

i2010 eGovernment Action Plan Progress Study Summary Report

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... Study

This Progress Study has been requested by the Unit for ICT for Government and Public Services, DG Information Society and Media, European Commission. Its strategic purpose is to undertake a qualitative progress evaluation of the i2010 eGovernment Action Plan, 2006-2010, and on this basis to make an input to future planning in the eGovernment area.



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i2010 eGovernment Action Plan Progress Study: Summary Report

Foreword

It is my pleasure to present to you the 2009 Progress Report on the i2010 eGovernment Action Plan in the EU27+ (i.e. all EU Member States and other European countries). eGovernment has been on the EU agenda for the past 10 years. In June 2006, the Council of Ministers supported the Commission's 5-year strategy for eGovernment - this i2010 eGovernment Action Plan provided a concrete basis for joint activities in Europe.

The Action Plan has managed to encourage all EU Member States and other European countries to work in common areas and towards common goals. I am happy about the results of the study which concludes that the Action Plan has been very successful in encouraging both general and specific eGovernment policies and implementation mechanisms to be put in place in European countries.

The report draws the conclusion that good progress has been made, but also that there is still a way to go. Clear challenges remain to be addressed - the take-up and use of electronic public services are still lagging behind their provision and online availability; and there is still a gap between policy ambitions and practice.

I fully support the recommendation of the eGovernment Action Plan Progress Report to continue building on the Action Plan, in order to shift focus and to step up a gear in the implementation of eGovernment. We need to maintain strong political support and continue strong cooperation.

I would like to thank the *Danish Technological Institute* and *TNO Information and Communication Technology* for this report. Finally, I am also grateful for the contribution of all countries participating in the i2010 eGovernment Subgroup. Their input was and will continue being extremely valuable in targeting future objectives and actions, so that Europe will remain being a global leader in the area of eGovernment.



Mechthild Rohen
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1. Introduction

This Progress Study has been requested by the Unit for ICT for Government and Public Services, DG Information Society and Media, European Commission. Its strategic purpose is to undertake a qualitative progress evaluation of the i2010 eGovernment Action Plan, 2006-2010, and on this basis to make an input to Member State and European Commission future planning in the eGovernment area.

The study has two main objectives. First to undertake a qualitative analysis of progress towards achieving the goals of the Action Plan, and second to evaluate the stimulus effect of the Action Plan and the level of progress triggered by it across Member States. Three main methods have been employed to meet these objectives: desk research, a National Self Assessment Questionnaire (NSA) filled in by each country,¹ and consultations including numerous interviews, a workshop and other feedback.

The i2010 eGovernment Action Plan was agreed between the European Commission and Members States, and prepared in 2006 based largely on the Ministerial Declaration published in Manchester at the end of 2005. It was updated by the Ministerial Declaration published in Lisbon in September 2007. In addition to some important general objectives, the Action Plan has five specific objectives relating to:

1. Inclusive eGovernment
2. Efficiency and Effectiveness
3. High Impact Services
4. Key Enablers
5. eParticipation.

This Summary Report presents the overarching results, conclusions and recommendations of the study. A full version of the report is available from: <http://www.dti.dk/27666>

2. i2010 eGovernment Action Plan Progress: main achievements and recommendations

The overall progress and impact of the i2010 eGovernment Action Plan to date has been significant in many areas. There have also been areas where progress has been slow, but these provide challenges and lessons for the future, and do not seriously detract from the generally good level of achievement.

2.1. Achievements

1 - Europe's global position

The Action Plan has been implemented at the same time as Europe's global eGovernment position has improved relative to other countries, even though eGovernment in the vast majority of countries has also grown considerably. (See Table 1) This is particularly the case in relation to Europe's main eGovernment competitors in North America, East Asia and Australasia. It is likely that the Action Plan has had some positive influence on this development. This is against the backdrop of a similarly good European performance in terms of general ICT supply and demand side indicators.

¹ All EU15 countries except Belgium, all EU12 countries, plus four non-EU (OEU) countries: Croatia, Iceland, Norway and Turkey.

Table 1: International eGovernment rankings: 2005 compared to 2008/2009

Source: United Nations 2008, and Waseda University 2009

United Nations eGovernment Readiness Rankings				Waseda University International eGovernment Rankings			
2005		2008		2005		2009	
Rank	Country	Rank	Country	Rank	Country	Rank	Country
1	USA	1	Sweden	1	USA	1	Singapore
2	Denmark	2	Denmark	2	Canada	2	USA
3	Sweden	3	Norway	3	Singapore	3	Sweden
4	UK	4	USA	4	Finland	4	UK
5	Korea	5	Netherlands	5	Sweden	5	Japan
6	Australia	6	Korea	6	Australia	6	Korea
7	Singapore	7	Canada	7	Japan	7	Canada
8	Canada	8	Australia	8	Hong Kong	8	Taiwan
9	Finland	9	France	9	Malaysia	9	Finland
10	Norway	10	UK	10	UK	10	Germany & Italy

2 - Putting eGovernment policies and strategies in place

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. (See Table 2) This is important because eGovernment performance and development seem to be positively correlated with the length of time policies have been in place.

3 - Importance of the Action Plan and its objectives

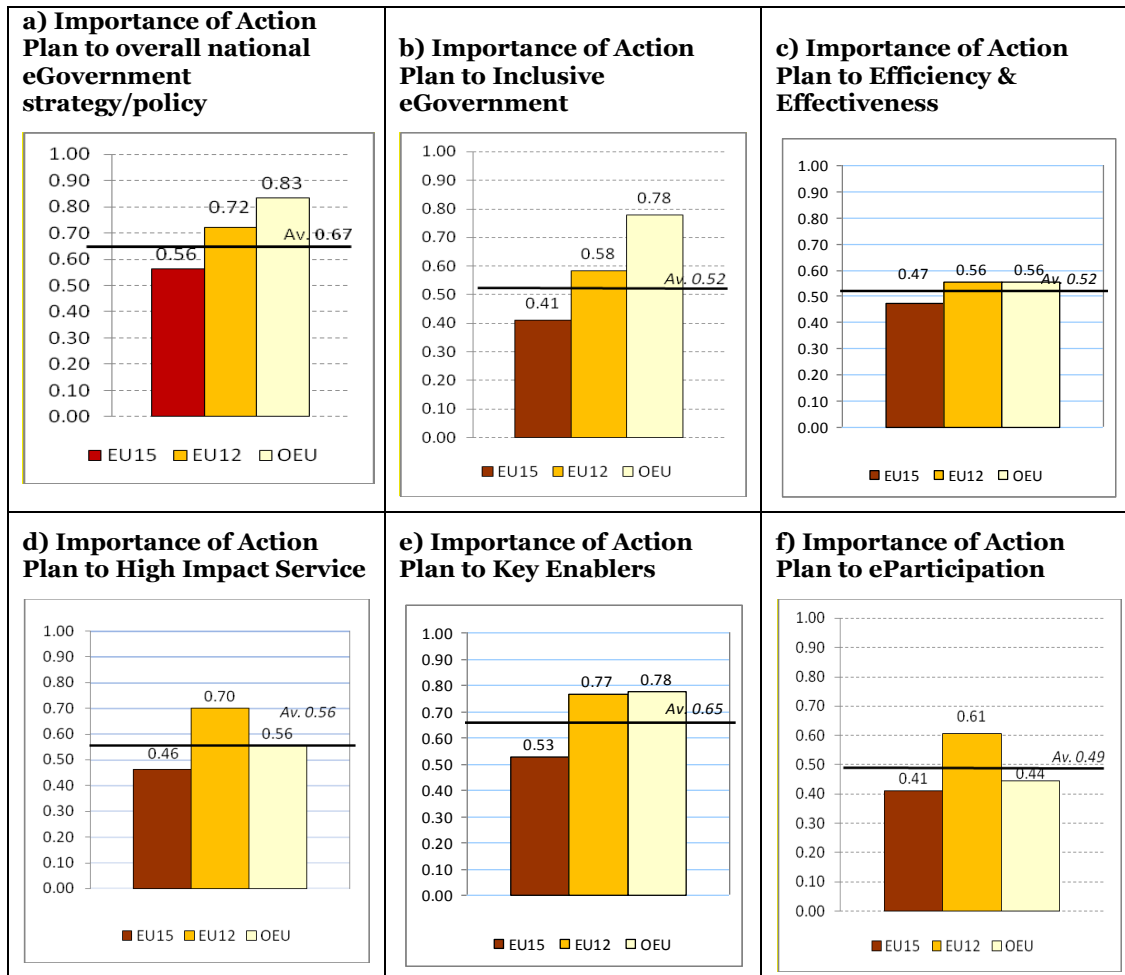
EU15 countries are more likely to have concrete policies, activities and achievements in place for a longer period but to rate the Action Plan less highly than EU12 and the four non EU countries (termed OEU). Both the latter, on the other hand, are more likely to rate the Action Plan as more important. (See Figure 1) For example, Hungary states that its strategy for an e-public administration has been built to run from 2008 to 2010, and “has been designed in line with the i2010 eGovernment Action Plan”. Similarly, Turkey states “we have taken the Action Plan as one of the reference documents in preparation of our National Information Society Strategy and follow up and re-design of national eGovernment activities.” This is probably because these countries are starting their eGovernment policies and actions later and from a lower base, and therefore welcome the support and guidance provided. The Action Plan is seen as a means for assisting their own catch-up, and a chance to engage directly within a framework of cooperation, support and learning in support of this process. This conclusion is supported by the fact that many southern European EU15 countries similarly rate the Action Plan as more important than Northern European EU15 countries, also because their own eGovernment policies are typically more recent.

Table 2: Countries with overall eGovernment strategies or policies, 2005-2009

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

Figure 1a shows that the overall assessment of the Action Plan by countries is somewhat higher than for each of its five objectives, given that it takes all aspects of the Action Plan into account, and also reveals general approval of the process. The Action Plan is clearly more than the sum of its parts.

Figure 1: The importance of the Action Plan and its objectives
(0 = not important, 0.33 = marginally important, 0.66 = important, 1 = highly important)



The front runner of the Action Plan's five objectives in terms of importance is Key Enablers because it provides important building blocks for the other objectives and good opportunities for cooperation. Key enablers, particular eIDM, interoperability and open standards, are the most important pre-conditions for successful eGovernment.

Next comes High Impact Services where eProcurement is already proving to be important for cost savings, implementing cross-border interoperability and supporting the Single Market through a clear set of targets and opportunities for cooperation.

