inter-dependence between benefits. For instance, internal process simplification and internal cost reduction through back-office integration may improve both service levels, such as response time and quality, and raise external efficiency, which in turn can lead to increased user satisfaction.

The benefits of eGovernment for citizens mostly derive from an improved service level and reduction of transaction times. Even though citizens may have only a few contacts with government each year (depending on the country), there are still benefits to be had. Citizens all over Europe are already saving millions of hours through online tax declaration. In the "Top of the Web" survey of 24,788 citizens, the most widely reported benefits for users were saving time and gaining flexibility. Benefits are most significant for those citizens who have frequent contact with governmental or public bodies, such as citizens requiring social benefits or students requiring loans³⁸, or for annually repeated transactions such as income tax declaration.

Convenience and time-savings for citizens: the provision of disability benefits in Belgium was re-organised using secure electronic identification and electronic documents in the Communit-e initiative. Whereas previously it took 3-4 weeks before a handicapped person could receive such benefits, this has now been reduced to seconds.

3.4. Democracy, citizen participation and inclusion

ICT is opening up new opportunities, leading to profound consequences for the way we understand and exercise citizenship, democracy and participation. eDemocracy is first of all about tools that bring citizens closer to each other and their governments. Online communities allow citizens to connect, exchange and organise their local civic life, as well as to attempt to provide input for governmental decision-making, policy and program development. eGovernment can provide easier contact to politicians and eRulemaking can make policy development more transparent, creating more trust. ePolling, the ePetition systems can help overcome problems of geographical distance and of communication in a dispersed population. eVoting, is still in its infancy and is not intended to replace traditional forms, but rather to act as a third channel.³⁹Evidence shows that it can successfully increase turnout, for example in Switzerland where the ICT channel is amongst a number of others including traditional and by post. In Communes conducting local referenda using Internet voting, turnout was 43% compared to 28% elsewhere.

eGovernment raises the potential to change representative democracy, but its desirability needs to be assessed⁴⁰. ICT can successfully include new as well as existing groups in democratic and participative processes, but there is still much uncertainty about how technology can increase the engagement and interactivity of citizens towards civil participation. There is also a lack of awareness on the part of politicians and civil servants

³⁷ CGEY (Cap Gemini Ernst & Young), 2004, "Does eGovernment pay off?" report for EXREXEMP under the Dutch Presidency, November 2004.

³⁸ idem

³⁹ European Commission (2004) eDemocracy Seminar, 12-13 February 2004, Brussels http://www.jrc.es/home/report/english/articles/vol85/ICT1E856.htm

⁴⁰ See e.g. Ignace Snellen, Towards Democracy without Politics (Vision Book, Directorate-General Information Society, 2004).

about how to do this and how to use the results.⁴¹Above all, there is a need to avoid potential problems such as trivialisation, populism, lack of responsibility, and dominance by the loudest voices.⁴²

eGovernment is particularly important for disadvantaged groups who may be interacting more frequently with administrations. On the top of that, many of the disadvantaged groups also have difficulty using ICT; there can be an access divide, a literacy divide, a social, a regional divide or a personal handicap or all of these together that are obstacles for ICT take-up and the use of eGovernment services. Consequently, there is a risk that the current digital divide could widen rather than close if no pro-active policy measures are taken. eGovernment can also serve as a tool to help addressing this digital divide. It is therefore important that eGovernment adopts a policy of eInclusion by design, both ensuring that no new exclusion results and that inclusion itself is increased⁴³. Appropriately designed and high quality eServices should be accessible to all individuals and groups, and relevant skills development and support policies are required. Concepts and implementations should follow, where needed, a multi-channel approach where access to eGovernment services is provided through various, not only web-based tools of communication or though intermediary contact points.

While the penetration of new technologies is mainly driven by market forces, public policies have the task of guaranteeing as broad as possible access to the enabling opportunities of ICT. In Europe, the political guidelines laid down by the European Council for the fight against poverty and social exclusion⁴⁴ set the objective "to exploit fully the potential of the knowledge based society and of new information and communication technologies, taking particular account of the needs of people with disabilities" in order to prevent the risk of exclusion.

4. WHY EGOVERNMENT AT EC LEVEL?

Modernising public administrations, realising internal efficiency gains, more effectively supporting the wider economy, and serving citizens and businesses in meeting their needs, for which eGovernment provides a powerful tool, are fundamentally Member States competencies. Better service levels create a more attractive environment for investment, which induces competition and thus continuous improvements by Member States. The rollout of eGovernment throughout Europe in recent years provides a strong basis. It can be argued, however, that there is a need for concerted and focused action at European level, both because of market failures and to better coordinate and exploit opportunities in order to ensure that

⁴¹ Mary Reid, eVoice Project.(2005), "Using eDemocracy to strengthen representative democracy" on International Political Forum on eDemocracy (<u>http://www.evoice-eu.net</u>), and ""eParticipation: the view from the Local eDemocracy National Project" by Isabel Harding, European Institute of Public Administration (2005) Workshop "The digitisation of European public administrations: what's the political dimension of electronic governance?", Maastricht, 1 April 2005.

 ⁴² Millard, J (2004) "ICTs and governance", The IPTS Report, The Institute for Prospective Technological Studies (IPTS), a Joint Research Centre of the European Commission, Seville, Spain, Number 85, June 2004.

⁴³ See also Inclusive eGovernment in the Ministerial Declaration on eGovernment and in Signposts Towards eGovernment 2010, Nov 2005.

⁴⁴ See objective 2 (a) in Annex I to the "Fight against poverty and social exclusion: common objectives for the second round of national Action Plans" endorsed by the Council in November 2002: <u>http://europa.eu.int/comm/employment_social/soc-prot/soc-incl/counciltext_en.pdf</u>.

multiplier effects are maximised (economies of scale and scope) and barriers to free movement are minimised across the EC.

4.1. Avoiding barriers due to fragmentation.

The EC has 25 different national, hundreds of regional and tens of thousands of local public administrations. There is a natural coexistence of different concepts of public service, while organisational structures and procedures, terminologies and technologies vary widely across Member States. Many Member States are introducing national legislation in eGovernment. Austria introduced a general eGovernment Act in 2004. Italy has introduced a law to allow for full replacement of paper ID documents by 2006. Nordic countries have had legislation for many years for a unique citizen number by birth that has paved the way for electronic identification. In 2003, Finland introduced a law for electronic communications with government, specifying digital rights and responsibilities. Denmark has made electronic invoicing for business-government-information services. Directly relevant EC-legislation includes the E-signatures Directive and the Re-use of Public Sector Information Directive. Indirectly related EC-legislation includes the Public Procurement Directives, the E-Customs code, the recent Financial Services Directives, the proposed Services Directive.

Availability of eGovernment services and cross-administrational interoperability can facilitate the development of cross-border activity by lowering transaction costs. However, uncoordinated implementation of legislation and strategies for eGovernment risk creating new barriers to the Internal Market, putting additional administrative costs on cross border business activity and rendering it less competitive. For example, electronic identification and authentication management systems mandated by law at national level are already incompatible across borders.

The consequences of this fragmentation are a burden for businesses (especially SMEs) that access eGovernment solutions. Without coordination, they have to comply with different systems in each Member State. As the EC progresses towards the removal of barriers from the free flow of goods, services, capital and labour, i.e. with increasing cross-border activity, this issue becomes increasingly pertinent. In addition, the development of the Internal Market has shown a slowdown since 2000⁴⁵, which urges for more tools easing mobility. Member States on their own will find it difficult to achieve the benefits of pan-European service accessibility: the European added value lies in working with public administrations in the Member States towards common concepts and standards and thus reducing the risk of (re)fragmentation.

4.2. Benefiting from economies of scale and scope

Governments in EU25 spent some \notin 36.5 billion on ICT in 2004, a figure that has been steadily rising and is projected to continue to rise.⁴⁶From that, around \notin 11.9 billion are estimated to be directly linked to eGovernment⁴⁷.

EC action has the potential to rationalise investments, keep costs lower and improve the outcomes of eGovernment investment. Leveraging on the diversity of Member States' initiatives and experiences as well as benefiting from a Europe-wide deployment scale and

⁴⁵ <u>http://europa.eu.int/comm/internal_market/score/docs/relateddocs/2004-im-index_en.pdf</u>

⁴⁶ http://europa.eu.int/idabc/en/document/4556/5866

⁴⁷ eGEP study ibidem

scope, good practice examples of initiatives, innovative solutions and research results can be shared among the administrations⁴⁸. Positive multiplier effects become stronger when enabled to cross-borders, both drawing on and impacting larger numbers of administrations, businesses and citizens. Measurement of progress and success can be supported by European level benchmarking, which can also serve as external incentive tool by setting objectives, lessons can be learnt and can feed back to Member State and regional or local levels.

Economies of scale and scope are enhanced through facilitating the free movement of goods, services, capital, and labour. The corresponding circulation of public services is an essential part of this development and needs to be explicitly included. This also applies to the ICT supply industry, which will enjoy increased economies of scale (and thus productivity and competitiveness improvements) in a larger European market due to aligned and interoperable technologies, standards and government/business processes. Economies of scale from administrative diversity can be realised on the basis of common infrastructure services and platforms.

