

# **Options for administrative actions towards the i2010 inclusive eGovernment goal**

Final findings of the inclusive eGovernment ad hoc group

27 November 2006

## Members of the inclusive eGovernment expert group of the i210 eGovernment subgroup

Chair: European Commission; DG INFSO eGovernment unit

|              |                      |   |    |
|--------------|----------------------|---|----|
| Costas       | AGROTIS              | Department Of Information Technology Services                                 | CY |
| Borys        | CZERNIEJEWSKI        | Institute of Control Systems  | PL |
| Jorma        | KARJALAINEN          | Ministry of Finance   | FI |
| Peter        | KUSTOR               | Federal Chancellery   | AT |
| Jean-Jacques | LÉANDRI              | Ministry of Finance, department for modernisation of the state                | F  |
| Adam         | LEBECH               | Ministry of Science, Technology and Innovation                                | DK |
| Berta        | MAURE RUBIO          | Ministry for industry, tourism and commerce                                   | ES |
| Pierre       | PECASTAINGS          | Ministry of Finance, department for modernisation of the state                | F  |
| Jiri         | PRUSA                | Ministry of Informatics   | CZ |
| Blanca       | RODRIGUEZ-ANTIGÜEDAD | Public Administrations Ministry   | ES |
| Natali       | SELSKAITÉ            | Information Society Development Committee                                     | LT |
| Tone         | SMITH-MEYER          | Ministry of Modernization   | NO |
| Pascal       | SOUHARD              | Ministry of Finance, department for modernisation of the state                | F  |
| Diana        | STANGU               | Ministry of Communications and Information Technology                         | RO |
| Aigars       | STIRNA               | Secretariat of Special Assignments Minister for Electronic Government Affairs | LV |
| Algirdas     | TRAKIMAVICIUS        | Information Society Development Committee                                     | LT |
| Martin       | TROY                 | Information Society Policy Unit, Department of the Taoiseach                  | IE |
| João Ricardo | VASCONCELOS          | Knowledge Society Agency of the Ministry of Science and Technology            | PT |
| Imke         | VRIJLING             | Ministry of Interior  | NL |
| Paul         | WALLER               | Digital Inclusion Team  | UK |
| Mette        | WICHMANN SØRENSEN    | National IT and Telecom Agency  | DK |
| Birgit       | WILDER               | Permanent Representation of Austria to the EU                                 | AT |

**Report prepared by Jeremy Millard  
DANISH TECHNOLOGICAL INSTITUTE  
Policy and Business Analysis**

# CONTENTS

|          |   |           |
|----------|---|-----------|
| <b>1</b> | <b>Introduction .....</b>   | <b>1</b>  |
| <b>2</b> | <b>Inclusive eGovernment issues.....</b>  | <b>1</b>  |
| <b>3</b> | <b>Analysing the needs and benefits of inclusive eGovernment target groups ...</b>  | <b>2</b>  |
| 3.1      | Target group taxonomies .....   | 2         |
| 3.2      | Options to promote benefits and tackle barriers .....   | 4         |
| <b>4</b> | <b>Summary of inclusive eGovernment options .....</b>   | <b>5</b>  |
| 4.1      | <b>Supply side options .....</b>  | <b>5</b>  |
| 4.1.1    | Undertake detailed behavioural analyses of specific target groups.....  | 5         |
| 4.1.2    | Develop and implement programmes for rolling out equipment and services appropriate for disadvantaged groups and providing them with broadband access ..... | 5         |
| 4.1.3    | Consider universal access, codes and charters .....   | 6         |
| 4.1.4    | Ensure the coordination of public intervention at different levels.....   | 6         |
| 4.1.5    | Continue to promote design for all .....  | 6         |
| 4.1.6    | Ensure specific assistance and special services are available for each disadvantaged group  | 6         |
| 4.2      | <b>User interface and service delivery options .....</b>  | <b>7</b>  |
| 4.2.1    | Understand how to segment users .....   | 7         |
| 4.2.2    | Contextualise inclusion in its local context.....   | 7         |
| 4.2.3    | Exploit the contributions non-public sector actors can make in designing and delivering services .....  | 7         |
| 4.2.4    | Ensure appropriate ICT channels for different disadvantaged target groups .....   | 7         |
| 4.2.5    | Promote flexi-channelling for an inclusive society .....  | 8         |
| 4.2.6    | Promote personalised pro-active services .....  | 8         |
| 4.2.7    | Ensure services are responsive to the changing needs of disadvantaged groups.....   | 8         |
| 4.2.8    | Promote personalised services through close government-citizen relations .....  | 9         |
| 4.2.9    | Promote individual self-service .....   | 9         |
| 4.2.10   | Develop guidelines for the design and delivery of quality eGovernment services for specific disadvantaged groups.....                                       | 9         |
| 4.2.11   | Ensure better marketing, targeting and promotion of eGovernment services for specific disadvantaged groups.....   | 9         |
| 4.3      | <b>Demand side options .....</b>  | <b>10</b> |
| 4.3.1    | Recognise and support the social use of eGovernment .....   | 10        |
| 4.3.2    | Continue to promote own use of eGovernment .....  | 10        |
| 4.3.3    | Encourage user-driven innovation in eGovernment services .....  | 10        |
| 4.3.4    | Promote the digital literacy of disadvantaged groups .....  | 11        |
| 4.3.5    | Subsidise (access to) equipment and services for disadvantaged groups .....   | 11        |
| 4.3.6    | Focus on the next generation .....  | 12        |