Both Inclusive eGovernment and Efficiency and Effectiveness come third in the assessment of objectives, but are not far ahead of eParticipation. Inclusive eGovernment is a challenging area particularly for EU12 and especially OEU, both of which are generally lagging EU15 in achievements, so the Action Plan is seen as useful tool for cooperation and support. Although Efficiency and Effectiveness does not score high and is perhaps too broad an area for easy assessment, it is the only objective where the differences between the three country groups are low. This may reflect the fact that this issue has similar relevance for all countries, whether relatively advanced or lagging in eGovernment, for example in relation to the importance of measurement. Finally, eParticipation was not included in the 2005 Ministerial Declaration and only belatedly incorporated into the Action Plan. It is also a relatively new area and has been establishing its focus over the last few years, although now almost all countries have an eParticipation policy in place.

4 - Action Plan process and collaboration

Collaboration between the participants in the Action Plan process has clearly been fruitful so far, if this is understood as a quite ambitious set of policy goals that were created in order to stimulate and motivate countries. For example, the use of roadmaps, where employed, has been very successful. The Action Plan has managed to bring together all EU Member States and other European countries, and encourage them to work in common areas and towards common goals. Specificities (cultural, legal, etc.) in each individual country require individual solutions to be developed for policy problems, but these often work best within a Europe-wide framework of support and comparison which the Action Plan provides.

The European Commission in particular has had an important role to play within the Action Plan process, alongside member and associated states, as enabler for this common framework. It has on the whole catalysed the Action Plan process, and provided support towards the definition of common goals and outcomes.

5 - Shift in focus within each Action Plan objective

All of the five Action Plan objectives report a shift over the last few years in underlying requirements and developments. There is increasing focus on user centricity and empowering citizens and businesses, on benefits and impacts, and with a longer term concern for improving performance and public value.

6 - Linking beyond eGovernment

Each of the Action Plan objectives is also forging stronger links with activities taking place elsewhere in the European Commission. For example, with DG Market and DG Enterprise & Innovation on administrative burden reduction, the Services Directive and on eProcurement, as well as with the European Parliament and the Council of European on eParticipation. There is also increasing focus on collaboration with other sectors, for example private sector eIDM and eProcurement solutions.

7 - Summary of progress on general Action Plan objectives

Table 3 provides a summary assessment of the progress and achievements of the general Action Plan objectives.

Table 3: Summary of general Action Plan objectives, 2006-2009

General objectives	Assessment
Monitor incorporation of AP in national eGovernment plans	This has been successful. Nearly all countries now have eGovernment policies or strategies in place, and the AP has in most cases been important to these.
Accelerate the delivery of tangible benefits for all citizens and businesses	The AP has been quite important in delivering such benefits to date, and a future focus on the demand-side through ensuring benefits, as well as wider societal impacts, is one of the major recommendations of this study.
Ensure cooperation of all stakeholders in the EU in sharing practices and in designing and delivering eGovernment	The AP has been quite important for cooperation as well as for sharing information between countries. It is recommended that in future more intelligent and tailored sharing and cooperation take place, for example through both more regional and more thematically focussed cooperation.
Extend benefits at EU level through economies of scale in MS initiatives	The AP has been quite important, and it is clear that scale economies need to be more proactively sought, for example in the context of the Single Market, cross-border services and interoperability, as well as in tackling Europe-wide challenges
Develop roadmaps and strategic monitoring of AP	Roadmaps have been developed and success in 3 of the areas: Inclusive eGovernment, eID, and eProcurement. The AP has also provided a framework for strategic monitoring, e.g. through the Lisbon 2007 Declaration, two studies in 2007, and the present study.

2.2. Challenges

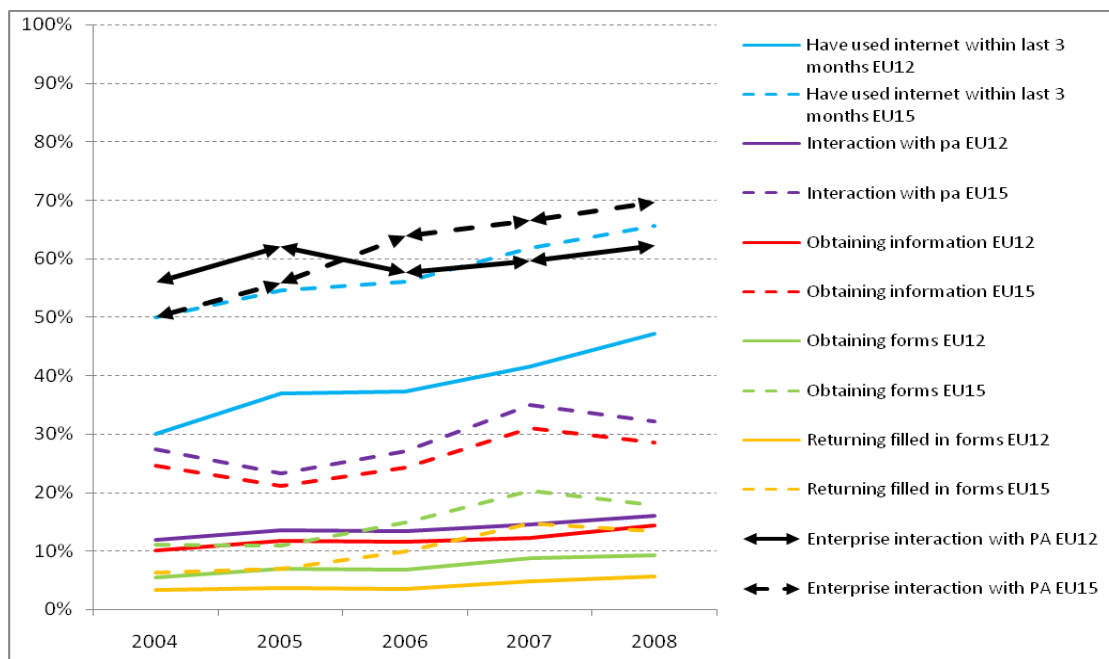
There are also a number of important challenges to the overall progress of the Action Plan and to European eGovernment.

1 - Citizen use of eGovernment services is lagging seriously behind provision

One important issue of concern is illustrated in Figure 2, which seems to indicate an overall ‘flatlining’ of citizen use of eGovernment services, and in the case of EU15 also a recent downturn. This is at the same time that the supply side of eGovernment services continues to improve, with online availability increasing from 59% in 2007 to 66% in 2009, whilst online sophistication has gone up from 81% to 92% over the same period (Capgemini 2009). Apart from interaction with the public administration, all other indicators of citizen online activity continue to show a year-on-year increase from 2004 to 2008, as exemplified by citizen use of the internet.

Figure 2: Percentage of citizens using the Internet and eGovernment

Source: Eurostat 2009



Overall progress in citizen eGovernment use between 2004 and 2008 has only been between 4% to 7% for EU15 and between 3% to 4% for EU12, so that the EU15-EU12 gap has slightly increased despite the recent downturn in EU15 usage. Set against this, enterprise use of eGovernment services has grown steadily with no recent downturn. These data also show that EU12 is keeping pace with EU15 in terms of enterprise use of eGovernment.

The explanation for these variations in eGovernment usage is difficult to pin down, especially given the short period under review. Some of the trend might be explained by the fact that an increasing number of ‘public’ services are provided by non-public sector actors from both the private and civil sectors. Thus, it may not always be clear to citizens who is providing a service so they may legitimately say they did not contact the public administration to obtain it, and this is a trend that is likely to continue (Gartner 2008). There is also the measurement issue surrounding the use of the term ‘public administration’ which can mean different things to different users and doubt may exist about which services this covers. Moreover, there is evidence that for some services or for some groups, electronic services may not be appropriate, and examples of this have been shown by the Inclusive eGovernment objective. The Netherlands also reported that a “recent survey revealed that citizens may prefer to make use of services through other platforms than a national portal, and even younger citizens sometimes prefer to physically visit the municipal offices for their public services.”

Another important trend is for some countries to use eGovernment to help “reduce avoidable contact”, for example as reported by the UK and Denmark, and thus keep usage as low as possible which saves time and resources for both the government and the user. This means that services can increasingly be offered automatically to users without any need for contact or active consumption from their side. This is because the government has sufficient information and data about the user to know when and how to provide a service.

However, there are more fundamental explanations of the flatling which the citizen usage data in Figure 2 illustrate which address the need for a more deep-seated transformation in the way governments use ICT to provide services. From this perspective, EU15 countries, which lead the way given their earlier start, are perhaps the first to hit a ceiling as far as citizen usage is concerned given that citizen services are still largely based on existing silos and a government-centric approach. A similar finding has been made by the OECD (2009) which points to the need to shift the eGovernment focus from a government- and silo-centric to a user-centric approach. Many other commentators characterise eGovernment as needing to undergo a transition from an eGovernment 1.0 government-centric phase to a second generation eGovernment 2.0 user-centric or user-driven phase before further significant take-up and impacts will be seen.²

eGovernment 2.0 both means that users’ interests and needs determine a service, rather than what is convenient for government, as well as that users are able to become more directly engaged in designing and delivering it alongside other involved stakeholders. When discussing future needs Spain reported: *“a bigger empowerment of citizens is required in order to engage them in the design and production of the e-services. Involving the citizens in the e-services design and development increases the use of these services.”* This implies a reinvigoration of the relationship between users and governments, for example through service personalisation and social computing, as part of a more participative interaction between the two.

2 - The gap between policy and practice

In many areas there is a gap between policy and practice, which 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 phase must focus on implementing the policies and strategies already there, as well as upgrading these in light of on-going developments. For example, the roll-out of Inclusive eGovernment solutions is still in its very early stages in most countries, and in the Efficiency and Effectiveness objective 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 eIDM (PEPPOL and STORK), although a good start, 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.

3 - Lack of quantitative and qualitative evidence

All of the five objectives report the general lack of impact evidence, although some improvements have been made over the last few years. For example in Efficiency and Effectiveness, only a minority of countries can show qualitative or quantitative evidence of policy advantages, and most have insufficient insight into progress indicators such as the availability, take-up and user satisfaction of High Impact Services. Only a small minority of countries have been able to provide sound data on the adoption, usability and impact of Key Enablers. Similarly, the measurement and understanding of the impact of eParticipation remains undeveloped both because it is intrinsically difficult to measure and that is a new and fast changing field.

