EUROPEAN UNION

Committee of the Regions

Governance and ICT – Innovative eGovernment actions at local and regional level

Governance and ICT – innovative eGovernment actions at local and regional level

A great deal of additional information on the European Union is available on the Internet.
It can be accessed through the Europa server (http://europa.eu.int).

Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 2003

ISBN 92-895-0277-0

Printed in Belgium

PRINTED ON WHITE CHLORINE-FREE PAPER

Foreword

ICTs (Information and communication technologies) are bringing about major changes in the way in which local and regional authorities operate, interact and communicate internally or with other administrations, enterprises and citizens. eGovernment is about harnessing these changes, looking not only at the increasing use of ICT as a technological tool for delivering services on line and improving the efficiency of administrations but as a new means for opening up government services to citizens thereby increasing transparency and participation, and thus making government more responsive and centred upon its citizens' needs.

The main purpose of this study is to promote the development of local and regional eGovernment measures through the dissemination of best practice, in the light of the conclusions of the CoR's conference on Local and regional eGovernment: connecting to citizens and improving efficiency in Santorini on 12-13 May 2003 which have specifically recommended such actions. Based on a structured analysis on a wide variety of innovative approaches concerning diverse local and regional contexts, the study illustrates the role of the regions and cities of the EU in carrying forward initiatives and puts forward future policy orientations in this respect.

As the closest level of government to the citizen and the main providers of public services, local and regional authorities are at the frontline in the development of eGovernment initiatives. For the CoR, eGovernment cannot be effectively developed therefore without proper consideration given to the local and regional level, which is the focus of this study.

eGovernment concerns a rapidly evolving multi-dimensional sector much influenced by globalization, in this respect exchange of experiences and best practice can provide a valuable tool in helping local and regional authorities to rise to the challenge and meet the expectations and needs of citizens in this digital age. This does not involve imposing a model but pooling the wealth of knowledge that we have together and tapping this resource.

Albert Bore

President of the Committee of the Regions

Acknowledgements

This best practice handbook has been compiled thanks to the efforts, help and expertise of the following people:

Barrero A. - Asturia Government

Colorado Casado Y. – Generalitat Valencia delegation

Feuillien H. and Vanderborght C. - CIRB (IT Centre for the Brussels Region)

Forsyth D. - Argyll and Bute Council

Hagen M. - Freie Hansestadt Bremen and Dr. Klein S. - Bremen online Services

Hodgson A. - Durham County Council and Tzamarias N. - Derwentside District Council

Kjer Hansen B. and Lolle B.- Copenhagen County

Landais Y. - ARTESI (Ile-de-France)

Burhin F. and Palante J.P. - OGNETs Brussels

Skerlan-Schuhböck T. - City of Vienna

Valayer C. and Prof. Van Binst P. - Service Télématique et Communication, Université Libre de Bruxelles

Verschueren I. and Dochot JM - European Commission

Wickman-Viitala T. - Information Technology Center - City of Tampere

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Executive Summary

As emphasized in the conclusions of the conference on "local and regional eGovernment: "connecting to citizens and improving efficiency" held in Santorini on 12-13 May 2003, the Committee of the Regions outlines five key elements in order to succeed in eGovernment at local and regional level:

- Local and regional authorities have a key role to play in promoting eGovernment and this should be recognized in the development of policy and practice in this field
- The exchange of information and dissemination of best practice should be strongly supported at EU level
- The local and regional dimension of eGovernment should be given strong emphasis in the development of eGovernment policy at EU level
- eGovernment must be developed bottom up, putting people first
- eGovernment should be recognized as a new tool for modernizing local and regional administrations

EGovernment has for some time already been identified as one of the major means to fully reap the benefits of the Information Society in Europe. As such, it has become one of the key areas of the eEurope 2005 Action Plan. Moreover, eGovernment provides governments and administrations at all levels with the opportunity to offer citizens and businesses better quality services, in a faster, more responsive and convenient way. It makes it possible to deliver more value for taxpayers' money and to strengthen democracy. Its impact will therefore be felt in multiple areas, from a more competitive economy to a more inclusive and participative society, leading to the concept of eDemocracy.

This, however, will only happen if a number of key success factors are met. To deliver on its promises, eGovernment requires a complex combination of investment in advanced technologies, far-reaching organisational changes, acquisition of new skills within public administrations, strong political commitment and leadership, close cooperation across organisational boundaries, and a willingness to start small and scale fast. Above all, it requires putting the needs of customers – citizens and businesses – at the very heart of electronic service delivery. The effort in training administration staff should not be underestimated.

It is for these reasons that the Committee of the Regions has prepared this study on *Governance and information and communication technology – innovative eGovernment actions at the local and regional level.*

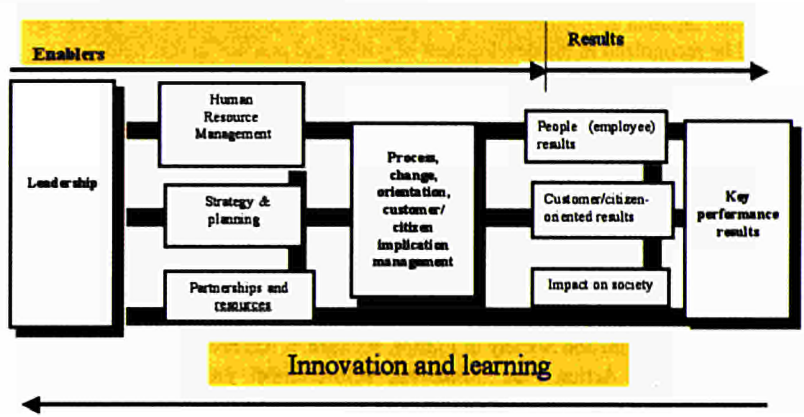
The awarded team led by OGNETs with the assistance of the Telematic and Communication Service of the University of Brussels chose therefore to follow a methodology derived from the quality management called the CAF model.

The model shows that results on:

- Customers/Citizens
- People (employee)
- Society

are obtained by:

- (political) leadership
- strategy and planning
- human resource management
- partnership and resources management and
- process and change management



Following this methodology allowed an in-depth analysis of the following seven best practice cases:

- The ServicePoint – 3 Island Partnership: an Argyll and Bute modernising Government project for Scotland (UK)
- The Citizen's Service Bureau of the Principado de Asturias (Spain)
- Bremen Online Services (Germany)
- The C.I.R.B. of Brussels (Belgium)
- The County of Copenhagen (Denmark)
- The Generalitat Valencia (Spain)
- eVienna (Austria)

Three further cases have been added where the CAF methodology was not judged appropriate to describe the cases:

- ARTESI: Ile-de-France (France)
- Derwendside (United Kingdom)
- Tampere (Finland)

Introduction

Objectives and Scope of the survey

This project, carried out for the Committee of the Regions[1], aims to present and evaluate relevant examples of best practices in the implementation of the «eEurope» action plan by local and regional authorities which contribute through their eGovernment programmes. eGovernment is defined by the EU Commission[2] as **the use of information and communication technologies in public administrations combined with organisational change and new skills in order to improve public services and democratic processes and strengthen support for public policies.**

The C.I.R.B., (www.cirb.irisnet.be) IT Centre for the Brussels Region in charge of the eGovernment policy for the Region of Brussels-Capital, is one of the best practices described in the study, and offers the entrance to the website dedicated to the project.

Based on the results of the best practice analysis, the project will illustrate the role the regions and cities of the European Union must play in this field, and will bring proposals to encourage the deployment of eGovernment and, at a larger scale, the development of telecommunication infrastructures and their use by everyone.

The Committee of the Regions is the youngest of the European Union's institutions. It was created by the Maastricht Treaty of 1991, as a representative assembly with the task of giving local and regional authorities a voice at the heart of the European Union.

The Committee of the Regions has chosen the consortium composed of the company "Organisation Gestion Marketing"[3] and the Service Télématique and Communication[4] of the University of Brussels (ULB) to carry out the study.

The conclusions of this study are presented in the form of case studies. The handbook also includes a brief summary of the development of eGovernment measures at the European level as well as programmes and initiatives supporting these measures.

Moreover, the handbook gives an overview of existing networks promoting eGovernment at the local and regional levels. A glossary will facilitate the comprehension of the technical terms used in this field in order to make this handbook accessible to all.

1 http://www.cor.eu.int/

2 Communication from the Commission to the Council, the European Parliament, the European Economic and Social Commttee and the Committee of the Regions – The role of eGovernment for Europe's Future, dated on 26 september 2003

3 www.ognets.com

4 http://www.iihe.ac.be/

Methodology

In terms of *best practice*, we think it is important to evaluate the real results, in other terms citizens' satisfaction, and to study the success or failure factors of these eGovernment initiatives.

We intend to define qualitative indicators concerning the use and the satisfaction of the citizens regarding eGovernment initiatives.

In order to study the success or failure factors of these initiatives we propose to use the CAF model (Common Assessment Framework[5]).

To structure the presentation of the best practice cases, the administrations participating within this project were invited to elaborate the drafting of their case by answering the questionnaire, which is based on the CAF model, a version of the EFQM [6] model adapted for public administrations.

Questionnaire:

The questionnaire[7] includes two parts:

Part one:

Part one is based on the CAF model, and was the topic of a seminar in Brussels held on September 15th, 2003 with the directors of the selected administrations.

This seminar enabled the exchange of best practice according to:

- Success factors
- Results achieved

These two topics are indeed most interesting but also most delicate to apprehend. An interactive seminar on this topic was very interesting and innovative. It enabled the participants to concretely exchange their points of view during theme-based workshops, definitely more motivating that a simple exchange of e-mail.

Part two:

The second part, could be filled remotely:

- Description of the general service
- Description of the administration's technological infrastructure

5 http://www.eipa.nl/home/eipa.htm. See projects

6 http://www.efqm.org/welcome.asp

7 See annex 1

The role of eGovernment in the framework of eEurope 2005

Beginning of the information society in Europe

In order to ensure the participation of European governments, citizens and business in the information society, the European Union is stimulating the development of new information and communication technologies. The legal basis of the EU policy for the information society holds four components, all part of the Treaty of the European Community: telecommunications policy (art. 47, 55, 81, 82 and 95), support for technological development (art. 163 through 172) and the contribution to creating the conditions for the competitiveness of the Community's industry (art. 157) and trans-European networks (art. 154, 155 and 156).

In the mid '80s two main policies were initiated: research and development activities in ICT in 1984 and the telecommunications policy through the Green Paper on telecommunication liberalisation in 1987. Following the 1993 White Paper, "Growth, Competitiveness and Employment", a coherent policy for the information society came into shape in the 1994 Action Plan "Europe's way to information society".

eEurope

By 1999, the information society had become a reality and further coordination of the Member States in this field was necessary. This was the purpose of a communication entitled "eEurope – An Information Society for All". The eEurope Action Plan was elaborated and adopted in 2000. In 2002, the Action Plan was revised and a new programme whose objectives are bound to be reached by 2005 is presently running.

The three priorities of the eEurope 2002 Action Plan were:

- Cheaper, faster, secure Internet
- Investing in people and skills
- Stimulate the use of the Internet

They reflect the will of this initiative to bring the benefit of the information society within the reach of all European citizens and businesses and to take advantage of the growth of the knowledge based economy. A series of important flanking policies, programmes and measures supported the eEurope Action Plan. They concerned:

- e-research
- e-security
- e-working
- e-accessibility
- e-commerce
- e-government
- e-learning
- e-health
- e-transport
- e-content

eGovernment

eGovernment is one of the important elements that contribute to the promotion of the information society. This was already the case for the eEurope 2002 Action Plan and is continued in the 2005 Action Plan. The target was to have all basic services available on-line by 2002, i.e. 8 services to businesses and 12 to citizens. A survey on 10,000 service providers revealed that centralised services have a higher rate of on-line delivery than services provided by local agencies and that important back-office reorganisation is needed.