# 1 Introduction

This brief report summarises the main conclusions on options for action from the more detailed study "An analysis of European target groups related to inclusive eGovernment", prepared for the ad hoc subgroup on Inclusive eGovernment set up by the European Commission in cooperation with Member States within the i2010 high level group. This report also supports the Inclusive eGovernment Roadmap, prepared by the ad-hoc subgroup, for defining actions and policy priorities for 2010 in line with the eGovernment Action Plan.<sup>1</sup> It may be taken to be a 'signpost' in the roadmap, as it offers a menu of ideas that administrations may choose from in order to move forward on their personal route to achieve inclusive eGovernment.

The report is structured into three main parts:

1. A brief summary of the main issues being addressed by the inclusive eGovernment ad-hoc subgroup.
2. A summary of the main disadvantaged target groups being addressed, how their needs and benefits can be assessed, what are the main barriers to those benefits, and which type of action should be considered to reduce or minimise the barriers.
3. A summary of options for administrative actions for inclusive eGovernment aimed at promoting the benefits across the disadvantaged target groups identified.

Although this options report provides a brief background document for the inclusive eGovernment roadmap, its purpose is wider than this as it presents a broader set of longer-term and a more comprehensive options for administrative actions which may not be achievable by 2010 or within the scope of work of the ad-hoc subgroup. However, the choices and priorities which the ad-hoc subgroup needs to make should be seen as part of this wider inclusive eGovernment agenda.

## 2 Inclusive eGovernment issues

There is already a lot of evidence that eGovernment can provide more inclusive services in an effective, appropriate and accessible manner.<sup>2</sup> eGovernment policies targeted at specific groups at risk of exclusion, such as younger people in situations of disadvantage, women, low-income, unemployed, retired people, older citizens, ethnic groups, the disabled, etc., can be successful, as long as they are accompanied by a focus on the eSkills of users and staff and on access. For example, the inclusion of citizens by providing appropriate eGovernment services is able to promote fuller employment and thus higher employment rates by equipping disadvantaged individuals with appropriate skills and additional channels to access work, such as by disabled people working from home or in sheltered environments. It also promotes more employment opportunities through boosting the ICT sector.<sup>3</sup>

---

<sup>1</sup> European Commission (2006) i2010 eGovernment Action Plan: Accelerating eGovernment in Europe for the Benefit of All, Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, COM(2006) 173 final, Brussels, 25 April 2006, p. 5.

<sup>2</sup> For example, European Commission (2005) "e-Inclusion revisited: the local dimension of the information society", DG Employment, SEC(2005)206 [http://europa.eu.int/comm/employment\\_social/news/2005/feb/einclusion\\_en.html](http://europa.eu.int/comm/employment_social/news/2005/feb/einclusion_en.html); Prisma project(2003), Good Practice in eGovernment, eServices for all – treating all users equally, Strategic Guideline, European Commission IST 5<sup>th</sup> Framework IST Programme: <http://www.prisma-eu.org>; The Beep project (2003) "Social inclusion" in Best eEurope Practices deliverable D8.1: <http://www.beepknowledgesystem.org> and <http://www.beepsocial.org>

<sup>3</sup> European eSkills Forum (2004a), "eSkills for Europe: towards 2010 and beyond: synthesis report", European Commission DG Enterprise and Industry, September 2004: <http://europa.eu.int/comm/enterprise/ict/policy/doc/e-skills-forum-2004-09-fsr.pdf>

---

The evidence shows that inclusive eGovernment is most successful when coordinated widely across the public sector at different levels – European, national, regional, local – as well as requiring the constant commitment and synergy of the main relevant players: governments, private sector and civil society in its various forms. This results in improved cross public sector policies and coordination of social protection, care, and health systems, human capital investment and education/training systems, etc., supported by eGovernment. In appropriate contexts, this needs to be accompanied by international and cross-border eGovernment social inclusion initiatives.

First, ICT in this context need not be new or novel. Indeed evidence suggests that a large number of people prefer to contact public and private services by the telephone. The more recent development of mobile phones has built on this popularity, and the fact that very high proportions of certain excluded groups now own mobile phones provides enormous opportunities to improve contact, communication, and engagement with public services. Other more inclusive access technologies should also be considered, such as digital TV and specially designed home platforms, each of which could have a positive impact.

Second, the ICT systems used to support socially excluded people are often ‘back office’ systems that support better service delivery by service providers. Innovative service delivery systems that facilitate electronic information sharing, better management of information and electronic work management systems, are invisible to service users, except in the outcome of better services. Such service delivery can thus include human intermediaries (whether formal or informal, or from the public, private or civil sectors) who deliver services using ICT to, or on behalf of, end-users who only experience a familiar human contact and a service fulfilled.