4.3. Bringing Europe closer to the citizen: eGovernment and the Commission

In an enlarging and deepening EU, the issue of bringing citizens closer to the EU institutions and EU level decision-making has become even more challenging. EU level actions on the use of ICTs is one of the most powerful way of re-connecting the EU with its citizens, revitalising their interest on EU level politics and strengthening democracy, cohesion and inclusion in an enlarged EU.

eGovernment has become an essential element in the implementation of a range of EC policies, such as in customs with the e-Customs initiative⁴⁹, cross-border public procurement with the Action Plan for the Implementation of the Legal Framework for Electronic Public Procurement⁵⁰, the Citizen Signpost Service for Internal Market information, the European visa and immigration system VIS.

The European Commission has itself taken up eGovernment through eCommission⁵¹ (modernisation of internal administration, improved communication with Member States and other European institutions, and better public services to citizens and business). Activities that directly concern citizens include online availability of all legislation and other official Commission documents, and the introduction of Interactive Policy Making for input to policy-making (spontaneous feedback and online consultation). This is now a major consultation tool for engaging the feedback and interests of citizens and states. Over 3 million citizens have visited the portal so far since its creation in 2001. The momentum for these developments is part of the Better Regulation approach concerned to improve governance, transparency and legislative actions. Europa 2nd Generation is providing portals for a complete range of thematic information and interactive services on EC policies and activities, hiding organisational complexity behind the scenes. New internal on-line systems are being implemented to improve internal operations and administration. However, in the recent

 ⁴⁸ Current means for sharing include the eGovernment Good Practice Framework <u>http://www.egov-goodpractice.org</u> and the (eEurope) eGovernment Awards, http://www.e-europeawards.org/.
 49 COM(2005)(00 and COM(2005)(00 af 20 New 2005)

⁴⁹ COM(2005)608 and COM(2005)609 of 30 Nov 2005.

⁵⁰ COM(2004) of 13 Dec 2004.

⁵¹ "Towards the eCommission: Implementation Strategy 2001-2005", June 2001 and E-Commission 2006-2010, Enabling Efficiency and Transparency, 22 Nov 2005.

eCommission Communication it was indicated that the European Commission still has some way to go to be on a par with exemplary eGovernment systems in Europe.

5. CURRENT STATE OF PLAY IN EUROPEAN EGOVERNMENT

5.1. Stage of development in an international comparison

The UN Global E-Government Readiness Survey 2005 looks at numerous features of eGovernment websites, telecommunication infrastructure and human resource endowment for eGovernment in 191 UN Member States and establishes a composite index for eGovernment readiness⁵².

According to the index, highest ranks the United States, closely followed by Denmark, Sweden and the UK and several other Member States are among the top performers.

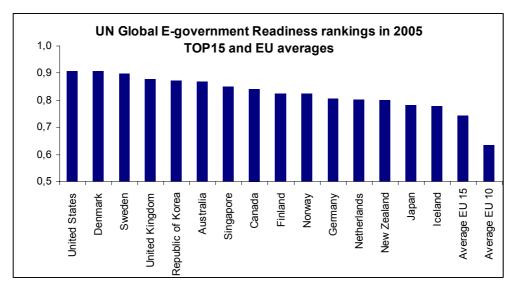


Figure 3 UN Global e-Government Readiness 2005

However, there are significant differences between Member States, especially in case of the EU10 that are on the EU15 development level of 2 years ago⁵³. EC action is about establishing synergies so as to maximise tangible benefits, at both, Member States and EC level by accelerating progress, allowing economies of scale and avoiding cost of potential

⁵² As countries progress in both extent and sophistication of their eGovernment offering they are ranked higher according to a classification corresponding to the following five stages: <u>Emerging presence</u>: limited e-government offering, basic information online. <u>Enhanced presence</u>: e-government provides greater sources of current and past public policy and governance information, such as policies, laws and regulations, reports, newsletters, and downloadable databases. <u>Interactive presence</u>: e-government enters the interactive mode with services such as downloadable forms and e-mail communication. <u>Transactional presence</u>: two-way interaction applications allow citizens and businesses to pay for public services online. <u>Networked presence</u>: the government actively solicits citizen views on public policy, law making, and democratic decision-making through online consultation mechanisms. This stage implies the integration of the public sector agencies with full cooperation and understanding of the concept of collective.

⁵³ European Commission / Capgemini benchmark of online availability of public services, 3 Mar 2005, <u>http://europa.eu.int/information_society/soccul/egov/egov_benchmarking_2005.pdf</u>

future fragmentation of solutions. This will support the lower ranking countries in Europe to catch up with the rest of the EU.

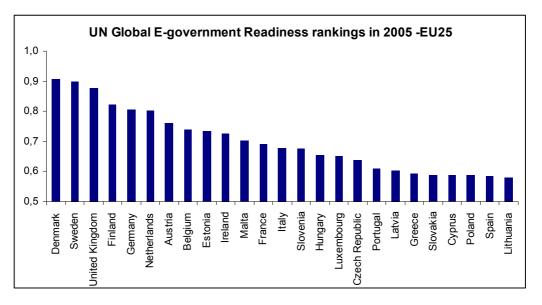


Figure 4 UN Global e-Government Readiness 2005 for EU25

Besides the top raking countries, such as Mexico (ranking 33 in 2005 and up from 70 in 2003), Brazil (35) and Chile (22) take the opportunity of uptake in telecommunications to increase their eGovernment services offers at a steady pace.

5.2. Availability

Development has been remarkable in past years and has brought us to the point where the online availability of public services in the EU countries is about to reach saturation: there is a nearly 90% availability of 20 basic public services according to the CGEY survey⁵⁴.

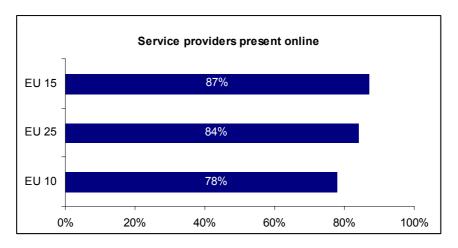


Figure 5 Online availability of 20 public services in 2004 (CGEY)

⁵⁴ European Commission / Capgemini benchmark of online availability of public services, 3 Mar 2005, <u>http://europa.eu.int/information_society/soccul/egov/egov_benchmarking_2005.pdf</u>

While EU15 countries are on average still ahead, in Oct 2004 the EU10 were roughly where the EU15 were 2 years earlier in terms of online availability, with Estonia already having reached position 8 in the overall EU rankings. The CGEY online availability indicator is different from the UN e-Government Readiness index above, therefore rankings are not (in detail) identical.

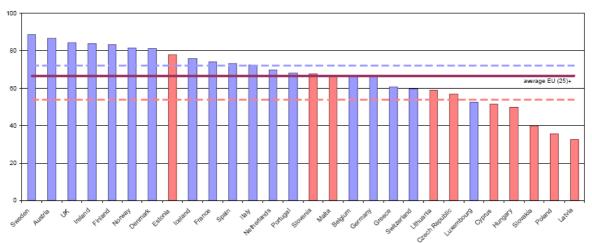
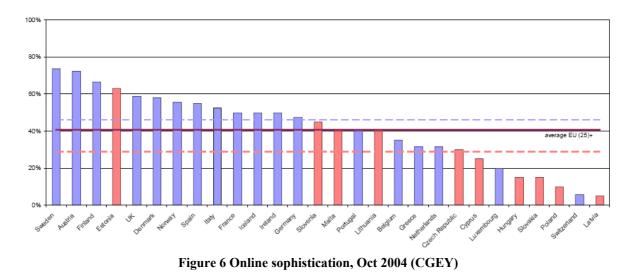


Figure 5 Online availability of public services Oct 2004 (CGEY)

Online availability of information is an essential milestone of development but the most significant benefits - direct and positive externalities of eGovernment come into play when the level of sophistication increases: going from the information-only state, through one-way-and two-way interaction to full transaction/case-handling. In some cases a further step is possible, full automation of the service where *interaction* is no longer needed. Information only services do not require much harmonisation, while the enabling role of the EU gains in significance when citizens and businesses engage in interactive services. The sophistication of these services has seen a fast increase in recent years: the average achieved sophistication level was 46% in 2005 up from 40% and 29% in 2004 and 2003 respectively. Though the achievable sophistication level depends on the type of services, on average it is now about half-way (45% in 2004) to its potential level.

Sophistication levels vary significantly between Member States, from 10% to 75%. Though the new Member States are generally lagging behind, they are on average where the EU-15 were some 2 years ago, while Estonia is already in the overall EU top.



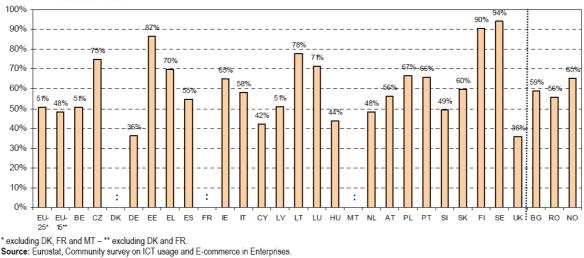
In contrast to information-only services, as the desired level of sophistication rises, Member States are confronted with increasing challenges in design and implementation. This is also the moment expenditures increase, due to the need for organisational change and skills improvement (studies in business show that 80% of expenditures in successful ICT projects is in organisation/skills whereas 20% is in ICT itself).

5.3. Take-up

Take-up and usage is also growing rapidly. In 2004, 51% of companies accessed government websites, as did 45% of citizens with internet access; the number of citizens doing so doubled from 2002 to 2003 and from 2003 to 2004⁵⁵. Excluding information-only services, 11% of EU citizens were found to be users of eGovernment services in 2004⁵⁶.

