



EUROPEAN COMMISSION

Brussels, 15.12.2010
SEC(2010) 1539 final

COMMISSION STAFF WORKING DOCUMENT

accompanying the

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

The European eGovernment Action Plan 2011-2015
Harnessing ICT to promote smart, sustainable & innovative Government

COM(2010) 743 final

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1. INTRODUCTION

1.1. Aim of the staff working paper

The present staff working paper accompanies the Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee on the European eGovernment Action Plan 2011-2015 (hereafter: staff working paper). The aim of the Communication is to implement the Ministerial Declaration on eGovernment (hereafter: Malmö Declaration¹) and to complement the Digital Agenda for Europe². This staff working paper provides a rationale for the issues dealt within the Communication.

1.2. Preparatory work and consultations

The Communication on the eGovernment Action Plan 2011-2015 and this staff working paper have greatly benefited from background analyses and interactions with relevant stakeholders, including questionnaires to the Member States and studies. These studies included extensive surveys of businesses, citizens and experts, concerning their needs, demands and the expected impacts of eGovernment innovation. Extensive interviews were also conducted within the different services of the European Commission, with all the Units concerned with eGovernment.

In addition, an Orientations Paper that gave guidance to the Malmö Declaration has been published. In parallel, preparatory groundwork has been performed by the eGovernment Subgroup³ which is the principal discussion forum where Member States⁴ and the European Commission jointly address European eGovernment policy.

The most important foundation for this Action Plan was laid on 18 November 2009, when Ministers agreed on the Declaration at the 5th Ministerial eGovernment Conference in Malmö, Sweden. The Ministerial Declaration has received wide support from both industry and citizens through an Industry Declaration⁵ and an Open Declaration on public services 2.0⁶ respectively. The Council restated among others the objectives of the Malmö Declaration in its Council Conclusions⁷ on the post i2010 Strategy. The Action Plan supports and complements the Digital Agenda for Europe through actions in the area of 'ICT-enabled benefits for EU society', 'Interoperability and Standards' and 'A vibrant Digital Single Market'.

Annex 1 lists the time line with the most important milestones in preparation of the eGovernment Action Plan 2011-2015.

¹ <http://www.egov2009.se/wp-content/uploads/Ministerial-Declaration-on-eGovernment.pdf>

² COM(2010) 245 (<http://ec.europa.eu/digital-agenda>)

³ The objective for the i2010 eGovernment subgroup is to inform the i2010 High Level Group on the implementation of the i2010 eGovernment Action Plan; to share good practice; and to monitor the progress of the eGovernment Action Plan and national plans

⁴ For the sake of convenience this staff paper uses the term "Member States" where it should read Member States including Norway, Iceland, Croatia and Turkey. These four countries have chosen to be actively involved in European eGovernment policy and the process leading to a European eGovernment Action Plan 2011-2015.

⁵ http://www.digitaleurope.org/index.php?id=34&id_article=390

⁶ <http://eups20.wordpress.com/the-open-declaration/>

⁷ Council Conclusions on Post i-2010 Strategy - towards an open, green and competitive knowledge society. 2987th Transport, Telecommunication and Energy Council meeting Brussels, 18 December 2009. On-line: http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/trans/111999.pdf

2. BACKGROUND eGOVERNMENT IN EUROPE

eGovernment is on the verge of a profound transformation. Many new technological opportunities are arising which may contribute to changing the way eGovernment services are delivered.

The first part of this chapter highlights the achievements within the EU in the area of eGovernment. Part two and three summarise the existing policies and corresponding actions that have affected eGovernment in Europe so far. Part four describes how eGovernment is likely to develop in the future. The fifth part sets out different scenarios for actions that can be taken at EU level and leads to the conclusion that it is necessary to act at EU level in order to maximise the impact of actions conducted at national level.

2.1. The achievements of online public services in Europe

Europe has continued to make significant progress in the delivery of online public services since eGovernment appeared on the European eGovernment Agenda in 2001⁸. The online delivery of basic services⁹ has continued to increase steadily in recent years: their full online availability¹⁰ went from 21% in 2001 to 71% in 2009¹¹ (Figure 1). However, there is a marked difference between services for businesses and services for citizens. Services for businesses reach 83% availability whereas services for citizens are still only at 63% availability.

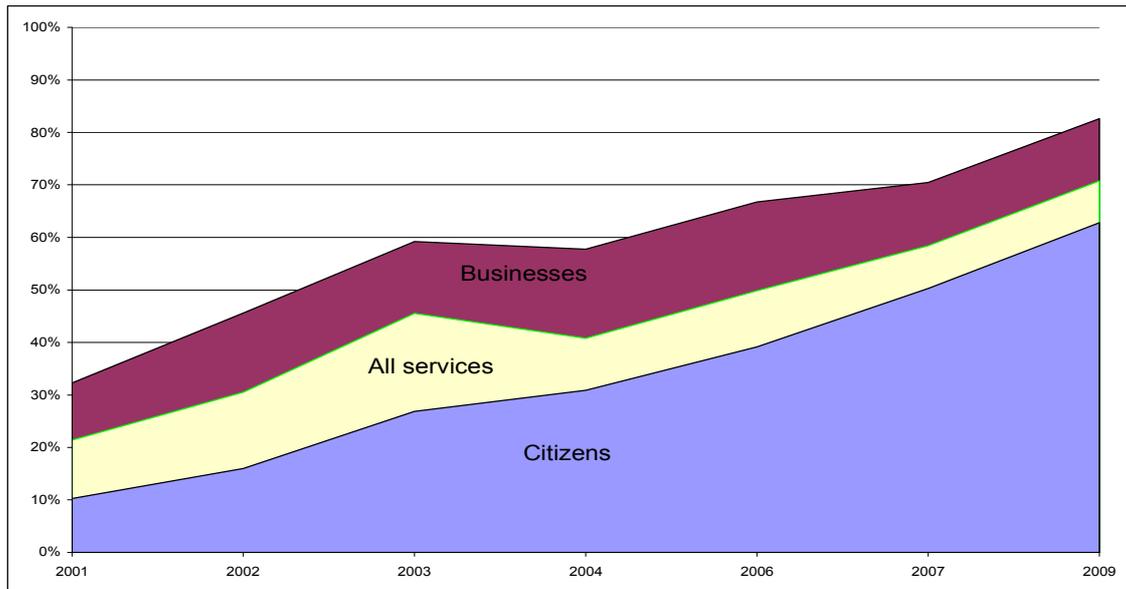
⁸ eGovernment ministerial declaration 2001, Brussels, Belgium. See: http://ec.europa.eu/information_society/activities/egovernment/docs/ministerial_dec/ministerial_declaration_2001.pdf

⁹ Basic Services refer to the 20 services (12 for citizens, 8 for businesses) used to benchmark online availability of public services. These are: income taxes, job search, social security benefits, personal documents, car registration, building permission, declaration to police, public libraries, certificates, enrolment in higher education, announcement of moving, health-related services (citizens), social contributions, corporate tax, VAT, company registration, statistical data, customs declaration, environment-related permits, public procurement (businesses).

¹⁰ Full online availability is an indicator which measures whether the service is delivered in a completely electronic way without need of interacting through traditional (i.e. paper, face-to-face) channels. It corresponds to level 4 and above of the sophistication indicator introduced below. The composite indicator is an average of the values taken in the 20 services.

¹¹ The small decrease in 2004 is due to an enlargement of the sample to New Member States: until 2003 the sample included only EU15 countries.

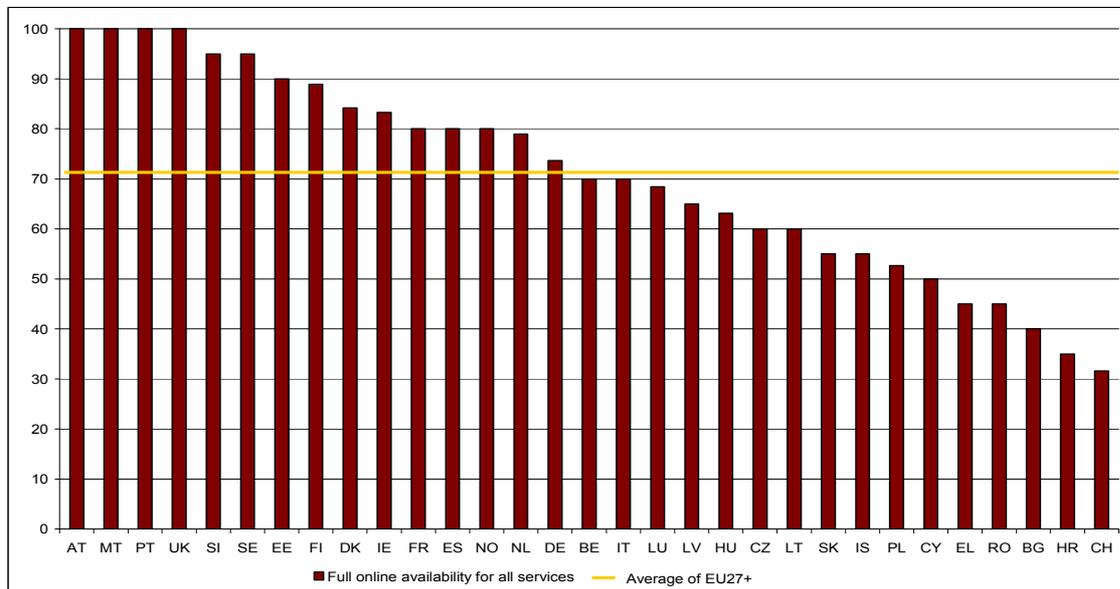
Figure 1: Full online availability, Trend from 2001 to 2009 for EU27+



Source: CapGemini “Smarter, Faster, Better eGovernment: 8th Benchmark Measurement”, 2009.

Despite major progress there are considerable discrepancies between Member States (Figure 2). The gap between the best and worst performer is large (68 pp.) although it has declined since last measured (85 pp. in 2007). Four countries (Austria, Malta, Portugal and UK) experience full online availability for all the 20 basic services considered in 2009.

Figure 2: Full online availability for all services



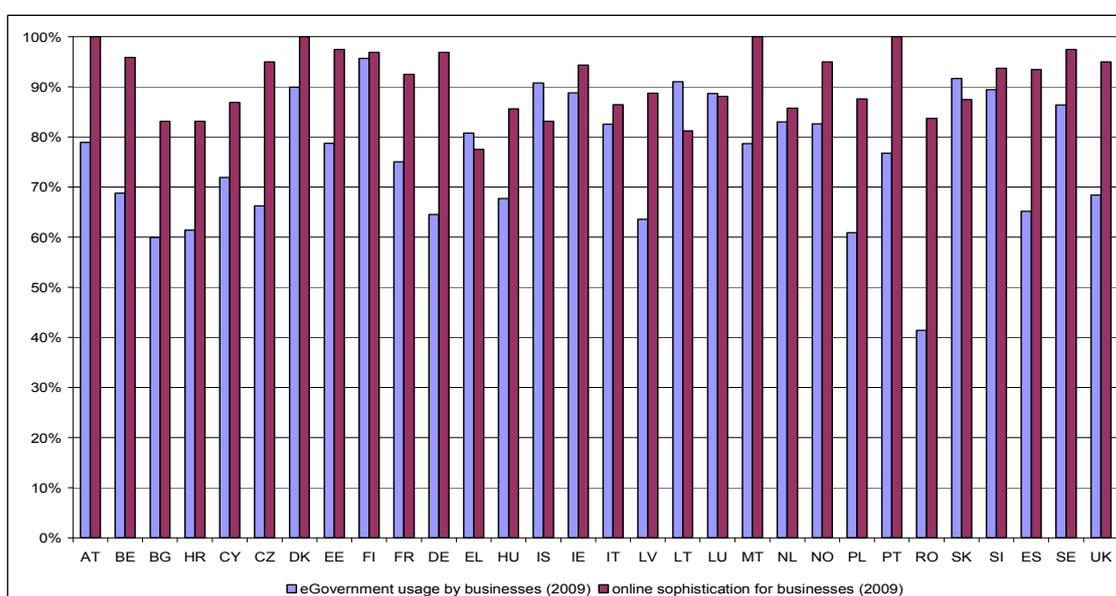
Source: Cap Gemini “Smarter, Faster, Better eGovernment: 8th Benchmark Measurement”, 2009.

2.1.1. eGovernment for businesses

eGovernment for businesses has progressed rapidly (Figure 1). It has also reached a high level of sophistication¹² (91% in 2009 compared to 84% in 2007). Some crucial services for enterprises like VAT, corporate tax, customs declarations and social contributions are fully available online in almost all EU countries. However, services concerning the registration of new companies are still lagging behind, although they are considered crucial to the European Growth and Jobs Strategy.

In general, the use of online public services by businesses has kept up with the supply (Figure 3): on average, use was at 72% in 2009 for the EU27 (up from 68% in 2008). Take-up is also relatively high for advanced ways of interacting with the public administrations: 54% of enterprises use the internet to return completed forms and 43% interacted with the public administration entirely using electronic transactions.

Figure 3: Supply vs. take-up - businesses¹³



Source: Cap Gemini “Smarter, Faster, Better eGovernment: 8th Benchmark Measurement”, 2009, and Eurostat, Community Survey on ICT use in Households and by Individuals, 2009.

2.1.2. eGovernment for citizens

The take-up of eGovernment services by citizens is less developed (Figure 4). The EU27+¹⁴ average value for sophistication is 78%. Only 30% of EU27 citizens used the internet for accessing eGovernment services (over the past 3 months) in 2009, rising to 38% of citizens using eGovernment services in the past 12 months. EU citizens do not extensively use advanced modes of interaction with the administration. Only 17% of them have downloaded

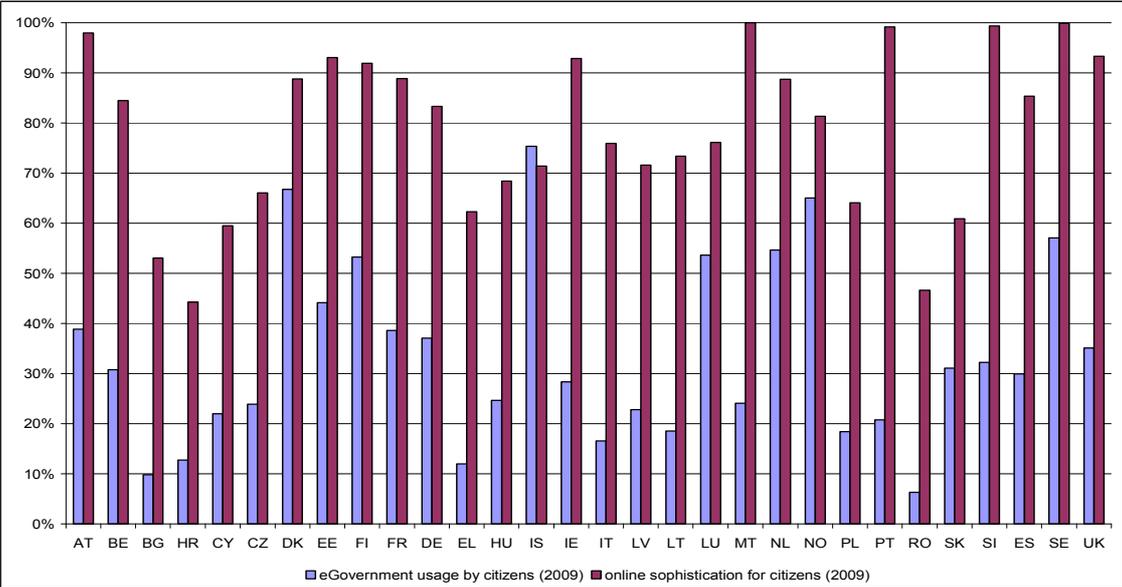
¹² Sophistication is an indicator that measures the degree of interaction possible between citizens and public administrations over the delivery of a given service. It consists of 5 possible levels: information, one-way interaction (downloadable forms), two way interaction (electronic forms), full transaction (full-electronic case-handling), personalisation (pro-active, automated).