According to Commissioner Erkki Liikanen, eGovernment is seen as an alternative for better delivery of governmental services in three ways: it offers the opportunity to achieve open government, it helps to provide a personalized public service and it contributes towards increasing efficiency and productivity, thus permitting public administrations to deliver more value for taxpayers money. As an open government form, eGovernment is helping democracy to function better as decision-making becomes a more transparent process. The EU offers programmes such as Better Regulation and a web site for public debate. In order to touch a larger part of the population, on line administrative services are bound to be offered more than only on PC, but on digital TV, mobile phones or public kiosks. Moreover, these services are personalized, in some cases through a smart card system, whose development is supported by the EU. As for productivity, the Action Plan aims for broadband connections in public administrations by 2005. eGovernment plays, thus, an important part in the R&D program of the eEurope 2005 Action Plan whose goal is to stimulate effective use of the Internet. A framework for interoperable pan-European eGovernment services is to be proposed by the end of 2003.

Overview of measures and relevant actions supported by the EU in this field at local and regional level

Regional development – Domains

In the present phase of the European regional policy (2000 – 2006), information society is a priority and the Structural Funds are provided in order to accelerate the transition to the information society and fight the digital divide. Already, at the Lyon Conference (2000) on "the contribution of the information society to regional development", it was concluded that "all information society measures financed under regional development should no longer be seen in isolation but within a framework of an integrated and single strategy on the information society".

BISER (Benchmarking for Information Society: eEurope Indicators for European Regions) is a European project meant to develop methodology, models, indicators and data sets for benchmarking regions in the information society. Within BISER, a framework for regional development has been developed. This framework is based on five policy fields of interest for regional development: entity and integrity, economy, technology, environment and sustainability, equity and cohesion. Subsequently, ten key domains have been identified as future targets for policy development:

- Government/Public Administrations
- Transport and the Environment
- Health and Care
- Regional Identity
- Business Enterprise
- Innovation and R&D
- Work and Labour Market
- Education, Training and Skills
- Social Cohesion
- ICT Infrastructure

eGovernment

eGovernment is, therefore, a focus point for future European policies in the regional context. According to the BISER paper, the information society drivers related to government and public administration are eGovernment (intra-governmental, G2C, G2B) including interactive communication with the public, inter and intra public administration networks/communication, e-procurement and knowledge management. As objectives for the European policies the paper cites government portals, interactive communication, transaction-based services, new

information services, less red tape[8]. The indicators proposed are situated at three levels: contextual (social structure, human capital profile, institutional framework, organisational structure), intermediate (level of Internet penetration, public Internet access points, internet usage rates) and e-indicators (on-line services, e-procurement, e-democracy, other B2C and B2B interaction).

Programmes

The eGovernment Research and Development website:
http://europa.eu.int/information_society/programmes/egov_rd/text_en.htm

The EU Commission have just published a new eGovernment R&D website which centralizes the information on EU support for eGovernment development in Europe.

eGovernment R&D mission

Research Development:

The Commission approach to R&D is that research is driven by policy, learns from best practice, and should provide input to future policy and be implemented through world-class best practice.

The R&D focus for eGovernment in the IST programme today – end 2003 – is on:

- organisational innovation and knowledge management;
- secure eGovernment and identity management;
- interoperability and pan-European services;
- user interaction and mobile services;
- eDemocracy.

8 Red tape: government imposed legislation, regulations, registration, licenses, permits, approvals, restrictions, standards, guidelines, procedures, reporting, filing and certification requirements, paperwork, investigation, inspection and enforcement practices

Projects can also address "horizontal themes" such as open source software, local/regional development, international cooperation, and socio-economic aspects such as indicators.

This focus captures nearly all current Fifth and Sixth Framework Programme projects, but does not pre-judge the R&D focus in future work programmes.

Best practice

Best practise should demonstrate that it meets policy priorities in real-life practice. It should benefit from EU R&D results.

Policy

Policy should get its reality check from real-life best practices and learn from individual cases for future policy challenges. Future policy needs can emerge from research work.

Specific programmes:

FP 6 (IST) Programme: http://www.cordis.lu/ist/home.html

The IST thematic priority will contribute directly to achieving European policies for the knowledge society as agreed at the Lisbon Council of 2000, the Stockholm Council of 2001, the Seville Council of 2002, and as reflected in the e-Europe Action Plan.

The strategy adopted in Lisbon 2000 is for an accelerated transition to a competitive and dynamic knowledge economy capable of sustainable growth, with more and better jobs and greater social cohesion. This requires wider adoption, broader availability and an extension of IST applications and services in all economic and public sectors and in society as a whole. ISTs are the key underlying technologies for easier and efficient knowledge creation, sharing and exploitation.

The objectives of ISTs in FP6 are therefore to ensure European leadership in generic and applied technologies at the heart of the knowledge economy. It aims to increase innovation and competitiveness in European businesses and industry and to contribute to greater benefits for all European citizens.

The focus of IST in FP6 is on the future generation of technologies in which computers and networks will be integrated into the everyday environment, rendering accessible a multitude of services and applications through easy-to-use human interfaces. This vision of "ambient intelligence" places the user, the individual, at the centre of future developments for an inclusive knowledge-based society for all.

This research effort will therefore reinforce and complement the eEurope 2005 objectives and look beyond them to the 2010 goals of the Union of bringing IST applications and services to everyone, every home, every school and to all businesses.

eEurope2005 aims at a wider deployment of IST, including modernising further public services such as eGovernment, eHealth and eLearning, and creating a dynamic business environment. It also aims at ensuring higher security of the information infrastructure and wider availability of broadband access.

eEurope will therefore contribute to the adoption of the research results as they emerge. It will also provide feedback about their acceptance and the problems related to their use. This close articulation between research and policy initiatives is a key component of the Union strategy to achieve the Lisbon goals.

The Community support for IST in FP6 will help mobilise the industrial and research community around high-risk long term goals. It should facilitate the aggregation of public and private research efforts on a European scale and enable the development of a European Research Area (ERA) in IST.

Applied IST research addressing major societal and economic challenges

- Towards a global dependability and security framework
- Networked businesses and governments
- eSafety for road and air transport
- eHealth
- Technology-enhanced learning and access to cultural heritage
- Applications and services for the mobile user and worker
- Cross-media content for leisure and entertainment
- GRID-based systems for solving complex problems
- Improving risk management
- eInclusion
- Products and services engineering 2010

Communication, computing and software technologies

- Broadband for all
- Mobile and wireless systems beyond 3G
- Networked audiovisual systems and home platforms
- Open development platforms for software and services
- Embedded systems

Components and microsystems

- Pushing the limits of CMOS and preparing for post-CMOS
- Micro- and nano systems
- Advanced displays
- Optical, opto-electronic, and photonic functional components

Knowledge and interface technologies

- Multimodal interfaces
- Semantic-based knowledge systems
- Cognitive systems

eGovernment is included in "major societal and economic challenges: Networked businesses and government." The aim is to enable networked organisations, private and public, to build faster and more effective partnerships and alliances, to re-engineer and integrate their processes, to develop value added products and services, and to share efficiently knowledge and experience.

The strategic objective "Networked businesses and governments" was included within the Call 1 of the IST priority published on December 17 2002 and closed on April 2003.

eGovenment and Regional Policy

Ever since its launch, the eEurope initiative has had a broad policy impact that has seen the strengthening and the fostering of new eInitiatives in Member States, but ever more significantly, in many European Regions.

Information on "Regional Development" issues within the framework of the European Commission policies and activities can be found in the following areas:

Regional Policy

European regional policy has entered a new programming phase (2000-2006) in which Information Society has been given a clear priority. Now that the objectives of the eEurope action plan need to be implemented, it is evident that the Structural Funds can be used to accelerate the transition to the Information Society in the regions of Europe and help fight the digital divide. As the new regional development programme becomes operational, general principles and commitments must be translated into investment decisions. For this reason, the Lyon Conference (18-19 December 2000) on « the contribution of the information society to regional development » concluded that: "*all information society measures financed under the regional development should no longer be seen in isolation but within a framework of an integrated and single strategy on the information society*".

However, the task of building a socially equitable and spatially-balanced information society involves much more that developing a technical ICT capability, even though this can constitute its backbone and is crucial for attracting new investment. Other factors seem to play an equally important role: the public awareness for the information society, the level of qualification and the educational level; the role played by the public sector in promoting the information society and the organisational capacities of firms.

This seems to confirm the analysis of the Commission which identifies a generally low level of awareness of information society benefits and opportunities, and a scarcity of ICT skills as the main barriers to the development of the information society. Thus, structural intervention should increasingly support regions in reinforcing the demand side of the information society, and especially the capacity of firms, institutions and citizens to effectively use ICT.

Hence, projects encouraging up-take of new technologies must therefore become a key element in regional development agendas.

Programmes and Initiatives

The Lyon conference has helped in catalysing ideas and in identifying priority areas for the use of Structural Funds. Its main indications are:

- To develop integrated and single regional strategies for the information society on the basis of the RISI initiative (Regional Information Society Initiative: a model for information society strategies based on the principles of partnership) http://europa.eu.int/ISPO/risi/. The Commission is facilitating the redirection of the funds by organising regional seminars on the information society for Objective 1 regions
- To limit the finance of telecom infrastructures almost exclusively in cases of absence of commercial incentives to invest in infrastructures and networks or when there is a lack of private initiative to fulfil specific social objectives (e.g. in rural, deprived urban areas)
- To re-engineer their processes on the basis of IT and take action on staff training and awareness raising for public employees, especially for educational institutions
- To work on eDemocracy and on making administration processes more transparent
- To create better links to the universities, polytechnics and research institutes
- To address key bottleneck of training teachers, and validate IT-skills
- To take transborder/transnational/interregional co-operation actions including candidate countries within Interreg III and Phare CBC (Cross-Border-Co-operation) funds
- To present regional programmes for Innovative Actions incorporating either one or more of the three strands:
  - eEurope-Regio
  - helping less-favoured regions raise their technological level
  - regional identity and sustainable development

The Commission will further seek to improve regional take-up and widespread deployment of ICT-applications developed within the IST research programme through the Cross Programme Action 11 on Regional and sectoral pilot actions and demonstrations for the digital economy.

The European Union has set up a specific support scheme for the 7 most remote regions of the Union:

- the four French overseas departments of Guadeloupe, Martinique, French Guinea and Réunion Islands
- the Canary Islands, which form part of Spain, and the Portuguese islands of the Azores and Madeira

The Commission will help these regions to seize the opportunity to develop the information society, contributing to the development of their socio-economic environment.

A study has been published on the impact of the Information and Communication Technologies in the remote and isolated regions of the European Union, in the framework of the actions planned in article 299§2 of the Amsterdam Treaty. More information on:
http://europa.eu.int/information_society/topics/regional/text_en.htm

Interchange of Data between Administrations programme (IDA)
http://www.europa.eu.int/ISPO/ida/jsps/index.jsp?fuseAction=home

IDA is a European Commission driven strategic initiative using advances in information and communications technology to support rapid electronic exchange of information between Member State administrations. The objective is to improve Community decision-making, facilitate operation of the internal market and accelerate policy implementation.

Its mission is to co-ordinate the establishment of trans-European telematic networks by:

- Promoting implementation of sectoral networks in priority areas
- Developing network interoperability measures
- Extending network benefits to EU industry and citizens
- Co-operating with Member States authorities and Community services
- Promoting convergence towards a common telematic interface

Initially, IDA helped set up infrastructure, establish common formats and integrate new ICT based business processes. It is now improving network services, tools, security and interoperability, opening IDA to more sectoral areas, and very soon, the EEA and EU applicant countries.

The eGovernment conference in Como on July 2003

http://europa.eu.int/information_society/eeurope/egovconf/index_en.htm

It is important also to mention the eGovernment conference in Como on July 2003

During this event the winners of the eEurope awards for eGovernment 2003 were announced. The first price was awarded to Bremen Online Services http://www.bremer-online-service.de/ , one of the case studies included in this survey.

European Local and Regional Networks related to eGovernment

ERISA

http://www.ianis.net/default.php?page=erisainfos

ERISA s' main objectives are:

eris@'s principal objective is to shape ways to promote sustainable economic, social and cultural development of member regions in the emerging Information Society and to create a common platform for the exchange of experience, know-how and projects among the regions. It will mobilize any system, service or activity which may directly or indirectly assist its members in achieving their objectives with optimum professionalism and efficiency. Accordingly, **eris@** seeks to support regions in their efforts to develop the regional information society, nd to exploit emerging information and communications technologies, for regional economic and social benefit. In doing so, **eris@** aims to enhance the competitiveness of its member regions and to promote and accelerate the development of the information society in Europe as a whole.

eris@ is the only European Association established with the specific aim of supporting regions in exploiting the opportunities of the information society for the purposes of regional growth and development.