4 - Complexity and fragmentation

The coordination and the integration of policies and programmes, as well as identifying and scaling up successful high impact initiatives, is often difficult and is not widespread. For

² See, for example, Baumgarten & Chui 2009, United Nations 2008, OECD 2009, Gartner 2008, Millard & Horlings 2008, and Huijboom et al 2009.

example in Inclusive eGovernment the objective is hard to implement due to complexity and lack of understanding, although some progress has been made, and in the Efficiency and Effectiveness area it has been found that implementing a coherent measurement framework is complex at both national and European level. In High Impact Services, greater synergy can be achieved by a further alignment of separate projects at the European level (STORK, PEPPOL, BRITE), and the more advanced eGovernment countries face the complexity of linking different parts of the eProcurement system together. Similarly more coordination and overall vision are needed between the various key enablers, such as eIDM, interoperability and open standards, whilst one of the clearest overall barriers to eParticipation at the European level is its high degree of dispersion and fragmentation.

5 - Lack of resources and the economic crisis

The economic crisis and other uncertainties make it all the more important that work is coordinated, integrated and focused as much as possible, and that preparations for the upturn are made based on experiences already gained. In this context, eGovernment services, alongside services delivered by other means, could become squeezed. On the other hand, the role of government and the public sector has been important across much of Europe in addressing the current economic challenges, so that the experience gained over the last four years in how eGovernment investments and initiatives deliver both efficiency and effectiveness should provide practical insights to support this ongoing work.

2.3. Recommendations

Both to meet these challenges and build on the achievements and future needs of European eGovernment, a number of recommendations are made.

1 - Build on present success

Continue to build on the successful working patterns that have been established throughout the 2010 Action Plan process. Learn from the strengths and weaknesses of the current process, including:

- Roadmaps have had a clear and important role in a number of areas and should continue to be used where appropriate, for example in helping to implement policies already put in place thus bridging the policy-practice gap where it exists.
- A stronger focus is needed on both developing and using quantitative and qualitative measurement frameworks, especially building on the frameworks already developed and the work already done.
- Downplay the use of flagships and other showcases in future if not abandon them altogether. They are typically descriptive rather than analytical so difficult to learn from or be used by others. If they had a role it was mainly political and awareness raising.
- In order to better support cooperation and information sharing between countries, it is recommended that in future more intelligent and tailored instruments for disseminating good practices as well as other important knowledge are used.
- Although coordination, avoiding duplication and involving all countries has had some success to date, the need for this will become even more important in future. This includes the need for more integration and alignment between policies and projects at European level which could enhance synergy and thereby increase impact.

2 - Develop a more specific overall framework vision

A concrete but flexible overall framework vision of European eGovernment is needed, with both short and long term elements, to guide all components of the next Action Plan. It should be composed of interlocking building blocks which are coherently described and aligned to reflect the main priorities and actions of the 2015 programme. This would enable the building blocks to be more systematically translated into tangible and measurable targets both for Europe as a whole as well as for individual countries or groups of countries where this makes sense, in order to improve overall impact.

Such a framework vision should also be designed to help resolve undue complexity where issues, concepts and relationships can be made simpler. It should assist in strongly addressing fragmentation so differences (between countries, levels, stakeholders, etc.) only exist because there is a good reason for them.

3 - Need to shift focus and step up a gear

Now that strategies and cooperation are in place, it can be recommended that the 2015 Action Plan should both shift focus and step up a gear by concentrating much more on the demand side, on user empowerment and engagement, benefits and impacts and addressing specific societal challenges. This should be done by supporting the real transformation of governance arrangements away from silo- and government-centricity towards becoming more user-centric and user-driven. This means ensuring that users and other legitimate stakeholders are invited more openly into a participative and empowering relationship with government in three main areas: 1) service design and delivery, 2) the workings and arrangements of the public sector and public governance more widely, and 3) in public policy and decision making.

Emerging technologies could support this development. A few examples are Web 2.0, social networking, new generation mobile devices and services, crowd-sourcing and modelling and visualisation, semantic web, the web of things and geographical localisation. These approaches should empower users to become more involved in designing, delivering and personalising services which they themselves consume. But this will also require back-office changes and more open, engaging and porous forms of governance which permit a plurality of stakeholders, intermediaries and channels in the service value chain.

4 - Prioritise Key Enablers and High Impact Services

The prominence of the Key Enablers and High Impact Services objectives in terms of overall importance to countries shows that the active promotion of such cooperation, integration and scale economies across Europe is very important and should remain high priority. These initiatives are critical for the Single Market, interoperability and cross-border services. They create efficiencies supporting mobility, such as for jobs, education, health, pensions and social security, procurement, trade, access to and re-use of public sector information and knowledge, etc. In addition to these economies and enablers, Europe- and global-wide challenges should increasingly be addressed directly by eGovernment, such as climate change, ageing, migration, security, crime and terrorism, sustainable growth, quality of life, tackling the democratic deficit and promoting good governance.

5 - Policy focus for the 2015 Action Plan

Although it is not the direct task of this study, some evidence collected suggests some additions or adjustments to existing plans³ apart from those mentioned in recommendations 3 and 4 above, for example:

- There should now be a concerted effort to move decisively forward from the eGovernment 1.0 phase of development to the new **eGovernment 2.0** phase which involves a reinvigoration of the relationship between citizens and governments.
- eGovernment services have become much more locally oriented in recent years where they seem to be having their biggest impacts, often in cooperation with local civil and private sector actors. It would thus be useful to focus on geographical localisation and **place-related services**, particularly in the context of 'localised modularisation' already very successful used by commercial services, and which central governments and European collaboration can promote. These will become even more important in the next few years as GPS starts to become a true "peoples' technology" built into everyday mobile devices and providing precise locations and navigation support for all services and activities.
- The growing trend of offering **mGovernment** services directed at new mobile devices needs to be addressed, and might be especially relevant in EU12 and other countries where traditional fixed infrastructures are not so well developed as in EU15. However, the future demand for government services is likely to be universal, from anywhere at any time in real time, highly flexible and highly personal. Mobile is best placed to meet this

³ As summarised in European Commission 2009

demand, almost certainly together with **digital TV** as another universal everyday medium.

- There is massive growth in mobile, smart and “augmented reality” “apps” for personal and commercial purposes often offered for highly specific purposes on local scales. There is also now some small start to **public service and democracy apps** particularly in the USA. These developments are likely to be driven by the rapid transformation of the ‘net’ generation into responsible adults needing public services and demanding the same quality and flexibility they receive from other providers.
- In addition to the good progress made to include user experience in current benchmarking initiatives, further steps should be taken towards more and better use of ICT itself to improve eGovernment **measurement and learning**, supported and coordinated at European level. In addition to the present approach based largely on top-down targets and the measurement of processes and outputs which are easy to implement but often provide only crude results, managing and evaluating performance should also incorporate a user-centric approach evaluated at the front-end by users as well as professionals and based on outcomes and impacts.
- There is a need for clear **coherence and strong links between the Actions Lines**. For example, the empowerment priority will need to bring user centricity and user-driven approaches together, as well as with participation, inclusiveness, personalisation and multi-channel, whilst high impact services and key enablers will need to come together within the Single Market priority. This should build on the lessons learnt about these different strands during the 2010 Action Plan process.
- To deliver many of the new eGovernment service and functional configurations required, **new business models** along the value chain will be needed. Although the democratically accountable public sector needs to ensure the public value, these models should be open and porous to all other actors, whether from the civil or private sectors or made up of more informal user groups and communities. The government actor should increasingly see its role as deeply engaging with the rest of society in a pro-active way in order to promote good governance.
- Part of this should be a move towards Digital Government Ecosystems or ‘governance webs’, where the notion of the value chain changes into a **value network** enabled by ICT. Some of the lessons learnt in the Inclusive eGovernment objective are highly relevant to rethinking the value chain in this way, for example in the context of universal personalisation which treats all users as individuals, whether designated as ‘disadvantaged’ or not, each with their own special needs worthy of unique attention.

6 - Measurement focus for the 2015 Action Plan

Although this study has shown that it is possible to evaluate the progress of the i2010 Action Plan and provide sound evidence for drawing conclusions, future such evaluations would benefit from more ongoing and systematic evidence collected during the implementation of the Action Plan or other instrument. Given the resources and commitments at stake, it is thus recommended that for the 2015 Action Plan:

- Each action should define clear objectives which are as far as possible precise and measurable, whether in quantifiable or qualitative terms, so that suitable evaluation criteria can be specified.
- Consideration should be given to setting objectives at different levels, for example at the level of society (governance, social cohesion, economic development, etc.), institutions (government, administrations and other public bodies, etc.) and/or technology (infrastructure, services, applications, etc.).
- In addition to outcome-oriented, some objectives could be more ‘process’ or ‘aspirational’ oriented, for example cooperation, sharing, alignment, eGovernment for all, etc.
- It should be made clear who should undertake evidence collection and evaluation (whether the European Commission, the Member States or others), how this should be done and how the results will be used. All stakeholders will need buy-in to, and ownership of, the process if it is to be successful.
- Evaluation criteria which are too onerous, difficult or expensive to measure and collect, are likely to result in lack of action, and if this is the case the original objective may need to be changed so that evaluation is feasible. As in any ‘benchmarking’ type exercise, there

will need to be a balance between the value of the measurement result and the cost of obtaining it.

- It may be possible in some cases to devise evaluation criteria from data and evidence collection which already takes place, such as by Eurostat, as this saves resources and boost the impact of existing efforts.

7 - Be ambitious but also pragmatic

Ensure that the activities prescribed in the future Action Plan take account of the current eGovernment status across MS, but also that they are at the forefront of eGovernment trends and needs in order to benefit from a forward-looking Europe-wide framework. It is also important that Europe seeks global leadership where feasible and beneficial. To support this, ambitious targets will be needed as an incentive, as long as feasible roadmaps are prepared and support made available, although it should be recognised that such targets may not be achieved by all countries.

