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# TECHNICAL REPORT

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## Study on “eGovernment scenarios for 2020 and the preparation of the 2015 Action Plan”

Final report (D5)

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Robbert Fisher

Prepared for the European Commission DG Information Society and Media

The research described in this report was prepared for the European Commission Directorate General for Information Society and Media. The opinions expressed in this study are those of the authors and do not necessarily reflect the views of the European Commission.

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# Preface

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This Executive Summary aims to inform the European Commission's Directorate-General for Information Society and Media (DG INFSO) in its preparation of eGovernment policies for the period 2010–2015, referred to as the eGovernment 2015 Action Plan.

It is targeted at policymakers with expert knowledge in the field and summarises the work conducted in the study *eGovernment scenarios for 2020 and the preparation of the 2015 Action Plan*. It builds on three prior documents:

- **Assumption Analysis (D2):** rigorous assessment of policy priorities reflected in the Ministerial Declaration signed in Malmö in 2009 and their underlying assumptions.
- **Trend Analysis (D3):** horizon scan and review of trends in current and latent demand as well as future supply of eGovernment services, underlying technologies and infrastructures. It brings together qualitative and quantitative evidence collected with regards to trends, relevant uncertainties, drivers and barriers, provides criteria for selecting and assessing policy options based on the evidence of supply and demand expectations for eGovernment services, and presents relevant policy options. Quantitative data has been drawn from our 2010 online survey and as available in literature, and is complemented by qualitative evidence from literature, interviews and case studies reviewing real practice applications.
- **Retrospective Analysis (D4):** aims to establish the extent to which current policies and instruments could effectively contribute to delivering the Malmö priorities. It reviews the recently finished and ongoing activities in the field with a particular focus on the work done by the Unit ICT for Government and Public Services (DG INFSO, H2) and its predecessors, in order to understand the environment of policy options, the choices made, the trade-offs and the effective results from the implementation of the different policies.

We note that the retrospective analysis has not been an evaluation, but rather an assessment of the effectiveness, efficiency, appropriateness, proportionality, relevance in terms of added value and impacts, coverage, results and processes in relation to the subject of the current study. On this basis, it has developed criteria for assessing the effectiveness of policies and instruments, and identifies where current activity supports new policy priorities and where gaps in coverage are likely to occur.

This report is structured as a consistent and essentially linear flow of reasoning, from assumption analysis, through trends and retrospective insights, towards policies. It serves as an Executive Summary and is intended to help the reader navigate through these different

parts of the analysis, and concludes with a set of concrete and actionable policy recommendations.

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# Contents

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Preface.....	iii
Table of Tables.....	vii
Acknowledgements.....	ix
<b>Executive Summary.....</b>	<b>1</b>
1.1 Introduction.....	1
1.2 The study approach.....	1
1.3 The road to the Malmö Declaration.....	2
1.4 Survey findings.....	3
1.5 Understanding the context for the eGovernment 2015 Action Plan.....	4
1.6 Lessons from the past.....	5
1.7 Inspiration from private sector practice.....	8
1.8 In conclusion.....	18





# Table of Tables

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Table 1: Wish list for pan-European services from the demand side.....	4
Table 2: Business models and service contexts for private sector lessons .....	10



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# Executive Summary

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## 1.1 Introduction

In Malmö in November 2009, European Ministers formulated a new joint vision and policy priorities for eGovernment in Europe. Since then, the European Commission has engaged in an open and collaborative discussion with stakeholders to translate this vision into concrete and actionable eGovernment policies for the period 2010–2015, referred to as the eGovernment 2015 Action Plan.

To serve this ambition, the objective of this study has been to collect and analyse high quality inputs relevant for contributing to the elaboration of the eGovernment 2015 Action Plan. Over the course of this project, the study has provided concrete input to the eGovernment 2015 Action Plan in terms of validated priorities and a selection of proposed policy actions in support of these priorities.

In this Executive Summary, we will introduce the study approach, bring together insights and present the main conclusions resulting from our research. To conclude, we will present concrete and actionable policy recommendations.

## 1.2 The study approach

To provide solid grounds for analysis, the study team has applied a multitude of qualitative and quantitative research techniques:

- A thorough literature study informed the assumption analysis, horizon scan and retrospective analysis, and helped to define an online survey. Due to the short research period available, the survey was conducted in parallel with expert and stakeholder interviews.
- The key informant interviews focused on acquiring a more in-depth understanding of the literature, and helped to ensure that the study adequately identified and addressed the latest developments in the field. Overall, twenty-four key informant interviews were conducted, of which sixteen focused on the state-of-the-art and future expectations and eight focused on the retrospective analysis to ensure ‘lessons from the past’ would be taken on board. We followed a semi-structured interview approach that allowed us to capture the interviewees’ key expertise and skill set, rather than asking a list of general questions.

- The online survey aimed to deliver representative insights into true (current and latent) demands among citizens, business and governments in a sample of EU countries, and explicitly focused on topics relating to the Malmö priorities. The survey was conducted in six countries (Austria, Germany, the Netherlands, Poland, Spain and the UK), and built upon the recent Deloitte & Indigov study of eGovernment user satisfaction and impact. In order to estimate the bias of using an online channel, the online survey was complemented by phone interviews in each country.
- The retrospective analysis studied the extent to which current policies and instruments could effectively contribute to delivering the Malmö priorities. The analysis is based on: (i) a meta-analysis of relevant eGovernment activity evaluations and studies (eTEN, eParticipation, CIP ICT PSP, etc.); (ii) interviews with policymakers and stakeholders; and (iii) a statistical analysis of the ePractice database.
- The case studies illustrate concrete examples and aim to inspire progress in effective take up of new business models. Three areas of application in the private sector were explored for their benefit to furthering the eGovernment agenda, namely: (i) crowdsourcing, (ii) multichannel delivery, and (iii) shared service centres.

### 1.3 The road to the Malmö Declaration

The Malmö Declaration identifies four main areas subdivided into a total of fourteen policy priorities. Each builds explicitly on a number of assumptions whose validity we reviewed while seeking evidence to develop sound policies.

Three preliminary assumptions set the parameters of the Declaration. Firstly, European citizens and businesses will expect their governments to be more open, flexible and collaborative in their delivery of public services across Europe. Secondly, eGovernment will become an important enabler of progress towards European-wide policy goals across different sectors (justice, social security, trading business services and beyond). Thirdly, the potential of eGovernment will be increased by promoting a common culture of collaboration and improving the conditions for interoperability of administrations.

Overall, the evidence gathered through our literature review seems mostly to justify these three assumptions. However, some of the priorities (in particular the first main priority, 'Empowerment') build on less evident assumptions.

For example, a striking difference between the Malmö assumptions and the actual evidence gathered in our literature review is that at the current stage of development most eGovernment users care less about open and collaborative government than about speed of service and burden reduction.<sup>1</sup> This conclusion was also tested and confirmed in our survey, which found that current business users demand speed and procedural simplification above all other improvements.