More specifically, **eris@** seeks to:

- Raise the profile of the Information Society as a vehicle for regional economic development and social cohesion.
- Promote European regions as the most suitable focus for strategic information society development.

- Support member regions in the development and implementation of their information society strategies and action plans.
- Develop strong working relationships between regions, the private sector, and European Institutions.
- Identify the emerging needs of regional communities through collaborative and targeted research.
- Provide a Regional Information Society Policy Forum to facilitate information exchange, develop collaborative proposals for policy actions, and to be the voice of the regions in EU information society policy development.
- Raise awareness of the information society and promote universal access in the regions to ICT applications and services in order to stimulate regional development and growth, safeguard and create employment, and promote social inclusion.
- Address the challenges of structural adjustment, social inclusion and economic cohesion so as to enhance the development capacity and competences of member regions.

IANIS

http://www.ianis.net/default.php

Co-ordinated by ERISA, IANIS´ main objectives are:

To sustain and further develop **interregional networking**, and particularly to provide network support to regions with approved Innovative Actions projects, in the context of the information society and Structural Funds' investments. It aims to support widespread sharing of information, experience and good practice through an electronic communications platform, physical and virtual newsletters, workshops, seminars, annual conferences and policy fora and a study visits exchange scheme;

To design, develop, maintain, and provide access to an **e-Region Hub** with a projects' database and with links to other materials and reports of relevance to regional IS developers working in the context of the Structural Funds.

These complementary activities are designed to enhance the exchange of information, experience, know-how and expertise between the participating regions – especially with a view to improving and increasing the use of Structural Funds' investments specifically for regional information society development and more generally for regional economic and social development.

ELANET

http://www.elanet.org/

The **European Local Authorities' Telematic Network**, ELANET, operates under the umbrella of the CEMR and it focuses on the deployment of Information society at regional and local level.

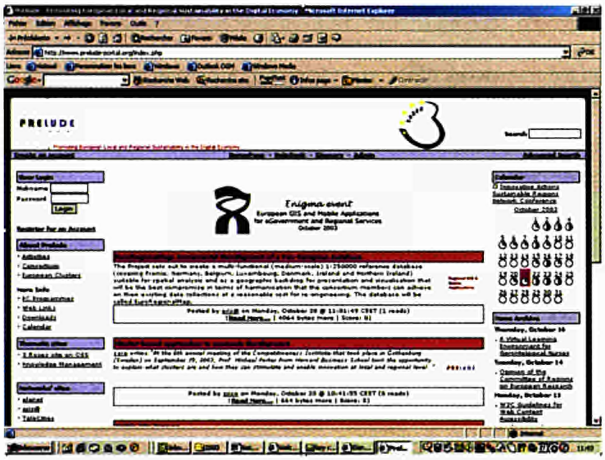
The particularity of ELANET is to bring together the public sector through the participation of national associations of local/regional authorities and private-organised bodies represented by their telematic daughter companies.

ELANET is coordinated by a **Steering Committee** elected by its members in the annual General Meetings. President and Vice-President are the top executive officers of ELANET. There are two **ELANET desks** in Brussels responsible for the network web site and support to the different working groups:

- The **Policy Group** meets regularly to discuss the different papers and documents on the Information Society introduced by various European Institutions, namely the European Commission, the European Parliament and the Committee of Regions.
- The **Project Groups** are continuously formed by different European consortia created by ELANET members to participate in calls for proposals under the various programmes on Information Society of the European Commission.
- The **EISCO team** is responsible for preparatory activities and realisation of the European Information Society Conference organised by ELANET every 18 months. The EISCO conferences gather local and regional decision-makers, civil servants and ICT experts from more than 25 countries of the EU, the Central and Eastern Europe and the Mediterranean area.

PRELUDE

http://www.prelude-portal.org/index.php



PRELUDE is a 24-month project, which is financed by the European Commission as an accompanying measure to the IST programme.

The short-term objective is to disseminate throughout the European Regions interesting practices supported by administrations that have been successfully experimented at local, regional and European level. Some of them are results coming from the IST programme while local or regional governments directly financed others.

The medium-term objective, to be achieved by the end of the project (first quarter 2004), is to have created a number of clusters for innovation working in each of the key **digital areas** of the project. These clusters are meant to be European public-private partnerships well focussed on territorial needs at regional and sub-regional level that have developed common grounds and a sound methodology to carry out mainstream initiatives within the Information Society-related programmes.

In the second phase of the project, **Regional Clusters for Innovation** are expected to find European partners and to transform themselves into European Clusters for Innovation (but emphasising the local and regional dimension). At an appropriate stage, the **PRELUDE Consortium** will assess these Clusters for Innovation and will select from amongst them those that are considered worthy of ongoing support from the PRELUDE project.

PRELUDE provides clusters with a package of services, mainly organised to support the start-up phase of the new constituency. These services are:

- Advice on the cluster's strategies and activities
- Participation of relevant experts to improve the cluster strategy
- Support to identify partners in the European arena
- Facilities to solve logistic problems for meetings and workshops
- Briefing to the European Commission staff on the cluster activities and projects

- Coordination of the different clusters to stimulate consultation and cross-fertilisation. This support includes advise on interesting European-oriented projects to look at or to use as a base to develop the clusters activities in its digital area.
- Continuous information on EU opportunities and PRELUDE clusters' current activities through the newsletter
- Access to the services of the PRELUDE portal and a web space to build own thematic web sites within the framework of the prelude portal, and using the web tools and applications created for this purpose.

The objective is to foster the creation of virtual communities and provide common platforms for the exchange of information and networking.

To make use of these services the cluster members must discuss a plan with the PRELUDE Consortium. This plan will be enclosed to a relevant Memorandum of Understanding, in which the general terms of the PRELUDE support to the RCI are described.

TELECITIES

http://www.telecities.org/

TeleCities is the major European network of cities committed to leadership in the Information and Knowledge Society. Established in 1993 in the framework of Eurocities, TeleCities is open to democratically elected city governments as well as to business and scientific partners.

TeleCities provides a platform of over 100 local authorities from 20 different European countries, sharing experience and developing practical solutions achieving an Inclusive Information and Knowledge Society, both at European and local level.

Its aim is to promote eCitizenship at local level to ensure that all citizens can equally gain from the benefits of the Information and Knowledge Society. To achieve this aim, TeleCities actively works for its members to:

- **Influence** the European Agenda to ensure that the interests of cities are taken into account in policy making

- **Foster** exchange of experience and knowledge transfer amongst cities. Co-operation and networking with South European and CEE cities is also pursued to contribute to the enlargement goals of the European Union
- **Inform** members on policies, programmes and initiatives at EU and local level
- **Facilitate and support** the development of EU funded projects relevant to the members and the network

Issues

TeleCities organises Conferences and Seminars, sets up Working Groups, produces policy papers and implements cooperation projects, to address the following key issues:

- Implementing local public online services integrated into **re-engineered processes**
- Promoting the right to **eSecurity** for all European citizens
- Implementing **eDemocracy** through new forms of citizens' participation and community empowerment
- Ensuring that all European citizens are **digitally literate and able to profit** from the benefits of the knowledge society
- **Benchmarking and learning** from the eStrategies of cities and their practical implementation

BEEP

http://www.beepknowledgesystem.org/default.asp

Funded by the European Commission's IST Programme, this site provides free access to a "good practice" knowledge system of cases and learning resources describing the use of Information and Communication Technology (ICT) to support a large number of social, economic, environmental and cultural goals.

Each Beep case uses a standardised report structure for ease of comparison and to facilitate research, and has been coded on the basis of detailed characteristics in order to enable sophisticated searching.

By using your preferred search tool you can identify relevant examples of "good practice" to use as inspiration and guidance in your own situation, or for research purposes.

Other learning resources are also available which build upon or support the good practice cases in the database: Beep learning resources.

European funding support ceased in the summer of 2003, after which the Beep Knowledge System will continue to be updated, expanded and improved using its partners' own resources, through partnerships with a number of organisations, by sponsorship, and other funding sources.

eGOVERNMENT-VISION.TV

http://www.egovernment-vision.tv/commonPages/main/

The new channel for public sector modernisation

Egovernment-Vision.tv, is dedicated to assisting Local Authorities implement the Government's 2005 modernisation initiatives. Produced in association with SOLACE, Socitm, IDeA and the ODPM, eGovernment-Vision.tv will provide a fresh perspective on the issues and challenges facing Chief Executives, Senior Managers and Councillors across Local Government.

There is no shortage of information and guidance on eGovernment. To the contrary, the governing and representative bodies provide a wealth of advisory and technically detailed documentation through many channels and web sites. eGovernment-Vision.tv provides a unique complementary role. Its engaging television format has the scope to keep this potentially overwhelming subject live and in perspective by discussing the issues in order to complement the detail.

Raising the Issues

eGovernment-Vision.tv's multi-channel format provides specialist programmes, features and content for different interest groups and for specific business and technology issues. Its partners, the major representative bodies, according to the needs of their membership, select key subject areas, issues and initiatives.

Each programme will comprise a number of Question Time panel debates where senior public sector executives, elected members and major suppliers discuss the latest strategic issues and progress being made. These will be complemented by service and technology features addressing specific areas of eGovernment implementation together with field reports and case studies.

Forthcoming Topics:

- National Projects - Their Role and Progress
- The Need for Partnerships - Public and Private
- Business Continuity and Disaster Recovery
- Resourcing - Recruitment, Training and Retention
- Information Sharing and Data Protection
- eDemocracy
- Staff competency and ECDL
- Risk Management and Mitigation
- Citizen Relationship Management
- Broadband and Citizen Access
- Service Design and Delivery
- Performance Improvement and Benchmarking
- Internet Infrastructure and Security
- Change Management and Leadership
- Smart Cards

Programme Distribution

eGovernment-Vision.tv programmes are web-cast live on a quarterly basis and the programme recordings are continually available in our online archive. The programmes are also distributed on CD, available to over 20,000 executives and managers as part of an extensive media-based marketing and awareness programme, and through the major industry bodies to their membership and communities.

I&DeA

http://www.idea.gov.uk/

The Improvement and Development Agency (IDeA) was established by and for local government in April 1999. Its mission is to support self-sustaining improvement from within local government.

As an advocate of the best in local government, the IDeA aims to deliver practical solutions to improve local government performance, develop innovative approaches to ensure the transfer of knowledge within local government, act on behalf of local government as a whole, building new platforms for joined-up locally delivered services, employ first rate staff to meet the needs and priorities of our customers and work with customers in a way which respects diversity and promotes equality. Overall the success of the IDeA will be judged by the extent to which local government improves. This will be measured by year on year improvement in performance indicators, the ability of local authorities to move up and through the Audit Commission, classification of authorities evidence of satisfaction amongst local communities with their councils and the services they provide

The IDeA is a non-profit organisation. Capital is ploughed - both intellectual and financial - straight back into local government.

The Agency's Board is responsible for the overall strategic direction and performance of the IDeA. It comprises members of all party groups from the Local Government Association, and representatives of stakeholders including trade unions, the private sector, the Welsh Local Government Association, and central government.

The IDeA's priorities over the next three years reflect those of local government, and the Agency will concentrate on these five key, and closely linked, areas of improvement and development:

eGovernment

The IDeA will help local authorities transform the ways in which they lead their communities and deliver services through the opportunities offered by eGovernment.

leadership

The IDeA will help authorities to review their forms of political and officer leadership and enable them to continually improve the ways in which they serve their communities.

capacity building

The IDeA will help local authorities to review their performance and put in place the capacity to deliver change to meet the identified needs of their communities.

improving council services

The IDeA will work actively with local authorities to drive continuous improvement of services and to challenge poor performance.

community well-being

The IDeA will help local authorities engage effectively with their communities, including building local partnerships and integrating sustainable development within their decision-making processes and delivery of services

Case studies

1. The 3 Island Partnership - Bringing services to people

"It's 5.00am on a Tuesday in November. It's dark outside and the rain is lashing against the window. The start of a gale is brewing and you have to get up to make the first ferry off the island. Ahead of you lies a three-day round trip to a hospital in Glasgow to see your consultant for a ten-minute appointment. Your condition means that when you return home on the last ferry on Friday night you will be exhausted."