Third, some of the more obviously present ICT hardware like telecare, CCTV security cameras, remote health monitoring, and smart cards, can provide immediate advantages to excluded people but do not require the user to have any technical knowledge or training to derive benefit.

In a society which is becoming progressively more technical, we need to ensure that the technology becomes progressively more social, and that it can more positively support the life chances and quality of life of all groups through improving personal capacity and better access to, and participation in, social and economic networks.

### **3 Analysing the needs and benefits of inclusive eGovernment target groups**

#### **3.1 Target group taxonomies**

The factors for exclusion are varied. They can be financial, educational, related to unemployment, to geographical circumstances or there may be technical barriers to products and services. These taxonomies should reflect as much as possible actual user behaviour in day-to-day life situations, and the problems they face, in relation to fulfilling (or attempting to fulfil) their real needs. In order to address these factors in a systematic manner, the ad hoc subgroup has identified up to twelve generic types of disadvantage important for eGovernment:

1. Families and children at risk, including single parents, violent families, large families
2. Young people at risk, including teenage pregnancies
3. Homeless, poor housing, frequent moving
4. Unemployment and job problems
5. Older persons
6. Disabled
7. Poor education and training, including low literacy
8. Criminal or other illegal behaviour (including ex-prisoners, substance abusers, etc.)

- 
9. Victims of behaviour causing physical/mental suffering or damage (including of crime, domestic abuse, etc.)
  10. Ethnic, cultural and language minorities, including foreigners, not all of whom are disadvantaged but eGovernment can increase their isolation
  11. Geographically deprived, in disadvantaged areas due to poor infrastructures and/or low socio-economic development
  12. Health and long term care disadvantages.

The following points should also be noted regarding this taxonomy:

- Low income and poverty have not been included as it can be argued that these factors underlie many of the problems manifest in most of the above groups, rather than constituting a distinctive group in their own right.
- Complex multi-need has not been specified as a separate group, given that, by definition, it covers many of the above and is thus conceptually difficult to tackle. However, the specific needs of multiple deprivation are extremely important and perhaps need to be tackled separately, although initially they would simply relate to a combination of the different types of exclusion a given individual experiences.

It should, however, be stressed that the purpose of the ad-hoc subgroup's work is not to develop a fully comprehensive taxonomy applicable in all situations, but to explore and illustrate different ways of defining disadvantage amenable to being tackled by eGovernment for the purpose of targeting action. Different countries have developed their own way to segment and target disadvantaged users, determined by their specific situation and need. For example, some research from a UK perspective but using international examples has adopted a problem-based approach:<sup>4</sup>

- Worklessness
- Educational underachievement
- Homelessness
- Crime
- Health and health inequalities
- Early years disadvantage
- Complex and multiple needs

Also, carers could be a group.

Another example is the taxonomy used in the Netherlands to profile target groups:<sup>5</sup>

- Benefit claimant (single mother on benefit)
- Volunteer
- Disabled child
- Senile older person (elderly invalid)
- Average family
- Healthy older person
- Chronically ill person
- Pensioner (disability benefit claimant)
- Unemployed

---

<sup>4</sup> Foley, P & Alfonso, X (2005) "An international study of technology initiatives to enhance social inclusion: extending the reach of what works", a report prepared by IECRC (International Electronic Commerce Research Centre) for the Social Exclusion Unit of the Office of the Deputy Prime Minister, August 2005.

<sup>5</sup> "Nederland Regelland: nine routes along Dutch bureaucracy", programme on the reduction of administrative burden for citizens, Ministry of the Interior and Kingdom Relations, The Netherlands: <http://www.lastvandeoverheid.nl>.

### 3.2 Options to promote benefits and tackle barriers

It is not useful to provide a one-on-one linking between benefits and barriers as the latter appear to be quite generic in preventing or lessening impacts across many if not most benefits. Suggestions for options can, however, be made more directly in relation to how specific types of barrier could be removed or mitigated, as summarised in the following table.