¹³ Take-up data for Belgium and Iceland refer to 2008.

¹⁴ The EU27+ aggregate includes the EU27 countries + Iceland, Norway, Switzerland and Croatia.

official forms from a public authority website and only 12% have used the internet to send back completed forms.

Figure 4: Supply vs. take-up - citizens

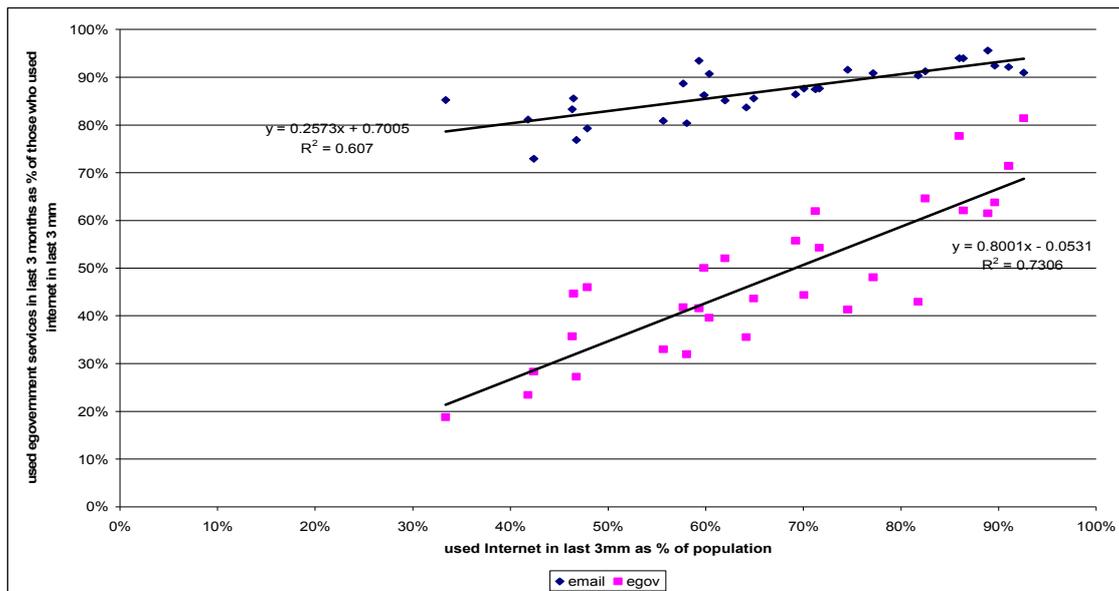


Source: Cap Gemini “Smarter, Faster, Better eGovernment: 8th Benchmark Measurement”, 2009, and Eurostat, Community Survey on ICT use in Households and by Individuals, 2009.

However, the large disparity in eGovernment use seems to be driven more by the degree of internet penetration in a country than by the degree of sophistication of its online provision. There is a strong correlation across countries between internet use¹⁵ and the percentage of users of eGovernment services (Figure 5).

¹⁵ i.e. Individuals who used the internet in the last three months.

Figure 5: Use of Internet vs. Use of eGovernment (and other) Services (2009, EEA countries + Croatia)¹⁶.



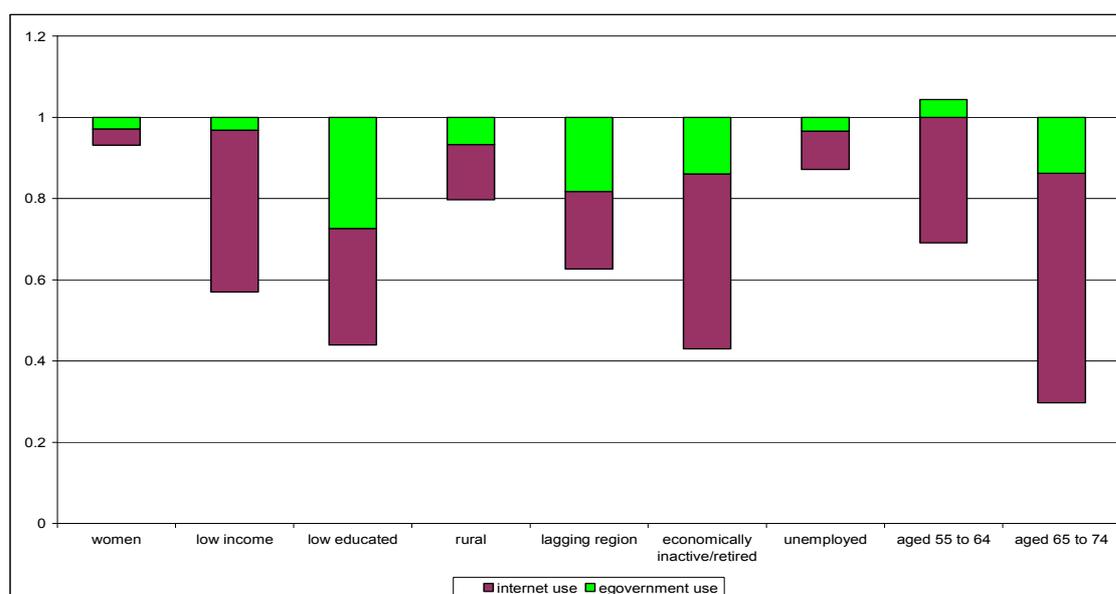
Source: Eurostat, Community Survey on ICT use in Households and by Individuals, 2009.

In addition, limited skills combined with a lack of education also contribute to the low use of eGovernment services, as they are the primary sources of disadvantage among groups at risk of exclusion from the digital society. A disparity indicator on eGovernment use¹⁷ (Figure 6) shows that there is no clear ‘digital divide’ in eGovernment use among internet users belonging to traditional groups at risk of exclusion. The various groups show usage only slightly below the population average and the age group 55-64 shows even greater usage of eGovernment services than the average population. For this latter category eGovernment usage may even be a major driver of internet use, for example to monitor accumulated pension rights in proximity of retirement. The main category at risk of exclusion from eGovernment usage (as well as from internet use) is that of not well educated people. This could signal that people with little education may lack the skills for use of ‘advanced services’.

¹⁶ x-axis: Used internet in last 3 months as % of population. y-axis: Used eGovernment (or email) services in the last 3 months as % of (i) people that used internet in last 3 months (ii) population.

¹⁷ The indicator has been calculated by taking the ratio of (proportion of eGovernment users in disadvantaged groups) over the (proportion of eGovernment users in the population). Therefore, a value of 1 would indicate pattern of usage for the concerned group equal to that of the population, while values closer to zero would indicate greater disparity in use. The groups not using eGovernment have been further split into two analytical subgroups: people not using the internet (and therefore eGovernment services either) and internet users not using eGovernment services.

Figure 6: Disparity indicator on use of Internet for eGovernment services in the last 3 months. Decomposition of Internet use effect and eGovernment use effect (2009, EU27).



Source: Eurostat, Community Survey on ICT use in Households and by Individuals, 2009.

In essence, although online provision of eGovernment services has made great progress in recent years, it has not been followed by an equal progress in take-up, especially on the citizens' side. The use of eGovernment services seems to be driven by both the degree of internet penetration in a country, skills, and by the degree of sophistication, availability and personalisation of online provision.

2.2. Existing eGovernment policies at EU level

In the past decade, the European Commission has contributed to the development of eGovernment by bringing together the actors and creating synergies in order to facilitate the modernisation of the public sector in the European Union. In 2001 Ministers agreed in Brussels¹⁸ that higher priority should be given to eGovernment issues. In 2003 in Como (Italy)¹⁹ Ministers emphasised the importance of effective eGovernment throughout Europe. The third policy orientation crystallised in the eGovernment Ministerial Declaration issued in Manchester²⁰ in November 2005 during the UK Presidency. This Declaration resulted in the i2010 eGovernment Action Plan²¹ that was welcomed by the Council of the European Union in June 2006.

¹⁸ http://ec.europa.eu/information_society/activities/egovernment/docs/ministerial_dec/ministerial_declaration_2001.pdf

¹⁹ http://ec.europa.eu/information_society/activities/egovernment/docs/ministerial_dec/ministerial_declaration_2003.pdf

²⁰ <http://archive.cabinetoffice.gov.uk/egov2005conference/documents/proceedings/pdf/051124declaration.pdf>

²¹ COM(2006) 173 final: i2010 eGovernment Action Plan: Accelerating eGovernment in Europe for the Benefit of All

The i2010 eGovernment Action Plan provided a concrete basis for joint activities at EU level. It was a comprehensive five point plan and integral part of the i2010 initiative²². It addressed the following five priority areas:

- inclusive eGovernment – no citizen left behind,
- eParticipation – re-engaging citizens in the political processes,
- efficiency & effectiveness – reducing administrative burden,
- key enablers – e.g. mutual recognition of electronic identity,
- high impact services – e.g. borderless electronic procurement.

Significant efforts have been made in all Member States to implement the Action Plan. All Member States now have policies and implementation plans in place for eGovernment and the five priority areas of the eGovernment Action Plan are reflected in the majority of the national action plans. In addition, the majority of Member States share the opinion that many subjects of the current Action Plan will remain relevant for the next five years²³. This was confirmed by the Progress Report on the i2010 eGovernment Action Plan in the EU27+²⁴.

One of the conclusions of the Progress report was that eGovernment performance and development seem to be positively correlated with the amount of time policies have been in place (See Table 1). In general, EU15 countries are more likely to have eGovernment policies in place for a longer period than the EU12. EU12 countries, on the other hand, are catching up quickly and see the Action Plan as a chance to engage directly within a framework of cooperation, support and learning.

²² i2010 was the EU policy framework for the information society and media between 2006 and 2010. It promoted the positive contribution that information and communication technologies (ICT) can make to the economy, society and personal quality of life.

²³ Source: Analysis of the questionnaire to Member States on 16 October 2008. The general message from the feedback to the questionnaire was to continue along the same main lines as in the former action plan, but to refocus and sharpen by bringing in new elements, and reducing the number of priorities while enlarging their scope.

²⁴ Millard Jeremy, Shahin Jamal et al. (2009). i2010 eGovernment Action Plan Progress Study. Report for the European Commission, Brussels: Information Society and Media Directorate. Note: Belgium has not been incorporated in the survey, and France indicated that it does not have a national eGovernment Action Plan.

Table 1: Countries with overall eGovernment strategies or policies, 2005-2009

By 2005 = 12/30		By 2007 = 20/30		By 2009 = 29/30	
Austria Bulgaria Cyprus Estonia Ireland Latvia	Lithuania Luxembourg Netherlands Portugal Sweden UK	Austria Bulgaria Cyprus Czech R Denmark Estonia Germany Greece Ireland Latvia	Lithuania Luxembourg Netherlands Norway Portugal Slovenia Spain Sweden Turkey UK	Austria Bulgaria Croatia Cyprus Czech R. Denmark Estonia Finland Germany Greece Hungary Iceland Ireland Italy Latvia	Lithuania Luxembourg Malta Netherlands Norway Poland Portugal Romania Slovakia Slovenia Spain Sweden Turkey UK

Overall, the Progress report concluded that the Action Plan has been very successful in encouraging both general and specific eGovernment policies to be put in place in European countries, coordinating these where appropriate at European level, linking them to related information society and public sector policies, and kick-starting or supporting policy implementation. Actions contributed to the effectiveness of the internal market and have spurred innovation in public organisations in order to increase their efficiency and effectiveness. In essence, the commitment to the Action Plan has stimulated alignment and coherence of national policies and new momentum to make public services more efficient, effective and more oriented towards the needs of the user.

2.3. Actions at EU level so far

The European Commission was and is engaged in deployment projects through pilots under the "ICT Policy Support Programme"²⁵ as part of the Competitiveness and Innovation Framework Programme (CIP ICT PSP), projects funded under subsequent Research Framework Programmes and the IDABC²⁶ (Interoperable Delivery of European eGovernment Services to public Administrations, Businesses and Citizens) and ISA²⁷ (the Interoperability Solutions for European public administrations) programmes. The projects launched play and will continue to play, a key role in improving innovation and supporting cross-border public services in the internal market. In addition, the EU has taken the lead in a number of sectoral initiatives.

²⁵ http://ec.europa.eu/information_society/activities/ict_psp/index_en.htm

²⁶ <http://ec.europa.eu/idabc/en/home>

²⁷ Interoperability solutions for European public administrations (ISA) (OJ L 260, 3.10.2009, p. 20). ISA replaces the IDABC programme (Interoperable delivery of pan-European eGovernment services to public administrations, businesses and citizens (OJ L 181, 18.5.2001, p.25).

The CIP ICT PSP programme has three main instruments relevant to eGovernment: large-scale Pilots Type A, Pilots Type B²⁸, and thematic networks. The Large Scale Pilots Type A implement interoperability of services between cooperating Member States in the context of agreed policy priorities with the aim to close missing links in the internal market. B Pilots demonstrate the implementation of innovative ICT solutions under realistic conditions in several countries. The thematic networks bring together stakeholders to explore new ways of using ICT to implement policies.

In this context, notable European success stories in the eGovernment area are three Large Scale Pilots Type A²⁹ funded by the European Commission. PEPPOL implements a European system of eProcurement that will facilitate the participation of businesses in (electronic) calls for tenders everywhere in the Union. STORK will enable citizens and businesses to identify themselves when interacting with their own and other national administrations over the internet. The third pilot Type A project, called SPOCS, is related to the Services Directive. It will enable service providers from all Member States willing to offer professional services outside their "home" country to deal electronically with all necessary administrative procedures.

In 2006, at the request of the European Parliament, the Commission launched the eParticipation Preparatory Action³⁰. This eParticipation Preparatory Action supported real-life pilot projects to demonstrate how using modern ICT tools can make it easier for people to participate in decision-making and can contribute to better legislation. Since 2009, eParticipation has been included in the CIP ICT PSP.

The 7th Framework Programme for Research³¹ (FP7) is funding research projects under "ICT for governance and policy modelling". The projects aim to develop new tools and technologies to manage digital democracy as well as analytical tools to help understand and interpret citizens' debates and opinions. Previously, eGovernment research in FP6 (2002-2006) has focused on modernising public agencies at all levels, innovating to create new and/or improved services for citizens and businesses.

Under the former IDABC programme, the European Commission and Member States have been working together on interoperability for European eGovernment services. Today several of these services are online and allow European public administrations to work together in

²⁸ Under the umbrella of the CIP ICT PSP also Pilots Type B have been or are being launched. Pilots B require fewer participants than Large Scale Pilots; also the duration is shorter. Examples of these pilots are projects addressing the reduction of administrative burdens across the EU or innovative solutions for inclusive and effective eGovernment.

²⁹ The cross-border Pilots A tackle potential fragmentation on the internal market in three areas: cross-border eProcurement (PEPPOL - Pan European Public Procurement OnLine) enables companies, especially SMEs, to respond electronically to public tenders issued in another country; interoperability of electronic identities (STORK - Secure idenTity acrOss boRders linKed) is a key enabler of future eGovernment services; the pilot on the Services Directive (SPOCS - Simple Procedures Online for Cross-border Services) contribute to achieving interoperability of the electronic processes. These pilots provide a new dimension to cooperation and a framework on which Member States can build and which can leverage their existing investments. At the same time these pilots help to find a common European way forward while respecting national approaches. PEPPOL has 8 participating countries, STORK 14, and SPOCS 7. The countries are those that were official partners at the time of writing (i.e. September 2010). Links: www.peppol.eu, www.eid-stork.eu, www.eu-spocs.eu.