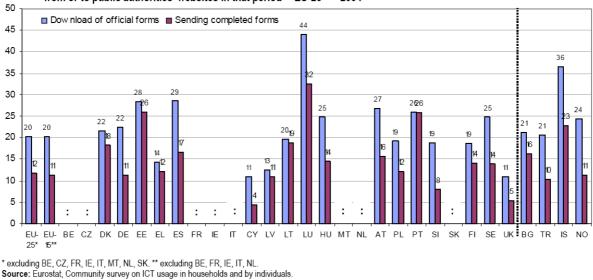
⁵⁵ Eurostat survey, STATS 05/138, 27 Oct 2005.

⁵⁶ eUser project, as reported at the Manchester Ministerial Conference, 25 Nov 2005, see <u>http://www.egov2005conference.gov.uk/documents/ps_presentation_ps4a.pdf</u>.



Graph 2: Percentage of enterprises with internet access having obtained information from public authorities' websites – 2004

Figure 7 Enterprises using online public services (graph 2 from Eurostat 2005)



Graph 5: Percentage of individuals that used the internet in the three months prior to the survey, having downloaded or sent forms from or to public authorities' websites in that period— EU-25* — 2004

Usage is increasing as services become more sophisticated. An Accenture survey found that "citizen's willingness to embrace a new generation of services outpaces governments' ability to deliver them. Citizens want more from government, in terms of cross-governmental collaboration and outreach."⁵⁷The "Top of the Web" survey showed large take-up differences between countries as well e.g. for online taxation.

Digital divide issues play a role in take-up. eGovernment usage faces the same obstacles as ICT usage in general: typical users are aged 25-44, with tertiary education living in densely populated areas. eGovernment, if well designed can contribute to lowering the digital divide by offering presently excluded groups a tangible, easily perceivable benefit of using ICT. The current state of play in these issues is that most government websites do not even comply with

Figure 8 Citizens using online public services (graph 5 from Eurostat 2005)

⁵⁷

https://www.accenture.com/Global/Research_and_Insights/By_Industry/Government/LeadershipExperiences.htm

basic accessibility guidelines, there remain serious eAccessibility barriers. The most recent European survey of public web-sites showed that only 3% achieved W3C Web Content Accessibility Guidelines, and that 70% showed relatively pervasive failures.⁵⁸Thus, usability remains a very important issue in the provision of eGovernment services and public authorities need to tackle this challenge, for example through improved channel integration, and by focusing on the most important usability factors on their web-sites. This is especially important in extending the use of high quality and highly accessible eGovernment services widely across all socio-economic groups. Addressing digital divide issues becomes more and more urging with the increase of sophistication and usage in order to prevent the widening of the gap.

5.4. Impact

The litmus test of eGovernment development is its impact rather than its availability. This includes time and financial benefits for the users and satisfaction with public services. Positive user satisfaction rates at 55% according to the eUser survey quoted before. Benefits are real and significant as illustrated before by case studies and some comparative surveys. E.g. the Top of the Web study found that millions of hours are saved in online taxation and hundreds of millions of euros saved in VAT declaration, while benefits from electronic public procurement / invoicing are already today shown to reach many hundreds of millions. Individual case studies, as e.g. reported in the recent eGovernment Awards provide many examples of such benefits⁵⁹.

Internal metrics (for the back office) of eGovernment are less developed and data are less available across countries. Some countries are applying ICT-readiness measurements and use Balanced Scorecard to link strategy to internal operations. Impact such as cost-savings or quality improvement internal in the administrations has been reported from multiple case studies and good practices. For example e-invoicing in Denmark provides administrative annual savings of \notin 150 million. Mistakes in customs processing in Poland have been reduced by a factor of 20⁶⁰.

5.5. Strategic Management

At the strategic level, all EU countries have now eGovernment strategies, often formulated in conjunction with overall information society strategies and generally closely linked to the strategies for modernisation of public administrations. All EU countries have an explicitly allocated responsibility for eGovernment, either within a single Ministry, as through inter-Ministerial cooperation, or with a dedicated agency or unit organisationally linked to the Prime-Minister's office. Most recent strategic plans are emphasising the delivery of measurable benefits, administrative re-organisation including shared services, the introduction or uptake of key enablers such as electronic identification and the need for interoperability and compatibility with other EU countries. At EU-level, i2010 establishes an overarching strategic direction. The proposed action plan is intended to deepen the detail for eGovernment, complement the actions already agreed within Member States and clarify priorities for European action.

⁵⁸ UK Presidency of the EU, 2005, "eAccessibility of public sector services in the European Union: executive briefing", published under the auspices of the European Public Administrations Network (EPAN), November 2005: <u>http://www.cabinetoffice.gov.uk/e-government/eaccessibility</u>.

www.e-europeawards.org

 $[\]overline{\text{See COM}(2003)567}$ and references quoted there.

5.6. European-level Activities

Member States cooperate through the eGovernment subgroup of eEurope (now i2010) programme management committees, project consortia, and intergovernmental networks (EPAN). Their focus is on realising the positive impact of eGovernment and achieving measurable benefits for citizens, businesses and administrations. Sharing good practices across Europe is one way to reduce barriers to, and the cost of eGovernment solutions. The European Commission has established a European Good Practice framework, as well as open source software and interoperability observatories. Several EU programmes are involved in the modernisation of public administrations. eGovernment-related programmes include IST/eGovernment for research and development, eTEN for market validation and trans-European pilots, IDABC for services implementation and specification, while Structural Funds support implementation related to regional development. The MODINIS programme is providing support for policy-related studies and benchmarking.

6. CHALLENGES AND OPPORTUNITIES

eGovernment can deliver tangible and significant benefits, but the challenge now is to achieve wide take–up and exploit the opportunity for large-scale impact, thereby contribution to Europe's competitiveness in the global economy as well as to societal and economic growth, thus fully supporting the Lisbon agenda.

eGovernment is developing rapidly in most countries. Decisions have already been made or are being made that impact upon the use of public services across borders. The risk of fragmentation of the Internal Market is real. The challenge is to overcome and prevent new barriers to the Internal Market.

eGovernment investments are substantial, with considerable risk of duplication of efforts between countries. Resources may be inadequate for each authority to be able to develop full solutions on their own. There is a real opportunity to achieve significant savings and acceleration of progress through co-operation and sharing.

Despite considerable investments and the increasing availability of online public services, pay-off is often not measured let alone compared. The challenge is to move to impact/benefits measurement, and to do so on the basis of a common framework, bringing comparability and economies of scale in measurement.

eGovernment does not yet reach all citizens. It has the potential to increase inclusion in general, which has not yet been achieved. The challenge is to avoid new digital divides in eGovernment while the opportunity is to pro-actively make use of eGovernment to enable more inclusive policies in general.

The potential for eGovernment to enhance the democratic process is real and growing, but has not yet been adequately addressed and there remain considerable uncertainties about how and when ICT can support participation.

In terms of EU-level strategy, Member States increasingly state the importance of cooperation and alignment, for economies of scale, efficient use of resources, and to help avoid the risk of

fragmentation and new barriers to the Internal market⁶¹. Member States recognise the benefits of collaboration at EU level and that the European Commission could take a stronger leadership role.

7. **POLICY OBJECTIVES**

Given the stage of development of eGovernment in Member States and the challenges, the following objectives can be formulated:

- Accelerate progress and the delivery of tangible benefits for all citizens and businesses, particularly by mobilizing the European programmes and contributing to improve European regulatory environments.
 - *Identify and implement high impact flagship eGovernment services* (e.g. eProcurement) for citizens and businesses which can act as major triggers releasing large scale multiplier effects across the public sector at European and Member States level.
 - *Identify and implement key enablers of eGovernment* which can remove major bottlenecks and release large scale multiplier effects across the public sector at European and Member States level.
- Safeguard that eGovernment solutions at the national level *do not lead to new barriers in the Single Market* due to fragmentation and lack of interoperability.
 - Extend the benefits of eGovernment at EU-level by enabling economies of scale of Member States initiatives, cooperation on specific European challenges of diversity and complexity and exploiting potential in European policy areas such as public procurement or European citizenship.
 - Ensure inclusion and cooperation of all stakeholders in the EU and beyond.
 - Ensure a coherent investment into policy development, research, deployment, implementation, sharing of good practices and solutions at EU level.
- Address critical Europe-wide socio-economic challenges by ensuring that all European citizens and businesses *regardless of who they are, where they live* or what their needs are have the possibility to benefit from eGovernment.
- Address critical Europe-wide political challenges by extending the benefits of *eGovernment for enhancing democracy and participation* through measured but innovative initiatives that respect different needs and cultures.

8. POLICY OPTIONS

When considering possible effective policies for the above mentioned objectives, there are two dimensions:

⁶¹

See CoBrA Recommendations of the eGovernment subgroup, quoted before.

One dimension is the scope of European level actions; **what** are those areas in eGovernment where European action can contribute most. eGovernment is a vast field and experience shows that Commission leadership and coordination impacts the development of eGovernment in the Member States. Multiple factors determine the choice of the scope: For Commission-supported contributions to have a critical impact, resources have to be made available. Resource requirement grows proportionally with the number of actions. For including an area into the scope of activity the European Commission also has to take into consideration the stage of development of individual eGovernment services and applications in the Member States, what are those areas where Member States can successfully move towards a common set of objectives, what are those areas, which are mature and should be brought into discussion. Along this dimension, three policy options have been considered: Reduced European Commission activities; a focussed action plan and an extensive action plan.