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<sup>1</sup> Accenture, *Leadership in Customer Service: Delivering on the Promise*, 2007. As of 13 December 2010: [http://nstore.accenture.com/acn\\_com/PDF/2007LCSUKDelivPromiseFinal.pdf](http://nstore.accenture.com/acn_com/PDF/2007LCSUKDelivPromiseFinal.pdf); Deloitte & Indigov, *Study on the Measurement of eGovernment User Satisfaction and Impact*, 2008.

The latter two of the three preliminary assumptions found more substantial, though incomplete, support in the evidence base. The enabling nature of eGovernment as a policy instrument is supported by the breadth of cross-border and pan-European electronic services that are being developed across the policy spectrum. Yet the actual impact of these services on common policy objectives as well as their impact on user satisfaction is still to be assessed.<sup>2</sup> Finally, collaboration and coordination with stakeholders in setting up eGovernment policies and programmes at the European level has been seen by national eGovernment representatives and the wider academic and policy community as useful for improving the effectiveness of eGovernment services: this is seen as a result of the framework of support and comparison as well as the conditions for interoperability that such collaboration provides.<sup>3</sup>

## 1.4 Survey findings

Based on recent statistics from Eurostat and the demand survey conducted in six EU countries by the project during 2010, we know that:

- Internet penetration is high in households (65 percent in 2009) and businesses (94 percent in 2009).<sup>4</sup>
- Citizens (30 percent) and businesses (80 percent) regularly interact with governments via online tools.<sup>5</sup>
- Overall, most businesses and citizens respondents to the 2010 survey are satisfied with basic eGovernment services.
- Overall, most business and citizen respondents indicate they would like government to do more online, and indicate they see value in development of new services.

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<sup>2</sup> The 'enabling' functions of eGovernment services, particularly pan-European ones, are about efficiency and ease of use, not increasing openness of governance, etc. There is a distinction between eServices and eGovernance; both seem to be lumped into the same strategy in the Malmö Declaration – but eServices can be very effective enablers because they foster greater efficiency and ease of use, without going into governance or even involving users in the service design.

<sup>3</sup> Rothenberg, J., et al., *Towards a Dutch Interoperability Framework*, Santa Monica, Calif.: RAND Corporation, TR-552-FS, 2008. As of 13 December 2010: [http://www.rand.org/pubs/technical\\_reports/TR552/](http://www.rand.org/pubs/technical_reports/TR552/);  
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Danish Technological Institute, *i2010 eGovernment Action Plan Progress Study, Final Report, SMART 2008/0042*, 2009, p.27.

<sup>4</sup> Eurostat, March 2010: in 2009, the Internet was available in 65 percent of all EU households, coming from 43 percent in 2005. Diversity in Europe is underlined by the wide range of availability in different countries – from 90 percent in The Netherlands to 30 percent in Bulgaria. In businesses, the range was much less wide, between 84 percent and 100 percent across the EU 27.

<sup>5</sup> RAND Europe online survey, 2010: 44 percent of businesses use the Internet often, 36 percent sometimes. 30 percent of citizen respondents to the online survey interact regularly with their government using online means, 70 percent irregularly.

Some scope for improvement was noted, including better information about available services; transparency about the handling of personal data; more and better-targeted services; and more scope for online participation in policy development.

Respondents trust governments to keep personal information safe; the level of trust is considerably higher than their overall trust in government. While this seems at odds with the 72 percent of responding citizens concerned with lack of transparency regarding personal data, it shows that overall, citizens and businesses are not opposed to information sharing for clear reasons. Another striking finding from our 2010 survey is that businesses would be willing to pay for more targeted services.

The prioritisation of new services across businesses and citizens was remarkably similar (for all categories that were put as an option to both), as is clear from the table below (where services are ranked in order of interest, with 1 indicating the most interest):

Pan-European services preferences	Businesses	Citizens
Secure email channel for all formal communication	2	1
EU standard for digital signatures	1	3
EU electronic identity card	3	2
EU-wide electronic platform for public procurement	4	n/a
EU registry of available jobs and job seekers	5	4
EU index of health care providers	6	5
Services supporting portability of pensions, etc.	n/a	6
eVoting, ePolling and participation services	n/a	7
EU electronic patient record	7	8
Pan-European emergency services	n/a	9
Online registration of EU-wide work permits	n/a	10
EU land and real estate registry	8	11

Table 1: Wish list for pan-European services from the demand side

## 1.5 Understanding the context for the eGovernment 2015 Action Plan

Several challenges towards achieving the Malmö objectives were identified through the literature review and refined through our 2010 survey and interviews, though a number of uncertainties remain.

Success or failure in meeting these challenges will determine the effective impact of the actions in the eGovernment 2015 Action Plan. Challenges span economic, social, political, legal and cultural domains, and include:

- Due to the current **economic situation**, true political commitment for action will require a clear link to a contribution to solving national priority issues such as budget deficits and high unemployment rates.
- Due to the wide **diversity in approach and progress** of different EU Member States in relation to several aspects of Internet penetration in households and companies,



skills (both for users and for public service providers) and availability of eGovernment services, it will be inevitable that Member States have different priorities within the process of eGovernment development. In order to embrace this diversity rather than try to manage it, there needs to be flexibility as well as a feedback loop on the impact of actions of individual countries on the overall process.

- Due to the fact that effective interaction at EU level will **require decisions** on strategies, standards and interfaces, preparation of which goes beyond the individual interest of Member States, the European Commission is called upon for the role of ‘servant leadership’ which needs to be substantiated by the courage to take (and enforce) decisions and support collaboration by ensuring the availability of key enablers at EU level.

These key messages partly reflect the Malmö Declaration, and also emerged from our reviews of literature and interviews with stakeholders. How well we will be able to deal with these challenges is an uncertainty, but it is clear that the Action Plan will need to reflect an understanding and appreciation of them.

Uncertainties also relate to the level of trust people have in systems, and their preparedness to take up eGovernment solutions. The results of the survey have been encouraging here – people (whether responding as citizens or as companies) seem, overall, to be willing to interact with their governments over the Internet, and willing to do more. Barriers such as costs and concerns about use of personal data exist, and in general people are open to overcome those when it is clear why that would be in their benefit.

In addition, it will be important to give specific attention to staff skills, and the way government organisations work. While there is a new generation coming into organisations today that grew up with the Internet, it is sometimes expected implicitly from every civil servant that he or she can adapt to new requirements – while the means are not offered. In addition, there is a danger that systems that currently work will not function that well when translated into ICT-supported services, as they depend on a tradition in service provision that might no longer be available in the new environments. Lastly, in a changing world with increased globalisation, IT governance is largely in the hands of a number of global enterprises, as they determine what the next offer will be. In order to avoid lock-in and interoperability concerns it will be important that governments deal with this, consciously and with good collaboration.