This study has shown that different countries and groups of countries have different strengths and needs. For example, the most advanced EU countries although generally supportive of the Action Plan approach, typically see it as less important, especially if it imposes too much extra or different activity, as they are by definition already doing well. On the other hand, the least advanced countries and those just starting out have welcomed the Action Plan much more as almost a ready-made blueprint to get them well on the way. Therefore, encouragement should be given and mechanisms provided for more regional cooperation between adjacent countries and/or those with similar challenges or goals, without sacrificing the benefits of a Europe-wide framework which are also very important. For example, good cooperation on developing new concepts for eGovernment services is underway amongst the Nordic and Baltic countries.⁴

Furthermore, it is clear that the next steps starting in 2010 are likely to be qualitatively different from the last four years. Policies and strategies have been put in place, pilots and other initiatives have been launched, and systems and mechanisms for cooperation set up. These now need to result in real benefits for citizens and businesses and big improvements in efficiency over the next five years, and this represents a big challenge to all countries. To compound this, the current financial crisis makes doing anything at all even more difficult. Thus, the next Action Plan needs to both get across this sense of real challenge and urgency, and show that it is worth doing because of the potential benefits, as well as the even greater challenges which will arise from doing nothing or not being ambitious enough. The relative success of the 2010 Action Plan shows that this can be done as long as a strong sense of common purpose and commitment can be maintained and a high quality plan developed and agreed. This has been achieved to date because most if not all involved countries have been able to obtain real benefits from participating in the Action Plan process. There is thus a lot to do but also a great deal to be gained.

3. Inclusive eGovernment

3.1. Issues and impacts

Inclusive eGovernment was a relatively new focus of concern within eGovernment when it first appearing in the 2005 Manchester Ministerial eGovernment Declaration and the 2006 eGovernment Action Plan.

- The first aim was to support disadvantaged groups to get online and to make web-sites and eGovernment services more accessible and user friendly to this end.
- Although this remains an extremely important component of Inclusive eGovernment, the focus since 2006 has shifted to also consider how the 30% of European citizens who will not be online in the foreseeable future can be provided with better government services.
- To do this, attention has turned to supporting new business models which create innovative partnerships facilitated by ICT between government and often local actors

⁴ The NORIA 2008: "The citizens' services - turning public-private outside-in": <http://www.nordforsk.org/text.cfm?id=497&path=58,66>

(from both the private and civil sectors) through multiple channels which include intermediaries and direct human contact. A recent study has shown this is can be successful, even though impacts are still on a small scale. (Blakemore & Wilson, 2009)

- The focus of Inclusive eGovernment policy content and deployment thus shows cumulative shifts between 2005 and 2009:
 - 2005: Providing physical access and skills to disadvantaged citizens. For example, the Besanc.clic project in France has shown the impact of recycling computers for public spaces, focusing on reducing the digital gap by financing IT equipment in the region.
 - 2007: Assisting disadvantaged citizens actually use and benefit from services, typically through multiple channels (Millard 2007) For example, the Czech Republic's Tyflost project as a unified system for all kinds of audio information which facilitates the orientation of the visually impaired when using suburban and railway transportation, on crossings, in subways, underground, etc. Similarly, the Senior Dom in Slovakia is a bottom-up value network in which elderly people identified their service needs to overcome exclusion problems such as isolation and the difficulty of accessing a wider portfolio of services. They have engaged using multiple channels and human intermediaries to access services and develop and enhance their life skills.
 - 2009: As in 2007 but with greater emphasis on the role of intermediary individuals and organisations, on a concern for improvements to the daily lives of disadvantaged people, and partnerships between organisations facilitated by ICT. For example, Amsterdam's Day Activity initiative in the Netherlands provides an innovative way for socially excluded people to improve their daily life activities of work and social interaction through a network of help and care service providers using multiple channels.
- Countries rated the importance of the Action Plan for their own Inclusive eGovernment policies and initiatives at 0.52 (on a scale from 0 to 1). This is a little below average for all objectives and equal third with Efficiency and Effectiveness. EU12 and OEU countries rated it as markedly more important than EU15. EU15 are more likely to have policies and initiatives in place and thus feel less need for the Action Plan, whilst EU12 see it as a useful means of support and guidance. For example, Romania reported that "the Action Plan contributed at helping us identify the major issues in the area of social inclusion and implement them into the strategy, which would represent the fundament for the future inclusive services that we plan to develop." In contrast, Ireland stated that "Initiatives and work undertaken in Ireland are not developed and driven by the Action Plan – they would have occurred anyway because of national need and priorities."
- The main achievements of the Inclusive eGovernment objective have been the wide scale development of appropriate policies across most countries, together with clear demonstrations of how these can be implemented in practice.

Figure 3 shows that, although the differences between the percentages of EU15, EU12 and OEU countries with policies related to Inclusive eGovernment are small in 2009, their policy development paths have been very different. EU15 countries have generally been in the lead, often substantially so, whilst especially EU12 but also to a lesser extent OEU countries have started from a very low base in 2005 before the Action Plan was agreed but have since made very rapid progress in policy making.

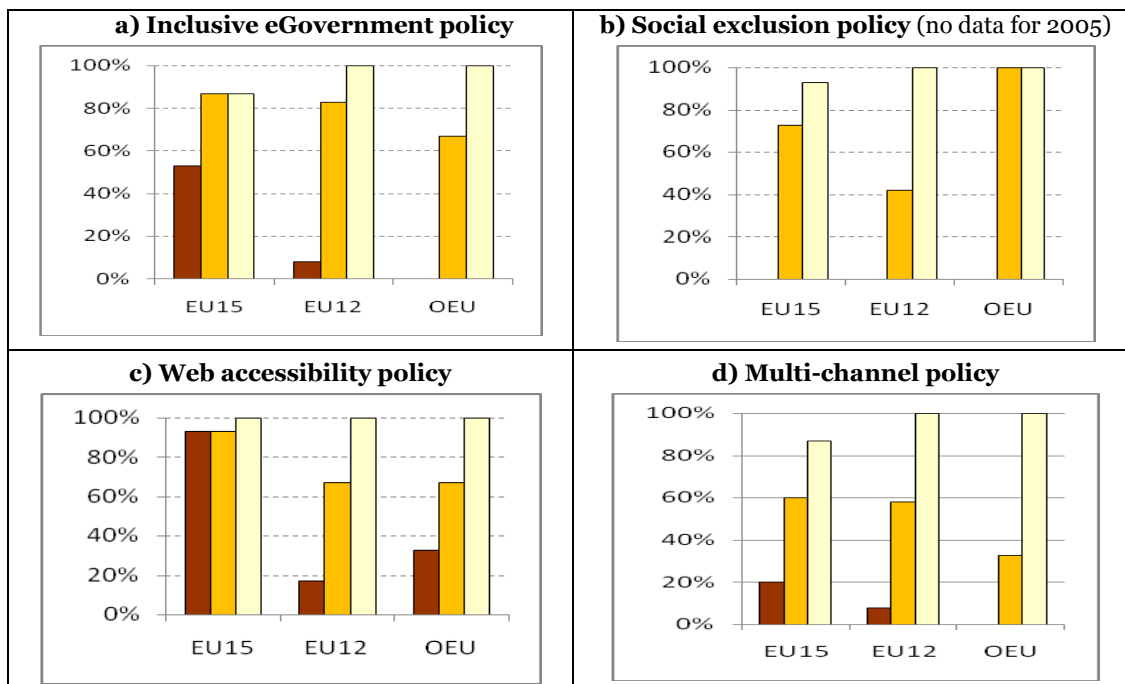
Thus, it is likely that the Action Plan has had its biggest effect in providing an incentive and a framework for the EU12 and the OEU countries, which have until recently been behind in Inclusive eGovernment policy-making, to catch up with EU15 countries. Indeed Figure 3 shows that in 2009 all EU12 and OEU countries have all four inclusive eGovernment policies in place, so have overtaken EU15 in three of the policy areas.⁵

For example, Iceland's social exclusion policy is supported by its Multicultural Information Centre as a service portal for immigrants containing comprehensive information on state and local government services together with practical information for those taking their first steps in Iceland. The portal is available in four languages in addition to Icelandic. Similarly, Croatia's eAccessibility policy commits all public administration bodies to harmonise their Internet content with the WCAG 1.0 standard.

⁵ Although the EU15 countries missing (Finland and Sweden) state that such issues are integrated in general eGovernment policies at all levels rather than being separate national policies.

Figure 3: National policies in the area of Inclusive eGovernment, 2005-2009

% of 30 countries with policies: 2005 ■ 2007 ■ 2009 ■



The study has also shown that the number of years that an Inclusive eGovernment policy has been in force has some correspondence with the number of initiatives in the country, over 70% of which are designed and delivered at local level. This is regardless of other country differences, thereby providing some evidence that if policies are given time they are likely to have an impact.

Table 4 provides a summary assessment of the progress and achievements of the Inclusive eGovernment Action Plan objectives.

Table 4: Summary of Action Plan objectives for Inclusive eGovernment

Inclusive e Government objectives	Assessment
<p><u>1) Action Plan: Main objective</u> Advance inclusion through eGovernment so that by 2010 all citizens benefit from trusted, innovative services and easy access for all (by 2010).</p>	<p>The Action Plan has had an important impact, particularly in EU12 and OEU in terms of national policies, although up to two thirds of all MS, consisting of an equal number of EU15 and EU12, have engaged at European level in developing common initiatives, exchanging experiences, and providing support.</p>
<p><u>2) Action Plan: Action</u> Agree with Member States on a roadmap setting measurable objectives and milestones on the way to making all citizens beneficiaries of eGovernment by 2010 (by 2006).</p>	<p>The roadmap has been very important for getting commitment to, and the development of, the objectives and the strategy of the Inclusive eGovernment area. It has been used as a common document to agree the goals, define the path, establish dialogue, and lay the basis for the strategy and updating it.</p>
<p><u>3) Action Plan: Action</u> Set up with Member States a common and agreed guide that aligns eGovernment developments with the eAccessibility Communication (by 2007)</p>	<p>Cooperation was undertaken with the eInclusion Unit which is also looking at eAccessibility. In future the important role of eAccessibility should be more directly integrated into the wider work of Inclusive eGovernment.</p>
<p><u>4) Action Plan: Action</u> Issue specifications for multi-platform service delivery strategies allowing access to eGovernment services via a variety of channels, e.g. digital TV, mobile and fixed telephone and other interactive devices (by 2008).</p>	<p>These specifications have been necessary to refine understanding of the area, identify future trends and needs, and show by way of real case studies both that achieving a more inclusive eGovernment can be done as well as how. (Blakemore & Wilson 2009) Most good examples in this study (14 out of 18) are in EU15, although EU12 rate the AP more important than do EU15. This is probably because EU15 have been tackling such issues for longer than EU12.</p>

Inclusive e Government objectives	Assessment
<p>5) Lisbon Declaration (pp.2-4)</p> <p>By the end of 2008 Member States shall identify and exchange information on their flagship eGovernment initiatives addressing the needs of disadvantaged and potentially excluded (by end of 2008).</p>	<p>The identified flagships have been somewhat disappointing, probably because of the uncertain quality of many of them, who selected them, why and how, even though they have had some awareness raising value. This approach should not be the priority for the future.</p>

3.2. Recommendations

1. The next step in Inclusive eGovernment should be to go beyond the mainly officials and experts from MS involved so far, and instead engage with a much larger number of policy makers, implementers and practitioners to ensure that momentum is not lost and deployment is scaled up.
2. An important component in this, as part of a broader pan-European approach, should be to investigate how demonstrated Inclusive eGovernment successes can be mainstreamed and disseminated more widely. This could include examining how in detail on-going work can directly link into and support the policies and implementation strategies of specific Member States on their own terms.
3. The area of Inclusive eGovernment needs to contribute to a number of wider but related dimensions, all of which need greater focus and to be brought more closely together. These include user centricity and personalisation, multi-channel, new business models along the value chain, flexible and combined service delivery, accountability, transparency, design-for-all, as well as capacity building for all practitioners engaged in the delivery of public services. All these are important components of user empowerment, and also relate to some of the changes being seen in the eParticipation area which focus on user participation in service design and delivery.
4. Some of the lessons learnt in the Inclusive eGovernment area are highly relevant to the notion of universal personalisation which treats all users as individuals, whether designated as 'disadvantaged' or not, each with special needs worthy of unique attention.
5. Given that eAccessibility should be the *sine qua non* of all eGovernment, whether for disadvantaged users or not, its important role should be more directly integrated into the wider work of Inclusive eGovernment.