The second dimension is **how** this should be undertaken in order to maximize the benefits of European-level action. The above three options rely on coordination, on taking an agreed leadership role. Progress and success largely depend upon the commitment of the Member States. Different from that approach, legislative options are also considered in a separate point. Legislation has to take into consideration in how far it can secure the achievement of the objectives and the realisation of benefits and if these benefits offset the regulatory burden caused by additional EU level legislation.

The European Commission has already announced, via i2010, that an eGovernment Action Plan will be established. However, a scenario with strongly reduced scope of activity and coordination should be discussed in order to picture the risks that arise from potential reduced financing of eGovernment.

8.1. Policy option 1: Reduced European Commission Activities

Description: Making eGovernment a negative priority: no action plan, and limited policy and leadership role, taking eGovernment out of the ICT part of the Competitiveness and Innovation Programme. No development of roadmaps, facilitation of agreement on critical areas for activity, particularly at European level. Continued activities on IST research, some activity on pan-European approaches and solution piloting/implementation. Continued action on limited standards areas. Member States are expected to identify and resolve a number of common areas such as cross-border and pan-European activities.

Costs: Some possible staff cost reductions as strategy and action plan activity, along with roadmap facilitation is no longer undertaken. Currently the estimated spending on eGovernment in the European programmes IST, eTEN and IDABC is about \in 75 million p.a. on which this option could bring savings of maximum \in 25 million p.a.. A less pronounced strategic direction and leadership is likely to increase costs in developing some European approaches. Disparate solutions are likely to proliferate with cost implications for users, lost economies of scale increased fragmentation costs. Other entities may pick up the coordination role, thereby incurring similar organisational costs to those currently incurred at the European Commission. European solutions are likely to be overall more costly due to duplication and slower convergence.

Benefits: Some European activities still take place, research investment continues.

Impact: Pace of developments in critical areas is likely to be slower, but steady and sustainable progress on a small number of areas. This option is less effective and overall more costly (especially at Member State level) than in other options. Globally, Europe will be perceived to be lacking in strategic leadership in a critical social and economic area. Opportunities for accelerating European business opportunities arising out of coherent activities will be partly lost; for example the European secure electronic identification and authentication industry would not see the same level of opportunity to develop as a global force if disparate and conflicting solutions are implemented across large parts of Europe. Increasing divergence between Member States on pace of implementation and risk of significant fragmentation still taking place.

Sustainability: The option would be financially sustainable under current perspectives. However, the impact would be significantly less than under other options and commitment from member States is likely to vary. There is a high risk of widening the gap between Europe and other regions of the world in utilising the power of the public sector to help modernise and stimulate other aspects of society and the economy.

Option 1 is considered to have a significant negative impact in Europe far outweighing any savings at the European Commission with likely higher costs in Member States, and is **not considered a viable option**.

8.2. Policy option 2: Focused Action Plan.

Description: European Commission provides a clear leadership role, setting out major practical objectives for Member States and itself. Roadmaps set out details of priority, pace and activity for areas agreed to be critical. Activities are focussed on a limited number of agreed areas that are clearly agreed with stakeholders and that are most likely to have the greatest positive impact in European eGovernment. Shared management and monitoring of progress towards common goals. Five particular areas are highlighted:

- No citizen left behind advancing inclusion through eGovernment
- Strengthening citizen participation and democratic decision-making in Europe
- Making efficiency and effectiveness a reality
- High impact flagship services for citizens and businesses
- Putting key enablers in place

Within these areas, specific objectives and actions address, amongst others, eProcurement in the public sector, electronic identity management and authentication, inclusion by design, European parliamentary decision-making, benchmarking, good practise sharing and strategic management.

Others potential areas were considered by stakeholders, particularly the eGovernment subgroup, but subsequently dismissed. The proposed areas tie strongly to overall strategic objectives and provide a natural coherence. There is strong and explicit commitment across

Member States with Ministerial level agreement for four of the five priority areas⁶². Their commitment stems from their potential to act together as the optimal triggers and multipliers for more economic and social gains than any other combination of priority actions.

There is also evidence to support the selected focus areas; for example: eGovernment policies aimed at those at risk of exclusion⁶³ have high probability of success where accompanied by 'eSkilling' of users and staff and improved access. This research also shows a need for support at EU level: eGovernment is most successful in this area when coordinated widely across the public sector at different levels – European, national, regional, local.

The case for eDemocracy is less straightforward as the introduction of ICT could polarise participation in respect of 'digital have-nots.' Indeed, ICT is not a replacement for, but rather an additional channel to enhance the openness of government in Europe. However, many practical problems remain to be overcome when deploying such systems which require research and technical pilots (notably security, authentication, dependability), and such research will be the main focus of the Commission's proposals in this area.

A focused action on eGovernment efficiency is unquestionably useful. There is increasing consensus that the more efficient and effective government is through governance, administration, regulation, specific services, democratic participation, and infrastructures, as well as through its actions as an employer, as a spender, investor and purchaser the greater the multiplication effects on competitiveness, growth and jobs⁶⁴⁶⁵. The OECD also provides strong evidence of impacts at all four levels of the eGovernment maturity model (information, interaction, transaction and data sharing / transformation), and concludes that the largest benefits are for transformation initiatives, or those which change the way in which governments do business in order to make gains in efficiency and effectiveness.⁶⁶A focused approach on eGovernment efficiency and effectiveness will also provide strong inputs to innovation, both in the public sector itself⁶⁷ and by providing direct and indirect support to

⁶² See Ministerial Declaration:

http://www.egov2005conference.gov.uk/documents/proceedings/pdf/051124declaration.pdf

⁶³ For example, European Commission (2005) "e-Inclusion revisited: the local dimension of the information society", DG Employment, SEC(2005)206 <u>http://europa.eu.int/comm/employment_social/news/2005/feb/einclusion_en.html</u>; Stephanidis, C (ed.), (2001), User Interfaces for All - Concepts, Methods, and Tools. Lawrence Erlbaum Associates, Mahwah, NJ.; Prisma project(2003), Good Practice in eGovernment, eServices for all – treating all users equally, Strategic Guideline, European Commission IST 5th Framework IST Programme:

http://www.prisma-eu.org; The Beep project (2003) "Social inclusion" in Best eEurope Practices deliverable D8.1: http://www.beepknowledgesystem.org and http://www.beepsocial.org
 ⁶⁴ "European Competitiveness Report 2004", Commission Staff Working Paper SEC(2004) 1397 of 8.11.2004,

http://europa.eu.int/comm/enterprise/enterprise policy/competitiveness/doc/comprep 2004 en.pdf

⁶⁵ European Commission, 2005, "The impact of eGovernment on competitiveness, growth and jobs", IDABC eGovernment Observatory, Background Research Paper, February 2005; European Commission, 2005, "Building the knowledge economy in public services: the role of EU research", chapter 5 "Socio-economic and policy impacts", report of the Measure Project; CGEY (Cap Gemini Ernst & Young), 2004, "Does eGovernment pay off?", report for EXREXEMP under the Dutch Presidency, November 2004; Millard, J. et al (2004) Reorganisation of government back-offices for better ePS - European good practices (back-office reorganisation), prepared for the Commission eGovernment Unit. Brussels. Januarv 2004. Available European from. http://europa.eu.int/egovernment and http://www.beepgovernment.org

⁶⁶ OECD (2005), "The Business Case for eGovernment" chapter 4 in "eGovernment for Better Government", Organisation for Economic Co-operation and Development, Paris, 2005.

⁶⁷ European Commission, 2004, "Working paper on eGovernment beyond 2005 – an overview of policy issues", an input paper for a meeting of the eGovernment subgroup of the eEurope Advisory Group in September 2004.

economic actors,⁶⁸ as well as in supporting innovation milieu, such as science parks, incubators, high value industrial districts, growth poles, etc. through infrastructures, facilities, training, services, etc., and in participating in these in public-private-partnerships, and with academia and civil society.⁶⁹

Procurement, as a major sector of the EU economy itself (in average 16% of GDP as noted), is clearly an important catalyst to improve effectiveness and impact of government services. For example, empirical research has found that public procurement triggers innovation particularly in Research and Development better than most other subsidies⁷⁰. The main argument for prioritising eProcurement is an Internal Market one: direct EU cross-border procurement remains low, accounting for just 3% of the total number of bids submitted⁷¹. Without action to institutionalise eProcurement, EU public market functioning is unlikely to improve. One key enabler identified in the focused Action Plan, is electronic Identity Management (eIDM). A focused action plan will aim to deliver a specific set of services and solutions for cross-border pan-European eIDM-based systems, such as company registration. Common interoperable systems are clearly optimal areas for EU level co-ordinating action.

Costs: European Commission and Member State costs remain at current and predicted levels. As for the European Commission this would mean to continue investment in IST, eTEN and IDABC at comparable levels as today.

Benefits: Critical areas, particularly high impact services and key enablers, are progressed at a faster pace than in option 1, thereby realising their benefits earlier. Fragmentation and duplication costs will be avoided. More complex areas such as inclusive eGovernment and eDemocracy will benefit from a greater critical intellectual mass focussing on the issues. Financial benefits are hard to quantify, but accelerating the delivery of eGovernment impact across Europe by just one year over the five-year period of this Action Plan, could be estimated to bring forward benefits in the order of $\notin 10$ billion⁷². Beyond the financial benefits, other benefits such as inclusion and quality of services will also be delivered earlier.