Until this year, this was the reality for islanders on **Islay, Jura and Colonsay**. Now, with the opening of the **3 Islands Partnership** all public services have been brought together under one roof on each island, to provide a complete one-stop-shop service. These **Servicepoints** are the first port of call for any queries from abattoirs to roads, and everything else in between. Each of the Servicepoints has videoconferencing equipment, which any islander can use. In addition to this, computers have been installed so that islanders can access the Internet.

The Argyll and Bute Council area covers a vast (2,680 square miles) mainland area on the west coast of Scotland. It boasts six major centres of population and covers many of the best known of Scottish islands, each with its own unique culture and characteristics and of which 26 are inhabited. Its coastline is longer than that of France, but it has a population density of only 0.13 people per hectare, one of the sparsest in the UK.

With this project as the lead agency, Argyll and Bute Council has brought the world to the doorstep of some of its islands

The 3 Islands

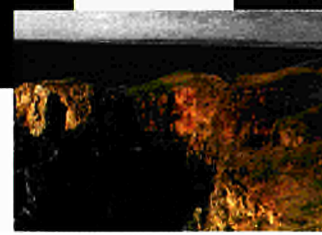
On **Islay**, [population 3325], the existing Council office was extended to provide a large reception area, a meeting room and 3 offices.

On **Jura**, [population 207], the former schoolhouse was adapted to provide a first time office facility; there is a meeting room and 3 offices.

On **Colonsay**, [population 99], an extension to the village hall has been built, so that small meetings can take place in the extension which also has a small office housing the Library [previously a box of books in the school] and the use of the hall itself for large meetings.

Portnahaven

Port Ellen



The Oa

Technical details

Islay has three rooms each with a different size of videoconferencing system. System One is a small single-user system that allows confidential videoconferences to be held, for example, a medical consultation.

System Two, which is also available on **Jura** and **Colonsay**, is a slightly larger system that can be used for videoconferences with a small local audience of up to 10 people.

System Three is capable of bridging four remote locations and can be used for self-contained videoconferences between Islay and the other Three Islands sites, and further a field.

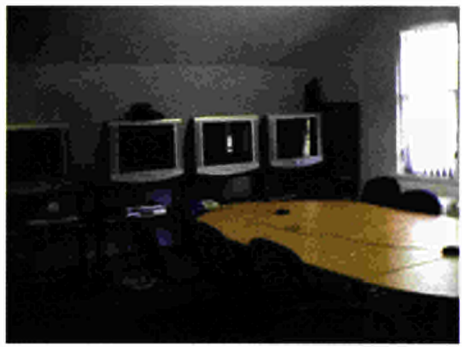
In addition, at each site, there are three PCs, which are attached to Argyll and Bute Council's network. This allows free access to the Internet and e-mail, already available to those on the mainland through the People's Network in libraries. There are colour and monochrome printers, a scanner and a CD writer. This means that people can use the Servicepoint to access the Internet, send and check their email, print letters, scan photos and burn CDs.

Each of the Servicepoints is managed by Council trained staff. No matter how advanced computer equipment becomes, nothing compares with one to one contact. Islanders can phone or drop into the Servicepoint and get advice about services, whether council, business or health.

Two video conferencing sites have also been provided on the mainland at Argyll and the Islands Enterprise headquarters in Lochgilphead and at Helensburgh which is only 30 minutes from

Glasgow and the central belt of Scotland. These are available to staff of all agencies and to the general public.

Examples of video links: NFU to Brussels, politicians to constituents, patients to consultants, islanders to planners, meetings of voluntary groups who have members on the mainland and on the islands.



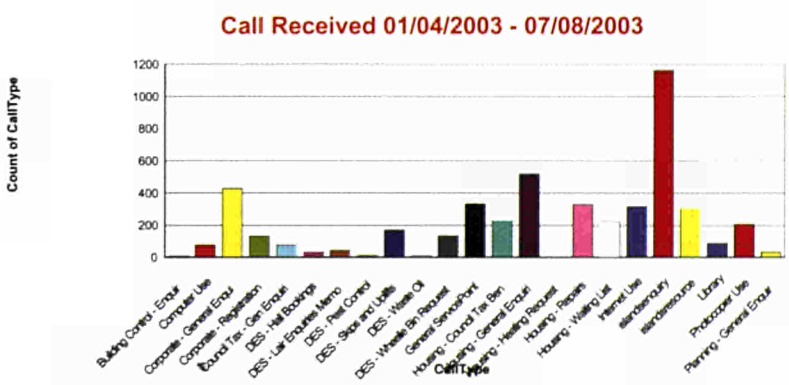
Training has been extensive. All staff have undertaken ECDL [European Computer Driving Licence], video conferencing use, access to the internet and customer care. Members of the community companies have had training to help them manage staff and the premises.

SVQ (Scottish Vocational Qualifications) training in customer service started in September 2003 in partnership with Highland Council.

Gaelic training has been taken up by the Servicepoint manager who will now be performing civil weddings in Gaelic.

Usage: From 01/04/2003 to 07/08/2003, there were the equivalent of more than one call for every islander (4834).

Statistics



Partnership working is vital to Argyll and Bute Council because it offers opportunities not afforded to the Council working alone. The Three Islands Partnership means that the Council, Argyll and the Islands Enterprise Company, the health service, the Scottish Executive and the local community companies all work together, to ensure that the residents of Islay, Jura and Colonsay are able to access services more easily with the use of new technology.

It has been especially beneficial to have the local development companies on Jura and Colonsay manage the facility for the partners. This has involved training for the companies as well as the local staff.

The 3 Islands Partnership is not a pilot project; it is rapidly becoming a way of life for many islanders. The ethos of the project is to bring services to people, not people to services and because this model has been so successful on Islay, Jura and Colonsay, it will be rolled out not only to other islands but to isolated mainland communities too.

Enablers

Leadership

It commenced when Argyll and Bute Councillors visited Service Points in Highland Council area and an opportunity arose to obtain funding from the Scottish Executive to modernise council services through new technology. They decided that to introduce Servicepoints to Islay Jura and Colonsay, 3 islands to the South of the Inner Hebrides and thus bring services to people, not people to services.

Leadership requires a determination to make the project happen and not to give up when things don't seem to be working out as was planned. Flexibility to change the plan to suit circumstances is necessary.

Consultation with the customers and stakeholders is essential for success.

The 3 Islands Partnership consultation process was fairly lengthy, requiring public meetings on Islay, Jura and Colonsay and several meetings with all potential public agency partners.

To manage the organisation, a steering group was set up composed of a Councillor and officers from Argyll and Bute Council, and a representative from each of the Health Board and Argyll and the Islands Enterprise. The steering group met frequently at the early stages, at least once a month, and the Project Team of the Project Leader, the IT specialist and the Finance Officer met every week.

The benefits of the services being more accessible was promoted with all potential agencies. Potential servicepoint staff were involved from the beginning to ensure that they could influence the outcome.

Frequent reports were made to the politicians in Argyll and Bute Council and Argyll and the Islands Enterprise to keep them informed and up-to-date with the progress of the project. Having a Councillor as Chairman of the Steering Group was extremely beneficial in this process and equally important was the involvement of local community development companies on Jura and Colonsay.

Community development companies are not common in other countries. These are companies limited by guarantee but which are subject to the same regulations about annual accounts, and directors responsibilities as any other company. The importance of the relationship with these

companies cannot be underestimated because on remote islands where there are no Council employees a method had to be found to manage the project, and this route has been extremely successful. It empowered the community making the success important to society as a whole.

Improvement Points - Better marketing to develop the use by staff is required

Strategy and Planning

At each Service Point HEAT software system has been installed to record every customer contact. The staff then follow up with customers to ensure that they are satisfied with the process. The follow up is done by phone. Statistics are available from the HEAT process and are attached.

Meetings are held of user groups to find out what they require from the Service Points; changes are then made to correspond with the needs of stakeholders. The video conferencing system has been rolled out to the island of Gigha which has been the subject of a recent community buyout and Argyll and the Islands Enterprise and Argyll and Bute Council intend to roll the whole process of video conferencing out to other rural and remote communities.

Their next step will be to formulate a plan and costs for the roll out and consult these communities. The effect of the Service Points on the 3 islands has been excellent. On the island of Colonsay which is also part of another eGovernment initiative called Digital Communities the impact of internet use has been less, because every householder on Colonsay received a PC and one years free internet access and therefore the need to use the internet at the Service Point was diminished. However, the video conferencing equipment has been well used. The island of Colonsay has only 100 residents and Jura 200 and the size of these communities is relevant to how the process is planned, reviewed and changed.

In regard to the reviewing of the facilities there were specific changes made to the reception area in Islay and the air conditioning system in the large video conferencing room there.

Improvement points - there was disappointment with the failure of the video conferencing consultants in advising of the problems of both static electricity and the build up of heat from the screens, both of which have caused substantial problems and additional costs which could have been overcome during the building process.

In regard to the planning of the whole organisation, customer service has been emphasised by both the Council and Argyll and the Islands Enterprise, and all staff are aware of the need for this to be their priority. Staff have been involved in the planning process and have made recommendations about what new equipment is required and new uses to which the Service Point can be put.

Human Resource Management

At a very early stage before funding was obtained calculations were made of how many staff would be required and what sort of training to undertake. The training has been concentrated on the use of ICT equipment and video conferencing. All staff are encouraged to undertake the ECDL (European Computer Driving Licence). They are also taking Scottish Vocational Qualification training in Customer Service. A Gaelic refresher course has been provided to the Service Point Manager who is now able to carry out Gaelic marriages. Staff have been asked to identify where training is required. The staff agreed the vision of 3 Islands Partnership "bringing services to people" and their motivation has increased as a result. Staff are encouraged to use their own initiative e.g. Bev on Jura has developed a Service Point for

computer classes and Sharon on Islay has marketed the facility by advertising in the local paper and arranging meetings with local stakeholders.

The employees are encouraged to use the video conferencing for meetings between the Service Points for support and development between themselves and this is probably happening about once per month.

Partnership and Resources

Partners are Argyll and Bute Council the local authority for the area, Argyll and the Islands Enterprise, the local enterprise company which promotes economic development within the Argyll and the islands area and Argyll and Clyde Health Board who are responsible for the overall strategy and planning of health services within the area. The Scottish Executive are partners in that they have provided funding and have the overall vision of improving opportunities for eGovernment.

In the Islay office there is joint working of staff between the Council and Argyll and the Islands Enterprise. Other organisations also use the premises; these include Benefits Agency, Health Board, Scottish Natural Heritage, local distilleries and businesses. Local voluntary organisations are heavy users of the facility and there is also a good relationship between the three centres. The most important partnership however is that with the development companies on Jura and Colonsay.

This has empowered local people who manage the development companies on behalf of their community to employ staff and run the Service Point through a Service Level Agreement with Argyll and Bute Council. Argyll and Bute Council in exchange for this pay the costs of the staff at the Service Point and the bills for the electricity, telephone etc.

Reference has already been made to the development companies and the empowerment of them has meant that the Service Points have succeeded where remote management from the mainland may have failed. To develop the partnership, Project Leader visited the Annual General Meetings of the development companies, explained the proposals and then entered into detailed discussions about how the management would work. This has been particularly successful on Jura but has taken longer to bed down satisfactorily on Colonsay. However, Colonsay have now appointed a member of staff who is very positive about the prospects for the Service Point and it is expected that this newer Service Point will continue to improve.

In regard to **managing knowledge** a frequently asked questions database covering all functions of the Council and Argyll and the Islands Enterprise has been developed by the Council in partnership with West Lothian Council who received funding from the Scottish Executive for their FAQ database. Although at present the FAQ is available only at the Service Points, it is planned that it will eventually be rolled out and available to all who have a computer through the website of Argyll and Bute Council.

A business information service has been provided for all three Service Points to enable the staff to access business information and provide it to customers.

Managing Finances

The Project Leader has full authority to manage the delegated budget and is able to use discretion to agree purchases of equipment and services on her own authority or after discussion with members of the Steering Group. The finance department provides information about the monthly state of the revenue budget and this is available for discussion with the Project Leader and Steering Group.

Managing Technologies

The video conferencing rooms are booked out using a diary process. The equipment is lent out with the use of a logbook signed by the borrower and the Internet is used by appointment, although if a member of the public comes in and no one is using it, it will be available on demand. Maintenance contracts have been entered into for the care of the video conferencing equipment and PCs with local companies.