³⁰ http://ec.europa.eu/information_society/activities/egovernment/implementation/prep_action/index_en.htm

³¹ http://ec.europa.eu/information_society/activities/egovernment/research/index_en.htm

critical areas such as health and consumer protection, the internal market for services and employment. These services are enabled by the definition of common frameworks. The best known is the European Interoperability Framework for pan-European eGovernment services. The IDABC programme has been replaced by the ISA programme, as IDABC came to an end in 2009. Under ISA, the Commission will launch actions in four areas:

- Creation and improvement of common frameworks in support of interoperability across borders and sectors;
- Assessment of ICT implications of proposed or adopted Community legislation as well as planning for the introduction of ICT systems in support of the implementation of such legislation;
- Operation and improvement of existing common services as well as the establishment, industrialisation, operation and improvement of new common services;
- Improvement of existing reusable generic tools as well as the establishment, provision and improvement of new reusable generic tools.

At EU level initiatives in many sectors have also contributed to the eGovernment agenda by creating interoperability. A few examples:

- The Services Directive 2006/123/EC³² requires Member States to set up Points of Single Contact (PSC) through which providers can complete electronically procedures and formalities necessary to provide a service. Interoperability of eIdentification, eSignatures and eDocuments is key for seamless functioning of electronic transactions.
- In the area of Environment, the INSPIRE Directive 2007/2/EC³³ aims to establish a cross-border infrastructure for spatial information to support Community environment policies.
- In the area of Justice and Home Affairs, a communication³⁴ stressed the benefits of improved effectiveness, enhanced interoperability and synergies among European databases such as the VIS, the SIS II, and Eurodac.
- In the area of support of the Community policies for customs, taxation and excise duties, the Commission coordinates and manages a set of operational activities relying on interoperable systems.

³² OJ L 376 of 27.12.2006 <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:376:0036:0068:en:PDF>

³³ OJ L 108/1 of 25.04.2007 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:108:0001:0014:FR:PDF>)

³⁴ On 24 November 2005 the Commission adopted a Communication COM(2005) 597 final on improved effectiveness, enhanced interoperability and synergies among European databases in the area of Justice and Home Affairs highlighting how IT systems can more effectively support the policies linked to the free movement of persons and serve the objective of combating terrorism and serious crime.

In addition, the European Commission has set up platforms for good practice exchange mechanism (ePractice.eu, OSOR and SEMIC³⁵) and provides a consistent progress benchmarking measurement³⁶ of Member States.

2.4. eGovernment policy development in the near future

The European Commission launched two vision studies³⁷ on the future of eGovernment. Both studies see the public sector as moving into a new era, in which the provision of public services will be oriented towards the creation of public value and user empowerment. In this context, empowerment means to increase the capacity of citizens, businesses and other organisations to function in society which can be stimulated through the creation of public value.

One vision study³⁸ has described the paradigm shift in the way that governments need to completely re-think and in many cases redesign the service provision approach. It has summarised how eGovernment is likely to develop in the future:

- An international environment should be created in which government organisations will be connected, networked and fully joined-up and in which public organisations will interact and connect intelligently with each other and with private actors – citizens, civil society organisations and businesses.
- Services should be increasingly responsive to user needs by providing more individualised services and allowing users to tailor the services to their personal requirements. Increasingly, users should be able to design, create and self-direct their own services, while providers should be able to differentiate and target recipients. In this regard, users should also have the possibility to easily access applications that use or processes their personal data.
- Governance must become much more open, participative and democratic and be receptive at all levels to inputs and interests from all segments of society. New 'crowd-sourcing' instruments should be developed to support evidence-based policies that are more effective in their own right and better justified in terms of their rationale by a presentation of the underlying evidence.
- Governments and public administrations must make better use of ICT to improve monitoring and evaluation techniques. This will allow them to increase their performance. E.g. ICTs can be used to automatically provide statistics on the uptake use of eGovernment solutions. The respective functions should be built in during the implementation phase.

³⁵ <http://www.epractice.eu/>, <http://www.osor.eu/> (Open Source Observatory and Repository for European Public Administrations), <http://www.semic.eu> (Semantic Interoperability Centre Europe).

³⁶ http://ec.europa.eu/information_society/eeurope/i2010/benchmarking/index_en.htm

³⁷ Botterman Maarten, Millard Jeremy et al. (2009). Value for citizens: A vision of public governance in 2020. Report for the European Commission, Brussels: Information Society and Media Directorate and Codagnone Cristiano & Osimo David (2008). Future technology needs for future eGovernment Services: Services platform report. Report for the European Commission, Brussels: Information Society and Media Directorate.

³⁸ Botterman Maarten, Millard Jeremy et al. (2009). Value for citizens: A vision of public governance in 2020. Report for the European Commission, Brussels: Information Society and Media Directorate.

Another vision study³⁹ confirms that government and civil society will both invest in providing services and continuously collaborate to innovate, provide better services and to address complex societal challenges. This new approach is reflected in the proposal for a new ICT service architecture for eGovernment. This architecture should be flexible and modular, so that both administrations and third parties can collaborate and share responsibilities in producing and providing services according to the accepted principles of subsidiarity. There may still be a 'one-stop-shop' on the internet where users can access all governmental services at once. However, it will also be possible to embed these services into other platforms. These platforms may be managed by businesses or by professional organisations, acting as providers of value added services or simply as gateways. Alternatively, users may prefer to embed some services in their own electronic environment, be that their internet hub, a social networking site or their personal page.

The above visions have been confirmed by Ministers in the Malmö Declaration, as they "...aspire to a vision, whereby European governments are recognised for being open, flexible and collaborative in their relations with citizens and businesses. They use eGovernment to increase their efficiency and effectiveness and to constantly improve public services in a way that caters for users' different needs and maximises public value, thus supporting the transition of Europe to a leading knowledge-based economy."

2.5. Policy options

When considering possible effective policies for eGovernment in Europe, three policy options have been taken into account: limited European Commission activities, a focused Action Plan and an extensive Action Plan. These three scenarios estimate the impact of Commission activities in the development of eGovernment in Europe. All scenarios take into account that the organisation of government is primarily the competence of national governments. This means that - according to the principles of subsidiarity - eGovernment measures are also mainly the responsibility of national administrations. The scenarios focus on the added value of a European eGovernment Action Plan that complements and brings together national initiatives.

2.5.1. Scenario 1: Limited Commission Activities

This scenario is based on the situation where the number of activities at European level will be cut back, where an Action Plan will not be adopted, and where the emphasis is on activities at national level. The scenario to cut back on eGovernment projects might be tempting in times of economic austerity.

The consequences would be, among others: a limited coordination role for the European Commission in the area; less emphasis on standards and interoperability; less visibility of the concrete outcomes of the political objectives; limited research and piloting of innovative eGovernment solutions in the FP7 research programme and the CIP ICT PSP programme. In addition to this, common political aspirations reflected in the Malmö Declaration would not be realised, as the European Commission would not propose a new Action Plan for eGovernment to translate the political priorities into concrete actions. This might lead to a

³⁹ This architecture is derived from the TAO scenario and is adapted from a scenario exercise presented in Codagnone Cristiano & Osimo David (2008). Future technology needs for future eGovernment Services: Services platform report. Report for the European Commission, Brussels: Information Society and Media Directorate.

reduced level of political support for European eGovernment policy. Member States would be expected to identify and resolve a number of common problems such as a lack of cross-border activities.

Moreover, pilots launched under the CIP ICT PSP programme would not be followed up. The 36 million Euros⁴⁰ in the three Large Scale Pilots could be regarded as lost, although experience gained from them may be useful for national purposes.

The impact will be that the pace of developments in critical areas will likely slow down in some Member States and will significantly vary across the EU.

Some Member States would have fully fledged personalised systems in place, while others would not have started the implementation of such systems⁴¹. In addition, many Member States – due to time constraints, budget restrictions or other reasons – would choose a rather minimal implementation approach based on legacy IT systems. This would lead to a situation where eGovernment services might remain basically silo-centric, top-down, with little service innovation, expensive, and with just as many failures as successes.

The overall figures for Europe's take-up of eGovernment will presumably not grow much further, as the take-up of ICT by governments and public administrations in countries lagging behind will not catch up with the private and civic sector. The assumption is that in the lagging countries the main focus of eGovernment services remains first and foremost to serve the needs of government, while disregarding user take-up.

The risk of not acting in this area is that valuable expertise will not be shared with peers in the absence of events and initiatives to exchange best practices. Countries that might have developed efficient, sustainable and user-centric eGovernment services would need to make additional effort to get their message across. Furthermore, experience with new innovative concepts such as offering services in the cloud might not be further exploited. This would be a missed opportunity to further reduce costs and to advance eGovernment services.

As for the internal market, most of the current barriers would not be addressed and the potential of current and future initiatives being set-up would not be reaped. Evidence⁴² suggests that current barriers on the internal market are mainly caused by national, regional and/or local regulation. Despite the increasing sophistication of national systems, legal, linguistic and procedural differences can cancel out the advantages gained by ICT. In addition, a proliferation of ICT services would cause new digital barriers to the free movement of people, goods and services in the European Union.

Without the implementation of standards and specifications to support interoperability, new and cross-border eGovernment services would not become available. This would result in untapped potential for the future strengthening of the internal market. This would have negative consequences, such as:

⁴⁰ This figure is based on the total estimated eligible costs of STORK, PEPPOL and SPOCS for the entire duration of the projects and includes the share of co-funding of participating Member States and other partners.

⁴¹ Capgemini, The User Challenge Benchmarking The Supply Of Online Public Services 7th Measurement, September 2007.

⁴² Villalba-van Dijk Lidia, Ridsdale Helen, van Oranje-Nassau Constantijn (2010). eGovernment Scenario's for 2010 and the preparation of the 2015 eGovernment Action Plan.

- An EU-wide common framework for electronic identities may not be set-up. This would be the most severe bottleneck for the progress of eGovernment services – both at the national level as well as for cross-border services. The potential of it, encompassing a wide use of B2B and B2C cross-border services, will not be exploited.
- The ISA programme would make progress on interoperability, but would not fully gain political visibility through a coordinated eGovernment Action Plan.
- Many providers would experience difficulties when exporting their services to other EU Member States, in setting up businesses in different Member States, or in procurements involving foreign organisations. The share of cross-border eProcurement in total eProcurement would remain low.
- The potential benefits of the EU Services Directive would only be partially realised if it remains implemented on the basis of legacy IT systems. The large potential of the EU Services Directive to serve as a reference for future cross-border services and to reduce significantly administrative burdens may be lost.
- Vendor lock-ins might remain, with a risk of hindering innovation and distorting competition, and of decreasing transparency and the efficiency of IT solutions.

The option of reducing the activities of the European Commission is considered to have a significant negative impact in Europe far outweighing any savings in the short term and with likely higher costs to society in Europe in the long-term. Therefore, this scenario is not considered a viable option.

2.5.2. Scenario 2: Focused Action Plan

The Progress Report on the i2010 eGovernment Action Plan in the EU27+⁴³ underlined the need to reap the benefits of existing policies and strategies. The report observed that there is still a gap between policy and practice and stated that this "is a natural reflection of the current phase of the many European countries which have only recently put their policies in place". Thus, the next eGovernment Action Plan must build on implementing the policies and strategies already in place. The report further observes that "[f]or example, the roll-out of "Inclusive eGovernment" solutions is still in its very early stages in most countries, and in the "Efficiency and Effectiveness" priority area many countries still do not have eGovernment measurement frameworks in place. In "High Impact Services" and "Key Enablers", the Large Scale Pilots on eProcurement and electronic identity management (PEPPOL and STORK) are still in their early days and need to attract more countries and stakeholders, whilst the coordination of separate "eParticipation" policies and practices across European institutions is lacking". The report concludes that there is a need to act at EU level in order to maximise the impact of actions implemented at the national level.

This requires that the European Commission plays a clear coordination role, setting out practical objectives for Member States and itself. Activities on a number of focused areas are agreed, and can have high impact on eGovernment in Europe. Pilots will build on current experiences and will have maximum impact and function as an enabler for wider deployment

⁴³ http://ec.europa.eu/information_society/activities/egovernment/docs/i2010_action_plan_progress_study_summary_report_2009.pdf

in the EU. Management and monitoring of progress towards common goals will be focused around political priorities described in the Malmö Declaration.

The role of the European Commission is to support this transition to more efficient and more user-friendly eGovernment services for business and citizens, as part of Europe's overall drive to strengthen competitiveness, which remains an important priority for Europe over the next 5 years. The European Commission will continue helping Member States to accelerate their development of eGovernment services by maximising actions done at national level and by exploiting the complementarities of national and European Union policy instruments.

Regarding the expenditures for the European Commission and the Member States, these will remain at current and predicted levels. For the European Commission, this would entail continued financial support through the CIP ICT PSP, ISA and FP7 programmes at comparable levels to today.

At the same time the current economic climate cannot be neglected. 'Doing more with less' means that public money can be spent on ICT more effectively. Effective eGovernment involves rethinking organisations and processes, and changing behaviour so that public services are delivered more efficiently to the people who need to use them and in the way they expect them to be delivered. Money, time and energy can be saved by a more coordinated and collaborative approach (standardisation, interoperability, sharing and re-use) for the establishment of eGovernment services.

The European Commission will play a key role in optimising the use of available resources and instruments, as eGovernment services will be developed more economically and more effectively by pooling resources. Examples of pooling resources are, among others, research and development, studies, exchange of best practice and training at a European level, sharing software components and infrastructure. The private sector could also contribute to the development of eGovernment services.

The benefits will be that overall political goals will likely be achieved in 5 years and that the take-up by citizens will increase. For all Member States the focus is to ensure that citizens and businesses have easy, robust and user-friendly access to administrative services in the internal market, and at the same time being responsive to those who are potentially excluded. Among others, this creates an opportunity for public organisations to embrace emerging technologies enabling citizens, businesses and other organisations to effectively participate in the design and operation of eGovernment services.

As for the internal market, eGovernment services have the potential to ensure that Europeans wishing to travel, work, study, reside or retire in another country, can move from one EU country to another as easily and smoothly as they can in their own country. Businesses will be able to seek new opportunities in other Member States, and reply to tenders issued in another country⁴⁴, or process financial claims taking into account that there are 27 different systems in the EU.

The underlying information and communication technologies offer the possibility to interoperate by exchanging information and re-using the information that has been exchanged. This demonstrates the need to further 'join-up' some of the most critical eGovernment

⁴⁴ Today cross-border procurement represents only 5% of all procurements. So, there is a huge potential to strengthen competition at EU level.

services, thus ensuring that eGovernment services are seamless and borderless and contribute to economic growth across Europe.

A focused action in eGovernment will be a better response than cutting back on eGovernment projects. Common actions will contribute to reducing public expenditure on the long term. The Citizens' Declaration of Malmö⁴⁵, for example, underlines the necessity to cooperate, as the "needs of today's society are too complex to be met by government alone". It calls for Europe to "grasp this opportunity and rebuild the relationship between citizens and the state by opening up public institutions and by empowering citizens to take a more active role in public services".

In conclusion, the focused Action Plan scenario has a high likelihood of success and the realisation of expected results is high. It proposes a balanced level of European Commission intervention, focussing on the close cooperation with the Member States with the aim of improving the internal organisation of administrations, of increasing the quality of electronic interactions with citizens, businesses and other organisations, and of creating more added value for the internal market at large.

2.5.3. *Scenario 3: An extensive Action Plan*

The extensive Action Plan would build upon the focused plan by accelerating the identification of areas for additional European action, extending support programmes, and initiating legislative measures. Typical examples of additional areas would be: more extensive activities in standards and interoperability areas; widespread benchmarking and analysis; more extensive R&D, piloting, validation and implementation support to convert technology developments and organisational learning into real advancements and the delivery of tangible benefits. The transformational change would be supported by legislative actions at EU level in order to make the electronic implementations of eGovernment at national level more compatible with each other.