Impact: A carefully focussed action plan, agreed by all, will deliver the greatest return/benefit for a given level of investment. Risk of failure is reduced as areas of action are well researched and fully supported, particularly by Member States – where most of the responsibility for action actually rests⁷³. Over 92% of respondents of the online consultation preferred a focused approach. The proposed areas of action have been identified through a lengthy consultation and collaborative development process and have been selected as those

⁶⁸ CGEY (Cap Gemini Ernst & Young), 2004, "Does eGovernment pay off?", report for EXREXEMP under the Dutch Presidency, November 2004.

⁶⁹ Jensen-Butler, C.N, Shachar, A. and Van Weesep, J. (Eds) 1997. "European Cities in Competition" Aldershot, Avebury Books; Herbig, P. 2002 "Innovation Hot Spots: Raison D'etre: Subcultural Effects" Indiana University, CIBER Research Series no 16; Castells M (2000) "The Rise of the Network Society" 2nd ed. 2000, Oxford, Blackwells Publishers.

⁷⁰ Rothwell R & Zegverl W (2004) Industrial Innovation and Public Policy. Preparing for the 1980s and 1990's, Pinter, London.

⁷¹ European Commission, DG MARKT 'A report on the functioning of public procurement markets in the EU benefits from the application of EU directives and challenges for the future 03/02/2004

⁷² based on the earlier estimates of 0.10% contribution to GDP growth and 2005 GDP figures for EU25

⁷³ Services enhancing citizens' mobility, an area identified in the course of consultations with the stakeholders as being a desirable policy focus until 2010, is not explicitly mentioned in "Option 2" due to the Member States lack of agreement on it, citing varying national political environments and constraints.

most likely to have a significant impact. ICT industry support for this option is strong as well 74 .

8.3. Option 2 – focussed action plan – has been developed closely with Member States and other stakeholder groups. It has widespread support as being practical, appropriate sustainable and sufficiently challenging. The likelihood of success and the realisation of expected benefits is therefore high. It proposes a balanced level of European Commission intervention, sufficient to accelerate key areas and reduce risks of fragmentation and duplication. Option 2 is the preferred option⁷⁵. Policy option 3: Extensive Action plan

Description: The extensive action plan builds upon the focussed plan by accelerating the identification of areas for additional European action and initiating or extending support programmes. Typical examples of additional areas would be: more extensive and aggressively paced activities on standards and interoperability areas; more widespread benchmarking and analysis, particularly in social and economic areas, accelerating the work already achieved in the measurement framework⁷⁶; more extensive and focused task groups to reach consensus on additional priorities and courses of action in a wider range of areas; more extensive R&D, piloting, validation and implementation support to accelerate and convert technology developments and organisational learning into real advancements and tangible benefit delivery.

Costs: Significantly greater at European Commission level (estimates of a sustainable increased pace of change would range from 2 to 3 times the level of current European Commission investment as in option 2, i.e. requiring possibly some \notin 75-150 million p.a. additional investment) and likely at least a similar increase in Member States. Greater management and coordination cost. There is a greater risk of some Member States being unable to match the pace of change through financial legislative or organisational barriers.

Benefits: Accelerated progress on a much broader range of services and activities than in the focussed action plan. Enhanced international perception of Europe's ability to develop its public services role and of European Commission's leadership capability. Financial benefits beyond option 2 would, however, not necessarily proportionally increase with the number of areas addressed as learning and re-use may saturate, though the leverage of key enablers such as eIDM would increase. Again it is difficult to make a financial estimate of the benefits but even if the additional benefits are in the same order as those in option 2 there is a considerably larger risk associated to attaining them, even for the core of the extensive action plan which would be the priority objectives of option 2.

Impact: An enhanced level of resources will lead to greater benefits, realised more quickly over a wider area of activities. For example, more high impact services could be taken forward in parallel (e.g. business registration/customs transactions accelerating support of movement of goods and services.; pan-European services to support benefits, particularly pensions, facilitating citizen mobility; pan-European support of educational qualifications and learning support, greatly facilitation movement of students and development of skills;

⁷⁴ EICTA Industry Declaration on eGovernment, November 2005

⁷⁵ In view of the current status of the discussion on **financial perspectives**, putting forward at this stage as the preferred scenario such a "*resources continuing unchanged*" option, cannot in any way prejudge any other future allocation decision on resources being decided at the proper level.

⁷⁶ Ref to MODINIS economic measurement framework.

accelerated access to pan-European healthcare applications). This would also enhance the role and use of key enablers, thereby reducing the 'cost by transaction' metric for these infrastructure products or services.

Sustainability: Under this option, as the pace and scale of change is increased, items can become more unsustainable. It is difficult to be precise, but the risk is recognised that, for example in eProcurement, overly ambitious objectives increase the risk of fragmentation and new 'e-barriers' to the Internal Market, hindering the effective uptake of the full potential of the market for e-procurement.

Option 3 – extensive action plan – is attractive: Accelerated access to benefits, greater global standing and impact, better 'draw-through', greater likelihood of stimulating innovation etc. However, there is a significantly higher European Commission and Member state cost to deliver this acceleration, a need for greater coordination and management, and an increased risk of losing Member State commitment. So although the increased impact and pace of delivery is attractive, the combination of increased costs, higher management & coordination overhead and risk of withdrawal of commitment makes this option less sustainable and **less favourable than option 2.**

8.4. Use of European Legislation

There would seem to be good arguments to legislate and/or provide administrative (implementation) regulations at European level:

- New barriers are appearing to the Single Market due to the ever-increasing body of incompatible national eGovernment legislation and incompatible electronic implementations,
- Incompatible implementations of European Directives, that 'under-specify' the actual implementation at the national level
- Significant economies of scale and scope (supply side and demand side) that can be gained at European level in specifying the administrative regulations related to legislation which can even go as far as having insufficient capacity at all in the national or regional jurisdiction.

Nevertheless, direct eGovernment related legislation at European level is not the preferred option <u>at this moment in time</u>:

- The mandate at European level based on the current Treaties is too limited for a broad-ranging eGovernment Directive, nor is the need sufficiently clear;
- For generic eGovernment (enablers) in particular eIDM where the risk is significant for Single Market fragmentation, direct legislative intervention may be justified but the evidence is currently insufficient; the proposed Action Plan will assess the evidence;
- Within specific policy / service areas for which a mandate does exist at European level there is scope to come forward with 'indirect' eGovernment legislation; consistency should however be safeguarded and the Commission and Member States should reinforce their mechanisms to ensure this;

- Means other than legislative intervention can still be explored, notably voluntary administrative cooperation such as in good practice exchange and better regulation, as proposed in the Action Plan.

9. ANALYSIS OF IMPACTS ON STAKEHOLDERS

The impacts on stakeholders of the policy options are assessed in more detail below. The options are not about developing eGovernment but about how the Commission can contribute to the development of eGovernment in the Member States and across borders. The 'reduced European Commission action' option would mean that within reduced means, thus reduced impact, the Commission will still strive to improve coordination, to deliver synergies between policies and programmes, to increase interoperability and to reduce risk of fragmentation. This nevertheless will impact eGovernment developments at Member States level. It also does not forbid bi- and multilateral cooperation.

An action plan approach (options 2 and 3) provides more visibility, buy in and coherence. It also allows setting and communicating clear priorities. The really distinct options are therefore to do nothing and stop policy activity at EU level, or to organise the EU activities in the most effective way, i.e. a coherent and feasible action plan, either as an extensive action plan or a focused action plan. The table below summarises the impacts of these three options. Impacts are largely dependent on the content of such an action plan. A more detailed analysis follows in the annex, in the form of a table identifying impacts of the proposed Action Plan (option 4 - Use of European Legislation - is not discussed further due to its obvious impracticality at this point in time).

Overall impacts				
OPTION (1) Reduced European Commission activity	OPTION (3) extensive action plan	OPTION (2) focused action plan - preferred		
+/- Reduced costs – fewer HR and financial resources committed at European Commission levels. But management and organisational costs for pursuing modernisation actions would pass to MS level	-/+ + Benefits dependent upon corresponding increase in resources and co-ordination to achieve impact across all action areas but if effected, there would be accelerated access to a broader range of benefits compared with the focused action plan	+ + Focus on identified and agreed topics that research and experience show maximise impacts through trigger effects across many areas, and address critical European-wide socio- economic and political challenges		
Slower pace of development of eGovernment activity	+ + Assuming above, actions under the 'focused' option would accrue same positive impacts as defined in adjacent table (but also negative). However, the additionality would be bipter as a	+ More focus means more visibility, and a higher force multiplication function for the European Commission		
 Haphazard and piecemeal uptake of research solutions and poor return on research investments Differential, un-co- ordinated uptake of 	additionality would be higher as a result of synergies through addressing a more extensive range of eGovernment activities - Risk of loss of MS commitment	+ Focus on most relevant common objectives, services and enablers to deliver both most urgently needed results and to provide reference point for cooperation.		
ordinated uptake of deployment solutions through CIP/IDABC	- Risk that MS cannot cope with increased resource requirement	+ High likelihood that these are		

Particular risk of developing conflicting and non interoperable services – for example in n eID - with knock on limitations on EU business opportunities Loss of strategic EU leadership	 that is associated with an extensive action plan. This would naturally result in diverging priorities across the EU. Risk of highly differentiated actions in MS with insufficient harmonisation of services of pan European importance 	the topics that maximise impact. + For MS, the focused AP has the lowest risk of failure.
- Less co-ordination and good practice activities will tend to weaken EU cohesiveness as MS partnerships and collaborative exchanges across MS are disbanded.	- Risk of MS not being able to reap full benefits due to the complexity and the volume of organisational changes required by an extensive AP.	