| Main barriers related to disadvantaged groups  | Main options for removing or mitigating barriers  |
|--|---|
| <p><b>Supply-side barriers</b></p> <ul style="list-style-type: none"> <li>• Lack of understanding about what (different types of) disadvantaged groups want and need</li> <li>• Poor availability of relevant ICT infrastructures</li> <li>• Lack of sufficiently robust or powerful equipment and infrastructure for a wide variety of often demanding user environments</li> <li>• Difficult to make financial and business case</li> <li>• Unaware leadership and inappropriate organisational arrangements</li> <li>• Inappropriate work process and staff skills</li> <li>• Poor coordination, supply chain and content</li> <li>• Inappropriate legal, regulatory and policy frameworks</li> <li>• Poor interoperability and data sharing</li> <li>• Lack of trust and privacy rules within public sector</li> </ul> | <p><b>Supply-side options</b></p> <ul style="list-style-type: none"> <li>• Undertake detailed behavioural studies of disadvantaged groups to better understand their real needs in real situations, both for government services generally and how ICT could support these.</li> <li>• Develop and implement programmes for rolling out specific eGovernment services for disadvantaged groups and providing them with broadband (high speed) access</li> <li>• Consider universal access, codes and charters</li> <li>• Ensure the coordination of public intervention at different levels</li> <li>• Continue to promote design for all</li> <li>• Design special services for specific disadvantaged groups</li> </ul>   |
| <p><b>User interface and service delivery barriers</b></p> <ul style="list-style-type: none"> <li>• Poor service visibility, findability accessibility</li> <li>• Poor service utility, usability and flexibility</li> <li>• Poor service quality and fulfilment</li> <li>• Inappropriate channel availability and compatibility (e.g. ICT, telephone, in-person) given that many disadvantaged users need high human-touch support instead of, or in addition to, own use of eServices</li> <li>• Lack of appropriate service offers, conditions and marketing targeted at specific disadvantaged groups</li> </ul>   | <p><b>User interface &amp; service delivery options</b></p> <ul style="list-style-type: none"> <li>• Understand how to segment users</li> <li>• Contextualise inclusion in its local context</li> <li>• Exploit the contributions non-public sector actors can make in designing and delivering services</li> <li>• Ensure appropriate ICT channels for different disadvantaged target groups</li> <li>• Promote flexi-channelling for an inclusive society</li> <li>• Promote personalised pro-active services</li> <li>• Ensure services are responsive to the changing needs of disadvantaged groups</li> <li>• Promote personalised services through close government-citizen relations</li> <li>• Promote individual self service</li> <li>• Develop guidelines for the design and delivery of quality eGovernment services for specific disadvantaged groups</li> <li>• Ensure better marketing, targeting and promotion of eGovernment services for specific disadvantaged groups</li> </ul> |

| <b><u>Demand side barriers</u></b>  | <b><u>Demand side options</u></b>  |
|---|--|
| <ul style="list-style-type: none"> <li>♦ Cost to user: <ul style="list-style-type: none"> <li>– lack of financial resources to acquire or use ICT equipment, or develop skills for ICT use</li> </ul> </li> <li>♦ User access: <ul style="list-style-type: none"> <li>– lack of space for ICT in demanding environments</li> <li>– lack of time to use ICT in quickly changing and demanding environments</li> <li>– poor user environments, e.g. lack of peace, quiet, supportive facilities, etc.</li> </ul> </li> <li>♦ User competence and skills: <ul style="list-style-type: none"> <li>– lower skills because of lower educational achievement and lack of opportunity to use ICT</li> <li>– lack of possibility to transfer ICT skills acquired at work to ICT skills needed for personal life</li> <li>– lack of ability to use services appropriately to help specific situation which is typically quite unique for each individual user (arguably, disadvantaged users need more targeted and fully personalised services than mainstream users)</li> </ul> </li> <li>♦ User motivation <ul style="list-style-type: none"> <li>– lack of trust (in both or either direction) between the disadvantaged user and the service supplier or mediator</li> <li>– for certain types of disadvantaged users (such as cultural groups, criminal groups, etc.), benefits may be difficult to achieve as they often depend on group-wide (or group leader) action or sanction, rather than purely individual incentives.</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>♦ Recognise and support social use of eGovernment</li> <li>♦ Continue to promote own use of eGovernment</li> <li>♦ Encourage user-driven innovation</li> <li>♦ Promote digital literacy of disadvantaged groups</li> <li>♦ Subsidise (access to) equipment and services for disadvantaged groups</li> <li>♦ Focus on the next generation</li> </ul> |

## **4 Summary of inclusive eGovernment options**

This section presents a summary of options for action by administrations to help achieve inclusive eGovernment, aimed at removing or mitigating the barriers to benefits across all disadvantaged target groups.

### **4.1 Supply side options**

#### **4.1.1 Undertake detailed behavioural analyses of specific target groups**

Given that the present analysis is performed but a first tentative step in analysing analysis of the target groups of inclusive eGovernment, the next step should include some quite detailed behavioural studies of one or more target groups in order to better understand their real needs in real situations, both for government services generally and also in terms of how ICT could support these. This should include examining existing evidence and case studies both of how particular types of disadvantaged users behave in their day-to-day life situations in relation to fulfilling (or attempting to fulfil) the needs they have, as well as examples of how this can be supported using ICT. This should be married to a vision of how government agencies, in cooperation with both private and civil sectors where appropriate, can transform public service delivery to particular types of disadvantaged groups, and examine how wider support can be provided.

#### **4.1.2 Develop and implement programmes for rolling out equipment and services appropriate for disadvantaged groups and providing them with broadband access**



---

The eUSER survey<sup>6</sup> has shown that supply-side conditions, particularly the roll out of eGovernment services, are the most strongly correlated with high and beneficial use of eGovernment services. Such factors seem to be more significant for eGovernment take up than socio-demographic factors like income, gender, labour force status and education. Thus, inclusive eGovernment policy should strongly promote widespread and own-use eGovernment take-up and this requires the availability of, and access to, appropriate equipment and services and high bandwidths.