The main benefit of this scenario would be faster progress on a much broader range of services and activities than in the focused Action Plan. Financial benefits beyond scenario 2 would, however, not necessarily increase proportionally with the number of areas addressed as learning and re-use may saturate, though the leverage of key enablers such as eID would increase. It is difficult to make a financial estimate of the benefits. However, even if the additional benefits are in the same order as those in scenario 2, there is a considerably larger risk associated with attaining them.

Despite the accelerated progress of eGovernment in Europe, the costs of reinforcing pilots at the EU level are significantly higher for the European Commission and Member States than in scenario 2, and would require the availability of substantial additional budget in the next 5 years. It would entail higher management and coordination costs. The risk would also be that Member States cannot find the resources to match EU co-funding for the IP ICT PSP Large Scale Projects. In addition to this, there is a risk that Member States would perceive actions at EU level as overambitious, which could lead to a reduced level of Member States' commitment in advancing eGovernment in Europe. As a result, some Member States could decide to withdraw from projects they are participating in. Another risk is that legislative measures would be proposed before the Large Scale Pilots have been tested thoroughly and

⁴⁵ <http://eups20.wordpress.com/the-open-declaration/>

their results have been fully achieved. This would reduce the support for legislative intervention at European level.

Scenario 3 seems to be attractive, as it would advance eGovernment through an increased intervention at EU level. However, it involves a higher cost for the European Commission and Member States to deliver results, a need for greater coordination and management, and an increased risk of losing some Member States' commitment. In conclusion, the combination of increased costs, higher management and coordination overhead and risk of withdrawal of commitment makes this option less sustainable and favourable than scenario 2.

2.6. Conclusion

eGovernment in Europe is going through a paradigm shift, which is much more than a simple transformation of paperwork-based processes into an on-line equivalent. Rather, it entails a complete re-thinking, and in many cases redesign of the service provision approach. Nevertheless, although online provision of eGovernment services has made great leaps in recent years, it has not been followed by an equal progress in take-up, especially by citizens.

The evidence summarised in this chapter suggests that in order to increase the take-up by citizens, policies need to focus on increasing the quality of public services by adopting a more user-centred approach rather than administration-centred. Both the public and the private sector should increasingly collaborate in order to maximise the value for society at large. In order to avoid fragmentation in the internal market both sectors should consider the cross-border aspect in their collaboration.

A comprehensive eGovernment Action Plan would be complementary to national Action Plans. The role of the European Commission is to support innovation in eGovernment in order to increase the efficiency and effectiveness of eGovernment and to support the development and provision of cross-border services. This will improve the functioning of the internal market and empower all social and economic actors in the European Union. The focus of actions at EU level should correspond to the political commitments that Member States have agreed upon in order to achieve a high likelihood of success. The following chapter will deal with these issues and will explain in depth how the political commitments that Member States have made in the Malmö Declaration should be converted into an Action Plan.

3. GENERAL POLICY OBJECTIVES

This Action Plan includes a range of complementary actions aimed at the provision of a new generation of eGovernment services for businesses and citizens. Both Member States and the Commission will cooperate closely in order to implement the Action Plan. The role of the European Commission is to contribute by bringing together the actors and creating synergies in order to facilitate the modernisation of the public sector. Both the Commission and the Member States aim to address potential fragmentations of the internal market caused by uncoordinated or non-interoperable implementations of ICT-based public services.

The first part of this chapter describes the context of the new Action Plan. Part two summarises the Malmö Declaration. The third part explains the alignment of the Action Plan vis-à-vis the EU2020 initiative and the Digital Agenda for Europe. Part four links the Action Plan to current legislative initiatives. Part five describes the links within the Action Plan. The sixth part elaborates on the implementation measures.

3.1. Context of the Action Plan

The eGovernment Action Plan responds to a call from Member States for a shared eGovernment policy in the European Union in order to build on past achievements and increase collaboration on eGovernment. This includes joint action between Member States and close collaboration with the European Commission. This call was made in the Malmö Declaration.

The Action Plan aims to implement the Malmö Declaration and is the successor of the Action Plan 2006-2010⁴⁶. The Ministerial Declaration has also received support from the industry as DigitalEurope adopted an Industry Declaration⁴⁷ that was presented at the conference. An Open Declaration⁴⁸ on public services 2.0 resulted in the involvement of citizens and the endorsement of three key principles including transparency, participation and empowerment. The Council Conclusions⁴⁹ on post i2010 of the European Council of 7 December 2009 restated the importance of the Malmö Declaration and invited the European Commission and the Member States to implement its objectives. The Granada Declaration⁵⁰ reaffirmed a number of priorities of the Malmö Declaration. The Digital Agenda⁵¹ further supported among others, a number of eGovernment related actions.

3.2. Malmö Declaration

The Malmö Declaration calls for an Action Plan that will contribute to a new generation of open, flexible and personalised eGovernment services of administrations at local, regional, national, and European level. Those services should empower citizens and businesses and should seamlessly interact. The Malmö Declaration on eGovernment defines four political priorities, of which one is a horizontal priority:

1. To support the creation of eGovernment services, which empower citizens and businesses. Such services should be designed around their needs and possibly developed in collaboration with users. They should provide better access to public information, make governments and administrations more transparent and provide effective means of increasing the involvement of citizens and businesses in the policy-making process.
2. To increase the mobility of citizens and businesses in the single market. Cross-border services should be developed that correspond to real social and economic needs. Seamless services should enable entrepreneurs to set up and run a business anywhere in Europe independently of their original location and allow individuals to study, work, reside and retire anywhere in the European Union.

⁴⁶ 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 {SEC(2006) 511}. COM(2006) 173 final, Brussels, 25.04.2006.

⁴⁷ http://www.digitaleurope.org/index.php?id=34&id_article=390

⁴⁸ An Open Declaration reflecting the growing interest of citizens in eGovernment was presented in Malmö in response to the Ministerial Declaration (<http://eups20.wordpress.com/the-open-declaration/>).

⁴⁹ Council Conclusions on Post i-2010 Strategy - towards an open, green and competitive knowledge society. 2987th Transport, Telecommunication and Energy Council meeting Brussels, 18 December 2009. On-line: http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/trans/111999.pdf

⁵⁰ Informal Ministerial Declaration, Granada, Spain, 19 April 2010.

⁵¹ COM(2010) 245 (<http://ec.europa.eu/digital-agenda>)

3. To improve the efficiency and effectiveness of governments and public services. This includes actions that use eGovernment to reduce the administrative burden, to improve organisational processes and to promote a sustainable low-carbon economy.
4. To create the legal and technical pre-conditions enabling the implementation of the above priorities. This includes the development of key enablers such as eIdentity management, the promotion of interoperability through open specifications and the stimulation of innovation in eGovernment in general.

In addition, the Malmö Declaration provides guidance on the governance and implementation of the priorities in the Declaration. In brief, Member States have invited the European Commission to organise the joint governance through collaboration and coordination on the development of the Action Plan for 2011 to 2015.

3.3. Alignment with EU2020 and the Digital Agenda for Europe

By supporting digitally enabled public services in the European Union, the Action Plan also contributes to building a knowledge based, sustainable and inclusive economy for the European Union, as set forth in the EU 2020 Strategy⁵². It supports and complements the Digital Agenda for Europe, through actions in the area of ICT for governments and public services.

Combined, the actions proposed in the Action Plan have the ambition to increase the take-up of eGovernment services from approximately 38% of citizens on average in Europe in 2010 to 50% in 2015⁵³ and from just over 70% of businesses in 2010 up to 80% in 2015⁵⁴.

3.3.1. Alignment with EU2020

The priorities in the Action Plan are in line with 'the Political Guidelines for the next Commission' proposed by President Barroso and support the vision for a European Digital Agenda for Europe outlined by Vice President Kroes. To achieve a sustainable future, the European Commission launched the Europe 2020 Strategy in March 2010 to prepare the EU economy for the next decade.

The eGovernment Action Plan contributes to the EU2020 agenda as follows:

1. In the context of the current economic, social and environmental challenges, the Action Plan points out how the potential of eGovernment can be increased and stresses the need to deliver better public services with fewer resources. The need for a quicker transformation in the public sector as a result of public sector reforms has been highlighted by the financial crisis⁵⁵. The Action Plan has the ambition to support further reduction of administrative burdens, improve the integration of administrative processes and hence contribute to increasing efficiency and effectiveness in the design and delivery of public services.

⁵² Communication from the Commission. Europe 2020. A strategy for smart, sustainable and inclusive growth. COM(2010) 2020, Brussels, 3.3.2010.

⁵³ This figure is defined in the Digital Agenda for Europe.

⁵⁴ The figures presented assume a stable growth of internet broadband penetration and adoption in the same period.

⁵⁵ OECD: The Financial and Economic Crisis – Impact on eGovernment in OECD countries - <http://www.oecd.org/dataoecd/57/57/44089570.pdf>

2. One of the priorities of the Action Plan is the empowerment of citizens and businesses; it aims at ensuring that open and user-driven, participatory and collaborative public services contribute to this empowerment. eGovernment services need to be provided in a transparent way, designed for all, and personalised.
3. Sustainable growth is at the heart of the Action Plan. It proposes ways to close the remaining gaps in the internal market and promotes mobility of citizens and businesses through the portability of services. One of the priorities of the Action Plan is that eGovernment supports the internal market so that citizens can study, work, reside and retire in any country and that businesses can start a company or provide and purchase services and goods anywhere in the internal market. In a broader sense, the Action Plan proposes to identify legal, technical and organisational obstacles that hinder the development of cross-border eGovernment services. The Action Plan also promotes innovation in eGovernment.
4. The Action Plan calls for efforts to reduce the carbon footprint of government operations and public services and to contribute to wider carbon-reduction targets through the efficient use of technology.

eGovernment can help with reinforcing EU citizens' participation, supports an internal market fit for the 21st century, and ensures that public services can serve an economy which relies on the networks of the future.

3.3.2. *Alignment with the Digital Agenda for Europe*

On 19 May 2010 Vice-President Kroes has presented the Digital Agenda for Europe⁵⁶ with the aim of contributing to the EU's economic growth and spreading the benefits of the digital era to all sections of society. The Digital Agenda is the first of seven flagship initiatives under the Europe 2020 strategy for smart, sustainable and inclusive growth. It outlines seven priority areas for action: creating a digital Single Market, greater interoperability, boosting internet trust and security, much faster internet access, more investment in research and development, enhancing digital literacy skills and inclusion, and applying information and communications technologies to address the challenges facing society like climate change and the ageing population. In these seven areas, the Digital Agenda foresees some 100 follow-up actions, of which 31 would be legislative. Five of those areas have a clear link with eGovernment.

The Digital Agenda for Europe clearly states that Member States should "implement commitments on interoperability and standards in the Malmö and Granada Declarations by 2013" and that "European governments are committed to making user-centric, personalised, multiplatform eGovernment services a widespread reality by 2015."

In addition, it provides guidance to the European eGovernment agenda by defining clear actions in the priority areas. The list below provides the most notable actions related to eGovernment:

- In the priority area 'A new Single Market to deliver the benefits of the digital era' the European Commission urges public authorities to make public sector information available and calls for more secure electronic identity solutions ensuring interoperability based on standards and open development platforms.

⁵⁶ COM(2010) 245 (<http://ec.europa.eu/digital-agenda>)

- The priority 'Improve ICT standard-setting and interoperability' defines the key action to promote interoperability between public administrations which will involve the Commission's adoption of a European Interoperability Strategy and the European Interoperability Framework to be drawn up under the ISA programme.
- The priority 'Boost cutting-edge research and innovation in ICT' emphasises that "Europe's public sector expenditure should be used to spur innovation while raising the efficiency and quality of public services." In particular, it notes that Europe makes little use of procurement of innovation and R&D to improve the quality and performance of its public services. To that end innovative and interoperable solutions in areas of public interest should be tested and developed in the framework of the CIP. In addition, an EU-wide strategy on "cloud computing" notably for government (and science) should be developed⁵⁷.
- The priority "Empower all Europeans with digital skills and accessible online services" aims to bridge the digital divide by helping members of disadvantaged social groups to participate on a more equal footing in services such as eGovernment. In particular, public websites and online services in the EU that are important to take a full part in public life should be brought in line with international web accessibility standards.
- eGovernment is very prominent in the priority area "Unleash the potential of ICT to benefit society"⁵⁸. This key action foresees that the European Commission should propose a Council and Parliament Decision to ensure mutual recognition of eIdentification and eAuthentication across the EU based on online 'authentication services' to be offered in all Member States. In addition to this, actions for the European Commission encompass the support of seamless cross-border eGovernment services in the internal market through the CIP ICT PSP and ISA programmes, a White Paper on how to interconnect eProcurement capacity across the internal market, and the implementation of an eCommission 2011-2015 Action Plan. Actions that address Member States are the interoperability of eGovernment services, overcoming organisational, technical or semantic barriers and supporting IPv6, ensuring that the Points of Single Contact function as fully fledged eGovernment centres beyond the requirements and areas covered by the Services Directive, an agreement on a common list of key cross-border public services – enabling entrepreneurs to set up and run a business anywhere in Europe independently of their original location, and allowing citizens to study, work, reside and retire anywhere in the European Union.
- The Digital Agenda also points out a target aiming at 50% of the citizens using eGovernment, with more than half of them returning completed forms. In addition, it defines that the key cross-border public services contained in the list to be agreed by Member States by 2011, should be available online by 2015.

eGovernment related actions listed in the Digital Agenda for Europe will be elaborated in this eGovernment Action Plan.

⁵⁷ The strategy should consider economic, legal and institutional aspects.

⁵⁸ The actions referring to a review of the Public access to Environmental Information Directive, and the implementation of cross-border eEnvironment services have not been taken into consideration in the eGovernment Action Plan.

3.4. Links between the eGovernment Action Plan and existing EU initiatives

A growing number of EU legislative acts relate to, or rely on, eGovernment services for their implementation. Examples include the Services Directive⁵⁹, the eSignatures Directive⁶⁰, the Directive on the protection of personal data⁶¹, the Directive on the re-use of Public Sector Information⁶², legislation in the area of procurement⁶³, and the INSPIRE Directive 2007/2/EC⁶⁴ on spatial information. Furthermore, a number of important policy initiatives are of direct interest to eGovernment, such as the Action Plan on eSignatures and eIdentification to facilitate the provision of cross-border public services in the Single Market⁶⁵, the Action Plan for the implementation of the legal framework for electronic procurement⁶⁶, the Action Programme for Reducing Administrative Burdens in the EU, Sectoral Reduction Plans and 2009 Actions⁶⁷, Interoperability Solutions for European Public Administrations⁶⁸, the Seventh Framework Programme for R&D⁶⁹, the ICT Policy Support Programme under the Competitiveness and Innovation Framework Programme⁷⁰, and the Lisbon Treaty providing for a citizens' initiative⁷¹ and supporting administrative cooperation⁷².