## 1.6 **Lessons from the past**

Several activities addressing eGovernment have been deployed by the European Commission in the recent past.

In this study we have limited our examination to activities that are most directly related, in particular to activities under eTEN, eParticipation, FP7, CIP IST PSP and IDABC. Through a meta-analysis of results, studies, evaluations and interviews with stakeholders as well as Commission officials, we have identified gaps and analysed where these activities have delivered anticipated results and progress and where they have not. In addition, we have analysed cases posted on ePractice.eu since 2004 to assess those (reported) activities that bear relevance to the Malmö Declaration and the Action Plan. Much attention has

been given at EU and national level to the preconditions for eGovernment activities at all levels.

Interoperability has been fostered by the implementation of (large-scale) pilots and work under IDABC<sup>6</sup> and currently ISA.<sup>7</sup> Steering the interoperability process (for instance through the European Interoperability Framework (EIF) and the Semantic Interoperability Centre Europe (SEMIC.EU)) and supporting standards (EU level de facto standards can pave the way) fall within the crucial leadership role at cross-border level, in spite of potential constraints of subsidiarity, especially when the EU competences are less clear. The path breaking and facilitating/brokering roles are obvious and uncontested. More direct support and coercive measures, even if they amount to creating a standards body, are more controversial. Key enablers such as electronic identification (eId) are being promoted through large scale pilots, but as the targets of the eGovernment Action Plan (2006–2010) have not been met, further effort is needed to ensure eId implementation and operation, including the potential for centralising parts of the related services and infrastructure in order to facilitate appropriate cross-border collaboration, long-term embedding and uptake.

With respect to efficiency and effectiveness there has been relatively less specific EU eGovernment activity within the scope of this study. This could be because the role of eGovernment is expected to be fully integrated with other efficiency-related activities that are predominantly integrated at national level. Concerns exist about the measurement of efficiency gains resulting from eGovernment. Often eGovernment services exist in addition to traditional services. This means that multiple channels have to be maintained (for instance to avoid exclusion, to provide full coverage, or due to legal constraints), thus creating additional cost. In other cases the gains made in one part of the chain are cancelled out by reduced efficiency, bottlenecks or duplication in other parts, thus offsetting or reducing the cost benefits.

Organisational change is essential to the successful implementation and roll-out of eGovernment services, and a likely consequence as well, yet it has only been addressed marginally until now. Also, the co-development of services and potential public-private partnerships (from straightforward outsourcing to truly jointly developing and operating public services) will affect the organisational structure for deploying these services.

Green eGovernment has not been on the agenda until recently, and doubts are being expressed by stakeholders whether the topic is specific for eGovernment or generic in the sense that no specific action is required and therefore eGovernment (as eHealth or eTransport) could contribute to lowering the carbon footprint by definition. In that case, 'green' targets should be defined in a generic policy framework and not necessarily as part of a specific eGovernment action.

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<sup>6</sup> IDABC stands for 'Interoperable Delivery of European eGovernment Services to public Administrations, Businesses and Citizens'.

<sup>7</sup> ISA stands for 'Interoperability Solutions for European Public Administrations'. ISA is the successor programme to IDABC.

Most of the recent eGovernment efforts (at EU and national level) have gone into activities and projects related to citizen empowerment (for instance 54 percent of the cases in the ePractice database relate to this topic), primarily through citizen participation in (user-centric) processes (inclusive, targeting minorities, joint policy and decision processes, etc.) at various levels of action (from R&D to deployment and implementation), and the scope ranging from local to pan-European. Both the Malmö Declaration and the draft eGovernment 2015 Action Plan clearly focus on this area of activity. The high levels of previous activity in this area have created a wide range of building blocks and knowledge pools, and the Action Plan should therefore concentrate on added value at EU level, providing leadership and avoiding costly and unnecessary duplications of effort, and going beyond a learning experience to be a proper framework of communication and comparison (especially at local and regional authority level).

Areas hardly covered in the ePractice cases or ongoing EU eGovernment projects include transparency and collaborative production of services. Reasons for the low number of cases for collaborative production of services could be manifold, such as concerns over intellectual property rights and political risks in case of failure.

A general conclusion from the recent actions is that if eGovernment activities at EU level are to succeed, the focus has to be on tangible and achievable goals. SMARTS (specific, measurable, achievable, realistic, time-bound and sustainable) goals should characterise each action, objective and anticipated outcome, especially in the areas where Member State collaboration is essential (for instance, for the Preconditions and the Single Market action lines).

Clear leadership at various levels is needed to give direction to the process. At EU level this leadership role includes defining and communicating a clear vision (providing direction to the various areas of activity, as to an extent has happened in the user empowerment field and through the Large Scale Pilots) and providing central services with a cross-border function and nature (also reusing existing tools, for example, the Internal Market Information System<sup>8</sup> as the basis for setting up and implementing services).

Although it is evident that subsidiarity plays an important role, the current economic climate that motivates keeping/bringing costs down, certainly from an EU perspective, seems to justify stronger (and pan-European) leadership in standardisation and guidance to administrations at all levels, including local administrations. Strong and pan-European leadership should aim to reduce cost by using existing knowledge and avoiding duplication and reinventing, and should go beyond mere exchange of good practice and similar activities.

In terms of implementation, activities should be demand driven. The effectiveness of picking winners (technology, application) is questionable. Arguments against it stress that it reduces the richness and balance of the set of technology or application candidates. It could thus probably have counterproductive effects in terms of innovation. Other means such as pre-commercial procurement should also be seriously considered to create a wider pool and avoid market distortions. Creating examples with forerunners rather than

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<sup>8</sup> As of 13 December 2010: [http://ec.europa.eu/internal\\_market/imi-net/](http://ec.europa.eu/internal_market/imi-net/)

spending most effort to be all-inclusive does seem to be effective especially when aiming at short to midterm goals. Although promising, the forerunner concept, as, for instance, applied in the Large Scale Pilots, still has to prove itself in the long term and in real market conditions. Instruments such as the Large Scale Pilot A projects have proven to be effective especially for achieving interoperability at EU level and creating forerunner groups, while the smaller Pilot B projects are needed to maintain the innovation potential and amongst others retain the possibility to validate research and technology developments. The function of Pilot Bs as an instrument needs to be reviewed. There is general agreement that they have good potential to foster innovative (but not yet market-ready) solutions, but the results so far are less than expected. This seems to be true for both the response to the different calls and for the overall results. One suggestion is that the activities could probably be more focused to get clearer results.

There seems to be less need to emphasise the creation of Pan-European eGovernment Services in general but a requirement to focus instead on cross-border services<sup>9</sup> to address specific policy targets.

Research and Development (R&D) efforts and policy direction should be better aligned, integrated and tuned to operational needs, overall eGovernment policy and eGovernment policy implementation.