Process and Change Management

The most important aspects are flexibility to change the process during the course of the plan. It was also important to introduce the Service Points on a step-by-step basis. Jura Service Point opened first in January 2002, followed by Islay in May 2002 and Colonsay in June 2002. This allowed a check to be made on whether the systems required to be improved whilst developing and delivering the services that the customers required.

On Jura, for example, because of the customer requirements one of the offices has been changed to become a PC learning centre. Citizens have been involved through the development companies previously referred to.

The local Councillor now uses the Service Point to access his e-mail and agendas.

The improvements to the video conferencing room and reception area in Islay were as a result of discussing the process with staff and customers and making appropriate changes.

Proposed is the production of a video to train members of the public in the use of the video conferencing process. This is an innovative proposal because video conferencing is being used more and more in remote parts of Scotland but many people are unclear about how to use it and how best to organise meetings through this process. This video will be made available to all.

A joint post with the local Gaelic College on Islay is currently being advertised to provide a key holder/advisor to meet the customer demand for the use of rooms in the evening on Islay. The Gaelic College is a local organisation but not currently a partner. This is an innovative way of managing resources to the benefit of both organisations. The use of the local development companies to deliver Council services is innovative and very successful and recommended for the success of a project which requires the support of the community.

Results

Customer Citizen

Customer usage statistics are attached.

There are many examples of how customers have used the video conferencing facility. Some of these are as follows.

1. Farmers on Islay speaking to civil servants in Brussels
2. A patient on Jura speaking to his consultant in Paisley
3. Sale of crafts materials made on a local island by using the 3D scanner / visualiser through the video conferencing to customers in the central belt of Scotland.
4. A member of the public speaking to a planner and discussing, with the use of the visualiser, the plans and amending them.
5. Management of staff from the headquarters of the Council by the use of video conferencing.
6. Training team meeting linking Islay, Jura and Colonsay

The satisfaction measurement can be demonstrated by the use of the HEAT system. This process requires every customer contact to be entered into a form on screen with a description of the request for assistance.

If staff can answer the question immediately they do so and the form is signed off. If further information is required, either by research or by reference to another person this will be carried out. The customer satisfaction is gauged by the follow up call which the member of staff at the Service Point makes to ensure that the customer did receive the answer to his request.

People

Employee results

The level of sickness of the Service Point staff is extremely low and this might be taken as an indicator of motivation.

Staff make suggestions for improvement without being prompted and indeed implement many of their ideas on their own accord.

Society Results

- The improvement of social inclusion in remote and fragile areas by bringing services to people.
- The satisfaction of the development companies who act on behalf of the community by the changed way the Council are carrying out their functions.
- The use of the facility by the Doctor on Jura on behalf of the community as a whole.

Environmental signs include the reduction in travel and the subsequent reduction in energy emissions, the upgrading of premises and landscaping around the buildings, and the provision of car parks on Colonsay and Jura to prevent congestion on single-track roads.

Key Performance Results

It is suggested that a graph show the peaks and troughs of visitor usage would be a useful key performance indicator.

On Colonsay this would show the underlying surge of use in the summer by visitors but the constant increase in use by islanders throughout the year.

Financial savings can be demonstrated by showing the cost of a single journey and indicating that this would be a saving for every time the video conferencing is used e.g. £300 for a single round trip for a Jura patient to visit a hospital consultant on the mainland or £450 for a Colonsay person, and similar savings for council staff carrying out e.g. a staff training session.

Quality of Life

These will impact on decisions made to live in a remote area and may affect population increase in the long term by encouraging families to remain or return.

The use of information from vocational training qualifications will be exceptionally useful to indicate customer satisfaction. In the 3 Islands Partnership the vocational training qualification has only just started but already staff have created personal statements which is a part of the process to show how they have given exceptional customer service.

Job Creation

This can be used as a performance indicator. New jobs have been created on all three islands.

Salary improvements. In a small community a job with a better salary can make a difference to whether families remain in the area or not. Pay scales are generally lower in such remote areas.

Digital Communities [already mentioned] has focussed the use of technology and increased peoples` confidence to use video conferencing and other equipment.

Risk Assessment

It is suggested that risk assessment is carried out for all projects at an early stage and amended as time goes on. A risk assessment exercise was carried out by the 3 Islands Partnership to overcoming the following risks:

1. Insufficient capacity to respond to demands for services
2. Increased demands for services which are not met
3. No increase in demand
4. The loss of a whole facility
5. Permanent or temporary loss or failure of equipment
6. Insufficient capacity at one or more of the facilities to respond to demand
7. Demotivation of staff
8. Staff resources becoming overstretched

In fact two of these risks have already transpired. Insufficient capacity at one or more of the facilities to respond to demand. It is clear that facilities could have been built that were twice the size and they would have been used. This may not however have been possible and on Jura for example one of the offices have been adapted to become a learning centre in response to demand.

Staff resources becoming overstretched in Islay has also happened and work is ongoing to try to increase the number of staff available at this Service Point.

Contact:

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2. Asturia: Proxim@ : Government closer to citizen

www.princast.es

The Citizen's Service Bureau (CSB)

The creation and development of the Citizen's Service Bureau is framed within the New Government Administration Model defined by the "Agreement to Modernise and Improve Quality in the "Principality of Asturias"".

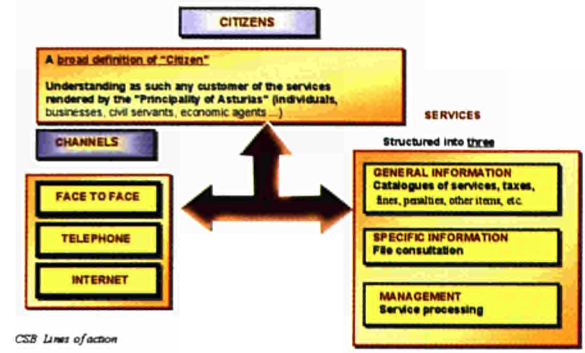
The final objective of the new management model is to definitively consolidate the administration of the "Principality of Asturias", characterised by:

- Its responsibility, capable of anticipating citizens' needs and the steps required to satisfy them, as well as the development of public policy required to drive the region economically and socially.
- Its accessibility, capable of providing transparent information and come closer to citizens, business and groups in Asturias.
- Its efficiency, such that the manner of executing public policies includes good resource management and the responsibility for obtaining results becomes a defining part of corporate culture.

CSB: Components

Mission of the CSB:

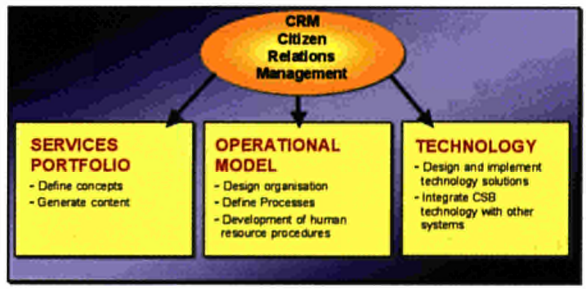
- Management of relationships with citizens
- Render quality services through a multi-channel system



CSB Lines of action

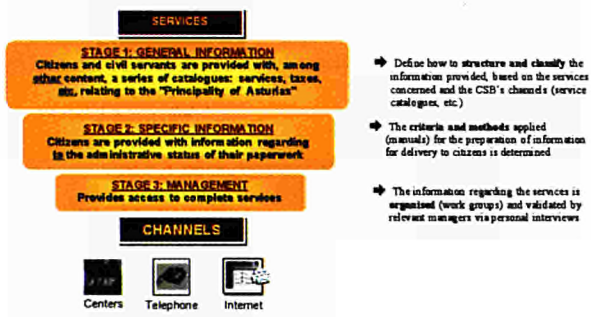
CSB: Lines of action

The Citizens Service Bureau will facilitate the connection between the organisation and the groups it serves, i.e. the Government of the Principality and its citizens and employees by applying a management approach called Citizen Relations Management (CRM). Three lines of action have been established to develop this approach.

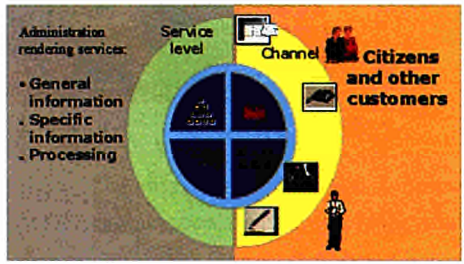


1. CSB: Services portfolio

The line of work that organises and catalogues the information service that the APA renders to both citizens and civil servants through the various channels:



CSB: Operational model



* Defines the CSB's working processes, i.e. The internal service activities and tasks

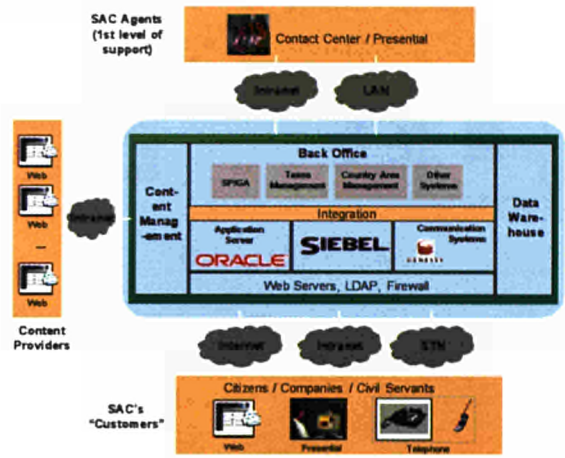
* Define the service structure that organises the persons responsible for work processes, both on central and territorial level

* Define the management model (profiles, duties, etc.) for the people who will be responsible for these processes and assigned to the CSB

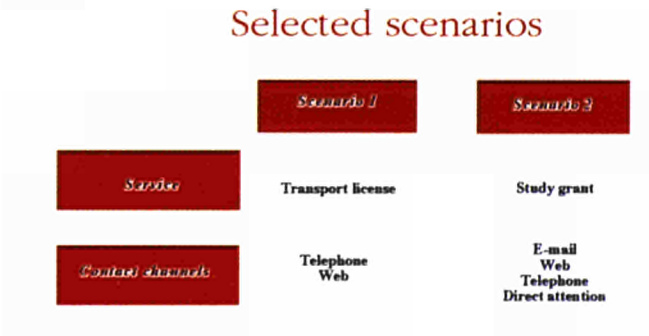
CSB: Technological platform

Technological implementation - basic lines

- SIEBEL at the core of the Technological Architecture
- Sole source for the information for the different channels
- Ensure the future development of the system through solutions from market leaders
- Implementation of components by stages
- Integration of systems by stages



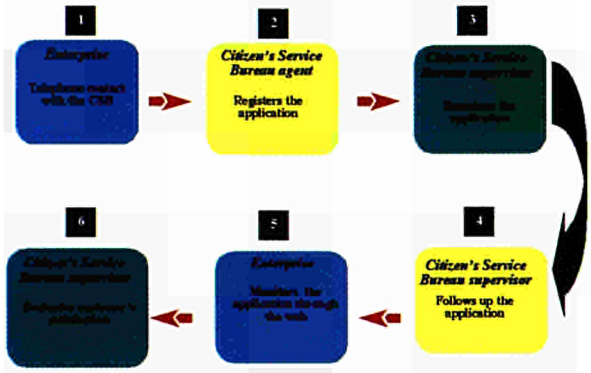
Examples



Scenario 1: What's going to happen?