#### **4.1.3 Consider universal access, codes and charters**

Universal access can be an important component of inclusion and cohesion policies for citizens. The principle of universality implies that all have equal access to, and equal opportunity to use, all services included in the USO (universal service obligation). In the context of the Information Society in Europe this does not at present apply to broadband, although much current discussion is moving in this direction. The USO could be related to a citizens' charter and based upon standards of access, range and quality of services, fulfilment criteria, affordability, skills needed, incentives, etc., and could contribute to measures to reduce the digital divide.

#### **4.1.4 Ensure the coordination of public intervention at different levels**

A recent EU report<sup>7</sup> concluded that coordinated public intervention at different levels is absolutely necessary to tackle and support social inclusion and regional cohesion in the context of the knowledge society. Within the public sector, and between all public service providers some of which may be private or civil sector partners, there is often poor coordination along the service supply chain and poor provision of appropriate content. Often this is also related to unaware leadership and inappropriate organisational arrangements, as well as inappropriate work process and staff skills. Underlying issues can also include inappropriate legal, regulatory and policy frameworks, poor interoperability and data sharing, and the lack of trust and privacy rules within public sector and with other providers. This also makes it difficult to make the financial and business case for inclusive eGovernment services. These supply side issues also tend to be barriers to eGovernment more widely, but tackling them in the context of inclusive eGovernment will also require specific and sustained focus.

#### **4.1.5 Continue to promote design for all**

Design for all (or inclusion by design) is defined as *ex ante* and often top-down interventions on the environments, products and services to ensure that everybody, including future generations, independent of age, gender, capacities or cultural situation, can successfully use services.<sup>8</sup> This implies developing products and services usable by everybody, thereby serving two purposes at the same time. First, meeting the needs of consumers who have difficulty using some products, and second meeting the needs of companies who want to expand their potential market.

#### **4.1.6 Ensure specific assistance and special services are available for each disadvantaged group**

Specific assistance is defined as *ex post* and often bottom-up interventions to assist disadvantaged users. Such assistance can be given by persons and/or through products, instruments, equipment or technical systems, offered to a person with disabilities or some other disadvantage in order to prevent, compensate, relieve or neutralise the impairment. Assistive

---

<sup>6</sup> Millard, J. (2006, forthcoming) "Report on current demand/supply match for eGovernment", part of Deliverable D5.2, eUSER Project, an IST Sixth Framework Programme R&D project: <http://www.euser-eu.org>.

<sup>7</sup> European Commission (2005) "e-Inclusion revisited: the local dimension of the information society", DG Employment, SEC(2005)206  
[http://europa.eu.int/comm/employment\\_social/news/2005/feb/einclusion\\_en.html](http://europa.eu.int/comm/employment_social/news/2005/feb/einclusion_en.html)

<sup>8</sup> ICTSB (2000) Project Team Design for All, Final Report, 15 May 2000.

---

technology and services, for example, can be split into 3 types: user-technology interaction, inter-personal communication, and supporting users in everyday life.<sup>9</sup>

## **4.2 User interface and service delivery options**

### **4.2.1 Understand how to segment users**

There is a need for a more sophisticated approach in the future to user segmentation by service. A key element here is not just understanding the composition of target groups, particularly when these are disadvantaged in some way, and what drives satisfaction, but also the various relationship types which citizens want to enjoy with government, and the roles of the various delivery channels. The analysis undertaken for this paper suggests that segmentation should reflect as much as possible actual user behaviour in day-to-day life situations in relation to fulfilling (or attempting to fulfil) the needs different groups have. It should also take account of real practical problems, benefits and barriers, i.e. reflect real differences in the way services could be offered and benefits realised, in order to provide a basis for realistic and operational user segmentation based on sound policy development and actions which could support the different actors involved.

### **4.2.2 Contextualise inclusion in its local context**

It appears that many inclusion and equality issues are most critical at the local and regional levels, as it is here that eCommunities, built around eParticipation, grow and flourish.<sup>10</sup> Despite the ability of ICT to ignore geographic distance, eCommunities are still primarily local in nature, and much of this arises from interactions between the citizen, civil organisations and local authorities using both ICT as well as traditional forms of communication. More information from, and involvement, by local and regional sources, is needed so that policies to help disadvantaged users access eGovernment services can be better targeted and localised.

### **4.2.3 Exploit the contributions non-public sector actors can make in designing and delivering services**

Two and three way partnerships between the public, private and civil sectors, should be better exploited based on the different roles, expertise and strategic interests each has to offer to inclusive eGovernment. For example, the private sector is likely to be strong in the effective use of ICT for driving forward efficiency and raising standards, in cutting costs and increasing output values, and in finding ways to pool and release demand so as to provide longer term self-financing solutions. The civil and community sector is likely to be less capable in using ICT but often couples a social service ethos with local knowledge, resources and activity. The public sector itself has the responsibility to develop services not just to serve immediate user need but also to implement wider societal policies, to set and maintain service standards regardless of location or group, and to ensure that no one is excluded, particularly the weakest and poorest members of society, which the private sector need not address.