The coordination of various types of eGovernment activity constitutes a key barrier to be addressed and has simultaneous coordinated technical, legal and organisational tracks. To do so, three potentially consecutive steps have to be considered:

1. Developing and embedding the appropriate legal framework(s)
2. Planning and preparing for the unavoidable and required organisational change
3. Moving towards ensuring semantic interoperability.

Another barrier is the lock-in created by suppliers, especially at a local and regional level. Pre-commercial procurement could be a way to open the market to new and often smaller suppliers, reduce cost and allow for better innovation.

## 1.7 **Inspiration from private sector practice**

There have been many technical, organisational and/or service-based initiatives aimed at improving e-services in the public, private and mixed (eg, outsourced public services) domains. Solutions developed in one domain are often reused in others; this can trigger further cycles of innovation and even feedback to the originating domain.

The public and private sectors each have comparative advantages in delivering different objectives. Private sector e-service development may be expected to place greater emphasis on characteristics important to competition with other service providers: for example, cost, quality of service, state-of-the-art functionality and performance. In contrast, public sector

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<sup>9</sup> Pan-European eGovernment Services (PEGSS) enable citizens and businesses from all Member States to access (similar or the same) eGovernment services in all Member States. PEGS are based on a common architecture. The term cross-border services is used when a service is accessible from one Member State to one or more other Member States.

e-service development is likely to prioritise security, accountability and transparency, and cost in the current climate. As all of these characteristics are ultimately important in both domains, iterative development where each domain learns from the others should produce more balanced progress and reduce and ultimately eliminate differences that hamper efficient public-private partnerships in service delivery.

Knowledge spillovers are currently more likely from private to public than from public to private or among public sector entities, as a result of the rapid development of private sector services, and the general lack of explicit service contracts to encourage such knowledge diffusion. In addition to having different objectives, public and private services develop and diffuse at different rates. We consider ‘back-office’ applications to be easiest to transpose from private to public sectors because the administrative functions involved appear to be most directly comparable. In contrast, there is often resistance to transposition of end-user- (or service-recipient-) facing initiatives – especially those that appear to embed a seller/customer relationship. Of course, this view is a bit simplistic; the business models used to deliver both public and private e-services increasingly claim to be ‘end-user centric’ though there remain differences as to whether this means coordinating services around the *anticipated* needs of end-users or giving end-users an *effective voice* in choosing, provisioning and delivering services. In this respect, end-user-facing developments may be the most fruitful area for knowledge transfer and shared innovation.

This section draws on private sector practice to articulate some of the most promising lessons for near-term knowledge transfer from private to public e-services. Because the specific services, technologies and stakeholder groups are so varied, it is useful to cluster these lessons around business model development and e-service relationships.

- Business model development – we consider three examples:
  - Crowdsourcing – replacing a job done by a designated entity, generally under a contractual (service or employment) relationship, with a more general open call to a larger, often undefined group of people, thus replacing explicit contracting with greater competition and opportunities for open collaboration.
  - Multichannel delivery – maintaining alternative means of delivering e-services in order to ensure non-discriminatory access that reflects relevant end-user characteristics and adapts to changing technologies and service requirements.
  - Shared services – concentrating services that have (or can be configured, bundled or unbundled to have) a common core in a single organisation (or part of an organisation) in order to reap economies of scale and scope.
- Service contexts – it is useful to divide these into four broad categories:
  - Policy consultation – seeking exchange with a broad range of stakeholders on issues of general policy and strategy.
  - Service consultation – seeking feedback from directly-involved upstream (suppliers) and, typically, downstream (eg, service recipients) entities about the composition and delivery of e-services.

- Upstream provisioning – linkages within the service supply chain, in eHealth services, for example, this would include both healthcare service providers and those who supply the necessary ICT platforms, services and applications).
- Downstream delivery – involving end-users directly in providing services (eg, giving them responsibility for initiating contact, providing relevant information, following up, etc.) and ensuring that their needs are effectively and efficiently met by facilitating service alternatives (such as preventive medicine, exercise and dietary changes) and changes in service (eg, increased independence).

In Table 2, which maps the main examples, an upper-case letter ‘G’ or ‘P’ indicates the presence in the cases reviewed of ‘relevant experience’ in the Government or Private sector, respectively. It does not necessarily mean ‘everybody is doing it’ or ‘is doing it well’, but does underline that important experience is there to draw from. A lower-case ‘g’ or ‘p’ means that relevant experience is more the exception than the rule and thus that further action may be required:

	Crowdsourcing	Multichannel delivery	Shared services
I. Policy consultation	Gp	Gp	-
II. Service consultation and feedback	gP	GP	gp
III. Upstream (supply-chain) service provisioning	gP	gP	GP
IV. Downstream (end-user-facing) service delivery	gp	gP	GP

Table 2: Business models and service contexts for private sector lessons

### *Crowdsourcing*

One of the business models that has developed with increasing Internet use is ‘crowdsourcing’, whereby instead of specifying detailed requirements and monitoring and controlling them through explicit employment or contractual relationships, an ‘open call’ is issued to a loosely-defined – and often quite large – group of people, who can then collaborate, cooperate and/or compete to produce the needed solution or service.

The rise of crowdsourcing challenges the validity of traditional business models built on individualised and explicit relationships and holds forth the promise of new relationships that emphasise innovation and ensure that characteristics important to a wide range of ‘crowd members’ are taken into account. However, these advantages come at a price: the incompleteness and openness that comprise the main advantage of a ‘contract with the crowd’ also weaken accountability and enforceability. This may be of greater importance in delivery of public services than of private services, because recipients are often more dependent on services (and thus on those who contribute to their provision) and typically have little, if any choice. This development is relevant for eGovernment especially in relation to service contexts I to III in Table 2. In particular, active consultation around policy – with clear terms of reference, active recruitment of participants, explicit redaction and response and clear evidence that serious suggestions are taken up or at least seriously considered – is an increasingly-important part of Better Regulation, joined-up government and other reforms intended to improve eGovernment (and public sector performance in general). It has had only limited application thus far in the private sector context, where policy consultation tends to be limited to formal (if collaborative), planning and stockholder meetings. By contrast, service consultation and upstream provisioning (including procurement from the crowd) are active areas of development in the private sector.

In particular, crowdsourcing can be used in the relatively distinct ways identified in Table 2. In relation to policy consultation, the overall message is that it is vital for governments to consult on policy, but conventional forms of consultation are often cumbersome and lead to suspicions of ‘Potemkin consultation’, ie, in name only. Opening policy discourse to wider constituencies (‘the crowd’) helps to broaden the range of opinion and improve transparency. However, like the referendum process, which is a non-electronic form of crowdsourcing policy consultation, it can produce suggestions that are hard to implement.

Crowdsourcing policy is less important for business, which is more concerned with structured input to policy from the supply chain, regulators and customers. It may be more important where businesses’ actions result in a public service outcome, like environmental safeguards and other forms of corporate social responsibility. Given current trends towards public service outsourcing, mission-critical public service obligations may pass to businesses. To deliver guidance and effective accountability in this setting, crowdsourcing is an attractive alternative to the voting mechanism available to politicians.