4. Efficiency and Effectiveness

4.1. Issues and impacts

A widely accepted premise is that ICT can yield substantial efficiency and effectiveness gains. However, because these are wide ranging and often hidden in general ICT or regulation policy, the efficiency and effectiveness objective is rather broad and diffuse. Despite these challenges, important steps to reap the efficiency and effectiveness benefits of eGovernment have been taken:

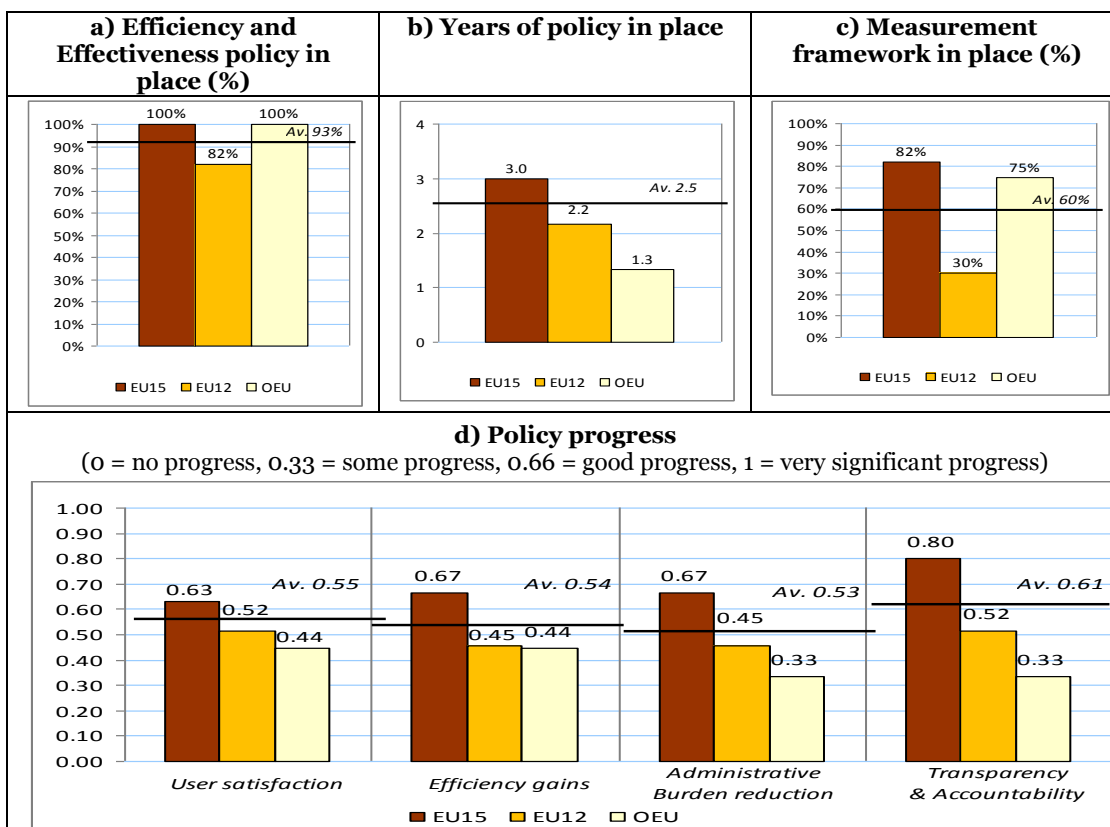
- In the last few years the number of EU27+ countries with efficiency and effectiveness policies in place has continued to increase, so that today 93% of countries have such a policy. In general, however, EU15 countries are more likely to have an Efficiency and Effectiveness policy than EU12 countries, and these have also been in place on average for a longer period, for example Ireland since 1999. (See Figure 4).
- At the European level, there has been increased awareness of and attention to measuring user-centricity, such as user satisfaction, as well as measuring the outcomes and impact of eGovernment.
- Good practice exchange is stimulated at both national and European levels by 86% of countries, with EU15 at 100%. The perceived importance of the ePractice portal for supporting good practice exchange is 0.51 on a scale of 0 to 1, with EU12 countries rating it as more important.

- Countries rated the importance of the Action Plan for their own Efficiency and Effectiveness policies and initiatives at 0.52 (on a scale from 0 to 1). This is a little below average for all objectives and equal third with Inclusive eGovernment, but also differs from the other objectives as showing little difference between EU15 and EU12. This is perhaps because the issue has similar relevance for all countries whether relatively advanced or not, for example in relation to the importance of measurement.
- The majority of EU15 countries have a policy on innovation and re-engineering, as well as initiatives exploring green eGovernment, compared to just over half for EU12. These objectives were first included in the Action Plan by the Lisbon Ministerial Declaration in 2007, so this result indicates that good progress has already been made. Innovation and re-engineering is an issue that has been important for a number of years but is difficult to achieve on a large scale with clear results, so its re-emphasis is a recognition of the need for continued focus. Green eGovernment, on the other hand, is a relatively new concern but one which is likely to increase in importance over the next five years, so this early recognition could be significant.

Countries report progress on user satisfaction, efficiency gains, administrative burden reduction and transparency and accountability, although only 60% of the responding countries actually measure eGovernment benefits and only a minority provided specific evidence of this progress. EU15 report more progress than EU12 and OEU (See Figure 4d), which is likely to be because they have had policies in place for longer. However, Norway is making progress in this area as its national bureau of statistics measures eGovernment efficiency gains at both state and municipal level on an annual basis. The Brønnøysund Register Centre reported reducing the administrative burden on the private sector by an estimated 230 full-time positions in 2008.

More specifically, Figure 4d illustrates that, on average, countries estimate the progress in user satisfaction as quite good (0.55 on a scale from 0 to 1), although the study and other evidence (e.g. Deloitte & Indigov 2009) also show that overall experience in Member States with surveying user satisfaction and impact is rather limited and dispersed. If experience is present, it often arises from ad hoc initiatives undertaken by individual government agencies.

Figure 4: Efficiency and Effectiveness policy and measurement frameworks, and policy progress



Further, countries estimate an average progress in efficiency gains of 0.54 on a scale from 0 to 1. Several countries have supported their estimation with – mostly – anecdotal examples. The Austrian government for instance achieved a 15% reduction of transaction times and a cost reduction of 38% by implementing digital filing and archiving systems in all Austrian ministries. However, several Member States argue that it is difficult to measure eGovernment efficiency gains as these are often incorporated into the general ICT gains so that the specific eGovernment effect cannot easily be isolated.

As regards administrative burden reduction, countries estimate the importance of progress at 0.53 on a scale from 0 to 1. Various countries have drafted and enacted legislation in order to cut red tape. Other countries actively involve their citizens in fighting bureaucracy. In October 2007, the Hungarian government launched the internet site www.burostop.hu which aims at providing citizens with information on the government’s activities in administrative burden reduction (i.e. legal texts, studies, etc.) and gathers opinions on how best to reduce bureaucracy and simplify administrative procedures. Portugal appointed a Secretary of State for administrative modernisation in May 2007. Within the administrative simplification program SIMPLEX, this enables the identification, selection and promotion of examples of how public agencies are able to modernise, monitor progress and disseminate results.

Countries tend to perceive progress on transparency and accountability as the most significant of the four areas shown in Figure 4d (0.61 on a scale from 0 to 1). Despite this, further improvements in this area could be achieved. Transparency as an indicator is, for instance, not included in eGovernment benchmarks. These benchmarks assess whether information is made available, but not whether government processes and procedures are becoming more transparent to citizens and businesses. In other words, the quantity of the information is being measured, but not the quality, although several directives do support the increased transparency of government, such as the Public Sector Information directive and Directives on Public Procurement (2004/17/EC and 2004/18/EC). In some countries, eGovernment helps to reduce corruption, for example, the Bulgarian government launched a new anti-corruption portal in December 2007. This aims to provide citizens with reports on incidents of corruption, and full anonymity when using it is guaranteed.

Table 5 provides a summary assessment of the progress and achievements of the Efficiency and Effectiveness Action Plan objectives.

Table 5: Summary of Action Plan objectives for Efficiency and Effectiveness

Efficiency and Effectiveness objectives	Assessment
1) <u>Action Plan, Main objective</u> : Member States expect eGovernment to contribute to high user satisfaction with public services and significantly lighten the administrative burden on businesses and citizens by 2010. Moreover, the public sector should achieve considerable efficiency gains as well as increasing transparency and accountability through innovative use of ICT by 2010.	Countries perceive good progress in user satisfaction, administrative burden reduction, efficiency gains and in transparency and accountability, although there is still a great potential for improvement. However, perceived benefits are generally not substantiated by consistent evidence, although some countries do not try to measure the benefits of eGovernment as these are often hidden in general ICT gains so that the eGovernment effect cannot be seen.
2) <u>Action Plan Action</u> : The Commission, working together with Member States, will propose a common impact-oriented eGovernment measurement framework and subsequently fine-tune it.	The Commission and MS have agreed a common impact-oriented eGovernment measurement framework for online availability, sophistication and personalisation of services, although measuring benefits is not yet widespread. Research focusing more on user satisfaction has been carried out. ⁶
3) <u>Action Plan Action</u> , In line with the i2010 benchmarking framework, benchmarking and case-based impact and benefit analysis based on common indicators will be performed based on Member States’ inputs to monitor progress with this Action Plan.	Most countries have a national measurement framework in place, although they differ in scope. At the European level, first steps have been taken in benchlearning involving several European public agencies undertaking detailed benchmarking and joint operational learning, based on eGEP 2006 indicators. ⁷

⁶ Capgemini 2009 and The eGovMoNet thematic network: <http://www.egovmonet.eu/>

⁷ The benchlearning community on www.epractice.eu.