3.5. Links between priorities within the Action Plan

This Action Plan follows the sequence of the four political priorities in the Malmö Declaration. However, these four political priorities should not be regarded as independent

⁵⁹ Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market, OJ L 376, 27.12.2006, on-line: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006L0123:EN:NOT>

⁶⁰ Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures, OJ L 013, 19/01/2000 P. 0012 – 0020, on-line: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999L0093:EN:HTML>

⁶¹ Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, Official Journal L 281, 23/11/1995, on-line: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:EN:HTML>

⁶² Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information, Official Journal L 345, 31/12/2003 P. 0090 – 0096, on-line: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0098:EN:HTML>

⁶³ http://ec.europa.eu/internal_market/publicprocurement/legislation_en.htm

⁶⁴ Directive 2007/2/EC, OJ L 108/1 of 25.04.2007 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:108:0001:0014:en:PDF>)

⁶⁵ COM(2008) 798 final: Communication from the Commission to the Council and European Parliament, Action Plan on e-signatures and e-identification to facilitate the provision of crossborder public services in the Single Market, (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0798:FIN:EN:PDF>)

⁶⁶ OJ L 134/1, 30.04.2004 (<http://www.dkom.si/util/bin.php?id=2004121408020465> and <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:134:0001:0113:EN:PDF>)

⁶⁷ COM(2009) 544 final: Communication from the Commission to the Council and European Parliament, Action Programme for Reducing Administrative Burdens in the EU, Sectoral Reduction Plans and 2009 Actions, *on-line:* <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0544:FIN:EN:PDF>

⁶⁸ Decision 922/2009/EC, of 16.09.2009 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:260:0020:0027:EN:PDF>)

⁶⁹ http://cordis.europa.eu/home_en.html

⁷⁰ Decision No 1639/2006/EC of the European Parliament and of the Council of 24 October 2006 establishing a Competitiveness and Innovation Framework Programme (2007 to 2013), on-line: http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l_310/l_31020061109en00150040.pdf

⁷¹ Art. 11 of the Treaty on European Union and Art. 24 of the Treaty on the Functioning of the European Union

⁷² Art. 6 of the Treaty on the Functioning of the European Union.

priorities, as they are very closely interlinked. A few examples are described below in order to explain some of the links:

- The possibility to re-use public sector information throughout Europe will not stop at national borders and will strengthen the internal market.
- An increased participation of users may be taken one level up by actively involving businesses and citizens in the development and production of eGovernment services, thus also contributing to more efficiency and effectiveness in the provision of government services.
- There is a direct link between the setting up of an electronic identities management infrastructure in Europe and the creation of new cross-border services.
- New computing paradigms such as services in the cloud and advanced service oriented architectures may allow administrations to innovate in a more flexible manner, reduce costs of service development and enhance the conditions for further innovation.

There are many more examples that demonstrate that the priorities of the Malmö Declaration and of this Action Plan are interdependent. The first three priorities (empowerment, internal market, and efficiency and effectiveness) can only be achieved if pre-conditions and key enabling technologies are put in place. This would improve the interoperability and the quality of services, offer guarantees for security and privacy and create the conditions for further service innovation. In a climate of economic austerity it therefore makes sense to start with improving the back-office systems that require immediate investment and create the conditions for new social and economic developments and to put in place the key enablers, such as electronic identities, that are the foundation of any new and improved eGovernment service.

3.6. Type of actions and measures

The Action Plan distinguishes three types of actions and related measures to support the implementation of the priorities of the Malmö Declaration. Most of these types of actions can also be undertaken by a group of Member States which aim to work more closely together.

3.6.1. Defining and reaching commonly defined targets with the Member States

This type of action focuses on areas where actions in the field of eGovernment are led by Member States, using their own resources. While the main responsibility for defining targets and reaching them rests with the Member States, the role of the European Commission lies mainly in the stimulation, support and coordination of these activities.

In this context, the proposed measures can include the setting up working groups, the exchange of best practice, studies to generate new knowledge, the exchange of information in order to define and to agree on targets and the formulation of recommendations or guidelines on how to reach them, and the monitoring and evaluation of the achievements of the Member States by the Commission.

3.6.2. *Joint development of services and sharing of results*

This type of action involves the European Commission and the Member States working jointly to develop or deploy new services, typically cross-border services, or to improve or extend existing ones. Typically, the Commission will take the lead in activities where joint resources are used, such as deployment projects or research and development, while the Member States hold the final responsibility for implementing activities that rely more on their own resources.

Such actions may involve research and development projects, the setting up of pilot projects, the roll-out of the results and solutions of pilot projects, the collaborative development of services by Member States, or the transfer of knowledge to the market.

3.6.3. *Creating enabling conditions*

For this, the European Commission can make use of policy actions to leverage the activities of the Member States in eGovernment. This may involve the formulation of guidelines, the development of legal instruments, the setting of standards, the implementation of enabling technologies and provision of (re-usable) technical building blocks as well as ensuring interoperability.

It should be noted that, with respect to the proposed three types of instruments, not all activities should be undertaken simultaneously by all Member States. A limited frontrunner group of Member States could take action and demonstrate the potential of the activities and actions while others could join at a later stage.

4. PRIORITIES AND OBJECTIVES OF THE ACTION PLAN

The eGovernment Action Plan implements the four main priority areas of the Malmö Declaration subdivided in 14 policy priorities. This chapter reviews in depth the policy priorities and seeks to provide evidence to develop sound policies.

4.1. User Empowerment

User empowerment is the key objective of this priority. The new generation of eGovernment services will better meet the expectations of users by ensuring that services are designed around their needs and developed in collaboration with them, whenever possible. They should provide better access to public information, make governments and administrations more transparent and provide effective means of increasing the active involvement of citizens and businesses in the policy-making process through the implementation of newly available technologies. The main consideration is that the customer must always be at the centre of what administrations do.

4.1.1. User centric and inclusive services

The Progress Report on the i2010 eGovernment Action Plan in the EU27+⁷³ has addressed the "need for a more deep-seated transformation in the way governments use ICT to provide services...", by explaining that "the use of services hit a ceiling [...] as far as citizen usage is

⁷³ Millard Jeremy, Shahin Jamal et al. (2009). i2010 eGovernment Action Plan Progress Study. Report for the European Commission, Brussels: Information Society and Media Directorate.

concerned given that citizen services are still largely based on existing silos and a government-centric approach." It is therefore important to identify, assess and consider users' needs and expectations when designing and delivering services. One of the major challenges that should be addressed is the diversity of users of services. It is not possible to create a single service that everyone will eagerly use and be satisfied with.

Instead public administrations should offer tools that are designed around users' needs and provide flexible and personalised ways of interacting with public administrations. Personalised services allow citizens and businesses to perform transactions with most public service providers, and to monitor the progress of administrative actions relating to them. In addition, the usability of eGovernment services should be improved in order to cater for the different needs of users by delivering eGovernment services through multiple channels and by ensuring that new electronic content is also fully available to socially disadvantaged persons.

This group typically consists of people with low income, poor education, marginalised status, or living in isolated locations (rural areas). It still represents a significant part of the European population and it is therefore important to design, implement and provide services that respect accessibility principles and, more specifically, that comply with the WAI guidelines (Web Accessibility Initiative from the World Wide Web Consortium). In addition, service provision for socially disadvantaged groups needs to be improved by working on multi-channel delivery.

The objective of these actions is that public sector websites (and websites providing basic services to citizens) should be fully accessible by 2015. By the same time Member States should have personalised web services in place.

To achieve the above the proposed actions are:

2011-2013	<p>The Commission will support Member States in developing eGovernment services designed around user needs, and in ensuring inclusiveness and accessibility by:</p> <ul style="list-style-type: none"> – agreeing common targets and evaluation criteria with the Member States, – organising exchanges of valuable expertise at national, regional or local level to support additional take-up, – supporting effective and concrete accessibility solutions, compliant with relevant European and international standards when available, through demonstration .
2013	<p>Member States will develop personalised online services including functionalities such as monitoring the progress of transactions with public administrations.</p>

Between 2011 and 2015 the tasks of the European Commission for these actions may include support to the Member States to:

- assist the Member States in defining common targets, corresponding tools and evaluation criteria for user-centricity, accessibility and inclusiveness of eGovernment services. Where appropriate, it will support European standards for eAccessibility and referring to the latest specifications from the Web Accessibility Initiative;
- organise the exchange of knowledge and expertise between Member States about delivering socially inclusive public services including the development of multi-channel strategies;

- organise the exchange of knowledge and expertise between Member States about delivering personalised services, including functionalities monitoring the progress of interactions with public administrations;
- evaluate the achievements of Member States on user-centricity, accessibility and inclusiveness of eGovernment services.

4.1.2. Collaborative Production of Services

Although internet users get increasingly involved in shaping and customising the services they want, the involvement of citizens and businesses in collaborative production and design of eGovernment services is still a relatively unexplored topic. The reason for this is that most European governments still seem cautious to engage third parties to deploy collaborative approaches. Third parties can be businesses, civil society or individual citizens, e.g. software producers facilitating the interaction between administrations and users. The Progress Report on the i2010 eGovernment Action Plan in the EU27+⁷⁴ notes the need "to undergo a transition from an eGovernment 1.0 government-centric phase to a second generation eGovernment 2.0 [...] user-driven phase before further significant take-up and impacts will be seen". The impact of the sharing production of services with others will lead to the creation of more innovative, flexible and personalised services. This will increase the overall effectiveness of eGovernment services and maximise public value. In this respect, the Citizens' Declaration of Malmö⁷⁵ emphasises that the "capacity to collaborate with citizens should become a core competence of government".

In order to achieve this, it should be possible to analyse the possibilities offered by ICT-based collaborative production techniques with the aim of engaging third parties, in developing services. This should lead to new open and collaborative services.

To achieve the above the proposed actions are:

2011	Based on a study, the Commission will first assess how to involve users actively in design and production of eGovernment services and further elaborate recommendations / guidelines with and for the Member States.
2011-2013	The Commission will facilitate exchanges of knowledge and experience between stakeholders, and, agree with Member States on common targets for the roll out collaborative services.

Between 2011 and 2015 the tasks of the European Commission for these actions may include the following:

- initiating a study on the possibilities for developing eGovernment services using methods of collaborative production. The study will assess the user needs and establish a joint mechanism to analyse how and for which purpose collaborative technologies and methodologies can best be implemented in public administrations.

⁷⁴ Millard Jeremy, Shahin Jamal et al. (2009). i2010 eGovernment Action Plan Progress Study. Report for the European Commission, Brussels: Information Society and Media Directorate.

⁷⁵ See: <http://eups20.wordpress.com/the-open-declaration/>

- supporting the Member States in defining targets and measurements for the development and provision of collaborative services;
- facilitating the exchange of experience between Member States and stakeholders such as national, regional and local administrations as well as private and civil parties;
- supporting the Member States in evaluating the mutual achievements in developing and offering services for collaborative production;
- monitoring and evaluating the achievements of Member States in developing and offering open and collaborative services.

4.1.3. *Re-use of Public Sector Information*

Information produced and stored by public administrations represents a massive resource with unique potential for re-use by third parties to create new products and services and to offer consumers more choice and more value for money. Through value added services and new products, the re-use of public information can stimulate public engagement, as well as business innovation, growth and jobs.

There are many issues that need to be addressed to ensure optimal re-use of public sector information. It is often difficult to determine what information is available and under what conditions it can be accessed. The lack of common principles for storing and describing information at various levels of administration and across countries may make it difficult to combine (mash) data from different sources to provide new insights and potentially new services. Re-using information at the European level faces additional linguistic, semantic, regulatory, organisational, and cultural challenges⁷⁶.

The Directive⁷⁷ of 17 November 2003 on the re-use of public sector information (PSI Directive) aims to overcome the barriers that limit the re-use of public sector information. The actions under this priority are linked to the implementation of this Directive. Well implemented, the PSI Directive enables Member States to maximise the value of PSI re-use at national level.

Member States have been required to identify and make public data resources that are readily available for re-use in all pre-existing formats and languages, and to take practical measures, such as the establishment of national PSI portals, to support re-use. Other rules established by the Directive include an obligation to provide clear rules for charging based on re-use-friendly principles, and to apply transparent and non-discriminatory conditions to re-use. While the Directive allows for charging for the information, Member States are encouraged to make their information resources available at – at maximum – marginal costs.

⁷⁶ Villalba-van Dijk Lidia, Ridsdale Helen, van Oranje-Nassau Constantijn (2010). eGovernment Scenario's for 2010 and the preparation of the 2015 eGovernment Action Plan. Preliminary Report, Assumptions Analysis: reconstructing the intervention logic. Prepared for the European Commission, Rand Europe: Brussels.

⁷⁷ Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information, OJ L345/90: 31 December 2003. See: http://ec.europa.eu/information_society/policy/psi/docs/pdfs/directive/psi_directive_en.pdf

Although progress in PSI re-use has been made since the adoption of the PSI Directive, the full potential of PSI still remains underexploited in Europe. Remaining problems concern high prices, unfair competition in the market by public sector bodies, persisting restrictive licensing conditions, lack of transparency, practical problems to identify public sector information resources, and a lack of machine readable formats.

Additional points for action for Member States have been included in the Commission Communication on the review of the application of the PSI Directive⁷⁸. In the context of the Digital Agenda for Europe, the second review of Directive has been signalled as one of the key actions of the initiative.

In order to maximise the potential of PSI re-use, Member States are invited to take proactive deployment measures.

To achieve the above, the proposed actions are:

2011	Member States will agree on a common set of PSI re-use indicators.
2011	The Commission will conduct a study to assess to what extent open data catalogues and/or PSI portals (e.g. data.gov.uk) have been developed and implemented by Member States
2011-2013	The Commission will facilitate exchanges of good practice and awareness-raising activities, and will adopt its own internal PSI strategy based on a review of the PSI Decision.
2011-2012	The Commission will review the PSI Directive, as indicated in the Digital Agenda for Europe, and will consider the possibility of an extended strategy for European PSI.

Between 2011 and 2015 the tasks of the European Commission for these actions may include:

- organising meetings of the PSI Group⁷⁹ where Member States will define and agree on a common set of PSI re-use indicators to be monitored over time, and where Member States can exchange information and best practices.

4.1.4. *Improvement of Transparency*

Transparency of public administration is a means to acquire public support for policies and institutions in the long term. Transparency also involves the use of new technologies to allow users to trace their personal data stored by public administrations, to check who accessed their administrative files and for what purpose, and to gain insight into the reasoning behind actions and the process of decision making. This is by far the most requested feature of eGovernment

⁷⁸ For more information, see http://ec.europa.eu/information_society/policy/psi/index_en.htm

⁷⁹ In 2002, the Commission set up an expert group called PSI Group. It consists of Member State officials, local or regional authorities, and representatives from private sector organisations who meet regularly to exchange good practises of PSI re-use and initiatives supporting PSI re-use and discuss practical issues regarding the transposition of the PSI Directive.

services by citizens. In the Rand⁸⁰ survey of citizens 51% of respondents request this possibility, and the Citizens' Declaration of Malmö also called for more transparency. By providing citizens with more, clearer and better information, administrations will become more accountable for their actions. If applied effectively, transparency can reduce administrative burden, duplication and corruption, and thus increase efficiency and effectiveness. As a result, it will increase trust of citizens and businesses.

Hence, transparency needs to be defined further, especially considering that the public tends to become more demanding. Although many individual Member States have defined goals for transparency, Europe has not yet defined common objectives for transparency. This provides a ground for setting common objectives on a voluntary basis and for sharing experience. On this basis, the European Commission will initiate actions that support reaching commonly defined targets.

The objective is that, depending on their national legislation, by 2013 Member States will publish on-line all public information on government policies, public budgets and expenditures, as well as laws and regulation. In addition, the aim is that EU citizens should be able to check on-line which personal data are kept electronically on them by public administrations. Actions should be in accordance with the Data Protection Directive⁸¹.

To achieve the above the proposed actions are:

2011	The Commission and Member States will set common voluntary transparency targets and exchange available experiences.
2013	Member States and the Commission will provide online access to information on government laws and regulations, policies and finance.
2014	In accordance with Data Protection Directive 95/46/EC, Member States will enable citizens to have electronic access to those personal data that are held on them when available electronically and will inform them electronically whenever such data are being processed by automatic means, in a simple and unambiguous manner.

Between 2011 and 2015 the tasks of the European Commission for these actions may include:

- organising the exchange of best practice examples on transparency enhancing measures with a view to making administrative processes widely accessible;
- stimulating the Member States to provide personal data websites where users can control their personal data.

⁸⁰ Villalba-van Dijk Lidia, Ridsdale Helen, van Oranje-Nassau Constantijn (2010). eGovernment Scenario's for 2010 and the preparation of the 2015 eGovernment Action Plan. Preliminary Report, Assumptions Analysis: reconstructing the intervention logic. Prepared for the European Commission, Rand Europe: Brussels.