Governments are especially interested in engaging citizens in a useful dialogue about policy issues, including the production and delivery of public services. Examples abound, including the March 2010 ‘Virtual Town Hall’ session conducted by the Obama administration in the US. This demonstrated that the participants appreciated the opportunity to express themselves, even without knowing precisely how (or even whether) their input would be used. But this is often insufficient, as we know from both public and private sector experience (and good practice guides) that such open-ended discussions (or ‘idea jams’) not only require listening to ideas, but also following up, and feeding back to those who contributed. The virtual town hall session like the ‘Big Conversation’ carried out by the UK government in 2003, was primarily billed as a way for government to listen to people, and risked giving the impression that the effect was to produce yet another channel for government to explain itself, and was in any case not generally seen as

interactive in terms of ‘immediate response’. In the event, such conversations should not be a series of even two-way interactions between the government on one side and (individual) members of the public on the other, but rather a mediated discussion among multiple groups with the government acting as host and government policy as the main subject. It may be expected that such initiatives should make active use of online moderation in order to ensure that participants listen to – and comment on – each other’s ideas and build on earlier contributions.

While these initiatives represent a good beginning, both our understanding and the underlying technology have moved on, and much better use of the web is possible to engage citizens in policy development. For citizen engagement, the most effective way forward seems to be:

1. Listen to the crowds, either by providing an open platform (idea jamming) or by raising specific issues (consultation).
2. With the ideas and suggestions provided, starting with moderation to foster dialogue within the crowds and by developing the most relevant suggestions further and implementing the best ideas.
3. Feed back to the crowds what has been done with the ideas in order to create a substantial and iterative environment in which all partners learn to better communicate and appreciate each other.

But it should be noted that this is not a panacea – such an effective crowdsourcing platform is vulnerable to adverse selection: the risk that those with an axe to grind, for example, will participate and that those with the greatest potential contribution will opt out in favour of quieter, more controlled environments or even inaction. It is also open to moral hazard, in other words, the risk that a party to a transaction has not entered into the contract in good faith and free-riding, in which participants (including governments) come to rely on the crowd rather than taking responsibility for concrete contributions (the ‘talking shop’ phenomenon) or adopt deliberately extreme and provocative positions (polarisation).

Governments that provide such open platforms publicly invite direct interaction, thus demonstrating sincerity and accountability as well as a desire to identify appropriate and beneficial uses of government power. These open platforms can also be provided by non-government parties that in a way act as ‘brokers’ for public opinion. Experience will show how effective such collective opinion mechanisms are in improving government policy.

This suggests the need for clarity for government-provided platforms. Given the costs and (policy) risks they entail, it is appropriate to ask what ‘official’ crowdsourcing initiatives add to the platforms already available (eg, blogs, social networks). It is not just a matter of openness – many citizens can now read their representatives’ blogs, send them emails, and comment on news stories. Representative samples of the citizenry get to provide more direct feedback through polling (eg, IPSOS Mori) and survey organisations (eg, YouGov) or e-petitions. This leads to four screening questions to evaluate crowdsourcing in the public sector:

1. What does an open public platform provide that existing open platforms do not?
2. Who would use these platforms and why – and what kind of messages would they deliver?



3. How can governments populate these platforms and ensure participation? This is voluntary, so citizens can be expected to participate when they need to and not when they do not. They will form effective communities of interest around the platforms, and will join with good will, providing (in addition to experience and opinion) knowledge, reasoning, analysis and debate.
4. How can we be sure that these platforms trigger useful action by the government and the public sector?

These questions recognise some of the ways active consultation has been criticised. It is not necessarily the case that e-platforms, whether crowdsourced and inherently asymmetric, client-server or socially networked and inherently peer-to-peer will overcome these criticisms or that consultation is likely to be better in relation to eGovernment than in relation to anything else.

For solving specific issues, inviting informed and sincere participation is the first crucial step. This starts by being crystal clear about what is asked: advice, action or decision, and on what subject, followed by 'low threshold' ways of providing input. A second step is to clearly engage, responding to suggestions made. Lastly, one must show that this all is done for a reason by doing something with the suggestions.<sup>10</sup> In a way, a lot of groundwork has been done, and, for instance, in the European Commission the legal commitment to publishing impact assessments together with policy papers is a clear demonstration of displaying how use is made of input from citizens.

As regards service consultation, the open characteristics of crowdsourcing are of particular value; getting feedback only from individuals gives a very limited (and highly selective) picture of how much good a service is doing. Something much wider is needed; ideally, it should be unstructured to permit stakeholders to tell the government how they see the service and break any cycles of paternalism and dependence.

Service consultation crowdsourcing may also be important for industry because it provides a platform for collaborative business models and service innovation, and also because it reaches out beyond current suppliers, partners and customers. To the extent that regulation delivers governance services to the economy, open forms of co-regulation come under this heading.

For upstream provisioning, using the wisdom of crowds to blend competition and collaboration has proven enormously attractive to businesses, especially in areas where control of proprietary knowledge is less important. Perhaps the best-known examples are open electronic reverse auctions in the supply chain and the 'expertise platforms' where

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<sup>10</sup> The nature of the feedback depends on the kind of question put, the nature of the crowd and what is expected from it. If the crowd is being asked to comment on policy, they are only asked for an opinion and the feedback should cover the range of opinions, any consensus and the way government redacted the inputs and used them in making a final decision. If the crowd is asked how to address a particular public interest challenge, some members may as a result be asked to do something – this kind of crowdsourcing (using engagement with the crowd to pick a (small number of) source(s)) is very different; the government needs to consider both the range of ideas suggested and the range of people suggesting those ideas. Finally, crowdsourcing may be used to get people to decide on – and implement – a set of public actions; in this case the crowd itself is asked to do something and the feedback should clarify the new opportunities and obligations and support people as they take the societal initiative forward.

potential clients describe specific problems and announce their willingness to consider bids to solve them. This combines some of the best features of an innovation tournament<sup>11</sup> and an auction or procurement in which the service to be provided is functionally described rather than in terms of a specific technology or organisational scheme. This and other new ways of buying government-specified goods and services from suppliers would be of interest to both public and private sector stakeholders, since they may bring down the price and/or improve the quality of the required goods and services. A further prospect – new ways of involving crowds in ‘producing’ what governments produce – is specifically interesting for governments who have political as well as business reasons to enhance citizen involvement.

Finally, there is at present little scope for crowdsourcing at the delivery end, except through the potential mobilisation of public activity in lieu of formal service provision. This is beginning to be stressed in the context of economic recovery programmes (the UK's ‘Big Society’ initiative being a prime example at the moment), and crowdsourcing may help inspire civil servants in solving problems, but to date there is little indication as to when it is likely to take off or produce a sustainable impact.