Efficiency and Effectiveness objectives	Assessment
4) Action Plan Action , The Commission, together with the Member States, will explore mechanisms to ensure the long-term financial and operational sustainability for sharing experiences, infrastructures and services.	Good practice exchange is growing both at national and European levels (e.g. on open source, ePractice.eu, open standards, good practice exchange, etc.). New challenges, such as quality control and the extraction of value from good practice exchange, have arisen due to the rapid growth of channels like ePractice.eu.
5) Lisbon Declaration (p. 4) , 1) Member States should have a policy on encouraging and managing process innovation and process re-engineering through e-Government; 2) Member States should explore the potential of eGovernment actions to make significant contributions concerning climate protection and energy savings, namely on the effort to reduce consumption and pollution.	Given the short period since the 2007 Lisbon Declaration, a good start has been made on both these initiatives with respectively 65% and 58% of countries already making progress. However, there is a marked difference between country groups, with EU15 well ahead, followed by EU12 and the OEU. This is almost certainly a reflection of the generally more mature nature of eGovernment developments in EU15.

4.2. Recommendations

1. SMART goals in the eGovernment Action Plan (Specific, Measurable, Attainable, Realistic and Timely) should be agreed, as this would help keep the benefits of eGovernment on the political agenda. An example of a policy already agreed is the 25% administrative burden reduction made by the Member States for 2012.
2. Member States need to progress in monitoring and assessing the impact of eGovernment policy and its benefits. Impact measurements of policy and services can facilitate Member States in making better decisions and policy on eGovernment.
3. There is still much work to do on the take-up and harmonisation of national measurement frameworks and on the development of such a common impact-based framework at the European level. There is a need to further increase the transparency of measured data and to expand European benchmarking on demand indicators, formulated around topics like life events, user friendliness and personalisation.
4. Given that the pool of experiences on ePractice, as well as their use by stakeholders is increasing so rapidly, it is important that the coordination and filtering of information can keep up at the same pace, for example by employing more intelligent and tailored tools.

5. High Impact Services

5.1. Issues and impacts

The area high impact services has the potential to achieve substantial and tangible results as these services aim to make a significant difference to citizens, businesses and administrations. An important high impact service is electronic public procurement (eProcurement) for which there is considerable evidence of substantial cost savings for both businesses and administrations.

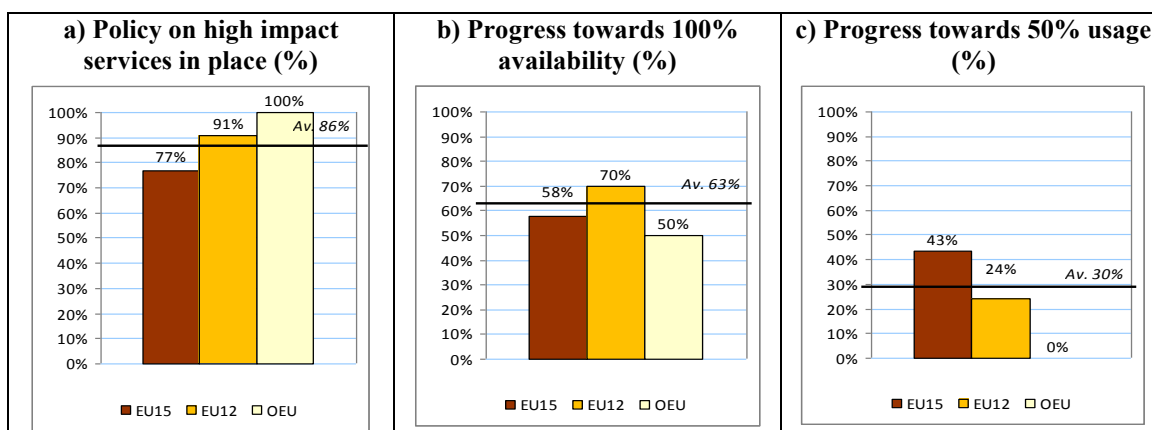
- Almost all countries have a policy on high impact services in place, with EU12 ahead of EU15, possibly due to the fact that some of the latter have already fully implemented several high impact services and thus currently have fewer policies in place. (See Figure 5) For example, Germany states that “*evidence on the Action Plan’s effect on national initiatives is not so important, because most of the German activities at federal level in the area of eProcurement started before 2006.*”
- Important contributions have been delivered at the European level, where the PEPPOL project aims to develop a pan-European eProcurement solution and the SPOCS project aims to remove the administrative barriers European businesses face in offering services in another country. Although still in their early stages, the first steps have been taken in these projects.
- The Service Directive appears to be a driver for specific eGovernment goals, such as the implementation of a Point of Single Contact (PSC) which enables service providers to

more easily engage with relevant authorities of other European Member States. It however remains questionable whether the deadline of December 2009 will be met by all countries. Although in the large majority of countries practical work to build the PSC is in full swing, in some Member States PSCs are still in initial stages. Sustained effort will be needed during the remainder of this year to meet the deadline.

- A key future challenge will be the definition and reaching of consensus on new high impact services. EU12 Member States have progressed less far in defining these with only 22% having done so compared to 82% of EU15.
- Countries rated the importance of the Action Plan for their own High Impact Service policies and initiatives at 0.56 (on a scale from 0 to 1). This was the second highest, after Key Enablers, and indicates the overall importance of this objective. EU12 countries rated it as more important than EU15, probably because, being less advanced in this area, they felt greater need for the support and guidance which the Action Plan provides. For Example, Italy says *“The action plan targets have contributed to accelerate the implementation and development of eProcurement and have inspired some key legal actions that have been put in force”*, and Slovenia that its own *“SEP-2010 strategy takes into account modern guidelines and initiatives which have been passed at EU level and which lead to success throughout the EU, including i2010 Action Plan.”*

Member States have made considerable progress in recent years regarding the 100% online availability and 50% usage of public procurement targets. Although these are unlikely to be achieved by all countries by 2010, in early 2009 63% availability and 30% usage has already been achieved, but with important differences between countries. (See Figure 5)

Figure 5: Progress made in policy, availability and usage of electronic procurement



EU12 are a little closer to the 100% target than EU15. For example, Cyprus had reached between 76% and 100% availability by September 2009. This can perhaps be explained by the generally smaller size of EU12 countries and a more centralised approach to strategy implementation⁸. Several countries report important barriers such as the discretionary power of government authorities to decide to adopt an electronic procurement system or not, and limited use of electronic signatures and complex procurement legislation.

The average usage of eProcurement reached to date is 30%. In contrast to the availability target, EU15 (43%) are progressing more on usage than EU12 (24%) and OEU countries (0%). These result may be explained by the higher internet and broadband penetration in EU15 compared to EU12. Overall, it is likely that – by 2010 – many but not all Member States will have reached a 50% usage of public procurement. Key barriers mentioned include the voluntary basis of usage, limited internet/broadband penetration (in particular as regards SMEs), lack of skills among end-users, and lack of confidence in secure data exchange. More research on eProcurement take-up is currently being conducted by DG Market the results of which will be available later in 2009.

⁸ See for example Economist Intelligence Unit (2004), E-government in Central Europe Rethinking public administration, available at: www.eiu.com/eGovernmentInCentralEurope.

Focus is currently shifting from pre-award systems (eNotification, eSubmission, tender evaluation) to post-award systems (eOrdering, eInvoicing, ePayment). Although the present status shows more pre-award than post-award systems in operation, as these tend to be put in place first and are easiest to do, 83% of countries now report that they are currently developing or implementing post-award systems and 66% pre-award systems. EU15 appear to be closer to the implementation of post-award systems than EU12 countries as they have been implementing eProcurement for a longer period. For example Denmark has had an eInvoicing system in place since 2005 saving about €120 million a year, and since July 2008 all Swedish central government agencies are obliged to process invoices electronically.

Table 6 provides a summary assessment of the progress and achievements of the High Impact Services Action Plan objectives.

Table 6: Summary of Action Plan objectives for High Impact Services

High Impact Services objectives	Assessment
1) <u>Action plan, Main objective</u> : giving all public administrations across Europe the capability of carrying out 100% of their procurement electronically (where legally permissible) and to ensuring that at least 50% of public procurement above the EC threshold is carried out electronically by 2010.	As regards the 100% online availability and 50% usage of public eProcurement, it appears that countries have made considerable progress in recent years. Despite this, however, it is not likely that all countries will have reached the 100% online availability and 50% usage targets by 2010.
2) <u>Action Plan Action</u> : Agree with Member States on a roadmap setting measurable objectives and milestones for achieving 100% availability of public eProcurement and 50% take-up of eProcurement by 2010.	This goal has been achieved. Member States agreed on a roadmap for eProcurement in the light of the Action Plan implementation, setting measurable targets and providing a time schedule of the activities to be undertaken.
3) <u>Action Plan Action</u> : Based on existing or under development Member States solutions, accelerate common specifications of key elements for cross border public eProcurement and launch implementation pilots by 2008.	In the context of the PEPPOL project and the activities undertaken by IDABC, a first version of functional specification for cross-border interoperability of eSignatures and a Virtual Company Dossier have been drawn up.
4) <u>Lisbon declaration Action</u> : By the end of 2008 Members States shall establish a list of new priority areas for high impact services, which can be further developed at the pan-European level with the support of EU programmes.	Only a minority of countries have identified other Pan-European high impact services so far. It is likely that Pan-European consensus on new priority areas for high impact services is a future challenge.