- SOCITRANS, a transport enterprise, contacts the CSB in order to apply for a transport license
- The CSB provides the service through different channels
- The enterprise chooses on line attention and follows the steps given by the Citizen's Service Bureau
- The enterprise evaluates the efficiency of the service provided by the Citizen's Service Bureau

Scenario 1: process overview

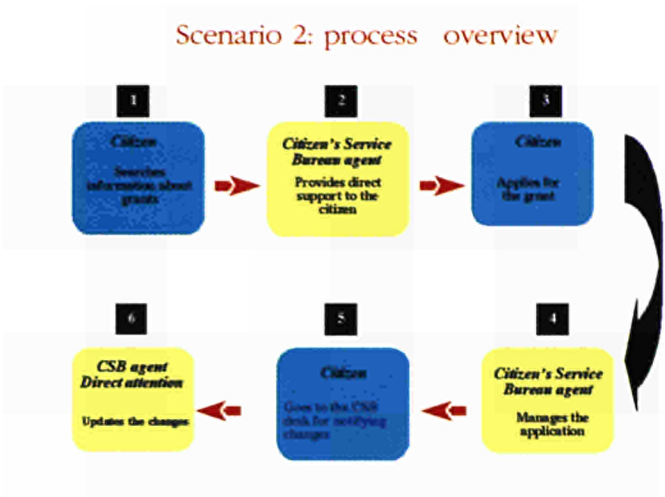


Results :

- Positive image of Government
- Easy finding of the required information through the Government website
- Customers get updated information about the progress of their applications
- Personalization of services provided by the Citizen's Service Bureau
- Easy monitoring of services provided by the Government of the Principality of Asturias

Scenario 2: What's going to happen?

- The Government of the Principado de Asturias provides information on grants
- The citizen applies for a grant
- The Citizen's Service Bureau helps the citizen with the red tape
- Citizens have also the possibility of being informed directly in the Citizen's Service Bureau



Results:

- The Principado de Asturias will become more active in providing services to citizens (takes the initiative through E-mail)
- Quick and effective finding of the required information in the Government website
- High level of efficiency resolving citizen's problems
- Citizens can get updated information about the progress of their applications
- Personalization of services provided to citizens
- Reduction of time needed for dealing with the application form

Information Society Accessibility for Asturian citizens

Asturias Telecenter Network:

Telecenters provides a public and free service to citizens.

Telecenters are established through cooperation agreements between the regional Government and the local councils (82 agreements signed).

The regional Government has invested between 2000 and 2003 4 MEUR in equipment and 4,7 MEUR in the management of the Asturias Telecenter Network.

The Asturias Telecenter Network supports:

- The development of Information Society
- The use of new information technologies
- The institutional cooperation

Telecenter activities include:

- Introduction to the Internet
- Introduction to the new information technologies
- Internet courses for advanced users
- Web pages design
- Video conference
- Digital photo editing

Case Study: Integral Solution for the Use of Digital Certificates in the Scope of the Principado de Asturias Administration

Background

Once the back-office administrative information systems were satisfactorily implemented and tested, the Principado de Asturias Administration considered acquiring technological and service tools to enable the front-office, in a single integral solution, to deal with citizens, companies and other public administrations via the Internet, the data transmission channel, on the basis of the full use of digital certificates. This solution is simply a combination of partial solutions and services that represent a global tool that makes the electronic administration of the Principado de Asturias possible, in an easy and practical manner.

The main matters considered at the start, were to find a long term integral solution:

- Independent of technology;
- Independent of the certification-service-providers, both national and international, public and private, that operate in the global market at all times;
- Based on international technical and commercial standards;
- That would not represent a heavy financial burden for the future;
- That provided a solution for two way data transactions between citizens and the administration;
- That could be easily integrated with any back-office system used and independent to the amount and the characteristics of the services that were available "on-line";
- That could provide a legal and judicial cover to gain citizens' trust;
- That could be implemented within a relatively short period of time (under six months).

Enablers

Strategic objectives

The short-term objectives established by the Principado de Asturias Administration using this integral solution can be summarised as follows:

- Outsourcing services and to be equipped with technological tools that enable these new transactions

- To start to adapt the traditional internal operational procedures to the new environment based on data transmission dealings with citizens, companies and other administrations, gradually and in a practical manner
- To exploit to a maximum, the potentials of the electronic back-office implemented, integrating it with the front-office
- Reducing the time for services rendered as much as possible, on the basis of streamlining, simplifying and automating the internal procedures
- To initiate a gradual adaptation of the Administration's personnel to the new practices (electronic documents and signatures, data transmission notification, fully electronic processes, etc.)
- To train the technicians responsible on the new technological tools
- To procure its own regulation framework that provides legal cover for the new transactions and practices, that inspires trust to the person concerned

The internal objectives on a medium and long-term basis are:

- General assurance for the continuity of the operation of the implemented solution (continuity of the services, maintenance of the technological tools, etc.)
- Quantitative expansion of the services provided by the data transmission channel
- An increase in the quality of these services (fully electronic transaction, electronic payment of taxes, etc.)
- A reduction in economic costs (paper, fungibles, etc.)
- To achieve an optimum utilization of the Administration's available human resources
- To facilitate greater participation in procurement processes that can lead to economic savings due to more competition (single European market)

The external objectives on a medium and long term basis are:

- To reduce costs and inconveniences for citizens, by making the Administration closer and more transparent
- To get individuals, professionals, businessmen, etc, to use the data transmission channel to a maximum and correctly, not only for dealings with the Administration
- To facilitate access to the services and information provided by the Principado de Asturias Administration for all citizens and companies, independent of their physical location (free circulation of individuals, capital, goods and services)

Resources

The integral solution designed by the Principado de Asturias Administration to use digital certificates required different types of resources in order to cover all the criteria and needs of the solution designed which included, among others: software, hardware, outsourced services to validate certificates and to issue certificates for internal use, legal services, training, etc.

To comply with the structure that fulfils the different requirements established and resolved by this solution, the following resources will be employed:

1. Validation of the digital certificates used by citizens to authenticate themselves or to sign electronically.

Method: Service outsourced in the DPC (data processing centre) that belongs to Gedas Iberia (http://www.gedas.es) in Catalonia (Spain). This is the first known case where a European Public Administration has outsourced this service.

Term of contract: 4 years, with a contract that contemplates an agreement for the level of services between the Administration of the Principado de Asturias and Gedas Iberia, which commits them to a minimum service quality.

Opportunities: Other administrations (local, regional, etc.) can benefit from this service contracted by the Administration of the Principality of Asturias, at a reduced cost by applying economies of scale.

2. Digital certification of the personnel who work for the Principality of Asturias administration.

Method: Service outsourced in the DPC (data processing centre) that belongs to Gedas Iberia (http://www.gedas.es) in Catalonia (Martorell). The Principado de Asturias Administration becomes the Certification and Registration Authority exclusively for its personal, outsourcing the issue of the digital certificates to Gedas (1,000 in four years).

With this solution the Principado de Asturias Administration does not depend on the platform or the technical solution chosen, as the provider guarantees that, at any time, the Administration can continue with technology belonging to another solutions provider.

Term of contract: 4 years, with a contract that contemplates an agreement for the level of services between the Administration of the Principado de Asturias and Gedas Iberia, which commits them to a minimum service quality.

Opportunities: Other administrations (local, regional, etc.) can benefit from the Principado de Asturias Administration's own certification hierarchy to have its own certification authority.

3. The solution in the front-office for the signature on electronic forms and documents by citizens

Method: Solution installed in the Principado de Asturias Administration's Web servers.

4. Corporate platform for the electronic signature of administrative documents

Method: Solution installed in the Principado de Asturias Administration's corporate servers.

5. Platform to notify administrative activities

Method: Solution installed in the Principado de Asturias Administration's corporate servers.

6. Legal advice

In order to provide a full legal cover for the solution, the services of a Law firm were contracted. They are specialists in the application of electronic signatures, authentications, etc.

7. Training

Another important issue was the course targeted at all kind of different profiles: system administrators, certificate controllers, users of implemented systems, etc.

Implementation

1. The first task faced was to implement the digital certificates validation service in the CPD facilities at GEDAS, using their physical and logical infrastructures. In parallel, the Policy for Accepting digital certificates was being defined in line with the legal advice, that would trust the certificates issued by any certification-service provider. The implementation was carried out in a short period of time, on the basis of using commercial solutions that comply with the standards. By doing so, the Principado de Asturias Administration does not have to worry about the appearance or disappearance of national or foreign providers.

2. The formal setting-up of the Principado de Asturias Administration's Certification Authority took place at the beginning of 2003, and a few days later (on the 23rd of January 2003) the physical creation of the two operative Certification Authorities took place: the Principality Administration's Root Authority and subordinate Authority. This own certification hierarchy has enabled the creation of a specific Authority to certify different authorities within the local administrations in the Principado de Asturias Autonomous Region. This possibility enables, fundamentally, Administrations with less resource to internally use this technology and solutions at a minimum cost.

3. In the back-office and while thinking about preparing the internal systems so that they can accept data transmitted applications for services and for the addition of signed electronic documents, a great standardizing effort was carried out to define HTML models of forms that can be used for whole groups of services (aid, subsidies, authorisations, etc.). These forms are created on the basis of data structures that are sent from the back-office in XML format when the person concerned requests them, which permits a generalised and easy updating.

4. The information collected and signed by the party concerned, is sent from the front-office, in XML format, to the application registration system that, on an automation basis, registers the application and generates a supporting receipt for it for the person concerned (static HTML page).

5. With regard to the electronic signature of administrative documents that are produced in the Principado de Asturias Administration, action was taken to functionally and technically integrate the corporate file management tool (SPIGA) implemented with corporate platform for the electronic signature of administrative documents. This integration had very little technical difficulty (message exchange in XML format), and was performed by pursuing minimum changes in the habits acquired by the Administration's own personnel, and by giving them maximum information about the data transmission conditions related to this matter. It simplified the sending of a specific document to the signature platform for the personnel, as well as the information regarding the status of the signature process.

6. This integration was generalised for any of the 350 services that SPIGA currently manages and its implementation is simply reduced to the desire to want to use the corporate platform for the electronic signature of administrative documents.

7. To use the administrative activities notification platform, the SPIGA corporate tool, was integrated exclusively in the administrative electronic documents repository, controlled and notarised by Valicert Digital Receipts. As SPIGA sends the administrative document to notify the person concerned, it simultaneously also notifies the front office CRM with the necessary information so that the person concerned is notified by e-mail of existing notification.

Results

With regard to practical results that have been proven and are verifiable:

- The validation service implemented did not represent a problem at all when integrated with the data transmission registration and with other internal systems. The general advantages obtained to confront minimum integration efforts, were due to the use and application of international standards and regulations. At present certificates from three certification-service providers are available to be validated, and this list can be increased easily and quickly. The person concerned has maximum easy and simple use, independent to the certificate used within those recognised.

The validation is carried out to authenticate the person concerned (personal consultations on matters via the Internet) as well as for the electronic signature of documents. This service can be used throughout the entire Principado de Asturias Administration, including Agencies, autonomous or decentralised Organisations or by any other Administration or company that signs an agreement for this purpose.

- The certificate issuing service enabled, in a short period of time, the Principado de Asturias Administration to have its own certification hierarchy, with a capacity for local administrations as well as for the private sector. The minimum effort and economic cost for this extended use was obvious. Certificates have been issued to servers, users and codes.
- The development of the data transmission registration (for any service) enabled easy integration with the back-office systems on the basis of the full use of the XML standard, in such a way that the application registration could be automated with the necessary information to automate the opening of the independent administrative file of the specific administrative procedure.

This service offers the person concerned the possibility to request the service, in addition to adding complementary documentation required, to appeal against the resolution adopted about a matter or to present a formal complaint to the Administration. Therefore, it covers all possible transactions required by the person concerned.

The advantage for the Administration is less work in the registration offices and less work in the processing units due to the aforementioned automations.

The standardisation of service application forms, significantly facilitates the expansion of these services to numerous administrative procedures.

- For the Principado de Asturias Administration, the use of a single corporate platform for electronic signatures integrated with the corporate file management tool SPIGA, represented important savings in multiple integration efforts with different systems. This integration can be used by the current 350 SPIGA users in the eleven Ministries in the Principado de Asturias Administration, which are being incorporated gradually.
- The solution adopted for the data transmission notification for administrative activities, presented the greatest difficulties in the functional definition of the notification via the Internet channel. The administrative habits and routines, supported by the applicable legal regulations, made any solution with this objective very difficult, and only a respectful attitude towards the legal regulations is valid.
- The integration of this platform with the back-office, and even with the front office, didn't present any particular difficulty.

A single electronic mailbox has been made available for each citizen, who accesses it securely with his/her digital certificate using an ordinary Internet browser, without having to previously download any software.

The teachings and experiences gained from this work consist of:

Generic conclusions

1. It is important to have a corporate back-office that is widely circulated in the organisation and contemplates the full administrative cycle, (from the registration of the application to the filing of the documentation), and at least in an electronic format. Once the back office is consolidated, the front office can be tackled with guarantees, exploiting the electronic channel, Internet, to a maximum.