#### *Multichannel delivery*

A business innovation that has existed for a long time, but has become more complex and easier at the same time, is multichannel delivery of content and other services.<sup>12</sup> It has become easier because IT and telecommunication networks allow data to be shared by multiple applications with multiple platforms for accessing the data and/or the services that are based on it. At the same time the number of channels has increased, and has become a complex mix of passive and active channels that range from mobile location-based applications to the traditional shop or city hall. In short, ‘multichannel content delivery’ (and thus access to communications and transactions) capabilities allow users to manage a central content repository while simultaneously delivering that content to desktop web browsers, mobile phones and other devices, operated by the end user, the service provider and/or an intermediary.

Driven by changing market needs, businesses need to be able to deploy their existing business operations over a wide range of channels in a consistent way when their competitors do the same. But they may also restrict multichannel access or develop different channels in distinctive ways to achieve market separation. For example, some service providers opt out of comparison websites; for retailers, prices of goods and services available online via the web, over the phone, in person or in writing differ, and show no signs of converging (eg, the Vodafone Economics of the Internet report<sup>13</sup>).

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<sup>11</sup> Brutscher, P-B, J. Cave & J. Grant, *Innovation Procurement: Part of the Solution*, Santa Monica, Calif.: RAND Corporation, DB-580-DH, 2009.

<sup>12</sup> It is important to distinguish multiplicity (several alternative ways of doing things) from complexity (having those structured or linked in complicated ways). A regular grid network has as multiple connections and nodes but is not complex. A long one-way supply chain may likewise be diverse and multifarious, but not complex compared to a shorter supply chain with a rich set of formal and ad hoc feedback loops.

<sup>13</sup> Vodafone, ‘The economics of the Internet’, The Policy Paper Series, Number 11, April 2010. As of 13 December 2010:

In much the same way, while it might be argued that governments cannot provide different information on products and services on different platforms, the reality may be more complex. An example is the requirement from government to telecom providers with regards to provision of emergency services, which varies depending on the use of fixed-line, mobile or IP-based telecom services. Emergency services need to provide reliable communication despite congestion or degradation of parts of the communications system, handle different bandwidths of traffic among and within separate emergency services, and provide automated location information. This requires both a mix of channels and a way of coordinating and handing-off between them as circumstances evolve. Therefore, it is a case of complex rather than just multiple delivery channels.

As for consistency, requiring automatic provision of locational information when people use Voice over IP (VoIP) to contact emergency services would have delayed the availability of this channel by many years, and discriminated strongly between, for example, business and home users of VoIP subscription services, and between people who subscribe to VoIP services giving access to the public switched telephone network (PSTN) and those using free VoIP to contact other users of TCP/IP services.<sup>14</sup>

In the long run, however, the principles of public service should be upheld at least in equivalent access terms: citizens have an equal right to access services, even when they do not own or have access to the newest and most innovative platforms.

To develop further guidance on multichannel service delivery, it is useful to distinguish between: i) situations where multiple (and possibly different) channels are used for the purposes of ensuring redundancy, reliability, mobility and a good match between each user and at least one channel; and ii) situations where multiple channels are cross-linked to provide a deeper (rather than just broader) service relationship.

Moving towards Multichannel Delivery Platforms brings renewed focus to existing objectives in eGovernment policies, such as:

- Data organisation – when done well within a unit, pulling together data across units will be easier, whether the unit is an individual public service, or even an entire member state government.
- Consistency of services – the same level of quality of information will be offered on all platforms.

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[http://www.vodafone.com/content/dam/vodafone/about/public\\_policy/policy\\_papers/public\\_policy\\_series\\_11.pdf](http://www.vodafone.com/content/dam/vodafone/about/public_policy/policy_papers/public_policy_series_11.pdf)

<sup>14</sup> The US imposed a legal mandate for automatic locational information on providers of VoIP as a cheaper substitute for PSTN telephony. This limited availability – in particular, it did not work for business subscribers, for whom the locational information only identified the cabinet where the business connected to the backbone, not the location from which person was calling. The UK adopted a policy of ‘interim forbearance’ - for four years, VoIP subscribers had access to emergency services but ISPs were not obliged to provide automated location information (instead, the operator was notified that this was a VoIP call and reminded to ask the caller for their address). Other Member States did not impose a locational requirement, giving VoIP users distinctly second-class access to emergency services.

- Single window concept – enabled by data organisation (management and accessibility).

These widely accepted concepts originate from an engineering and design perspective and advantages as seen from the perspective of providers. However, when considering the perspective of the citizens, it is important to take the following points into account:

- Data organisation may not respect privacy, transparency, or accountability and may break the Personal Data Protection Directive obligation to give users control of their data. Methods that work for giving access to data held by a government or its agents in data centres do not necessarily work so well when the channel and the service are interactive – when ‘backhaul’ traffic becomes important and must also be managed across all the channels. Most content delivery models are too simple to provide good data organisation models.
- The platform neutrality aspect of consistency of services sounds good in practice, but its costs may outweigh the benefits. If citizens are limited to or strongly prefer a specific channel it seems entirely appropriate that service delivery over that channel should prioritise the interests of that group. Governments in the current economic climate cannot afford to make all services available over all channels, or even to deliver services over any channel that society or the market may endorse. For one thing, the bandwidth requirements of high-functionality web platforms would overwhelm communications to remote areas and mobile (as opposed to wireless LAN/nomadic) handsets. On the other hand, few would favour throttling or reducing the functionality of services offered in urban areas with superfast broadband. Consistency is also not just a matter of formatting a web page; different channels offer different levels of security, privacy and reliability.
- Single windows, in the form of ‘one-stop-shops’ can – based on current implementations – limit access by, for example, the elderly, and encourage personnel and work-flow organisation changes that effectively reduce service relevance and quality. For example, a single window hooked up to a large data centre allows and encourages the use of staff who know more about consulting the system than they do either about the service(s) itself or the individual members of the public with whom they interact. In the health domain, this is illustrated by the recent emphasis on continuity of care, the varieties of which (management continuity, informational continuity and personal continuity) are important in different ways to different groups but often conflict.

Many of these activities are underway. While today’s economic environment slows down new developments requiring investments, implementing these platforms is widely expected to generate a clear focus on both service delivery improvements and cost savings. At the same time it is clear that when real return on investment can be demonstrated, this provides an extra incentive to undertake that investment (for instance, replace OpEx with CapEx).

#### *Shared services*

‘Shared service centres’ (SSCs) are a business innovation that started to pick up in the 1980’s. Shared services refers to the provision of a service by one part of an organisation or

group where that service had previously been found in more than one part of the organisation or group. Companies actively seek ways to make certain back-office functions work in a more competitive and business-like way by trying to achieve an internal client-vendor relationship. The expected benefits include cost reduction, improved quality and responsiveness and a more rapid pace and better direction of investment and innovation (by aggregating services in a way that realises economies of scale and the identification of reusable components and synergies of interaction). SSC business models can improve the functioning of complex organisations, both in terms of quality of service and costs. This development is relevant to eGovernment in two ways:

1. Improving organisational functioning: governments are complex organisations in which priorities constantly need to be set and adapted according to the needs of the society they serve and the possibilities they have. By separating primary (core) processes from supporting (context) processes, it becomes easier to set priorities.
2. Enabling the optimal use of resources in society in delivering services: an open model of provision of services facilitates outsourcing processes to business partners when they can deliver them more effectively and efficiently.