5.2. Recommendations

1. More synergy needs to be achieved by a further alignment of separate projects at the European level (e.g. PEPPOL, STORK, BRITE, GUIDE, PROCURE). These are highly interdependent and increased coordination can help to fully exploit their potential.
2. Given that some of the limited progress in eProcurement can be explained by the dominance of the service provider's perspective at the cost of the end-user's viewpoint, the application of a more citizen-centric approach to eProcurement is recommended in order to stimulate take-up by citizens and businesses.
3. To explore all possibilities to enhance take-up, it may be worthwhile also to consider the option of making eProcurement obligatory for government entities and their suppliers, perhaps with special support where there are problems such as for certain SMEs as has been successfully implemented in Denmark.
4. Not all Member States have a sufficient insight into progress indicators such as the availability, take-up and user satisfaction of high impact services. Enhancement of the measurement and monitoring of policy and projects can enable countries to take efficient measures to advance projects.
5. Although there has been strong focus within the high impact service area on eProcurement, a broadening of the scope is needed. Future focus could be related to the 5 European Union freedoms: the free movement of people, services, goods and capital as well as freedom of establishment. A sixth freedom, i.e. of information and knowledge, should also be explored.

6. Key Enablers

6.1. Issues and impacts

Key enablers are seen as being of high importance across all eGovernment areas as they provide the building blocks for achieving concrete results in those areas. High impact services, such as eProcurement, can for instance only be provided if electronic identification management (eIDM) systems are in place. Rolling out key enablers is, however, often complex; many stakeholders are involved, technology is rapidly evolving and the benefits are often indirect and difficult to convey. Yet, many countries have made recent progress:

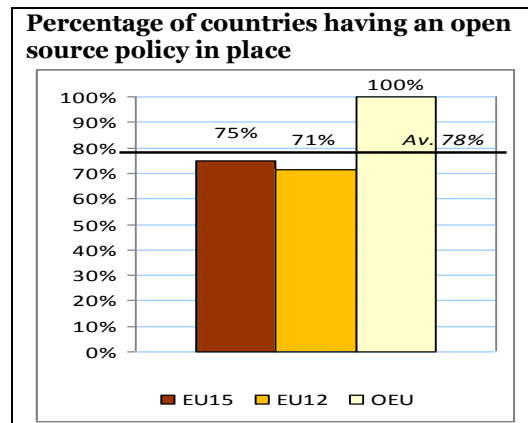
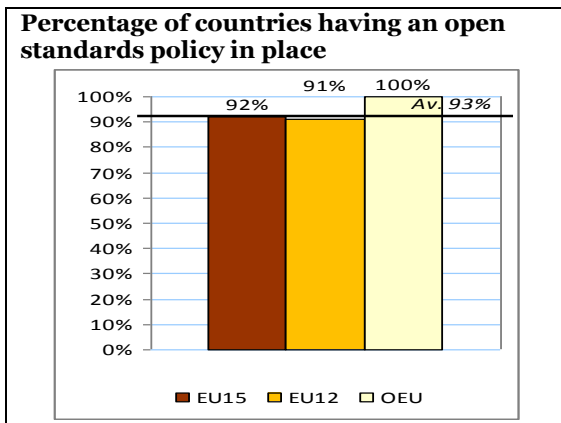
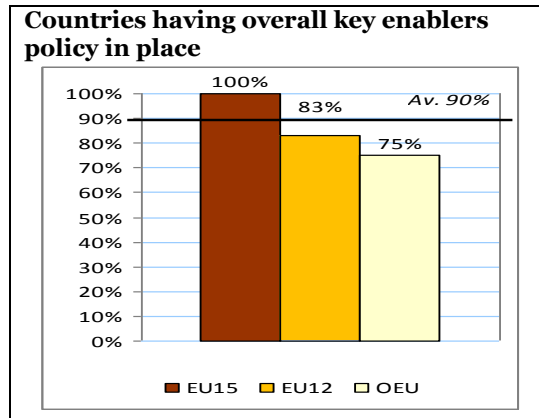
- Almost all countries now have policies on various key enablers, although EU15 are more likely than others to have eIDM policies in place. (See Figure 6) On the other hand, open standards and open source policies are more common in OEU countries.
- The large majority of countries (83%) have implemented electronic eIDM systems to provide citizens and businesses with national, regional and local online services. For example, since 2008 Luxembourg has made available a national eID and eSignature called LUXTRUST, and in Poland the “zaufany profil” has been developed as a secure profile password solution for access to the electronic platform of the public administration.
- At the European level, efforts have been made to establish the interoperability of national eIDM systems. Several projects such as STORK, SPOCS and ePSOS are expected to play a crucial role in providing a functional infrastructure model for eID interoperability between countries. Work has also started on the European Large Scale Action (ELSA) initiative by the European Commission which will provide a long-term vision of a digital Europe which integrates large scale projects like STORK, and will focus more on the needs of citizens, business and government
- Countries rated the importance of the Action Plan for their own Key Enablers policies and initiatives at 0.65 (on a scale from 0 to 1). This is seen as the most important of the Action Plan’s five objectives because it provides important building blocks for the other objectives and good opportunities for cooperation. The Action Plan is seen as much more important for EU12 than for EU15, which may be explained by the fact that some EU15 countries had key enablers largely in place before the Action Plan was launched. For example, Latvia states the Action Plan *“has stimulated the work of development of eID cards conception, the use of eSignature has increased among public administrations, thus making the harmonisation process faster and also greening eGovernment.”*

Despite this good progress, a number of challenges are apparent. First, many countries which have an eIDM system in place merely provide low or medium level security. For example, 29% of countries only provide a low or medium security level. In particular EU15 countries apply relatively higher security levels. To be able to provide government services which require sensitive data exchange (e.g. healthcare records), high security levels are often needed. Second, take-up by end-users remains limited, so a shift towards user-centric models of identity management may be needed to stimulate take-up. Third, the majority of countries (68%) are not able to measure the take-up of eIDM systems. Most countries that do measure show an average take-up by citizens of around 32% and by businesses around 54%. However, in most cases this is in relation to only parts of the total eIDM system.

At the European level, efforts have been made in recent years to promote the European interoperability of national eIDM systems. Projects such as STORK – aimed at developing a series of cross border eIDM pilots – have started to create functioning applications which support eID tokens from multiple countries. The STORK project currently focuses on improving the interoperability of (what is being perceived as) secure types of electronic signatures and will in the long term take a more technology neutral approach. Several other initiatives which are likely to play a role in the future European eID arena are the projects PEPPOL, ePSOS, SPOCS and ECRIS.

Figure 6: Key enablers policies in place

Percentage of countries having a general Key Enablers policy and underlying elements in place			
Policy area	2007	2009 ⁹	Difference
General	92%	90%	- 2%
eIDM	n/a	100%	n/a
eDocument	57%	73%	+ 16%
Open standards	71%	93%	+ 22%
Interoperability	78%	100%	+ 22%
Open source	53%	78%	+ 25%
eSignature	n/a	96%	n/a



The cross-border interoperability of public administration systems is not restricted to eIDM only. To be able to provide European citizens with seamless public service delivery within the Single European Market, interoperability between European public administrations also needs to be established. To this end, a European Interoperability Framework (EIF, versions 1.0 and draft 2.0) has been developed which describes the way in which Member States could interact to provide European citizens with pan-European services. In addition, a “European Interoperability Strategy” (EIS) is currently being established which serves as a basis for defining the organisational, financial and operational framework necessary to support cross-border and cross-sector interoperability.

Key in achieving the interoperability of national public administration systems is also the use of open standards, and Figure 6 shows that 93% of countries now have a policy for these in place. For example, the Belgian government has defined an eGovernment interoperability framework – BELGIF – which includes a first list of open standards to be used by the public authorities. Open source solutions are also being used in some countries, as in Finland which since 2003 had has a Centre for Open Source Solutions (COSS) which aims to promote open source software in the public and the private sectors and remove barriers to adoption.

Table 7 provides a summary assessment of the progress and achievements of the High Impact Services Action Plan objectives.

⁹ Some respondents left the questions on eDocument, open source and eSignature unanswered. These blank answers were not used in the calculations.

Table 7: Summary of Action Plan objectives for Key Enablers

Key Enablers objectives	Assessment
1) <u>Action Plan, Main objective</u> : enabling citizens and businesses to benefit, by 2010, from convenient, secure and interoperable authenticated access across Europe to public services (by 2010).	Almost all countries have policies on various key enablers. The large majority - 80% - of countries have implemented electronic identification management (eIDM) systems to provide citizens and businesses with national, regional and local online services. As for some key enablers (e.g. open standards), the translation of policy into concrete measures is still needed.
2) <u>Lisbon Declaration Action</u> : Member States shall continue to promote privacy and protection of identity as well as enhancing trust and security by means such as the comprehensive use of electronic identity and authentication (2006-2010).	43% of countries which have an eIDM system in place merely provide a medium or low security level. There appear to be significant differences between the security and trustworthiness of eIDM systems used in different countries, with EU15 applying the highest security levels.
3) <u>Action Plan Action</u> : Undertake review of eIDM take-up in public services (by 2009).	The take-up of eIDM systems by citizens and businesses is still limited, however, about 70% of countries do not have data on this. Private sector uptake is important to ensure that any given eIDM system is used in practice and that this becomes intuitive. Take-up may also be stimulated by a citizen-centric approach which enables individuals to exert sufficient personal control over their data. Trust in eIDM systems can be gained by ensuring data and privacy protection, keeping in mind the different cultural contexts.
4) <u>Action Plan Action</u> , Agree common specifications for interoperable eIDM in the EU (by 2007) and monitor large scale pilots of interoperable eIDMs in cross-border services and implementing commonly agreed specifications (by 2008).	At the European level, significant efforts have been made in recent years to establish the interoperability of national eIDM systems. Projects such as STORK – aimed at developing a series of cross border eIDM pilots - have started to create functioning applications which support eID tokens from multiple countries. Other initiatives which are likely to play a significant role in the future European eID arena are the projects PEPPOL, BRITE and ECRIS.

6.2. Recommendations

1. Over the next few years, the alignment of key enabler policies and projects of various European Commission DGs (e.g. DG Information Society and Media and DG Informatics) should take place.
2. An overall vision on future European eGovernment in which several building blocks are coherently described may help to align separate initiatives. The outcomes of various projects (e.g. STORK, PEPPOL, BRITE) should also be integrated within this vision.
3. Given that the take-up of eIDM systems by citizens and businesses remains limited, more focus should be placed on the involvement of the private sector as many solutions have been developed by companies which could also provide eIDM models for the public sector to increase take-up by end-users.
4. The application of user-centric models of eIDM which provide users with sufficient personal control over their data may stimulate end-user take-up.
5. Improvements in monitoring the adoption, usability and impact of key enablers should be made. Only a minority of countries have been able to provide sound data on this.