10. MONITORING AND EVALUATION

Please note that there are no reporting obligations/cycles formally imposed on the Member States other than those already in the Lisbon cycle. Whatever reporting tasks are mentioned in this document and the Action Plan itself are the self-agreed result of discussions held among the Member States, in the eGovernment Subgroup of i2010.

10.1. eGovernment Subgroup of i2010

Given the instrumental role of the eGovernment subgroup of leaders and representatives of the national eGovernment initiatives, their productive working methods and practical working relationship with EPAN, this group will perform strategic monitoring, develop roadmaps and evolve the European eGovernment Action Plan at the strategic level under i2010.

The group will report on the incorporation of the Action Plan in national eGovernment plans (Member States have committed to report in 2006), and strategically evolve specific topics such as inclusive eGovernment and high impact citizen-oriented services.

Widespread reporting of progress, new directions for political priorities, recognising achievements and promoting re-usable solutions is foreseen to happen on a two-yearly basis through Ministerial Conferences.

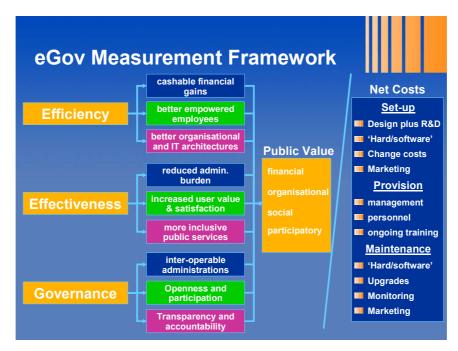
10.2. Measurement Framework

A measurement framework has been developed to allow monitoring of eGovernment investments and benefits. This framework includes a coherent set of factors and indicators that allow the understanding and the analysis of the outcomes⁷⁷.

The framework is outlined in the diagram below. It measures the aspects of efficiency, effectiveness and governance in terms of public value production, which, divided by net costs

eGEP study, quoted before.

allow us to know the net benefits. The framework is therefore applicable to all possible actions of the preferred policy outlined in this document.



In the context of developing and using this framework, there has been extensive involvement of key stakeholders, internally and externally. The eGovernment subgroup has been involved in its development as well as various Commission Services.

About 70 indicators have been currently developed in the context of the measurement framework. Over the next four years, the type of work that can be done is described in the next diagram. An example of indicators can be seen for each of its three domains. All indicators can be grouped in three categories, depending on their current level of development:

- (1) those ready to be used now and are needed within the proposed Action Plan;
- (2) those that have not yet been sufficiently defined and further refinement before they can used in the Action Plan;
- (3) indicators that have not yet been sufficiently defined but on the basis of the framework can de developed and used according to emerging needs, and which are not (yet) needed for the Action Plan.

2006-2010 Indicators				
Drivers	Indicators	Best fit for		
Efficiency	 % ∆ in case handled in a given time period % ∆ in K€ Full Time Equivalent gains % ∆ in overhead costs (paper, print, postage) % ∆ public servants eGov/ICT skills 	Bench-learning Bench-learning Bench-learning Benchmarking		
Effectiveness	 % ∆ in time saved by citizen&business % ∆ eGovernment users satisfaction index % ∆ in e-services with certified accessibility % ∆ in usage of inclusion related e-services % ∆ in e-service with multi-channel delivery 	Bench-learning Benchmarking Benchmarking Benchmarking Benchmarking		
Governance	% Δ in administrations using common eID % Δ in two-way interaction with users % Δ in transparency and accountability score	Bench-learning Benchmarking Benchmarking		

Progress on measuring eGovernment developments has been presented at the Ministerial Conference in Manchester in November 2005. Further reporting will take place in forthcoming events, including the next planned Ministerial conference on eGovernment in 2007 in Portugal. The eGovernment subgroup is proposed to perform strategic monitoring on the basis of this measurement framework.

A further valuable source of monitoring evidence will be drawn from the two EUROSTAT annual surveys on ICT usage of a) households across the EU and b) of enterprises in all Member States. Included in these surveys are question blocks concerning eGovernment usage relevant to the measurement of objective "No citizen left behind" and eGovernment usage of enterprises including a question covering eProcurement issues. These surveys, beginning with the 2006 survey as a benchmark, will be used to support the monitoring of progress on an annual basis.

Finally, individual actions, as proposed at the Action Plan, will integrate the relevant indicators of the measurement framework and the respective roadmaps will include their usage.

ANNEX

1. eGovernment in practice - some examples from Member States

eGovernment includes a broad variety of projects and undertakings. The common characteristic of these is the deployment of ICT for the sake of improving public administration; better 'customer service', better internal operations and also better policymaking. This broad reach of eGovernment renders the notion as such rather intangible. In order to better visualize this variety, below are cited some examples of how eGovernment can materialise.

1.1. Citizen/ business services

Electronic tax declaration in Slovenia

The Slovenia eTax system is a complete business solution combining a web portal with back office integration and the highest level of security. The system allows individuals and companies to file taxes online using a digital certificate issued by any registered certification authority in the country. In this way, the solution helps to increase the take-up and use of digital certificates for not only tax filing but for other public and private purposes as well.

This transactional e-government service can provide fast, accurate and secure tax reporting for citizens and corporations. New efficiencies were created for the Tax Administration by speeding up the processing of tax returns, cutting down on paper, reducing errors due to data re-entry and improving employee productivity.

The eTax system also contributes to the Single Market objectives, specifically by supporting the E-Commerce Directive by enabling the filing of VAT recapitalization statements for exchanges between EU member states.

Supporting job search: EURES the European Job Mobility Portal

EURES (European Employment Services) is a network of the national public employment services, the European Commission and, within the framework of the EURES cross-border partnerships, trade unions and employers' organisations, and local and regional authorities.

The EURES web portal brings together job seekers and employers throughout the EEA. Beyond providing information on available jobs and the possibility for job seekers to post their CVs online, the Portal contains information on living and working conditions, labour market developments (tracking shortages and surpluses of labour), and on education and training opportunities (via the PLOTEUS site run by the Commission's Directorate General for Education and Culture).

EURES is playing an increasing role in identifying the surpluses and deficits of manpower in different sectors, and in overcoming qualification bottlenecks. The network also helps improve employability particularly that of young people, through the acquisition of professional experience abroad. EURES also contributes to the creation of a common European labour market, as well as, in certain border regions, to the establishment of an integrated regional labour market.

Belgian social security

eGovernment in Belgian social security, a successful combination of back office integration and an ePortal solution.

Social security in Belgium is carried out by about 2000 public and private institutions, for which information is one of the main resources. The information needed by each of these institutions in order to calculate the contributions and the social security benefits is quite similar (identification data, data concerning professional and social status, data related to career history and wages). After extensive business process re-engineering within and between the social security institutions they could be connected to a network where they can mutually consult their databases and exchange up to 169 different types of electronic messages. In 2002, 242.5 million messages were exchanged, which saved as many paper declarations or certificates. Through a social security web portal, electronic communications between companies and citizens were put in place (information and transactions). An integrated workflow has consequently been developed between companies and social security institutions. The portal is intended for citizens, companies and public institutions. It contains numerous integrated services, over 4,000 pages of information and at the present time 16 operational transactions. All exchanges between companies and the social security system are now fully automated.

Car registration in Italy

The "Auto e-Counter" is a gateway to enable access to services and information relating to car registration and ownership. It is a comprehensive exercise of collaboration between public and private organisations implemented on a nation-wide scale.

The motorist/car owner had to make several visits to different offices to register the vehicle and notify any related changes in the details already supplied. With the introduction of the ecounter, a variety of public and private entities (including the 'car agency') provide the entry point to access the on-line world of motoring information and services. This includes car file processing in real time.

Personal documents in Belgium

Putting electronic ID cards in place, the Belgian citizen, company or municipality is enabled to execute the following operations online:

- to access the personal records kept by the local authorities
- to request on-line documents from the administration (for instance copy of a birth certificate)
- to exchange information on-line with the administration through a secured channel. For instance, ("tax-on-web")
- to make statements or transactions (social services, banks, post, insurance) from a distance
- to get in touch with the municipal authority. Several municipalities are already equipped with electronic windows that enable to make requests by filling in electronic forms.

- to get in touch with the regional and federal services on the Internet.
- to affix electronic signature on documents (the electronic signature has the same legal value as a handwritten signature
- to use applications provided by the private sector: bookings, registrations, payments, to place orders, to terminate contracts, company badges, electronic payment cards, etc.

Building permissions in Germany

The Building Portal of the District Administration Soest contains the following functions: an online information system for all building permit applications (also for the ones that have not been submitted per Internet), Internet building permit submission (automatic transfer of the building permit application from the internet data bank to the building permit applications data bank) as well as online involvement of expert offices. As soon as the data is saved in the building authorisation procedure, it becomes available to all the parties involved on the Internet under "Building superintendence online". The constructor receives access to his data by means of a password with delivery confirmation. The architect has to apply for access only once for all his procedures. The following information concerning the processing stand can be viewed: The responsible official, status of the application, the processing technology, involvement of the offices and the data of the application. Every change of status will be sent to the constructor and the architect, provided that their e-mail addresses have been submitted. Additionally a status light on the internet provides quick and easy information on the processing stand of the building permit application by means of a colour presentation. After the authorisation, the construction start notification as well as the notification of the completion of the building shell and the construction completion can be submitted through the Internet by means of a simple mouse click. The data and the original data are automatically taken over into the building permit application software. Any kind of manual registration becomes obsolete. The result is a fully electronic submission of the building permit application.