### **4.2.4 Ensure appropriate ICT channels for different disadvantaged target groups**

It is clear that there is a serious eGovernment digital divide, and that online services seem, even more than traditional government services, to be used by a social elite rather than by a representative cross section of adults. However, traditional channels, including the increasingly important telephone-based services, are likely to continue to be offered and used by all types of

---

<sup>9</sup> Prisma project(2003), Good Practice in eGovernment, eServices for all – treating all users equally, Strategic Guideline, European Commission IST 5<sup>th</sup> Framework IST Programme: <http://www.prisma-eu.org>

<sup>10</sup> European Commission (2005) "e-Inclusion revisited: the local dimension of the information society", DG Employment, SEC(2005)206  
[http://europa.eu.int/comm/employment\\_social/news/2005/feb/einclusion\\_en.html](http://europa.eu.int/comm/employment_social/news/2005/feb/einclusion_en.html)

---

users, including those beyond the digital divide. In addition, there are burgeoning examples of eChannels which are increasingly being used by those beyond the digital divide. First, multi-media home platforms using, for example, digital TV which could be rolled out relatively cheaply through a public procurement process. The aim should be both easy and cheap access for all to eGovernment services, as well as to dynamise local economies. Many countries have already taken this route, including Italy, Belgium, Finland, and Korea. Second, mobile will become ever more important for delivering government services in the future. mGovernment is becoming a necessity, otherwise there is a risk of neglecting a very large number of users, particular those with disadvantages of various kinds given that such groups tend to use mobile channels proportionally more than other groups to access eGovernment and other services.

#### **4.2.5 Promote flexi-channelling for an inclusive society**

Much evidence shows that a multi-channel, rather than single channel, strategy can successfully reach out to disadvantaged users in new ways, and provide better tailored and more appropriate services. Although the face-to-face and increasingly telephone channels remain most important particularly for disadvantaged groups, the use of electronic channels is rapidly increasing and channel balance is dynamic and evolving. ICT in the back-office can also help the civil servant provide better services to users in traditional ways, and this may be for the time being more important.<sup>11</sup>

There is a danger in some developments towards a single 'e' channel which could further exclude disadvantaged groups, especially as these groups would not have the resources to access high cost face-to-face channels in situations where these could provide higher quality service. On the contrary, it seems clear that flexi-channelling is extremely important in its own right and may not be a temporary phase in the move from traditional to eChannels. It involves informed and skilled users switching between channels according to their personal preferences, to the service being accessed and to the task involved, and is strongly associated with both greater and more successful use of government services generally. Such flexi-channelling strategies are used much more by eGovernment users than others, and this is often a deliberate choice based on each channel's own strengths and weaknesses, which taken together are highly complementary and beneficial to users.

#### **4.2.6 Promote personalised pro-active services**

As back offices become more and more integrated and able to share data and resources, an interesting and growing strategy at the front-office is the ability to offer users a personalised pro-active service. This is a service for which the relevant public sector agency takes full responsibility to initiate, deliver and fulfil. Thus, the input and responsibility of the user is minimised and may even disappear altogether. Such services are therefore sometimes termed 'disappearing services' and could be extremely relevant for disadvantaged groups.<sup>12</sup>

#### **4.2.7 Ensure services are responsive to the changing needs of disadvantaged groups**

When providing services to users, the public sector must be constantly context and location aware of the user's needs and situation through monitoring, as well as through intelligent and complex decision-making. This implies extreme flexibility in system design so that it can respond to needs and demands as these change. An important component would be automatic scenario and simulation development, as well as impact assessment prognoses, in order to react appropriately to actual situations as well as anticipated future probabilities, without (necessarily) the conscious or direct intervention of civil servants or users, although this also

---

<sup>11</sup> OECD (2005), "Multi-channel service delivery" chapter 2 in "eGovernment for Better Government", Organisation for Economic Co-operation and Development, Paris, 2005.

<sup>12</sup> Millard, J., Kubicek, H., Westholm, H., Cimander, R., Iversen, J.S. (2004) Reorganisation of government back-offices for better ePS – European good practices (back-office reorganisation), prepared for the European Commission eGovernment Unit, Brussels, January 2004. Available from: <http://europa.eu.int/egovernment> and <http://www.beepgovernment.org>

---

needs to be possible. This could include automatically triggered responses to actual or threatening crisis or emergency situations.