⁸¹ OJ L 281, 23.11.1995 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:EN:HTML>)

4.1.5. *Involvement of citizens and businesses in policy-making processes*

The Rand⁸² survey of citizens reveals that a vast majority of citizens feel that their opinion is not sufficiently valued by the government, and they estimate that online tools are an effective means to remedy this situation. New participative Web 2.0 technologies can provide citizens with means to understand legislative processes and to voice their opinions and views on policy issues. This will boost the legitimacy of policies and administrative decisions. By improving the quality of decisions, user involvement in policy has great potential to bridge the perceived gap between governments and citizens.

In order to strengthen participation and democratic decision-making, more knowledge is needed on how online consultations (including blogs and other forms of eParticipation) can actually influence the political discourse and political agenda setting. In fact, how accountability and responsibility is tracked and controlled, and how information is distributed and checked still need to be explored in more detail. Member States are seeking concrete suggestions on how to engage people for an active democracy and how to exploit ICT when dealing with empowered citizens. This also encompasses digital applications for mass involvement of citizens in policy-making, transparent decision-making, accessible legislation processes and digitally interactive relations between politicians and citizens.

At EU level, the Treaty of Lisbon defines the principles of democratic governance of the EU one of which is participatory democracy (notably the Citizens' Initiative provisions in Article 11). These new forms of interaction between citizens and the European Institutions in the EU's decision-making processes provide new impetus for active user involvement in policy making and create a new institutional framework for developments. This will support the implementation of 'eParticipation' tools for citizens.

The Malmö Declaration proposes to actively develop and promote more useful and better ways for businesses and citizens to participate in the policy processes. Some actions in this context have already been initiated in 2010 and will be pursued under this Action Plan.

In 2010, the European Commission has launched several FP7 projects on governance and policy modelling as well as eParticipation pilots under the CIP ICT PSP programme, supporting the involvement of stakeholders in policy-making processes and productive collaboration. These projects provide a base for implementation schemes and the exchange of best practices. The first results of projects launched under the CIP ICT PSP and FP7 programme should be disseminated by the European Commission to administrations at local, national and European level. In addition, the availability of operational participative services based on pilot projects in Member States needs to be assessed.

The intended outcome of these actions is the availability of operational services in the Member States.

To achieve the above the proposed actions are:

2011	The Commission will collaborate with Member States on developing the electronic
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⁸² Villalba-van Dijk Lidia, Ridsdale Helen, van Oranje-Nassau Constantijn (2010). eGovernment Scenario's for 2010 and the preparation of the 2015 eGovernment Action Plan. Preliminary Report, Assumptions Analysis: reconstructing the intervention logic. Prepared for the European Commission, Rand Europe: Brussels.

	service to support ‘citizens initiatives’ (as foreseen by Art. 11 of the Treaty on European Union).
2011	The Commission will assess existing research projects and launch new ones under the ‘ICT for Governance and Policy Modelling’ objective of the 2011-2012 FP7 Work Programme and ensure further exchanges of knowledge and best practice.
2011-2015	Member States, the Commission and other representative institutions such as parliaments should develop services that involve stakeholders in public debates and decision-making processes building on pilots and demonstration.

Between 2011 and 2015 the tasks of the European Commission for these actions may include the following:

- organising the exchange of experiences between Member States and stakeholders on services that involve stakeholders in public debates and decision-making processes;
- following-up the CIP ICT PSP pilots on eParticipation;
- following-up the evaluation of the FP7 research projects on policy modelling and governance;
- making available the results of eParticipation projects under the CIP and the research projects on policy modelling and governance;
- assessing the availability of participative services in Member States.

4.2. Internal Market

eGovernment should support the further construction of the internal market. There is a need to do ground breaking work: the delivery of cross-border services and the stimulation of mobility for citizens and businesses. Substantial problems remain to be solved in the transferability of public services such as those related to social security rights, health benefits, pensions and other personal services, or to facilitate eProcurement across borders. The barriers which still exist can be broken down by means of better and more effective eGovernment services, by facilitating mobility for citizens and businesses, and by creating synergies in eGovernment solutions.

In addition to this, cooperation among dispersed organisations in different countries, with different cultures, jurisdictions, legal traditions, incentives and concerns, obviously makes cross-border cooperation a challenge. With this in mind, the aim of this priority is to support the easier provision of services that can be offered to all businesses and citizens across borders in the internal market.

4.2.1. Seamless Services for Business

The objective of this priority is to increase business mobility by supporting cross-border eProcurement and capitalising on the implementation of the Services Directive. Actions in these areas help businesses to interact and do business with public administrations by electronic means, as well as across borders.

The first objective of this priority addresses an interoperable and easily accessible eProcurement infrastructure, so that European companies can provide their services more easily to clients in other Member States. Currently, public procurement represents approximately 16% of the EU's GDP and the value of public procurement advertised at EU level amounts to around €1500 billion. Therefore, Europe has substantial opportunity to benefit from an internal market approach⁸³. Nevertheless, the lack of common standards for electronic data exchange is considered an obstacle for companies to participate without barriers in public procurement processes. An interoperable eProcurement infrastructure would result in economies of scale, so that European companies could provide their services more easily to clients in other Member States. This will contribute further to the implementation of Public procurement directives 2004/18/EC and 2004/17/EC and of the Action Plan for electronic public procurement adopted in 2004 (COM(2004)841).

In this regard, the Large Scale Project PEPPOL⁸⁴ has contributed to generating solutions to interoperability challenges in key eProcurement processes. As a next step, a plan for the long-term sustainability for concrete eProcurement solutions needs to be established and implemented in order to reach a critical mass.

The second objective of this priority aims to support the activities that develop further and go beyond the implementation of the Services Directive⁸⁵. The Services Directive (Directive 2006/123/EC) obliges Member States to ensure that "Points of Single Contact" (PSCs) are fully functioning after the end of 2009. It is the first time that Member States have a horizontal legal obligation to put in place eGovernment services. The PSCs are destined to become an online gateway through which businesses can exercise their rights in all EU countries by electronic means.

As a next step services should be developed in the framework of the Large Scale Pilot SPOCS⁸⁶. This would entail the extension of the application of the Services Directive to business areas other than those currently covered by this Directive. This should eventually lead to a "second generation" of Points of Single Contact. To this end, PSCs need to be developed by enhancing their functionality, making them more user-friendly (including the use of other languages, customised information, reducing the amount of information required from service providers), and ensuring enhanced cross-border accessibility and the use of eSignatures, eIdentification and eDocuments.

The primary objective of these actions is to achieve a cross-border and interoperable eProcurement infrastructure and to make it as easy as possible for businesses to provide and use cross-border services in the EU.

To achieve the above the proposed actions are:

2011	Member States and the Commission will assess outcomes of PEPPOL and SPOCS and ensure sustainable follow up.
2011	The Commission will issue a White Paper on practical steps to inter-connect

⁸³ Smarter, Faster, Better eGovernment, 8th Benchmark Measurement, November 2009

⁸⁴ PEPPOL (Pan-European Public Procurement Online) (<http://www.peppol.eu>)

⁸⁵ OJ L 376, 27.12.2006 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006L0123:EN:NOT>)

⁸⁶ SPOCS (Simple Procedures Online for Cross-border Services) (<http://www.eu-spocs.eu>)

	eProcurement capacity across the internal market.
2012-2014	Member States should roll out cross-border services based on the results of PEPPOL and SPOCS.
2013	Member States will ensure that a ‘second generation’ of points of single contact will function as fully fledged eGovernment centres beyond the requirements and areas covered by the Services Directive.

Between 2011 and 2015 the tasks of the European Commission for these actions may include the following:

- disseminating and exploiting knowledge and expertise produced by the SPOCS Large Scale Pilot;
- carrying out a high level study on the functioning of the PSC (including the eProcedures) and their further enhancement. It will look at the state of play, identify the main challenges and propose concrete ways of addressing them;
- following-up on the findings of the study on the PSCs and also assessing the need to take further initiatives;
- disseminating and exploit knowledge and expertise produced by the PEPPOL Large Scale Pilot, including the promotion of successful eProcurement platforms and applications, and supporting the re-use of successful solutions across the internal market;
- preparing a White Paper with concrete steps on how to inter-connect eProcurement infrastructure. This could include commitments to review EU procurement legislation if needed to provide a clearer environment for the operation of on-line procurement and remove bottlenecks to on-line completion of procurement related processes (authentication); initiatives to promote standardised and interoperable solutions particularly in critical pre-award phases (tendering/submission) where limited progress has been made to date; actions to promote use of (PEPPOL-generated) solutions to interoperability challenges in key eProcurement processes. If the PEPPOL Large Scale Pilot is successful, implement a sustainable plan and define a roadmap for a trans-national infrastructure for eProcurement.

4.2.2. *Personal Mobility*

The overall aim of the actions in this area is to increase citizen mobility across Europe. According to the Monti report⁸⁷ intra-EU mobility concerns more than 11.3 million Europeans. For example, around 350 000 Europeans per year engage in an international marriage with a national of another Member State. Every year 180 000 European students move to another Member State for the Erasmus programme or to attend a post graduate degree. However, according to the Monti report progress in this area has been slow.

⁸⁷ Mario Monti: A new strategy for the Single market at the service of Europe's economy and society (2010) (http://ec.europa.eu/bepa/pdf/monti_report_final_10_05_2010_en.pdf)

In the Malmö Declaration, actions are also based on the European Directive on the right of citizens of the Union to move and reside freely within the territory of the Member States⁸⁸ and on the fundamental freedom of free movement of persons.

eGovernment can reduce the costs as well as the legal and administrative burdens of mobility. Although these administrative burdens are in reality only a fraction of people's concerns when they decide to move to a different country, eGovernment may facilitate it by making mobility cheaper and less burdensome, as users should be able to complete all administrative procedures without the necessity to physically appear in foreign offices. In addition, possible data on citizens could be exchanged between administrations without requiring citizens to submit data already stored by public administrations. In the Rand⁸⁹ survey, a secure delivery (and storage) system for information and documents is by far the eGovernment service which is most requested by citizens in terms of concrete applications, and it is second in the list of most requested services by businesses.

In the area of citizens the focus will be on facilitating the development of services enhancing their mobility with regard to study, work, health care, residence and retirement. The aim of these actions should be interoperable services for secure cross-border exchange and safe storage of electronic information (eDelivery), including functionalities such as receipt confirmation and eSignatures. eDelivery enables citizens to communicate, as well as send and receive electronic documents and information to and from public administrations.

The objective is to achieve interoperability of electronic delivery of mobility documents and information in the above mentioned areas by 2015.

To achieve the above the proposed actions are:

2012-2014	The Commission will support the exchange of best practices and coordinate the efforts of Member States to jointly develop and set-up interoperable eDelivery services.
2015	Member States shall provide cross-border and interoperable eDelivery services for citizens to e.g. study, work, reside, receive health care and retire anywhere in the European Union.

Between 2011 and 2015 the tasks of the European Commission for these actions may include the following:

- coordinating and stimulating the activities and efforts of the Member States to set-up a system of secure cross-border eDelivery services;

⁸⁸ Directive 2004/38/EC of the European Parliament and of the Council of 29 April 2004 on the right of citizens of the Union and their family members to move and reside freely within the territory of the Member States amending Regulation (EEC), OJ: L 158/ 77

⁸⁹ Villalba-van Dijk Lidia, Ridsdale Helen, van Oranje-Nassau Constantijn (2010). eGovernment Scenario's for 2010 and the preparation of the 2015 eGovernment Action Plan. Preliminary Report, Trend analysis. Prepared for the European Commission, Rand Europe: Brussels.

- supporting the coordination between the Member States to achieve interoperability of the electronic delivery of mobility documents and information when countries use different formats;
- coordinating the activities of the Member States leading to a better integration of eGovernment services related to study, work, health, residence and retirement.

4.2.3. EU-wide implementation of cross-border services

The objective is to develop seamless cross-border eGovernment services that correspond to well defined needs – enabling entrepreneurs to set up and run a business anywhere in Europe independently of their original location, and allowing citizens to study, work, reside and retire anywhere in the European Union. These services should be supported through the CIP ICT PSP.

The CIP ICT PSP Large Scale Pilots (such as PEPPOL, STORK, SPOCS, epSOS⁹⁰ and possible new ones such as on eJustice and eEnvironment) are designed to remove administrative barriers to ensure that services can be offered on a non-discriminatory basis to all businesses and citizens across Europe. The next step is that these projects should benefit from each other's synergies by re-using existing infrastructures, by sharing results from the Large Scale Pilots, and by identifying gaps and opportunities in order to facilitate interoperability and to maximise their impact. In this way, development efforts may have to be aligned. Further emphasis should be on the exploitation of the results of the pilots and on the use of these results for setting up operational services. This includes investigating how strategic partnerships with third parties can be used to find appropriate solutions.

In doing so, it is necessary to assess the real social and economic needs, costs and benefits, and barriers for future cross-border services where interoperability is key. Based on the assessment, Member States will agree on a list of key eGovernment cross-border services that have the potential to be available in 27 Member States by 2015. The Malmö Declaration already puts forward the idea of cross-border services for starting and running a business.

In this context, the "Interoperability Solutions for European Public Administrations" (ISA) programme is an important instrument that could analyse and suggest ways to ensure the sustainability of common services and generic tools developed and demonstrated in the Large Scale Pilots.

These actions will also gain insight in the administrative procedures related to cross-border life-events or life-stages.

The aim is seamless, interoperable and sustainable cross-border eGovernment services that can be offered to all businesses and citizens across Europe by 2015⁹¹.

To achieve the above the proposed actions are:

2011	The Commission will conduct a study with the Member States, on the demand for cross-border services and assess the organisational, legal, technical and semantic
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⁹⁰ epSOS (Smart Open Services for European Patients) (<http://www.epsos.eu>)

⁹¹ Except for the action on life events, all actions in this paragraph are defined in the Digital Agenda for Europe.

	barriers.
2011	Member States will agree on a number of key cross-border public services to be rolled out between 2012 and 2015 and will identify appropriate life events/stages ⁹² .
2012-2015	The Commission will support and coordinate the efforts of Member States to roll out Large Scale Pilot projects and to start new ones, while encouraging coordination and re-use of results and solutions between them.
2012-2015	The Commission will work with Member States and stakeholders to implement cross-border eEnvironment services

Between 2011 and 2015 the tasks of the European Commission for these actions may include the following:

- initiating a study in order to assess the needs for further cross-border services, where interoperability is key. This analysis should comprise the organisational, legal, technical or semantic barriers to deploy such services. This study will also make a cost-benefit analysis for services in the business and citizen community and assess obstacles to such services. As a conclusion, this analysis should propose options for how the internal market can stimulate the mobility of citizens and businesses and identify the most potential cross-border services;
- supporting experience sharing and the exchange of good practice between running and new pilots (such as PEPPOL, STORK, SPOCS, epSOS and possible new pilots on eJustice and eEnvironment) in order to benefit from synergies by re-using existing infrastructures and building blocks⁹³, sharing results and by identifying gaps and opportunities in order to facilitate interoperability and to maximise their impact⁹⁴;
- supporting and coordinating the efforts of Member States to continue and roll-out existing Large Scale Pilots;
- supporting the efforts of the Member States to develop new cross-border services, in particular those that correspond to identified needs capitalising on past investments;
- supporting the long-term sustainability of services developed and demonstrated in pilot actions;
- organising workshops to discuss the potential for future cross-border services.

4.3. Efficiency and Effectiveness of Governments and Administrations

This priority includes the reduction of administrative burden and introduces the topic of organisational change on the European eGovernment agenda. The latter includes the horizontal integration of processes across administrative boundaries, the vertical integration of

⁹² See Digital Agenda for Europe

⁹³ Such as the DAE actions on eID, Points of Single Contact, and eSignatures.