Online company registration in Sweden

Företagsregistrering offers a single point for filing of applications to two authorities and by also make it possible to file applications signed with electronic ID's it's now easier and goes faster to register a company. *Företagsregistrering* is a cooperation e-service between the Swedish Companies Registration Office and Swedish National Tax Board to give a one-stop-shop for business start-ups needing swift and effortless communication with the authorities. The projects have also paved the way for the wider use of electronic ID in Sweden, which is essential for the future transformation of government. The following services are provided for registrations of companies:

- Get information and support about registration a company and running a business.
- File information that is needed for the registration
- File and change information about VAT registration
- File and change information about tax and payroll tax registration

- Apply for or withdraw F-tax or FA-tax
- File information for an approval of preliminary paid taxes, if newly registered

The user of *Företagsregistrering* can either apply electronically with a digital signature within the service or via printed out and by hand signed paper forms through mail. To sign digitally the user needs a standard electronic ID/certificate, that is approved for the service and issued for instance by several banks in Sweden.

This cooperation is inline with the Swedish agenda for "24-timmars myndigheten $\!/$ 24-hour agency".

UK's HERO; an academic matchmaking portal

HERO is the official gateway to universities, colleges and research organisations in the UK. It does away with the need to visit a plethora of different websites and aggregates information which otherwise would not be readily accessible. The website serves as a quick route to any information you require on higher education in the UK. It also strives to be:

- the primary internet portal for academic research and higher education in the UK
- the natural entry point for enquiries about higher education in the UK for the widest possible range of customers
- a showcase for the diversity and quality of research and higher education in the UK.

1.2 Internal Efficiencies in Public Services

Knowledge Management at the German Police

EXTRAPOL.DE is a platform for knowledge and co-operation based on Internet technologies which is spanning Federal police and Federal State police forces and into which selected content and areas of the Intranet of the participating organizations (all of the Federal police and Federal State police forces as well as the customs criminality forces) will be submitted. Through its Federation and Federal State spanning character it is the first of its kind within the administration in Germany. EXTRAPOL.DE places the complete police knowledge nationally at the disposal of all the employees of the German police forces. The medium improves the information, communication and cooperation between the German police forces, it organises their information exchange in a faster and more effective way and promotes synergy effects, for example through the so-called "one for all" principle in the course of the design and operation of ICT applications.

1.3. Better policy making and citizen participation

Inclusive Latvian citizen portal

The eVentspils portal caters for the citizens of the Kurzeme region of Latvia and includes news and discussions groups, voting as well as public and private eServices.

Many customised configuration options are available for users to tailor the look of the site, the presented information and the functions it offers. Special care has been taken to include all social groups (minorities, the disabled, the elderly, youth, women, etc) and provide easy access using public internet access points, computers in libraries, schools, homes and mobile devices.

eDemocracy is supported by providing discussions on documents and important questions. Other features include a voting system and on-line municipal budget(s). All civil servants and decision makers can be accessed using a built-in public e-mail system. Other distinctive features of the eVentspils portal are:

- Free authenticated e-mail for every citizen, providing a personal communication channel,
- Built-in messaging system and subscription to active services (automatic notification on mobile phone or e-mail when documents have been processed, when news arrives, etc.),
- User-centric information layout and customisation options,
- eLearning programmes for citizens (basic computer skills, internet, e-mail, Word, Excel, PowerPoint, etc.),
- 24x7x365 help-desk service for users.

Denmark debates

DanmarksDebatten is at the heart of a plan to develop a citizen-centred approach to eGovernment. The overall objective was to establish a democratic forum where citizens, public administration and politicians could engage in debates. A key task was to create a common platform for all public debates taking place within the public sector whether at local, regional or national level.

Using the internet and portal technology, a range of players representing citizens, institutions and government are consulted on issues affecting them. The project seeks to further enhance local democracy by allowing debates nationally as well as locally and by giving politicians the opportunity to dialogue directly with the electors.

The debate module is fully portable and can be integrated into any public web-site wishing to provide a forum for debate or to survey its users. There is also an e-mail alert service that gives information about forthcoming debates. The system supports moderated debates as well as the conducting of opinion polls and the compilation of statistics. It also enables analysis of and views to be expressed on issues at both national and local level. Developing communities of good practice is a major IT policy goal for the Danish Government. DanmarksDebatten is a nation-wide XML-based ASP-type of service that the National IT and Telecom Agency offers to any central and local public institutions wanting to expand their dialogue with the citizens/users.

	options		
impacts	(1) reduced European Commission activity	(3) extensive action plan	(2) focused action plan
Competitiveness, economic efficiency and growth (national, European)	 High risk of fragmentation; investment, risk of loopholes, loss of competitiveness due to lack of services supporting functioning of Internal Market Less possibility for standard development, leading to fragmented markets Less learning opportunity for laggards +/- Informal clusters of cooperating MS may develop + More competition between MS to use better government as a way to attract FDI Duplication of efforts, investments imposes more costs and harms national competitiveness 	 Need large coordination from EU side and possibly unaffordable efforts from Member States to keep interoperability solutions consistent + Higher impact of Government as economic actor (several key enablers for efficiency and performance can be addressed, Governments' ICT procurements would be greater, stimulus for the ICT industry would be greater) + More angles with positive economic impact can be covered e.g. in customs benefiting MS revenue collection + Broader range of streamlined services will reduce business costs (lower transaction costs, speedier service)and stimulate productivity gains - It cannot be ensured that the highest impact areas progress most in all MS - Return on 1 European € will be lower - Risk of overall failure is higher 	 + Does not entail additional resource requirement for management and coordination on EU level + MS agree on investing in focus areas, acknowledging wider positive economic impacts of focuses + In focus areas efforts can be concentrated ensuring better ROI and less risk for MS investments + Low risk of not achieving interoperability and harming the Internal Market. - / + Those elements that are outside the focus risk adding barriers to the Internal Market. These areas are closely monitored for the risk of adding barriers to the Internal Market = To a great part, possible actions were left outside the focused actions because they are presently immature, but could be taken on board in the future + Actively working towards inclusion can

		+ Limited ability for European Commission to influence specific policies; which is more in line with the European Commission's (treaty) competence in this area	result in an increase of the active population and a decrease of unemployment improving productivity in the economies. Disadvantaged SMEs can see their competitiveness increase.
Innovation strength (national, European)	 Slower progress on eGovernment activities will reduce innovation systems at MS and EU levels – evidence points to approximately 60% correlation between innovation and the quality of public administrations⁷⁸ More difficult to push for implementation of already defined policies in raising level of investment to 3% of GDP. Most markedly affected will be procurement where measures to increase innovation through public procurement will be difficult to mobilise.⁷⁹ Nationally produced innovations 	 available, this option would provide greater opportunities for stimulating innovation: the volume of ICT deployment in Government will stimulate the supplier side and creates a more innovative economic milieu in general. ++ Increasing the scope of eGovernment 	 + Progress of deployment/investments made by Governments and transparent roadmap creates a favourable climate for innovation. + Increasing the scope of eGovernment services calls for more innovative ICT solutions (e.g. in case of eInclusion or eDemocracy).

⁷⁸ The Commission's innovation scoreboard was tallied with the 'quality of public administrations' index of the World Economic Forum. Report of eGovernment, Ministerial Declaration, Manchester 2005 79

See: Report of Expert Group to European Commission "Developing procurement practices favourable to R&D and innovation. DG Research, September 2005.

Businesses	 won't necessarily be innovations on European level with less coordination = Reduction in administrative burdens is aim of every eGovernment policy in the MS. - Realisation of these gains for businesses will be slower and possibly less extensive – depending on MS actions- with less coordination. - MS alone cannot set up systems supporting the mobility goals in the Internal Market; cross-border businesses will continue to suffer additional transaction costs. - With restricted coordination, ICT supply businesses are less competitive in Europe, as they have to adjust their products to several different systems. 	 + Broader range of eGovernment services will reduce business costs (lower transaction costs, speedier service) and stimulate productivity gains + Several additional actions that favour business mobility in Europe could be introduced, opening up new markets and opportunities for them. -/= These additional productivity gains for businesses realise only if and when MS accrue appropriate resources to business eServices. 	 + Focused AP favours business mobility across Europe and enables them to benefit from new markets while bearing less transaction costs - There are important business mobility services that remain outside the scope of the AP + Businesses will benefit from cheaper, faster, simpler procurement + Actively working towards inclusion helps SMEs that suffer from regional divide.
Employment	 + More Government procurement/ demand could entail increased employment in these sectors. Quality of workforce increases. + More ICT in public 	 + + More Government procurement/ demand could entail increased employment in ICT sectors. Quality of workforce increases. + + More ICT in public administrations 	 + More Government procurement/ demand could entail increased employment in these sectors. Quality of workforce increases. Extent is lower than in the option3. + Accelerated and focused progress in

	administrations renders the workforce more competitive, too. Actual impact depends on the pace individual MS chose.	renders the workforce more competitive, too, and is an incentive for the citizens to increase ICT literacy levels, which improves their chances for employment.	Inclusion can reduce unemployment.
Citizens, Inclusion & Cohesion	 Citizens would still be able to access eGovernment services, but there won't be a certain set of services is Europe-wide provided. /= Lack of minimum set of services hinders cross border mobility The achievement of inclusion goals is not guaranteed, in addition it is also more expensive for the MS achieving inclusion goals without benefiting from European economies of scale. 	 + Broader range of targeted actions will support better citizen services, notably a drive to improve actions for citizen mobility +/- Again the potential for accelerated benefits depends on commitment for certain actions and the dedicated resources. eInclusion can be very costly and benefits indirect and hardly measurable, which renders eInclusion unattractive for investment by government. 	 + Clearly articulated inclusion goals e.g. multi-channel availability, usability will improve service levels and user satisfaction, especially for citizens needing high frequency contact with public services. + Accelerated and focused progress in Inclusion gives disadvantaged users (due to regional divide, social divide or disability) increased chances to integrate into economic activity; political or communal participation. + Focus areas clearly improve quality of life. - Citizen mobility services are not in the focus of the AP