It may also become easier for the shared service to develop its own business model responding to the specificities of the service it provides rather than those of the (internal) service user. As experience with specialist procurement offices shows, this can result in a triumph of operational efficiency over effectiveness and a consequent reduction in internal communication and, ultimately, value for money. To prevent this, it is necessary to preserve the rigour of the agency relationship, to develop appropriate and testing service level agreements (SLAs) and to 'crowdsource' service users as a whole to keep the service organisation in touch with both overall strategic objectives and the needs of frontline service providers.

Another benefit is that the creation of a service agency can set the stage for outsourcing of the business process involved. Business process outsourcing (BPO) is a growing trend in the private sector, and shared services can lay the basis for its further development in government. Ultimately, there is little difference between SSCs and BPO – other than the fact that the services provided by SSCs fall within the managerial competences of the organisation. Cloud computing can be cited as an example, since many more public institutions are outsourcing routine processes (from information processing and record-keeping to email) to the cloud.

SSCs are not new in government. However, their possible role and impact is enhanced by increased capability to store and handle data and communications through connected networks, and because much more is known about how to effectively implement shared services within organisations by, for instance:

- Explicitly defining services in SLAs and by setting expectations informed by benchmarking to enhance the effectiveness of collective service provision.
- Using SSCs to handle support services and retaining control of mission critical core services, thus making it easier to oversee the impact of transferring responsibility for shared services to dedicated agencies and to design and monitor arrangements for outsourcing specific public services to private parties.

- Using SSCs as a first step in facilitating the development of pan-European services. A ‘shared service centre’ at European level would clearly define its service(s), involve mutual obligations between the service provider (SSC) and its clients (European government agencies), and be subject to strategic goal and priority setting and continuous improvement through a suitable benchmarking framework.

To capture the potential benefits of these lessons, we would recommend:

- Increasing awareness raising measures to ensure that existing lessons are taken into account;
- Developing a shared evidence base of lessons learned from public and private practice, and knowledge about (and indicators of) potential benefits and drawbacks;
- Having a dedicated activity focused on the prospects for using shared services to benefit multiple European governments by streamlining, harmonising and improving the competitiveness of supply of back-office services or even by enabling the roll-out of pan-European services in areas where these are justified and acceptable.

## 1.8 In conclusion

We conclude with a set of robust policy recommendations emerging from our analysis, and organised by Malmö priority.

**On Priority 1, Empowerment**, we have learned from our six-country citizen survey and interviews with experts that with regards to citizen-centric services it remains to be determined how user-centricity<sup>15</sup> relates to efficiency, user satisfaction and increased trust. It seems that technology is not the decisive factor; not surprisingly user-satisfaction is determined mostly by demonstrated understanding of (specific) users’ needs (including the need for trustworthiness), (lifestyle) preferences and relevant contextual factors, for example, the diversity in views across Europe and the way this is expressed in the design of the service. Moreover, actual services are only indirectly related to important determinants of user-satisfaction, namely overall trust in government, awareness, availability and access. A large part of policy activities at EU and national level in eGovernment in general and subsequent recent projects and reported cases have focused on user empowerment in a wide sense (54 percent of the ePractice cases, for instance, relate to this topic). The high levels of previous activity in this area contain a wide range of building blocks and knowledge pools, and the Action Plan should therefore concentrate on added value at EU level, providing leadership and avoiding costly and unnecessary duplications of effort, and going beyond a learning experience to be a proper framework of communication and comparison (especially at local and regional authority level).

On involvement of third parties, the challenge remains to determine public value, as this is not the aggregate of all personal values. This complicates the development of a common impact-based measurement framework in Europe. Aiming for more transparency has many recognized advantages, yet brings the challenge that it should not stifle government action.

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<sup>15</sup> User centricity meaning ‘concentrating on the citizen’s needs or involving the citizen in the process of meeting them’.

This may well require cultural and organisational change in government towards a more risk-based approach tolerant of mistakes within generally acceptable boundaries. In addition, it is important to consider the (potentially destructive) interactions between accountability, transparency and responsibility. If transparency means making all records publicly available, accountability means answering (actively or passively) to an outside authority and responsibility means ‘owning’ the policy risk or area in question, then the ultimate combined impact of their conflation (and of ICTs that facilitate linkage) depends on the efficient allocation of responsibility: this has to balance the power to act, motivations for action and the information required. The main challenge with involving stakeholders in decision making processes is to avoid potential problems such as trivialisation, populism, lack of responsibility and dominance by the loudest. The key is to ask what stakeholder involvement is desirable and why it is sought by those implementing eGovernment. It is possible that in an eGovernment context, stakeholder involvement is seen as a way to shift or avoid responsibility, or to occupy them with questions of ‘how’ rather than questions of ‘what’ or even ‘whether’ services should be provided). This is especially true when there is selection among stakeholders, so that those who choose to be involved do not represent either the current or the potential group affected.

As such, both businesses and citizens responding to the survey showed a high interest in participating in public policymaking when enabled to do so via low threshold electronic means.

**On Priority 2, Reinforcement of the Single Market**, we can conclude from the initial experience with pan-European implementation that while important barriers to the Single Market for Services are non-legal, including lack of information and cultural/language barriers, impediments to developing services addressing Single Market needs are often caused by prohibiting or conflicting regulations at national and EU level, subsidiarity issues or even the lack of regulation or legal embedding, as has been experienced with earlier pan-European applications and current local service providers (LSPs). For facilitating business set-up and operation in the Single Market, there is still significant work to be done in terms of identifying the real net impacts of eGovernment in order to prioritise and coordinate policies in ways that attain key objectives. Important factors triggering citizens’ mobility are job- and income- related, and the main barriers to mobility are linguistic and cultural differences, and especially social factors (fear of losing social networks, for example). Therefore, eGovernment is unlikely further to stimulate (cross-border) mobility, but may facilitate it by making mobility cheaper and less burdensome. Ideally, it should facilitate productive mobility while retaining the useful inertia that motivates people to engage with local problems, instead of moving away in ways that imperil balanced (regional) development. Mobility (exercise of the ‘four freedoms’ – the free movement of people, goods, services and capital) also requires cooperation among dispersed organisations in different countries, with different cultures, jurisdictions, legal traditions, incentives and concerns; the complexity of different, non-transparent and/or incompatible arrangements obviously makes this cross-border cooperation hard.