⁹⁴ In this regard, in May 2010, a meeting with all the running Large Scale Pilots took place; another meeting is foreseen.

back and front-end processes as well as the collaboration with private and civic parties. In addition, this priority expresses a legitimate concern to make the best use of ICT to reduce the carbon footprint.

4.3.1. *Improving Organisational Processes*

Improving organisational processes concerns internal efficiency and effectiveness in administrations. Along with outdated eGovernment infrastructures and the lack of key enablers, ill-defined institutional boundaries and working processes represent a net extra cost to administrations. These aspects are mainly due to a lack of integration between inherited administrative procedures and organisation schemes. Investing in new methods of working and changes in back-offices will reduce operational costs and increasing efficiency in the delivery of government services in the long term. For example, the Austrian government reduced the costs of filing and archiving by 38%⁹⁵. However, in the short term, the investments might lead to an overall increase in government spending.

In a climate of economic austerity, it is important to generate knowledge on improving organisational processes and the implementation of key enablers. The role of the European Commission will be to launch European training and learning experiments on organisational change along with a programme for staff exchange between administrations in different Member States. The ePractice.eu portal could play a pivotal role in enabling the learning experiences. Besides ePractice.eu, the OSOR and SEMIC are platforms which also support the Member States' eGovernment practitioners and possible synergies should be exploited.

In addition, the Commission will lead by example in implementing smart eGovernment services. These services will support streamlined administrative processes, facilitate information sharing and simplify interaction with the Commission, thereby empowering users and improving the efficiency, effectiveness and transparency of the Commission.

In addition to this, the objective of the eCommission 2011-2015 Action Plan is to evolve from today's 'Integrated Commission' to tomorrow's 'Transformed Commission' whereby public services are built from the viewpoint of external and internal users, rather than based on the organisation's structure, with completely automated end-to-end processes crossing organisational boundaries, where information is shared in transparency among services, and cross-DG working groups collaborate and share knowledge and expertise.

To achieve the above the proposed actions are:

2011	The Commission will facilitate the exchange of experience, encouraging re-use of successful solutions and applications and exploring new approaches to support the Member States in improving organisational processes
2011-2012	The Commission will transform the ePractice.eu portal into an effective experience exchange and information tool for Member States' eGovernment practitioners.
2013	The Commission, in close cooperation with Member States, will set up a programme for staff exchanges between administrations in different Member States.

⁹⁵ Villalba-van Dijk Lidia, Ridsdale Helen, van Oranje-Nassau Constantijn (2010). eGovernment Scenario's for 2010 and the preparation of the 2015 eGovernment Action Plan.

2011-2015	The Commission will implement an ambitious eCommission 2011-2015 action plan, including full electronic procurement.
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Between 2011 and 2015 the tasks of the European Commission for these actions may include the following:

- facilitating an exchange of best practices between Member States on the benefits of organisational processes and generating knowledge on the implementation of key enablers;
- stimulating the learning experiences in the Member States through the coordination of staff exchange programmes;
- improving the dissemination of knowledge and expertise by providing access to available didactic and other material on the subject;
- organising workshops with experts in order to rethink the functions of ePractice.eu, OSOR and SEMIC and to exploit synergies between these platforms;
- assessing the eCommission 2006-2010 achievements, defining the vision for the eCommission 2011-2015, and preparing the associated roadmap for the envisaged actions under the umbrella of the eCommission 2011-2015.

4.3.2. *Reduction of Administrative Burdens*

The Industry Declaration of Malmö⁹⁶ states that "the reduction of administrative burden for citizens and businesses should be one of the key raisons d'être for eGovernment". The development of services based on workflows instead of the traditional 'silo' approach of public administrations can lead to substantial efficiency gains and a reduction in administrative burdens. Users can save time and money due to the simplification or elimination of processes and requirements, e.g. the multiple submissions of similar information for both businesses and citizens.

'Once only registration of data' is number one on the wish list of citizens in the Rand Study⁹⁷. The citizens' survey reveals that 41% of users want to have to provide their personal data once only, so that it can be re-used in subsequent interactions with public administrations. Despite some concerns regarding privacy protection and access to their personal data, users do understand that they will profit from such functionality as they will save time with other possible gains still to emerge.

The High Level Group of Independent Stakeholders on Administrative Burdens has in many of its opinions emphasised the importance of the efficient use of eGovernment and ICT as tools for reducing the administrative burden for enterprises. In this context, in January 2007

⁹⁶ See: http://www.digitaleurope.org/index.php?id=34&id_article=390

⁹⁷ Villalba-van Dijk Lidia, Ridsdale Helen, van Oranje-Nassau Constantijn (2010). eGovernment Scenario's for 2010 and the preparation of the 2015 eGovernment Action Plan. Preliminary Report, Trend Analysis: Prepared for the European Commission, Rand Europe: Brussels

the European Commission presented an ambitious Action Programme⁹⁸ for Reducing Administrative Burdens in the European Union. The European Council endorsed the Programme in March 2007 and agreed that administrative burdens arising from EU legislation, including national measures implementing or transposing this legislation, should be reduced by 25 % by 2012.

The outcome of these actions should be that the Member States to eliminate as many unnecessary administrative burdens as possible, especially where electronic procedures and communications can replace paper-based procedures. This can be done, for example, through the implementation of the principle of 'once only' registration of data by 2015 under the condition that data protection and privacy protection requirements are respected.

Another important aspect of reducing burden for businesses and citizens would be to introduce functions for automatic statistical data collection and reporting into eGovernment solutions. Statistics on the use of the electronic services would be created as part of the normal business process. Measures would have to be taken to assure data confidentiality. Following this approach could lead to a significant reduction of burden on the one hand and would satisfy growing need to providing statistical evidence and benchmarking on the other hand.

To achieve the above the proposed actions are:

2011-2013	The Commission will organise the sharing of experiences with Member States on the implementation of the 'once-only' registration principle and of electronic procedures and communications having become a dominant channel for delivering eGovernment services, conduct a cost-benefit analysis and designing a roadmap for further implementation.
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Between 2011 and 2015 the tasks of the European Commission for these actions may include the following:

- assessing the costs and benefits of the principle of 'once only' registration of data and designing a roadmap to implement the principle of 'once only' registration of data by businesses and citizens;
- evaluating and assessing the achievements of the Member States in implementing the principle of 'once only' registration of data;
- exploring and assessing possibilities for integrating statistical data collection tools into eGovernment solutions considering necessary harmonisation process for reporting purposes;
- stimulating the exchange of information and best practice examples on how electronic procedures and communications can replace paper-based procedures;

⁹⁸ COM(2007) 23
[lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0023:FIN:EN:PDF](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0023:FIN:EN:PDF)

(<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0023:FIN:EN:PDF>)

- evaluating the impact of ICT usage in achieving the objectives of the Action Programme for reducing administrative burdens;
- exploring through the ISA programme the possibilities offered by ICT technologies to support an effective and efficient implementation of new legislation by assessing the ICT implications of new legislation on existing or new ICT systems.

4.3.3. Green Government

The Malmö Declaration assumes that the use of ICT by governments can play a leading role in the fight against climate change by contributing to the reduction of carbon emissions. In fact, emissions can be decreased by reducing the energy consumed directly by ICT equipment. At European level, the Commission Recommendation⁹⁹ on mobilising information and communications technologies to facilitate the transition to an energy-efficient, low-carbon economy of 9 October 2009 includes public organisations in its framework.

Although the Commission Recommendation does not contain specific measures pertaining to eGovernment, this Action Plan underlines that eGovernment can play a key role in leading to a greener environment. Examples of green government are:

- Considerable energy savings from what is called dematerialisation or substitution, by replacing offline administrative processes with on-line applications and services, and the use of electronic delivery;
- The public sector can stimulate the demand for notably green ICT products and services through public procurement;
- Promoting teleworking, telephone conferencing and virtual meetings;
- Shared services, as well as developing power-efficient ICT systems could be promoted.

To this end, the European Commission together with Member States will assess the possibilities for administrations to reduce their carbon footprint and agree on actions and evaluation procedures for the reduction of the carbon footprint of administrations. Energy saving targets should be in line with the Commission Recommendation on mobilising ICTs to facilitate the transition to an energy-efficient, low-carbon economy.

The aim of the actions will be that the carbon footprint of administrations in Member States will be reduced by 2015.

To achieve the above the proposed actions are:

2012	The Commission will conduct a study on the potential of eGovernment to reducing carbon footprint of governments including best practices
2013	Member States should develop and agree indicators and evaluation procedures for measuring the reduction of the carbon footprint of their administrations as a result

⁹⁹ COM(2009) 111
 (http://ec.europa.eu/information_society/activities/sustainable_growth/docs/com_2009_111/com2009-111-en.pdf)

Between 2011 and 2015 the tasks of the European Commission for these actions may include the following:

- supporting a collaborative effort of the Member States to define green ICT targets and guidelines for Member States;
- organising the exchange of expertise on how eGovernment services contribute to reducing public administrations' carbon footprint and how to measure this contribution;
- coordinating an assessment of the Member States performance in reducing the carbon footprint of their administrations.

4.4. Pre-conditions for Developing eGovernment

A number of pre-conditions need to be fulfilled to allow for secure and efficient electronic collaboration between Member States. Actions in this respect include the development, deployment and interoperability of ICT infrastructures. The pre-conditions take into account the benefits of open specifications as a means to promote interoperability, the key enablers for improving existing and developing new services, and the innovation in eGovernment service architectures brought about by research and development, pilot projects and other implementation schemes.

4.4.1. Open Specifications and Interoperability

Europe does not yet reap the maximum benefit from interoperability. When establishing National eGovernment Services, there is a risk that Member States opt for incompatible solutions and that new electronic barriers emerge. Member States and the Commission should increase their efforts to avoid market fragmentation by striving towards interoperability.

Interoperability fosters the delivery of cross-border public services and is an important pre-condition for the open, flexible delivery of eGovernment services to citizens and business. It enables collaboration between administrations in Europe, as it facilitates the exchange of data across Member States. This involves technical as well as semantic interoperability, as the latter in particular allows for the seamless exchange of administrative data across Member States. The role of ICT standards and specifications is essential to achieve interoperability in the area of eGovernment.

The Malmö Declaration emphasises the need to pay "particular attention to the benefits resulting from the use of open specifications in order to deliver services in the most cost-effective manner." The Granada Declaration notes in addition that it is important to "embed innovation and cost effectiveness into eGovernment through the systematic promotion of open standards and interoperable systems, development of EU wide eAuthentication schemes and proactive development of eInvoicing, eProcurement (and pre-commercial procurement)."

Open specifications have advantages in terms of securing business model freedom, as well as providing a number of other benefits including faster innovation, lower costs, and lower entry

barriers. Nevertheless, public administrations decide which formal specifications they select to ensure interoperability.

The Commission will further improve the conditions for interoperability and open specifications. In addition, the Commission aims for a level of smart interoperability that maximises synergies at both national and EU levels. Member States have already made investments. Consequently, the approach towards Member States fully takes into account the subsidiarity principle.

By 2010, the Commission will have adopted an ambitious European Interoperability Strategy (EIS¹⁰⁰) and the European Interoperability Framework (EIF¹⁰¹) to be drawn up under the ISA programme (Interoperability Solutions for European Public Administrations¹⁰²). ISA will implement activities to make the EIF and EIS concrete through a rolling work programme.

EIS will build on experience in the fields of trusted information exchange, architecture and interoperability awareness. The strategy focuses on actions to foster cross-border interoperability by recommending how to improve cross-border interoperability, providing common tools and services in support of interoperability, and proposing a governance model in order to maintain an overview of initiatives.

The EIF will recommend, among others, that where possible, public administrations use open specifications when establishing public services. Member States should follow the EIF in their activities while designing, implementing and using ICT systems. Failing to do so, might hinder or significantly prolong the process of overcoming the difficulties in data exchange between ICT systems across Europe. Efficiency gains as well as cost savings may also be limited as a result.

The aim is a common strategy for achieving interoperability at European level and for the Member States to align their national interoperability framework with the European Interoperability Framework and related policies.

To achieve the above the proposed actions are:

2011-2015	The Commission (via the ISA programme) will implement activities to put into action the European Interoperability Framework (EIF) and the European Interoperability Strategy (EIS) (adoption of the EIF and EIS expected in 2010).
2012	The Commission will organise exchanges of expertise and promote the re-use and sharing of solutions to implement interoperable eGovernment services. This includes establishment of interfaces to gain access to and use authentic national sources.
2013	Member States should have aligned their national interoperability frameworks to the EIF ¹⁰³ .

¹⁰⁰ <http://ec.europa.eu/idabc/en/document/7772>

¹⁰¹ <http://ec.europa.eu/idabc/en/document/7728>

¹⁰² Interoperability solutions for European public administrations (ISA) (OJ L 260, 3.10.2009, p. 20).

¹⁰³ This action is defined in the Digital Agenda for Europe.

Between 2011 and 2015 the tasks of the European Commission for these actions may include the following:

- encouraging the Member States to re-use and share solutions and to collaborate on the development of common solutions when implementing eGovernment services;
- encouraging the ICT industry to cooperate on the development and emergence of open specifications in the domain of public services for the re-use by all stakeholders;
- fostering an agreement between the Member States on the formalised specifications to be used to ensure technical interoperability when establishing cross-border eGovernment Services.

4.4.2. Key Enablers

Electronic identification (eID) technologies and authentication services are essential for the security of electronic transactions (in the private and the public sector), and today the most common way to authenticate is by the use of passwords. For many applications this may be sufficient, but more secure and privacy protected solutions are increasingly needed¹⁰⁴. Europe needs in particular better administrative cooperation to develop and deploy cross-border public online services; this should include practical eIdentification and eAuthentication cross border services.

In general, electronic identification (eID) is the key enabler for many services: registration of personal data, provision of personalised services, automatic service delivery and the simplification of administrative and commercial transactions including billing and payment procedures. It is expected that in the future digital society electronic identity management will be expanded both in the private and in the public sector to domains such as eHealth, eCommerce, finances, transport, travel and web 2.0 communities.

Electronic Identification allows for significant quality improvements in eGovernment service provision, such as the 'once only' registration of data and the provision of personalised or automated services. It is also the key to combine openness and flexibility with an adequate protection of privacy and increased security in electronic environments. The results of the Rand Study¹⁰⁵ reveal that an electronic identity management (eIDM) system ranks in the top 3 of most valued eGovernment facilities by businesses and citizens."

In order to achieve this, an interoperable infrastructure for eIDs should be set up that takes into account multiple identity instances, from government-accredited to commercially accepted, and ranging from near-anonymity to strong and unambiguous identification. This should start from a user-controlled and privacy-protecting perspective and provide the basis for accountability and innovative applications in an open and competitive market.

The role of the European Commission is to support the creation of conditions for the development of such an interoperable eID infrastructure. There are a number of barriers for

¹⁰⁴ Which is why the Commission has proposed a European Strategy on Identity Management under the Stockholm Programme - COM(2010) 171.

¹⁰⁵ Villalba-van Dijk Lidia, Ridsdale Helen, van Oranje-Nassau Constantijn (2010). eGovernment Scenario's for 2010 and the preparation of the 2015 eGovernment Action Plan. Preliminary Report, Trend Analysis. Prepared for the European Commission, Rand Europe: Brussels.

the implementation and acceptance due to fragmentation in the internal market, and a lack of user control, transparency and interoperability of eID. This work will complement and add to the existing European Action Plan for eSignatures and eIdentification¹⁰⁶, as well as the revision of the eSignature Directive planned in 2011.

Currently, considerable progress is being made on the technical implementation and mutual recognition of interoperable electronic identity management in the EU, through the ICT PSP Large Scale Pilot STORK¹⁰⁷.

To this end the Commission will propose a Council and Parliament Decision to ensure mutual recognition of eIdentification and eAuthentication across the EU based on online 'authentication services' to be offered in all Member States (which may use the most appropriate official citizen documents – issued by the public or the private sector).