2. It is essential to have the single-data of the person concerned (one single reference or identification per person concerned) for a practical and constructive electronic administration. The creation and use of a database with these single references (in Spain this is facilitated considerably by the National Identity Number), including the name, surname/s, etc., has been very useful and important for the electronic Administration of the Principality of Asturias.

3. It is possible to have a common method for the provision of services via the Internet, without considering each service as a laborious and expensive project. Our experience is that the normalisation, simplification and generalisation of the back-office and a generic solution for providing services on the Internet, eliminates work and costs, and in addition, it contributes to flexibility.

4. You have to be innovative in the way the administrative work is computerised. You cannot tackle as many computer projects as there are services. The Principado de Asturias Administration has resolved this problem satisfactorily with metadata structure management, which has significantly increased the number of possible services that can be provided on the Internet.

5. The technological level achieved at present has, in general terms, sufficient maturity to make electronic administration possible, the main obstacles being the administrative legal regulations and primarily the habits and customs acquired by the public administrations. The elimination of these administrative habits is effective by simplifications and automations that reduce the workload, and the modification of the organisations' structures should be considered as a natural result of having varied the tasks.

Specific conclusions

6. In general, public Administrations are structured along the basis of the responsibilities (services) and not along the basis of the real needs of the citizens. Our experience is showing us that the mission to achieve the full transaction of a service collaborates in achieving this new focus.

7. Undervaluing the importance of electronic payments of public duties or taxes via the Internet, to be able to fully carry out the transactions with the Administration, is an important restriction for citizens. Likewise, it is a mistake if the Administration doesn't consider paying suppliers via the Internet.

8. Outsourcing all those services that the private sector can perform better and cheaper, is a strategically correct decision. The Principado de Asturias Administration has outsourced the validation of external digital certificates and the issue of internal

certificates. This decision has made it possible to increase the possibilities and at the same time, reduce costs and implementations times.

9. With electronic Administration, there is often a tendency to carry out the same bureaucratic tasks but with different resources, which severely complicates their materialisation.

10. The differentiation between the back-office and the Administration's solutions and services to be provided on the Internet, not only enables the objective to be achieved, it also allows the experience and the solution itself to be transferred to other public administrations, that have other back-offices.

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3. BREMEN ON LINE SERVICES

The Free Hanseatic City of Bremen

Organization

The Free Hanseatic City of Bremen is Germany's smallest state. It consists of two cities, Bremen (ca. 541.000 inhabitants) and Bremerhaven (ca. 119.000) inhabitants. As a city-state, it combines the function of a state and local government. This means that in Bremen both the power to legislate and the direct responsibility to deliver services are held at regional level. It can be estimated that residents, both private and commercial, deal with Bremen administrations in more than 80 % of times they have to deal with government. All public services including justice, social security, construction, environment, education, culture, science, trade and economics are offered by the cities' administration.

The government of Bremen (not counting the local government in Bremerhaven) employs more than 40.000 people, making it one of the largest employers in the state. Half of the employees are employed in the core administration, and the other half works in other public agencies, publicly owned firms and partly privatised companies. The staff consists mostly from graduates with a college-type education.

IT is used universally throughout the administration. Several departments such as finance and social welfare have used large IT-based systems for decades. The oldest products in use today date from the 1980s. In the 1990s, the city equipped most desk jobs with PCs and networked

these. Today, more than 90 % of the employees have E-Mail, and almost as many have access to the Internet or at least an Intranet-connection. It is estimated that more than 60 dedicated special applications are in use in the administration. Also, office software is universally common. Since 2003, SAP R/3 is being rolled out as the common ERP-software. Old and new systems are being opened up for direct manipulation from the outside through the use of eGovernment.

The prime responsibility for formulating the government's IT-strategy and carrying out their objective rests with the Section for eGovernment and New Media at the Senator for Finances' central department for personnel and organization. This section also co-ordinates the eGovernment initiative and the efforts undertaken in the umbrella program "Bremen Online Services", as detailed in the case study.

The customers/citizens and/or the internal customers

The outside customers of the Free Hanseatic City of Bremen fall into four groups:

- Citizens
- Intermediaries (such as lawyers, tax professionals, car registration companies),
- Business
- (own) Employees.

Each of these groups has very different skills, motives and demands and requires effectively special strategies. Differences exist in regard to frequency of contact, level of knowledge in administrative affairs and other social and economic resources.

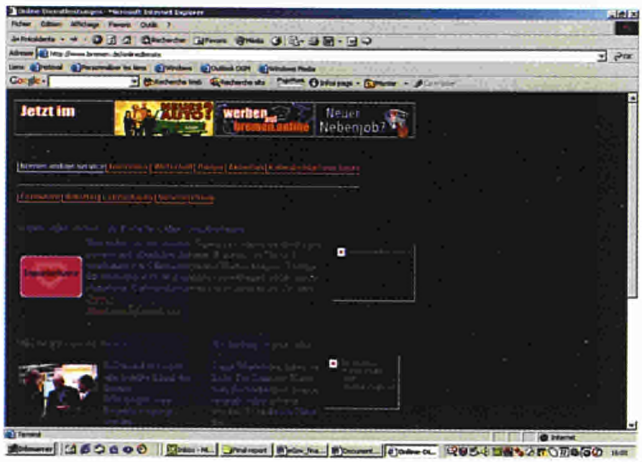
It is a challenge for the eGovernment initiative to build applications for all of these groups while using the very same technology for each one of them. But this is crucial if key policy objectives should be met. For example, it is necessary to use finance an expensive transaction platform through applications targeted to intermediaries, but also open this very platform to the use by individual citizens, so that they can profit from eGovernment as well.

Suppliers and partnerships

The Free Hanseatic City of Bremen is restructuring itself according to the "Leitbild" of a "company". This means that only core competencies will remain at the heart of the administration. Where possible, operational tasks are delegated to firms or other companies, who are then charged with carrying out public tasks by contrast. The fact that already half of the public employees work in that latter sector underscores the seriousness with which Bremen is pursuing this restructuring. As a result, it is very common for the administration to work closely with firms, semi-private institutions or partly owned private companies.

In regard to eGovernment one public-private-partnership is of particular importance: Bremen online services (bos). The city and private partners, as detailed in the case study, jointly own it. The idea behind this partnership is that the city will purchase eGovernment solutions preferably from the private market. Where there is no market, it is the objective of bos to develop this.

Bremen Online Services



Approach (Enablers)

The Free Hanseatic City of Bremen's attempts to develop electronic government are, to a large extent, bundled in the project Bremen Online Services. It provides online transactions and payment options to citizens, businesses and intermediaries (lawyers, tax consultants, etc.) in a secure and legally binding way. The intermediaries have become the prime user group. Quality of service has increased due to eliminating paperwork from government communications. Significant savings have been achieved both on the side of lawyers and companies on the one hand and on the administration's agencies. The project has been fully operational for two years, with new services being added continuously. It uses electronic signatures for authentication and is implemented using OSCI (Online Services Computer Interface), an open communications standard which is en route to become the de facto standard for online-transactions in Germany.

The project is carried out in an innovative public private partnership by the Free Hanseatic City of Bremen and regional and national partners from private industry. It has created new jobs in the region of Bremen and stimulated the eGovernment industries all over Germany. Additionally it bears the potential to become a significant part in future EU-funded middleware initiatives, such as IDA's eLINK pilot.

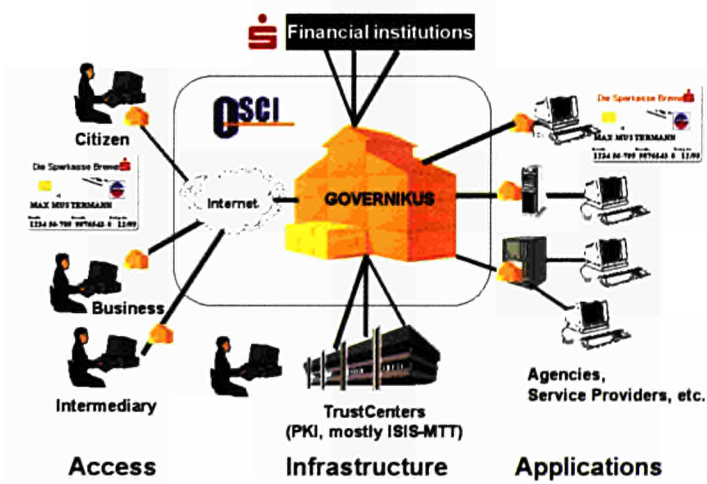
During the initiation and design phases, the project profited greatly from the high-level **leadership** it gathered. Both the first mayor and the second mayor in Bremen supported the initiative and helped to assure widespread cooperation and support within and outside the administration. For them, the project and its ultimate success presented numerous opportunities in which to present Bremen as an innovative and successful city-state, which they greatly appreciated since it contrasted nicely with Bremen's struggling economic situation. The leadership was also necessary to overcome some initial resistance by actors and companies who had opposed the integrated concept because they wanted more direct funding for individual projects.

The **strategy** behind Bremen online services focussed on an integrated approach to deliver online services and help distribute electronic signatures. It was developed as an answer to a federal competition called MEDIA@Komm, championed by the Federal Ministry for Economics and Work since 1998. Bremen won the contest in two phases and was awarded 10 Mio. EUR in matching funds to deliver the project. Crucial to the strategy is the belief that the three areas "access", "infrastructure" and "applications" should be developed at the same time.

The project was carried out in an innovative public-private partnership, described below. Within the administration, more than 100 different employees were involved. At the beginning, participation was voluntary. For several public administration applications, in such areas as legal administration, finance, building application permits, procurement, car registration, citizen's register and the institutes of higher education, funds have been awarded to allow the necessary re-engineering.

However, it was important that additional **human resources** were provided to the projects as well. Close to 30 so-called "relief forces" were employed who relieved core staff of their regular duties so they could commit time to the project or were employed directly. This is very uncommon in public administration projects today, where the new recruitment of labour is always a sensitive issue. The individual project groups are led by members of the Office of New Media and eGovernment within the central organisation department at the Senator for Finances and a representative from the respective agencies, which also participates in the project. The concept worked out by each team had to be approved by the powerful employees representation office.

At the heart of Bremen Online Services lies an innovative eGovernment architecture, which can be called after its prime implementing product GOVERNIKUS (see graph 1). GOVERNIKUS and all its associated components have been the central technological **resources** of the project.



Graph 1: GOVERNIKUS and OSCI

GOVERNIKUS allows encoded and signed online transactions using electronic signatures according to the signature law. Particular value has been placed on the assurance of interoperability during the development of GOVERNIKUS.

GOVERNIKUS conforms to W3C at all levels, and uses near platform-independent technologies such as Java and XML. Open source products are being used as much as possible. Besides reducing costs, this also ensures the operational compatibility of GOVERNIKUS without particular commercial product features.

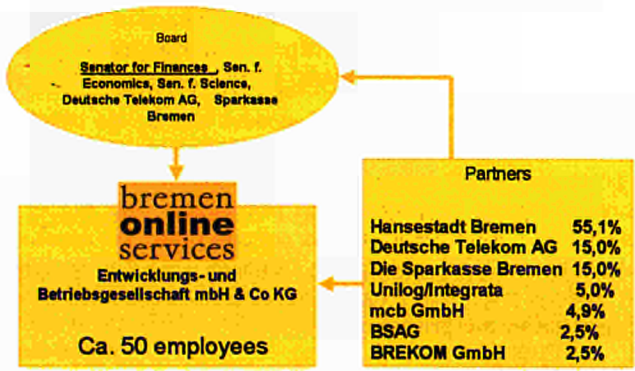
The GOVERNIKUS architecture ensures the independence of communities and citizens when making decisions about external products and systems. GOVERNIKUS implements transport layers from OSCI for Internet-compatible applications by using middleware products. OSCI stands for Online Services Computer Interface. OSCI is based on SOAP, XMLencryption and XMLsignature, which are all open standards adopted in the e-commerce-world. OSCI tailors these standards to the needs of public administration.

The GOVERNIKUS client-enabler caters for the linking of card-reader, smart-card and software certificates on the user side. It interfaces with various PKIs. All of the commonly used German PKIs (TeleSec, Signtrust, DATEV, etc.) are already implemented. The preferred standard for PKI is ISIS-MTT.