Reducing this complexity (by adopting harmonised procedures, or at least harmonised platforms and technical standards) or its adverse impacts (by encouraging eGovernment services that build in interoperability and citizen empowerment to ensure that problems are

visible to those best placed to address them – not always the traditional bodies) may lead to better overall use of Europe’s human and organisational resources.

There are also other factors that impede cooperation and actual integration of services. The European Commission is not in a position to lead due to the lack of a clear EU mandate. Furthermore, cross-border activity is rarely budgeted for within national public agencies, and the project-management skills of qualified IT personnel to run multinational, multi-stakeholder initiatives are a scarce resource. At the same time, the benefits of cooperation are not always evident in the short-term, whereas the risks of failure are high.

**On Priority 3, Efficiency and Effectiveness Enablement**, there are few challenges to the underlying assumptions, although it should be noted that while eGovernment might reduce the administrative burden to businesses and citizens, it is not yet clear whether it reduces the financial expenditure of government, in particular as costs are likely to increase in the early phases where investments need to be made to serve parallel channels and stimulation of uptake, and as things can still go wrong in the implementation phase. Non-financial benefits and costs of eGovernment should be taken into account – as much for predicting acceptance, utilisation and compliance as for designing services – but are even more difficult to calculate. At the same time, our survey showed that many people and businesses would be happy to pay for better services. Even though many ongoing activities at national and EU level indirectly contribute to this priority, very few are dedicated to one or more of the aspects. Regarding Green Government, the debate concentrates on whether this is a specific issue that can be driven by eGovernment per se or rather a consequence of Government policy goals on reduction of carbon footprints, and thus driven by common and more generic activities.

**On Priority 4, Key Enablers and Preconditions**, most assumptions have already been tested. We know that the European Interoperability Framework (EIF) is an important instrument to improve the definition of systems and processes to coordinate the actions of different levels of government and identify ways to facilitate sharing of documentation resources and procedures to foster the development, where justified, of trans-border online services. It is widely understood that identity is a key means both to organise (personal) information and to secure access to data to those with a valid right or need to see them; eIdentity is a logical next step. At least at the technical level (what it is rather than what it is used for), this seems appropriate for pan-European initiatives; the obstacles are mainly legal and political challenges, as well as being able to raise the necessary investment capital, rather than technical barriers.

On open-source software (OSS), the assumptions are less clear from evidence. If we limit attention to open-source versus proprietary software, open source does not always give organisations the support they get from brand-name vendors. Commercial vendors constantly update and fix flaws, even if it is only to survive in the market. They also provide the technical support many organisations need to keep operating. However, in doing so they often try to lock in customers and suppliers of related products or services and provide support at substantial additional cost. There is a difference between commercial-off-the-shelf (COTS) products, available as ‘standard’ from suppliers and bespoke vendors, and systems integrators/solution providers. But the issue of openness goes beyond software to include open standards and high levels of interoperability. Some



(increasing numbers) of system integrators, solution providers and providers of outsourced or shared services incorporate openness in their integrated systems, and provide support (if not always updates) as part of the service component. In software terms, this represents a 'halfway house' between OSS and commercial software. It is even a function that can be supplied within government by a dedicated agency, such as an SSC. The issue for many organisations is accountability: who will take responsibility if a problem occurs?

On R&D, the debate whether research issues in eGovernment are sufficiently specific to justify dedicated R&D action is still ongoing. The current gap between R&D in the eGovernment area and the operational needs of governments may give the impression there is no need for additional R&D in the area. However, the lack of innovation projects<sup>16</sup> in (for instance) the Competitiveness and Innovation Programme ICT Policy Support Programme (CIP ICT PSP) would indicate there is a need to 'fill the pipe' from the R&D side. The gap needs to be addressed from the demand side in order for new, innovative and operationalisable eGovernment services to be developed. The eGovernment R&D should become an integral part of the chain of eGovernment service development.

In addition, government funded R&D often does not deliver the desired final outcomes. This is at least in part due to the modality itself, for example, the time-to-market penalty of public R&D and deployment support in fast-moving areas like ICT, or the residual tendency of administrative selection procedures to favour 'low-hanging fruit' or to attempt to 'pick winners'. In addition, there is a reluctance to embrace the benefits of behavioural additionality and innovative forms of procurement and partnerships between suppliers and users. This is not specific to the eGovernment context, but relates instead to the European paradox (world-class research, but lagging uptake into deployment) which derives from the innovation culture, financial arrangements and other obstacles identified in the Hampton Court and Aho reports.<sup>17</sup>

We conclude that the highly dynamic environment in which the Action Plan needs to work requires a simple approach, with strong commitment from those who want to make it happen, and with a clear understanding of the stakeholders' diversity and different priorities. Rather than focusing on all barriers, it will be important to strengthen the overall vision and move ahead by empowering people, businesses and governments to contribute to achieving that vision.

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<sup>16</sup> The Treaty obligation to avoid market distortion has been interpreted to militate against active intervention in the 'engineering' gap between R&D and deployment. Also, as with eTEN, there is a requirement on large public resource investments that the technology, at least, should be 'proven' and feasible. To strengthen innovation (as opposed to invention) in this area, policy should support explorations of innovative ways to use existing 'solutions', which underlines the need for substantial and sustained user involvement throughout the effort. To complement this, socio-economic research is needed to understand, track, predict and optimise the impacts.

<sup>17</sup> Available at (as of 13 December 2010):  
[http://ec.europa.eu/invest-in-research/action/2006\\_ahogroup\\_en.htm](http://ec.europa.eu/invest-in-research/action/2006_ahogroup_en.htm)

This requires a 'servant leadership' role from governments: at EU level, in terms of the pan-European vision, and at Member State level in terms of national vision and implementation. It needs to be recognised that:

- eGovernment implementation needs to clearly address socio-economic challenges in order to get the necessary political and financial backing.
- Key lessons learned from the past include the need to explicitly address the legal framework, plan for organisational change, and ensure interoperability at its most crucial level: the interoperability of meaning (semantics).
- No application makes sense if there is no demand from either businesses or citizens.
- Levels of Internet use and eGovernment maturity considerably differ across Europe; while this should not hold development of new services back, it requires an innovative approach as well as transfer of know-how and experiences.

Governments need to remember that they serve citizens first and foremost, and that they serve businesses to increase the extent to which they serve citizens. They have gone a long way towards forgetting those principles; eGovernment gives an opportunity to return to a more service-oriented governance architecture. It also gives this restoration of the principal-agent relationship a sharpened imperative derived from the risks of taking the old institutionalised government stance into the new world, with its greater dynamism, dependence on highly complex (and often externally supplied and controlled) technology and increasing scope for citizens to bypass government entirely for some of their needs, thus impairing the ability of government to deliver even truly collective needs.

It is essential to let the citizens lead. Not only does this increase the odds of getting it right, in the long run it also helps the citizenry to mature and to take greater and more rational responsibility for and control of their own lives (in the public, private and civil spheres). This ultimately deepens the partnership between government and governed and enables the achievement of truly lasting benefits.