7. eParticipation

7.1. Issues and impacts

eParticipation is the strongest growing area of all five objectives over the period of the Action Plan when measured by the increase in the number of countries with national policies, the growth of initiatives, and overall research and networking activity. One reason for this is that

it starts from a low base and was not included in the 2005 Ministerial Declaration, and still has potential to developed.

- The number of countries with a national eParticipation policy rose from 9 in 2005, to 16 in 2007 and to 25 in 2009 with 3 additional countries soon to join them,¹⁰ which will mean a three fold increase over the period. In 2009, there is no real difference between EU15, EU12 and OEU in the proportion having policies, although EU15 have had them in place for longer. (See Figure 7)
- The use of Web 2.0 channels has increased in importance since 2007, and multi-way deliberation and discourse are now just as important as one-way information. However, they are used by initiatives at sub-national level more than at other levels with especially the European level finding multi-way eParticipation interaction difficult. The clear challenge here is that the larger the geographic and population scale, the more difficult it is to use interactive, multi-way eParticipation tools and approaches.
- Before the elections of the European Parliament in June 2009 10% of MEPs were involved in eParticipation Preparatory Action projects, and almost all national MS parliaments are involved either in the eParticipation Preparatory Action or in relevant European RTD.
- Countries rated the importance of the Action Plan for their own eParticipation policies and initiatives at 0.49 (on a scale from 0 to 1), which is the lowest of all of the five objectives although only marginally so. EU15 countries are more likely to have concrete policies, activities and achievements in place for a longer period but to rate the Action Plan less highly than EU12 countries. The latter, on the other hand, are more likely to rate the Action Plan as more important. This is probably because they are starting their eParticipation policies and actions later and from a lower base, and therefore welcome the support and guidance provided. For example Malta states that *“The Action Plan has been a valuable guiding framework which was used when developing the national strategy. We are also highly encouraged by its inclusion in the CIP programme.”*

Most eParticipation is at local and regional level, where it is starting to take-off in many localities. (See Figure 7) For example, the e-dialogos project in Greece which offers all citizens the opportunity to get involved directly with local policies and the process of development and implementation in the city of Trikala through an online platform of dialogue and participation. National level initiatives are also important, such as the European Information Bureau of the Seimas which focuses on Lithuanian membership in the EU, and the official website of the UK Prime Minister’s Office which allows the public to submit ideas and feedback including through twitter, youtube and flickr feeds.

The European level is the least developed and has special challenges, although there are also many success stories. For example, DEMOS@WORK, one of the projects funded by the eParticipation Preparatory Action. is designed to enable European-wide discussion between elected representatives and civil society. One of the issues examined is the war on smoking which is being stepped up in Europe. The project is tapping into anti-smoking sentiment for a test run in participatory democracy. Also, Debate Europe is an initiative fully owned and operated by the European Commission. It was launched in March 2006 as part of the “Internet objective” in Plan D for Democracy, Dialogue and Debate. European institutions are also an important funding source, including for national and sub-national initiatives.

The evidence collected by this study also shows that eParticipation is likely to continue to grow in future. It is becoming more bottom-up and driven by citizens and communities, although to be successful this will require both simpler and more standardised top-down frameworks which also need to be flexible. It is also broadening in scope and concept to embrace wider empowerment and engagement in governance using ICT as well as greater pro-active involvement in eService design. eVoting is starting again to become a focus of interest, as in Estonia where in the June 2009 European election about 15% of votes were cast electronically.

There has been a real shift in European policy since 2005 towards active bottom-up participation rather than only one-way information and top-down consultation. It is clear that, although most citizens are not much interested in the mechanics of (e)participation, many remain very interested in public issues and policies which affect them or their communities directly, as well as in Europe-wide issues like the environment, jobs, migration, crime, etc.

¹⁰ Denmark, Spain and Sweden have reported that they will shortly have national eParticipation policies, which will increase the percentage of EU15 countries to 100%.

Figure 7: Countries with national or sub-national eParticipation policies and different levels of initiatives, 2009

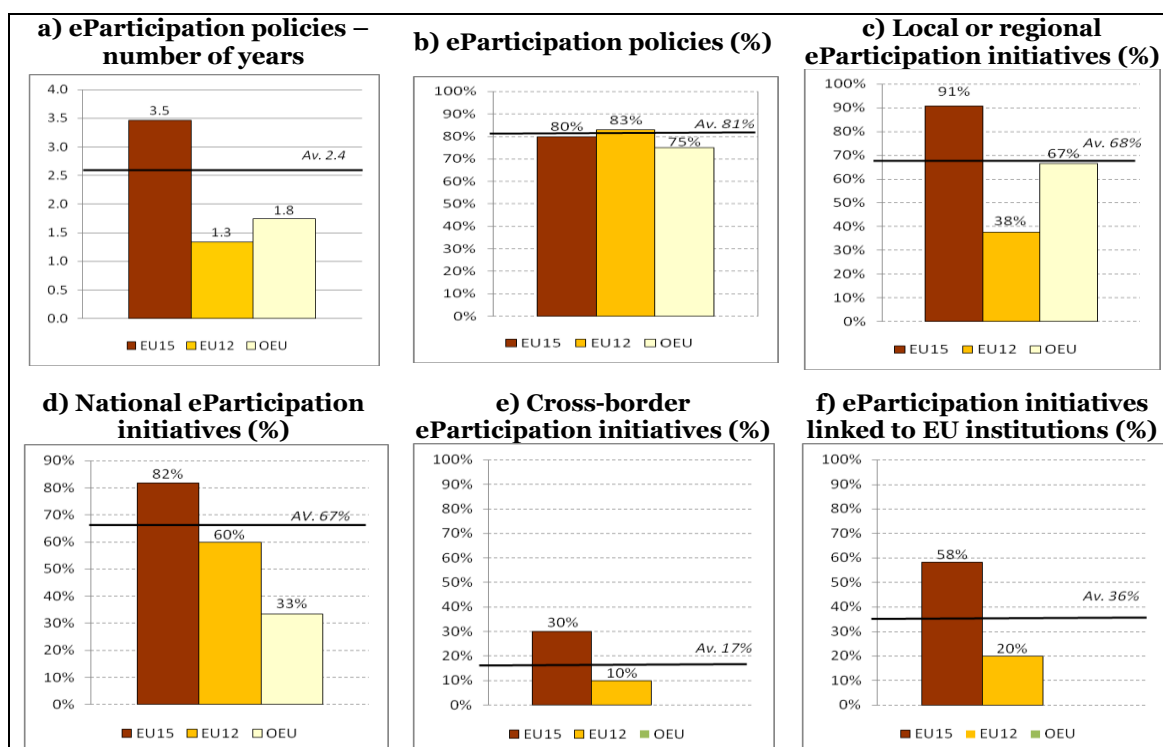


Figure 7 also shows that over the period 2005-2008, that EU15 countries have had eParticipation policies in place for longer than other countries and this seems to be reflected in the number of initiatives at all levels. There is thus some evidence that policies have had an impact. This is reinforced by the fact that the number of European countries in the top ten of the United Nations eParticipation Index increased from 3 in 2005 to 4 in 2008, with a general move up the rankings, and that the greater the number of years national or local eParticipation policies have been in place, the more likely a country is to be high in the 2008 rankings.

Table 8 provides a summary assessment of the progress and achievements of the eParticipation Action Plan objectives.

Table 8: Summary of Action Plan objectives for eParticipation

eParticipation objectives	Assessment
1) Action Plan (p.4): Main objective Demonstrating, by 2010, tools for effective public debate and participation in democratic decision-making, including at European level (by 2010)	Given that eParticipation was not part of the Manchester 2005 Ministerial Declaration, and was only subsequently incorporated into the 2006 Action Plan, plus its relatively recent emergence as an important area of focus compared to the other eGovernment areas, this main objective has been partially met. There has also been considerable and successful activity at the European level, especially through the Preparatory Action, and more recently through a commissioned study (European eParticipation 2009), the ePractice community, the Thematic Network ¹¹ and various events, as well as the new FP7 RTD.
2) Action Plan (pp.10-11): Action Test ICT-based tools that facilitate transparency and public involvement in democratic decision-making. Support experience exchanges (between 2006-2010)	This has generally been achieved, through FP6 RTD projects, the Preparatory Action, the ePractice community, and the 2007 and 2009 eGovernment Awards. The commissioned study and the Thematic Network have also supported good practice exchange.

¹¹ <http://pep-net.eu>

eParticipation objectives	Assessment
3) Action Plan (pp.10-11): Action Launch a preparatory action on ICT-based tools for enhanced parliamentary decision-making (by 2006)	The Preparatory Action has been an important component underpinning the other Action Plan achievements. It has now concluded after 3 years, and a recent evaluation for the European Commission is positive. (Rambøll Management 2008)
4) Action Plan (pp.10-11): Action Set advanced forms of eDemocracy as a priority of the IST research programme under FP7 (between 2007-2013)	This has been successfully achieved by launching the FP7 research on “ICT for Governance and Policy Modelling” with three target outcomes: 1) Governance and participation toolbox, 2) Modelling, simulation and visualisation, and 3) Roadmapping and networking for participation, governance and policy modelling.
5) Lisbon Declaration (pp.2-4) By the end of 2008 each Member State shall identify and exchange information on their national initiatives that aim to make intensive use of electronic means to increase participation and public debate (by end of 2008)	This has not generally been successful at European level. Each country has tended to do its own thing, although the identification of good national initiatives may have been useful within individual countries. There has been some cross-border exchange of information via ePractice, the eDemocracy and eParticipation Community, the Thematic Network and the commissioned study, but this has been limited.

7.2. Recommendations

1. Even though most eParticipation objectives in the Action Plan have not been highly ambitious, they have generally been achieved. However, one of the barriers has been some lack of resources to focus on and follow through successful initiatives. Attempts should be made to remedy this in future through wider access to expertise and practitioners, as well as stronger liaison with other European institutions using eParticipation.
2. Links and cooperation with the new parliamentarians elected to the European Parliament in June 2009 should be established as soon as possible in order to build on the successful relationship established over the last few years, for example through the eParticipation Preparatory Action.
3. Serious consideration should be given as to how countries can better support each other through more analytical, intelligent and targeted information exchange.
4. One of the clearest overall barriers to eParticipation at the European level is its high degree of dispersion and fragmentation, for example because definitions, systems and tools differ widely between initiatives and institutions. It is therefore recommended to coordinate policies and approaches across institutions at EU level, as well as directly exchange experiences and good practices between them.
5. The future focus of research and implementation in eParticipation should recognise and incorporate its broadening agenda and gain experience through more testing of how successful eParticipation tools can be used more widely.

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