Administrations	 Potential duplication of efforts on EU deprives the MS from significant savings. = Most administrations in the EU would pursue modernisation plans 	1 50	
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Democracy	 eDemocracy solutions will remain sporadic throughout Europe. Currently, there are few examples, without coordination there is little occasion for sharing and discussing how to design effective systems. It cannot be guaranteed that a MS initiates any activity in the field of eDemocracy. 	increases, transparency of administrations, it is also a tool for better informed policy making by involving citizens and wider range of experts: The	Plan, eDemocracy is probable to develop in every MS. In several MS there have been experiments, but eVoting, ePolling, eRulemaking are in their infancy. Sharing of success and failure accompanied by
Environment	1 2 1 1	itizens and businesses do not need to trave t). The trade off between these impacts is no	l, thus save energy, but it also creates hardly ot clear.

Detailed impacts for the focus areas

eProcurement

(1) reduced European Commission activity (3)	3) extensive action plan	(2) focused action plan
 explicit priority and therefore competition will be lower and internal market barriers will exist. Real life use of eProcurement will be lower. The 50% take-up objective will probably not be achieved. Therefore, all the benefits for all stakeholders (citizens, business, and administrations) as well as for the society and economy will be reduced. Availability will be limited (in particular smaller administrations). The 100% availability objective will not be achieved. Interoperability will be limited as access to common interoperable solutions will not be an objective. 	Similar benefits to the focused action plan but with the additional risks described above. Citizens Better spending of taxpayers' money ncreased transparency for citizens Business More cost effective procurement to administrations (less time and money to sell o governments, faster selling, reduced lead imes, faster payments) Level playing field in selling to governments New markets: wider geographic participation o cross-border public procurement More SMEs which can access PP	Citizens Better spending of taxpayers' money Increased transparency for citizens Business More cost effective procurement to administrations (less time and money to sell to governments, faster selling, reduced lead times, faster payments) Level playing field in selling to governments New markets: wider geographic participation to cross-border public procurement More SMEs which can access Public Procurement. Administrations Lower transaction costs: efforts for public procurement working time and shorter lead times. Simplification of procedures

Lower transaction costs: efforts for public	corruption and fraud
procurement working time and shorter lead times. Simplification of procedures	Access to common interoperable solutions
Lower prices, larger choice; better quality,	Economy & Society
less corruption and fraud	Better functioning of public procurement
Access to common interoperable solutions	markets (more and better information, increased fluidity, lower risks)
Economy & Society	Economic growth due to cheaper and faster
Better functioning of public procurement	procurement
markets (more and better information, increased fluidity, lower risks)	
Economic growth due to cheaper and faster procurement	

eID		
(1) reduced European Commission activity	(3) extensive action plan	(2) focused action plan
Benefits could only be achieved at the national level due to the fragmentation of eID solutions in Europe.	Similar benefits to the focused action plan but with the additional risks described above. Citizens & Business	Citizens & Business Assertion of the authenticity of online identity (one safeguard against identity fraud). Easier
Cross-border incompatibility of eID schemes. However, bilateral agreements may reduce the problem between certain groups of countries.	Assertion of the authenticity of online identity (one safeguard against identity fraud). Easier	ownership and management of personal/business data. Respect for EC principles of mobility and
The internal market will find severe barriers. Issues like citizens and workers mobility in	personal/business data. Respect for EC principles of mobility and non-	non-discrimination in eServices. Use of national eID scheme in transactions with eGovernment services in other Member

cheme in transactions with eGovernment	
ervices in other Member States.	Citizens, Business & Administrations
Citizens, Business & Administrations	Making data entry more efficient and less redundant.
Taking data entry more efficient and less edundant.	Reduction in number of authentication means
eduction in number of authentication means	that are required to access eServices across the EC (not "one token, one service").
hat are required to access eServices across the C (not "one token, one service").	Administrations
dministrations	Lower transaction costs: less data management and easier authentication
ower transaction costs: less data management	procedures.
-	Lower costs in accountability and reporting (better data-use auditing)
better data-use auditing)	Simplification of procedures
implification of procedures	Economy & Society
conomy & Society	Reduction of administrative burden for all.
	Increased security and trust in online
ansactions, use of eServices and in	transactions, use of eServices and in eCommerce generally. Accessibility to
Services for all, whether using electronic	eServices for all, whether using electronic means directly or via a trusted.
Ala de de d	aking data entry more efficient and less hundant. duction in number of authentication means t are required to access eServices across the (not "one token, one service"). ministrations wer transaction costs: less data management d easier authentication procedures. wer costs in accountability and reporting etter data-use auditing) nplification of procedures onomy & Society duction of administrative burden for all. reased security and trust in online nsactions, use of eServices and in ommerce generally. Accessibility to

E & E

(1) reduced European Commission activity	(3) extensive action plan	(2) focused action plan
 (1) reduced European Commission activity All the benefits indicated in the middle column could potentially be achieved but not all of them by all Member States with different speed and intensity; lacking European cohesion and duplicating efforts. The pace will generally be slower as there will be no critical mass in emerging areas in which the exchange of experiences and sharing approaches is essential to speed-up progress. It is extremely unlikely that a better understanding the relationship between eGovernment and socioeconomic impact will be achieved as even if some countries make efforts in such direction, there will be no common framework and methodology to have a common understanding. Overall, the impact/euro invested in eGovernment in the EC will be lower. 	Similar benefits to the focused action plan but	 (2) locused action plan Citizens Time savings through less administrative burden Increased user satisfaction Business Time and Cost savings through less of administrative burden i.e. fewer and lighter transactions with Government due to data request reduction - re-use rate of public data Increased user satisfaction Administrations Increased efficiency due to less routine work, streamlined processes Less supplier dependence / Lower overall system development costs thanks to re-use of available tools and software and Open standards Lower operational costs, through streamlined range of processes and channels and improved staff satisfaction on job (due to reducing

Lower operational costs, through streamlined range of processes and channels and improved	manual job, low paid jobs, less job with unsatisfied customers)
staff satisfaction on job (due to reducing manual job, low paid jobs, less job with	Economy & Society
unsatisfied customers)	Increased social and economic impact at
Economy & Society	(e.g. Productivity of the public sector, European competitiveness, involved citizens, increased
Increased social and economic impact at	trust, ICT sector growth)
(e.g. Productivity of the public sector, European competitiveness, involved citizens, increased trust)	Better understanding the relationship between eGovernment and socioeconomic impact.
Better understanding the relationship between eGovernment and socioeconomic impact.	

eDemocracy

(1) reduced European Commission activity	(3) extensive action plan	(2) focused action plan
eDemocracy will not be a tool to "Reconnect citizens with the EU" missing an opportunity for the forthcoming EU challenges. The pace and intensity of the benefits identified on the middle column will be significantly lower as eDemocracy is an emerging area in which learning by example and exchanging experiences is essential to make progress. Inclusion efforts will be fragmented and the	 with the additional risks described above. Citizens Increased democratic engagement Empowering the citizen in the exercise of its democratic rights Visibility and easier participation in 	Increased democratic engagement Empowering the citizen in the exercise of its democratic rights Visibility and easier participation in democratic activities

speed of emergence of common eGovernment inclusion standards at the EU level will be severely damaged.Some of the benefits indicated in the middle column could potentially be achieved by some Member States but with no cohesion and duplicating efforts.	Self-democratic organisation	Business
	Business	Empowering business in the exercise of its democratic rights
	Empowering business in the exercise of its democratic rights	Administrations
	Administrations	Reconnecting Citizens
ITC company providers and others will face a fragmented European market in which	Reconnecting Citizens	Better communicating legislative initiatives and others
different approaches are adopted in Member States. Economies of scale will not be possible at the EU level	Better communicating legislative initiatives and others	Citizens input in future policies
	Citizens input in future policies	Better functioning of public services through citizen feedback and engagement
	Better functioning of public services through citizen feedback and engagement	Economy & Society
	Economy & Society	A more open and democratic society
	A more open and democratic society	Democratic control
	Democratic control	

(1) reduced European Commission activity	(3) extensive action plan	(2) focused action plan
Progress will mainly rely on individual national initiatives.	Faster progress in these areas delivering benefits led by specific operational objectives.	Progress in these areas is not defined as an objective.
		However, the focused action plan is expected to stimulate progress in these areas thanks to:
		The key enablers which will be put in place making possible fast progress (eID being an essential one for most areas).
		The progress made in the focused areas will serve as a widely visible reference to stimulate progress in other areas not covered in which there is a need and resources are available.

Other areas not covered in the focused action plan (e.g. eCustoms, etc.)