#### **4.2.8 Promote personalised services through close government-citizen relations**

A user personalisation strategy could include a 'one-to-one' relationship between user and the public sector, where a government representative (an individual civil servant, a small team of civil servants, and/or an electronic agent) has the responsibility to fully support individual (or groups of) users, whether these be citizens or businesses. This support could include all areas of life or business covered by legislation or other standards, and could consist of standardised and personalised services, advice, and all relevant types of help and assistance. Such an approach would be extremely relevant for disadvantaged groups compared to mainstream users who tend to be more pro-active in their approach to (e)government services. This concept could be crystallised around the term 'citizen account manager' (in order to draw an analogy with 'key account managers' in business), citizen service activist, or sometimes the term "street-level bureaucrat" has been used. This is, in essence, a type of civil servant intermediary. At the European eGovernment Ministerial Conference in late November 2005, the term customer-service-director was also suggested.<sup>13</sup>

#### **4.2.9 Promote individual self-service**

As public sector back offices become more and more integrated and able to share data and resources, in addition to offering pro-active services (see section 4.2.6), it is also possible to offer the individual user, not less but, greater responsibility and control over a given service. This would mean that users take responsibility for service initiation and control, and this may be more appropriate for particular target groups and their intermediaries. This will enable transparency for individual users by having direct access to, and control over, certain data and service components, because these data are now electronically accessible wherever they are within the public sector, making it possible for individual users to access and use them on their own initiative. Thus shifting responsibility and control for a service either to the agency or to the individual user/intermediary are both enabled by digitisation and interoperability, and whether one or the other takes place is now a policy, rather than a technical, decision within the prevailing legal, ethical and cultural framework.<sup>14</sup>

#### **4.2.10 Develop guidelines for the design and delivery of quality eGovernment services for specific disadvantaged groups**

Guidelines for the design of quality eGovernment services for specific disadvantaged groups should be developed. These should build on existing guidelines and best practices from different Member States and service providers, to develop a European wide information resource on eGovernment service design, including appropriate standards, which maximises usability (ease and simplicity of use), experience (time and effort savings, e.g. through up-to-date and accurate information), fulfilment (service realisation, i.e. users actually achieving what they set out to achieve), and the personalisation of eGovernment services to suit individual needs to be used within a multi-channel environment complementing other channels, including face-to-face, telephone, etc.

#### **4.2.11 Ensure better marketing, targeting and promotion of eGovernment services for specific disadvantaged groups**

---

<sup>13</sup> The European eGovernment Ministerial Conference, "Transforming public services", 24-25 November 2005, Manchester, England, under the UK Presidency.

<sup>14</sup> Millard, J., Kubicek, H., Westholm, H., Cimander, R., Iversen, J.S. (2004) Reorganisation of government back-offices for better ePS – European good practices (back-office reorganisation), prepared for the European Commission eGovernment Unit, Brussels, January 2004. Available from: <http://europa.eu.int/egovernment> and <http://www.beepgovernment.org>

---

It is clear that significant barriers to take-up exist, many of which decrease significantly once eGovernment services are used. Much of this is lack of awareness and unfounded reservations or fears on the part of prospective users, although both these issues vary considerably depending on the type of potential user, so that clear marketing, targeting and promotion will also be needed in many instances. What is required is not only focused awareness raising of eGovernment services, but also efforts and supports to change the behaviour of the target groups. These could include specific campaigns as well as clear incentives to use, such as less bureaucracy, lower fees where these exist, easier deadlines, special offers, etc. This should include ensuring that eGovernment services actually save users time and effort, and are easy and simple to use so that the fear and experience of complexity is reduced as much as possible.

### **4.3 Demand side options**

#### **4.3.1 Recognise and support the social use of eGovernment**

The eUSER project<sup>15</sup> shows that using eGovernment services on behalf of others (i.e. as an 'intermediary') is undertaken by 51% of users as part of their job for their employer, and 42% on behalf of family or friends, the latter thus being termed 'social intermediaries' for eGovernment. In addition, the data indicate that each social intermediary supports about 2.6 other users. Both social intermediaries and the users they assist are not typical eGovernment users, but tend to be older, under- or unemployed, more likely to be socially disadvantaged, and to live in countries with less well developed Internet and eGovernment services. The social intermediaries therefore represent a potentially rich future resource, as part of already existing social use assistance networks. It is also likely, of course, that this is nothing new, and that such social networks have existed at family and community levels helping to disseminate the benefits of public and private services long before the Internet provided another channel. Policy design should recognise and promote these networks in a flexi-channel future.

One way of envisaging the social use of eGovernment is as a powerful transition phase for many, prior to their own use of eServices. This is certainly the historical pattern of diffusion of new technology in which leaders (temporarily) assist laggards, such as radio in the 1920s, TV in the 1950s, and PCs and telecottages in the 1980s and 1990s. However, we also need better understanding of whether intermediaries ultimately act as a barrier or a steppingstone to own use of eGovernment services.

#### **4.3.2 Continue to promote own use of eGovernment**

However, despite the importance and desirability of the social use of eGovernment for disadvantaged groups, this paper has shown that people who themselves use eChannels for government seem thereby to increase their overall interaction with government and to obtain important benefits which non-eGovernment users do not readily enjoy. So, although the weaker and digitally excluded members of society will continue to be served particularly by traditional channels, and increasingly by mobile devices or social intermediaries, the overall benefits they receive from government are still likely to remain considerably less than mainstream eGovernment users. Thus, it remains important to promote the digital literacy and skills of disadvantaged groups, as well as provide them with easy access to appropriate services.