As a next possible step, the Commission may, amongst other related activities, contribute to the joint development with the Member States of an EU-wide initiative to implement an eID management infrastructure¹⁰⁸.

eID is closely linked to the interoperability of services based on public and business registers enabling secure cross-border exchange of sensitive personal data between Member States. Interested Member States should develop and test such services, in compliance with data protection requirements and obligations.

The outcome of these actions should be a framework for eID that would build on the results of the on-going CIP Large Scale Pilots, in particular STORK.

The aim should be an eID framework that allows for secure and reliable electronic identification and authentication throughout the EU, complies with the data and privacy protection provisions, and is mutually recognised by all Member States.

To achieve the above the proposed actions are:

2011	The Commission will propose a revision of the eSignature Directive with a view to providing a legal framework for cross-border recognition and interoperability of secure eAuthentication systems ¹⁰⁹ .
2012	The Commission will propose a Council and European Parliament Decision to ensure mutual recognition of eIdentification and eAuthentication across the EU, based on online 'authentication services' to be offered in all Member States (which may use the most appropriate official identification documents — issued by the public and private sectors) ¹¹⁰ .
2012-2014	Member States should apply and roll out the eID solutions, based on the results of STORK and other eID-related projects.

¹⁰⁶ <http://ec.europa.eu/idabc/en/document/7768>

¹⁰⁷ STORK (Secure identiTy acrOss boRders linKed) (<https://www.eid-stork.eu/>)

¹⁰⁸ COM(2009) 116 final: A Strategy for ICT R&D and Innovation in Europe: Raising the Game.

¹⁰⁹ This action is defined in the Digital Agenda for Europe.

¹¹⁰ This action is defined in the Digital Agenda for Europe.

Between 2011 and 2015 the tasks of the European Commission for these actions may include the following:

- launching a thematic network on eID. The outcome is expected to be a roadmap for the implementation of interoperable identification including steps to overcome the barriers for its implementation, and the barriers concerning mutual recognition;
- exploring the possibilities for an EU-wide initiative to implement an effective eID management infrastructure;
- validating the common specification for the eIdentification and eAuthentication models developed by STORK and organising the roll-out of the STORK Large Scale Pilot as an operational interoperability framework for eID in as many countries as possible;
- supporting activities required for the preparation of the Council and Parliament Decision on mutual recognition of all electronic identification and authentication in the EU (e.g. studies, consultations, etc);
- assessing the results of ongoing initiatives that aim at the interoperability of services based on public and business registers, and investigating whether further pilots will be needed.

4.4.3. *Innovative eGovernment*

Among other initiatives on ICT innovation, services in the cloud and service-oriented architecture (SOA) are technical and innovative approaches to construct open, flexible and collaborative eGovernment services while at the same time lowering ICT costs.

Cloud computing is an emerging approach of shared IT infrastructure in which large pools of systems are linked together to provide IT services on demand. While concerns about dependability, as well as security-related issues still need to be resolved, clouds are increasingly being used by businesses and citizens. The introduction of cloud computing in public administrations will have an impact on IT operations and development models. The public sector should leverage the concept as well. Cost reduction due to the standardisation of processes will become a major driver for establishing public services in the cloud. This concerns not only the infrastructure level, but also the service creation level.

SOA, when pushed to the extreme, is a key enabler for transforming government agencies into user-centric driven entities. It supports the transformation of administrative processes into a set of linked services or repeatable tasks that can be accessed over a network whenever and wherever needed. SOA will enable public administrations to quickly adapt to changing (e.g. regulatory) requirements.

Additionally, public administrations will need to take actions for upgrading to IPv6 relevant eGovernment infrastructures (portals, websites, applications, etc.) and on-line services of public interest, in view of the depletion of IPv4 addresses. This uptake of IPv6 will be beneficial for public authorities in Member States to foster innovative, efficient and accessible

applications and services¹¹¹. Therefore IPv6 deployment for governments (e.g. to enable IPv6 on public sector websites and eGovernment services) will be supported by the European Commission.

A European “GovCloud Initiative” may promote the availability and usage of convenient, on-demand access to shared resources and services for the provision of eGovernment services. In addition, the innovative approaches of SOA allow to identify the different functionalities of eGovernment services and to build ICT components or 'objects' around them, which can be combined with each other to construct new services.

The defined actions are expected to contribute to the promotion of innovation in eGovernment services, effective delivery of services, re-use of public services, including public sector information and the reduction of IT costs. Direct, measurable effects are to be expected in terms of the financial resources and energy required to run data centres within public administrations. Promoting a shared-resources approach will also heavily impact the effectiveness and efficiency of service provision by easing the flow of information and the re-use of data and applications, including the re-use of existing granular services.

The aim will be that new technical and innovative eGovernment approaches will be widely available and used in Europe's administrations by 2015.

To achieve the above the proposed actions are:

2011	The Commission will launch a study and recommend action on how to apply emerging technologies and paradigms (such as SOA and clouds of public services) in the public sector.
2011	The Commission will launch activities under the CIP programme to support administrations to pilot the upgrade to IPv6, thereby creating showcases and new momentum for moving to IPv6 on a large scale.
2012	The Commission will launch pilots to demonstrate how public administrations can deliver eGovernment services in a more flexible and efficient way through the use of innovative architectures and technologies.

Between 2011 and 2015 the tasks of the European Commission for these actions may include the following:

- organising the exchange of expert opinions (workshops) and launching a study to explore the possibilities offered by new architectural approaches and the options available with a focus on their costs and benefits;
- investigating the areas where further research will be needed;

¹¹¹ In line with COM(2008) 313, the Commission will prepare a Staff Working Paper in 2011 identifying any follow-up actions that may be required.

- launching pilot(s) to demonstrate the possibilities and benefits of the innovative architectures and technologies, including the sharing of components with the Member States' administrations and other service developers;
- evaluating the study results and defining follow-up actions with a view to implementing new paradigms, including exchanges of knowledge and experience.

5. GOVERNANCE

5.1. Monitoring Progress

The overall progress of the Action Plan and of eGovernment in general will be measured annually, using an appropriate mix of instruments (benchmarking, bench-learning, self-assessment) and methodologies (web research, public data analysis, user testing, interviews).

In addition to these EU-wide exercises, Member States shall share with the European Commission and other Member States any benchmarking initiatives conducted within their country. This will enrich the knowledge base and also enable the development of common measurement exercises among interested parties. All this taken together shall constitute the basis of an eGovernment benchmarking framework in line with the goals of this eGovernment Action Plan.

The aim is to have a good picture of how the EU is progressing and at the same time benefit from the lessons learned as much as possible. For this reason, the measurement will be complemented by the active and intense exchange of experience between Member States and the Commission (ePractice, thematic workshops). To this end active learning communities will be established in ePractice.eu.

The Commission will continue to support and develop the ePractice.eu portal as the place where eGovernment professionals can meet, share and learn from real life experiences. This platform has already proven to be a success in terms of users, cases and specialised communities. The Commission intends to continuously enhance the quality of the portal, in particular search facilities, making the most of web 2.0 technologies, increasing accessibility and developing multi-channel access.

5.2. Evaluation

A coherent framework needs to be established in order to discuss the take-up of eGovernment in Europe, to monitor and evaluate the Action Plan and exchange experiences. The implementation of the eGovernment Action Plan will be subject to a mid-term evaluation in 2013. The evaluation will examine the extent to which the Action Plan objectives have been achieved, the progress made and the difficulties encountered. Depending on the results of the evaluation, any necessary adjustments to the objectives and actions of the Action Plan will be reviewed with the proposed High Level Expert-Group. A review of progress, discussions on new directions for political priorities and subsequent updating of this Action Plan, and the promotion of eGovernment services, are envisaged on a regular basis through Ministerial Conferences.

5.3. Governance

The commitment of the Member States as demonstrated in the Malmö Declaration is essential for a successful implementation of the Action Plan. The Member States expressed the need in the Malmö Declaration to be involved in the follow-up of the Action Plan through a "steering group" chaired by the Commission in order to ensure a fruitful collaboration.

To this end, the European Commission will set up and chair a High Level Expert-Group of the Member States representatives responsible for the national eGovernment strategies. This High Level Expert-Group will inform the High Level group for the Digital Agenda about progress in the eGovernment areas and will coordinate with the ISA Programme Committee. The intention of the Commission is to suggest to Member States that the same delegates participate in the High Level Expert-Group and the ISA Programme Committee. Additional cooperation will also be encouraged.

The eGovernment High Level Expert-Group shall be composed of the representatives of the Member states and Candidate countries responsible for the eGovernment national strategies. Representatives from public administrations specifically responsible for the priorities in the Action Plan may need to be appointed. Where appropriate, the eGovernment High Level Expert-Group will report to or jointly meet with other expert groups.

To achieve the above the proposed actions are:

2011	The Commission will establish a High Level Expert-Group of Member States' representatives and will suggest an appropriate mandate.
2012	Member States will inform the Commission and the High Level Expert-Group how the political priorities of the Ministerial Declaration of Malmö have been or will be reflected in their national eGovernment strategies.
2013	All Member States have incorporated the political priorities of the Malmö Declaration in their national strategies.
2013	The eGovernment Action Plan is evaluated and the findings are used to update the Action Plan.
2015	All Member States inform the Commission and the High Level Expert-Group in which way the political priorities of the Malmö Declaration have been realised.

ANNEX 1: MILESTONES IN PREPARATION OF THE ACTION PLAN

A time line with the most important milestones in the preparation of the eGovernment Action Plan 2011-2015 has been listed below:

- On 6 August 2008 the European Commission sent a questionnaire to Member States collecting the priority issues. The European Commission received completed questionnaires from 31 countries. The general message from the feedback to the questionnaire was to continue along the same main lines as in the former Action Plan, but to refocus and sharpen by bringing in new elements, and reducing the

number of priorities while enlarging their scope. In addition, a more feasible sub-Action Plan should be specified. The European Commission sent an analysis of the questionnaire to Member States on 16 October 2008.

- In December 2008 the report ' Value for citizens: A vision of public governance in 2020'¹¹² was presented. The vision expressed is to stimulate the debate on the key transformations and challenges ahead for the renewal of the European eGovernment agenda beyond 2010.
- On 20 March 2009 the European Commission published its Orientations Paper¹¹³. The aim of this paper was to provide guidance for the decision-making processes that led to a new Ministerial Declaration on eGovernment in 2009. It concluded that Member States and the European Commission will continue to foster innovation in eGovernment and to carefully assess its actions, in order to increase the efficiency and effectiveness of European governance in its own right and in order to support the development and provision of cross-border services that will improve the working of the internal market and empower all social and economic actors in the European Union.
- On 30 June 2009 Christiano and Osimo¹¹⁴ published their report on future eGovernment Services. Among others it presented the Tao Government scenario that leads to a flexible architecture. This would enable both government and third parties to collaborate and share responsibilities in producing and providing services.
- In November 2009 the Progress Report on the i2010 eGovernment Action Plan in the EU27+¹¹⁵ was published. The objectives of the study were to undertake a qualitative analysis of progress towards achieving the goals of the i2010 eGovernment Action Plan, 2006-2010, and to evaluate its stimulus effect across the Member States.
- At the same time in November 2009, the 8th eGovernment Benchmark¹¹⁶ report was presented that concluded among others that Europe shows continued steady progress in terms of full online availability. The overall EU27+ measure has risen to 71% in 2009 from 59% in 2007.
- On 18 November 2009 Ministers have unanimously approved the Malmö Declaration at the 5th Ministerial eGovernment Conference in Malmö, Sweden¹¹⁷. Its aim was to build on past achievements and to further improve online public services for citizens and businesses in Europe and to shift from a "one-size-fits-all" to a

¹¹² Botterman Maarten, Millard Jeremy et al. (2009). Value for citizens: A vision of public governance in 2020. Report for the European Commission, Brussels: Information Society and Media Directorate.

¹¹³ eGovernment Sub-group Working document, 20/03/09, Visions and priorities for eGovernment in Europe; Orientations for a post 2010 eGovernment Action Plan. Online report: http://ec.europa.eu/information_society/activities/egovernment/docs/2015_background_doc-210-pvt.pdf

¹¹⁴ Codagnone Christiano & Osimo David (2008). Future technology needs for future eGovernment Services: Services platform report. Report for the European Commission, Brussels: Information Society and Media Directorate.

¹¹⁵ Millard Jeremy, Shahin Jamal et al. (2009). i2010 eGovernment Action Plan Progress Study. Report for the European Commission, Brussels: Information Society and Media Directorate.

¹¹⁶ Smarter, Faster, Better eGovernment, 8th Benchmark Measurement, November 2009, Capgemini, Rand Europe, IDC, Sogeti and DTI for: Report for the European Commission, Brussels: Information Society and Media Directorate.

¹¹⁷ <http://www.egov2009.se/wp-content/uploads/Ministerial-Declaration-on-eGovernment.pdf>

customised approach. Ministers have indicated that public administrations should jointly strive for the following policy priorities, to be achieved by 2015:

- Citizens and businesses are empowered by eGovernment services designed around users' needs and developed in collaboration with third parties, as well as by increased access to public information, strengthened transparency and effective means for the involvement of stakeholders in the policy process,
 - Mobility in the single market is reinforced by seamless eGovernment services for the setting up and running of a business and for studying, working, residing and retiring anywhere in the European Union,
 - Efficiency and effectiveness is improved by a continuous effort to use eGovernment to reduce the administrative burden, improve organisational processes and promote a sustainable low-carbon economy,
 - The implementation of the policy priorities is made possible by appropriate key enablers and legal and technical preconditions.
- The Ministerial Declaration has received support from the industry as DigitalEurope adopted an Industry Declaration¹¹⁸ that was presented at the conference in November 2009.
- An Open Declaration¹¹⁹ on public services 2.0 drafted by citizens resulted in the involvement of citizens and endorsement of 3 key principles including transparency, participation, and empowerment.
- On 4 December 2009 a questionnaire on the eGovernment Action Plan 2011-2015 was sent to Member States, which aimed to identify objectives, actions and targets for a new eGovernment Action Plan 2011-2015. 17 Member States have provided the European Commission with their comments.
- On 18 December 2009 the Council of the European Union presented its conclusions on a Post i-2010 Strategy - towards an open, green and competitive knowledge society¹²⁰. With regard to eGovernment the Council emphasised the four objectives of the Malmö Declaration and added that promoting open ICT standards will facilitate interoperability, technological progress and extend the use of ICT to citizens and businesses.
- On 1 January 2010 Rand et al. started a study on eGovernment scenarios for 2020 and the preparation of the 2015 Action Plan. This study supported the elaboration of an eGovernment Action Plan 2011-2015. The study provided inputs to the process that lead to the definition of a coherent set of actions that contribute to the realisation of the political priorities and objectives laid down in the Malmö Declaration.

¹¹⁸ http://www.digitaleurope.org/index.php?id=34&id_article=390

¹¹⁹ An Open Declaration reflecting the growing interest of citizens in eGovernment was presented in Malmö in response to the Ministerial Declaration (<http://eups20.wordpress.com/the-open-declaration/>).

¹²⁰ http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/trans/111999.pdf

- On 19 May 2010 the Commission launched the Digital Agenda for Europe¹²¹. The Agenda outlines seven priority areas for action: creating a digital internal market, greater interoperability, boosting internet trust and security, much faster internet access, more investment in research and development, enhancing digital literacy skills and inclusion, and applying information and communications technologies to address challenges facing society like climate change and the ageing population. In these seven areas, the Digital Agenda foresees some 100 follow-up actions, of which 31 would be legislative. The Digital Agenda is the first of seven flagship initiatives under the Europe 2020 strategy for smart, sustainable and inclusive growth.

¹²¹ COM(2010) 245 (<http://ec.europa.eu/digital-agenda>)