#### **4.3.3 Encourage user-driven innovation in eGovernment services**

---

<sup>15</sup> Millard, J. (2006, forthcoming) "Report on current demand/supply match for eGovernment", part of Deliverable D5.2, eUSER Project, an IST Sixth Framework Programme R&D project: <http://www.euser-eu.org>.

---

Much current thinking in eGovernment is predicated on the concept of user- or citizen-centric systems.<sup>16</sup> The next step, within a ten to fifteen year time frame, should transform this into a strategy for user-driven innovation. This means not just designing government and services for users and taking their needs fully into account (i.e. user-centric), but drawing users and/or user groups themselves fully into the processes whereby government and services are determined and (co)created (i.e. user-driven).

There are many examples of user-driven services from the commercial world, for example the mushrooming of SMS messaging, the gaming and open source communities, as well as in manufacturing like kite-surfing and mountain bikes. The use of new social software and social network tools, both so-called Web 1.0 tools like email, instant messaging, web pages and discussion boards, as well as so-called Web 2.0 tools like newsfeed (RSS), podcasting and MP3 players, webcasting, web blogs, and wikis, as well as gaming and simulation applications (such as the Sims and HotDate, which were both invented or strongly modified by users), is starting to explode. They are already revolutionising the nature, products/services and business models of many market sectors by democratising the tools of both production and distribution and ensuring much closer market matching between supply and demand than has ever been possible before.<sup>17</sup>

These technologies are now poised to do something similar in the civil and public sectors, and there are already a few interesting examples many of which are also based on the increasing availability of other technologies like professional cameras, radio and mobile transmitters and receivers, audio equipment, sensors, multi-media mixing, etc, which means that the use of these technologies need not be restricted to governments or the private sector but can also be used by citizens to create their own services. The challenge for the public sector is how to enlist users as co-producers and co-designers in the way the computer games industry has. If only 1% of (e)government users become involved in designing and producing public sector services, that is a huge increase in the development workforce and potentially a huge increase in the relevance and use of services.

#### **4.3.4 Promote the digital literacy of disadvantaged groups**

The eUSER survey<sup>18</sup> has shown that, after supply-side conditions like the roll out of eGovernment services, user skills and digital literacy on the demand side are the next most important determinants of high and beneficial use of eGovernment services. Such factors seem to be more significant for eGovernment take up than socio-demographic factors like income, gender, labour force status and education. Thus, inclusive eGovernment policy should strongly promote wider own-use eGovernment take up and this needs a strong focus on promoting the digital literacy of disadvantaged groups. These 'first-order' factors can be tackled within the present policy time frame as concrete strategies with relatively easily recognized and measurable results and impacts.

#### **4.3.5 Subsidise (access to) equipment and services for disadvantaged groups**

Low income and poverty tend to underlie many of the problems many disadvantaged users have, as well as compound barriers of access to appropriate eGovernment services through lack of equipment and infrastructures. Although some of the new channels (like mobile phones) are much less expensive as well as being easier to use compared to the more tradition PCs and

---

<sup>16</sup> For example, the Cobra recommendations: European Commission, 2004f, "Cobra recommendations to the eEurope Advisory Group: eGovernment beyond 2005 – modern and innovative Public Administrations in the 2010 horizon", 3<sup>rd</sup> eEurope Advisory Group meeting, Amsterdam, 27-28 September 2004.

<sup>17</sup> Anderson, C (2006) "The long tail -- why the future of business is selling less of more: the new economics of culture and commerce", Hyperion, New York.

<sup>18</sup> Millard, J. (2006, forthcoming) "Report on current demand/supply match for eGovernment", part of Deliverable D5.2, eUSER Project, an IST Sixth Framework Programme R&D project: <http://www.euser-eu.org>.

---

Internet, their acquisition can still be a huge burden for some groups. One part of a strategy for inclusive eGovernment should therefore also consist of direct financial support for the acquisition of equipment and infrastructure and/or the provision of free or subsidised facilities, including PIAPs (Public Internet Access Points), and special facilities in places where certain groups congregate (like homeless hostels).

#### **4.3.6 Focus on the next generation**

The up-coming generation may change our understanding of inclusion. Many youth today have grown up with computers and the Internet, so their attitudes to the use of what the older generation terms 'new technology', as well as to (e)services generally, already appear to be completely different. It is possible to envisage that within 10 to 20 years, when the youth of today become responsible citizens and workers, concepts of (e)government and (e)inclusion will change dramatically if not disappear altogether. The technology will probably also have changed out of all recognition. However, this does not absolve us from tackling current issues and problems, but simply warns us against adopting a Micawber-like solution to these problems by doing nothing on the assumption 'that something good will turn up'.

---

**For further information about the eGovernment Unit:**

European Commission  
Information Society and Media Directorate-General  
**eGovernment Unit**

Fax (32-2) 29-6 41 14

E-mail [EC-egovernment-research@ec.europa.eu](mailto:EC-egovernment-research@ec.europa.eu)  
Website [http://ec.europa.eu/egovernment\\_research](http://ec.europa.eu/egovernment_research)