One of the most important characteristics of both OSCI and the GOVERNIKUS implementation is the "double envelope". A message will be encrypted end-to-end, while it is still processed via one platform. This is achieved by encrypting both the user data ("the payload") and the transport data (""the message header") individually. The intermediary is then able to perform all necessary verifications and payments, although not touching the potentially sensible user data, which can only be read by the intended recipient.

The product GOVERNIKUS could only be developed through a close **partnership** between the public and private sector. For this purpose, a public private partnership called "Bremen online services Entwicklungs- und Betriebsgesellschaft GmbH & Co KG" (Bremen online services development and operating company, cf. www.bos-bremen.de) was founded in 1999 (see graph 3).

The Bremen Online Services GmbH & Co KG



Graph 3: Public Private Partnership

The company is partly owned by the city-state and industrial partners. Its major shareholders are the Deutsche Telekom and the local savings bank, which has a market share of about 50 % in Bremen. Several others smaller companies, as well as transport and telecommunications providers are also among the partners. Together, these partners have invested 10 Mio. EUR in the development of eGovernment between 1999 and 2002. This has been an impressive achievement, since about 5 Mio. EUR were invested by the private sector in eGovernment.

The company is scheduled to be profitable by 2005. Revenue is earned by marketing GOVERNIKUS to other governments throughout Germany on all levels of government and to other European governments. This approach is an example of how eGovernment can be a true win-win-situation for the users, the administrations and the third party providers alike.

Within this partnership and using GOVERNIKUS, the project set out to deliver more than 100 different services online. These services were bundled into several projects. The **process** by which each project started out with was characterised by developing a specific vision detailing the intended workflow. The involved civil servants and employees, thus guaranteeing both the recognition of their requirements as well as their buy-in from the start, drafted this vision.

The next milestone in each project was a business process analysis, for which a consultancy company was hired. All processes were documented with the ARIS tool-set. After that, the project groups agreed on an optimised process. This included legal adjustments and organizational changes. For example, in the courts dealing with collecting outstanding liabilities, four offices were merged into one, therefore freeing up 2/3rds of the employees involved.

Results

Bremen Online Services has resulted in the online delivery of more than 120 online services, 60 of which include electronic signatures. These services were targeted to several **customer groups**. The most important ones of these are those who have several high-volume transactions with government, such as lawyers (Claims for outstanding liabilities, Searches of and changes in the commerce registers), tax consultants (Tax-related issues), architects (Construction permits and several reporting requirements throughout construction projects), Car dealerships and registration companies (Car registration for their customers) and general business (Procurement). About half of the services were targeted at general citizens. All services can be accessed via http://www.bremen.de/onlinedienste.

It is difficult to judge the correct number of customers who use the online services. The transaction portal logs well over 70.000 page impressions a month. The web-site www.bremen.de records 7 Mio. page-impressions a month. With almost 2700 electronic signatures distributed directly to customers, and probably the same number of signatures available to users by other means (banking cards, company cards), this means only about 0,8 % of the population have electronic signatures. A significant number of signatures are used by students, about 30 % (see graph 9). In comparison to other cities, however, the overall numbers for electronic signatures are exceptionally high.

And contrary to initial beliefs, many applications do not require qualified electronic signatures, but can be processed directly or with advanced electronic signatures. The actual user group of online services is therefore much higher, estimated at several 10.000 active users throughout the

city. Also, the user group which is smallest in size is using electronic services the most: intermediaries and business, which together total 665 electronic signatures distributed to them.

Some of the electronic services targeted to the intermediaries have transformed the ways in which the **employees** work inside the administration. They have to handle less repetitive tasks and are relieved of direct interactions with customers. For example, all demands for collecting outstanding liabilities used to be taken care of in person by court personnel. With the online-application, 20 % of all inquiries today are dealt with electronically. Other benefits for them include better data quality, direct cost savings, increased legal correctness of electronically supported workflows, for example in e-procurement, and better controlling data.

Bremen online services has not only helped to make "information **society**" a little more into a reality. It has made Bremen one of the leaders in eGovernment. Bremen online services showcases the future of interaction with online government.

Most importantly, though, Bremen Online Services has helped the administration in Bremen to improve some **key performance results**. While these are in general hard to measure, due to an imperfect use of usable controlling methods inside the administration, several net-benefits of the applications can be calculated.

The introduction of the application "Collection of outstanding liabilities" into the Bremen court system has resulted in approx. 1670 applications received online per month. After the system had started it didn't take long until it handled roughly 20 % of all incoming requests, as major companies which immediately made use of this new option send most of these. Thus, of the 12 positions dedicated to the relevant section four could be eliminated. Each one of them leads to savings of 34.230 EUR a year, totalling 140.280 EUR a year. Similarly, the online register handled 20.000 requests and led to a reduction of personal dedicated to answer the phone by also a third. Thus, it can be assumed fairly safely that online-transactions generate roughly 7 EUR in savings per transaction. This means that in the area of services for lawyers alone, Bremen saved 469.000 EUR in 2002 by introducing its online services. Similar assessments can be made for other services (see table 1).

	Transactions (200)	Transactions (2003, est.)	Savings per Transaction	Savings per year (2002)	Savings per year (2003, estimated)
Collecting of outstanding liabilities	20000	30000	7,00 €	140.000,00 €	210.000,00 €
Online-register search	**24000**	**30000**	**7,00 €**	**168.000,00 €**	**210.000,00 €**
Bid for public tenders		2000	7,00 €	- €	14.000,00 €
Reporting requirements after construction began		**2000**	**7,00 €**	**- €**	**14.000,00 €**
Tax reporting requirements for business	23000	28000	7,00 €	161.000,00 €	196.000,00 €
Car registration for car dealers		**3000**	**7,00 €**	**- €**	**21.000,00 €**
Total (intermediaries and business alone)				**469.000,00 €**	**665.000,00 €**

Table 1: Savings for the administration with applications for intermediaries and business

Concerning the users, the same qualitative and quantitative improvements can be noted. Of course, the numbers largely depend on the frequency with which the online services are being used. Exemplary savings are listed in table 2.

		Per contact	Savings 2002	Savings 2003
5 contacts a month	Business	7,00 €	420,00 €	420,00 €
10 contacts a month	Architects	7,00 €	840,00 €	840,00 €
20 contacts a month	Car dealers	7,00 €	- €	1.680,00 €
50 contacts a month	Lawyers, tax consultants	7,00 €	4.200,00 €	4.200,00 €

Table 2: Savings for Uses, detailed by various groups of intermediaries

The estimated cost for developing individual applications is between 10.000 and 200.000 EUR (including both specific works on the project and a relative share of the costs for developing the intermediary), so these services have already re-financed themselves. Thus, eGovernment already yields a small return-of-investment rate.

However, this is only true for applications targeted at intermediaries. Applications targeted at citizens champion a much lower take-up, while they require the same amount of investment costs. For these applications, the government needs to decide on how much they value the added functionality and ease of use in order to calculate costs and benefits of these applications appropriately.

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4. C.I.R.B.: «Centre d'Informatique pour la Région Bruxelloise» - IT Center for the Brussels Region

www.cirb.irisnet.be

Description of the Irisnet service

Indirectly, the C.I.R.B. offers citizens a way to facilitate their relationship with the administration of Brussels by developing for the latter web and other IT applications. New means of communication emerge in our society; consequently, the citizen has the right to expect a significant improvement in his relationship with the administrations.

The action of the C.I.R.B., as a service centre, is integrated in an eGovernment strategy. The C.I.R.B. book n°20 "eGovernment" refers to this.

(http://www.cirb.irisnet.be/ci/Document/Library/Documents/Cahier20/Cahier20.pdf).

The first IRISnet services were developed within the framework of the European projects MIRTO and CITIES. http://services.irisnet.be/

Administration

Electronic desk for the municipal authorities of Watermael-Boitsfort, Woluwe-Saint-Pierre, Saint-Gilles, Ixelles, Schaerbeek:

- Order and pay online for 10 certificates (e.g. civil statements, birth, nationality) which will be then forwarded by mail
- Print forms to be completed and transmitted to the local administration
- Receive financial help for projects supported by the locality
- Communication with local administration departments
- Agenda of activities in the locality
- Official site of the local administration.

Transport

- Theoretical and real time schedules for the Brussels Public Transport Company (STIB)
- Search for public transport itineraries
- Communicate with STIB departments (mileage certificate, lost and found, routes, job vacancies, subscriptions, transport for handicapped people)
- Order public transport season ticket online
- BITC: Brussels Info Traffic Centre
- Search of Taxi location and communicate with Taxi companies

Localisation

- Find and localise addresses in Brussels (URBIS map)
- Find and localise a piece of land or buildings for sale/for rent (business oriented service)
- Find and localise an apartment (student oriented service) or a rest home in Brussels

General description of the C.I.R.B.

The CIRB is a public organisation; its main goal is the computerisation of the authorities of the Brussels Region. Its role is to organise, promote and disseminate the use of ICT by local authorities and the various administrations of the Brussels Region. The C.I.R.B. is a service centre enabling the use of a telematics application by the administrations and between the administrations and the citizens; it ensures for this purpose management and control of the regional telecommunications network IRISnet. More than 150 highly qualified IT specialists and programmers work at the Centre and deliver ready-to-use services and applications to the various regional and local administrations, in particular within the framework of projects of the European Union and the Federal government. The C.I.R.B. has invested in eGovernment as its main activity since its creation in 1987. eGovernment activities comprise: computerizing localities, proposing multiannual plans, training and assisting the IT managers, following projects regarding IT, providing telematics and cartography for the various institutions of Brussels (including the Brussels Parliament), setting up and managing a telecommunications network and a regional web portal.

The C.I.R.B. is a Service Centre for local and regional authorities and deals with:

- E-mail and internet connection, irisnet.be domain, proxy-servers, firewalls, security strategy
- Implementation of the Digital signature (C.I.R.B. is accredited to issue Digital Certificates)
- eGovernment implementation in Brussels (follows the co-operation agreement between the Federal state, the Regions and the local authorities)
- Organisation, subsidisation and implementation of the internal network for local authorities
- Set up and support of the telemammography project with 2 hospitals
- Transversal projects like IRIScom (management of roadwork): coordination between public authorities, private constructors and operators
- Education programme: high capacity internet access, PCs and local networks for all primary and secondary schools of Brussels
- Broadcasting of regional televisions on the Internet
- Aggregation of IRISnet to connect local and regional authorities with the National Register and the Social Security Bank
- Secure payment
- Digital cartography
- Video Streaming and e-learning
- Chat between politics and citizens (eDemocracy)

All these services are developed within a legal framework to be found at:
http://www.cirb.irisnet.be/ci/FR/BaseLegale

The C.I.R.B. developed a matrix organisation with on one hand, a classical hierarchical organisation with the different departments, and on the other, several horizontal support departments.

CIRB departments:	Functional support departments:
- Infrastructure and telecom	- Legal
- Regional and local authorities	- Budget and finance
- Geomatics	- Account
- Telematics	- Communication
- Development	- Marketing

Three strategic missions are assigned to the C.I.R.B.:

Authority and recommendation

In order to guarantee social cohesion which is likely to be endangered by progress related to telecommunication and information technologies, especially regarding services provided by the public administrations to the citizens, the C.I.R.B. will make recommendations to enable the evolution of working methods of the public organizations and companies using these technologies. In its Annual Report, the C.I.R.B. devotes a chapter to these recommendations.

Promotion

The C.I.R.B. ensures on behalf of the Government permanent promotion of new information and communication technologies.

Outlook

In order to achieve the first two missions, a permanent technological and strategic survey is necessary, including self-benchmarking with other regions and European countries.

The Centre annually reports to the Government (through the annual report) on this outlook action. The C.I.R.B. ensures on behalf of the Government the role of a service centre, but also takes care of the filtering of addresses, ensuring the operation of the proxi-servers and as well as the management of the firewalls. Within this framework, the C.I.R.B. assumes the responsibilities related to the recognition at regional level for electronic signature and will accredit the regional and communal civil servant having the electronic signature within the framework of the federal law relating to the activity of the service providers of certification of the use of electronic signature.

It is accordingly that the C.I.R.B ensures its mission of deploying eGovernment in the Brussels Region. This deployment is done in agreement with the initiatives of eGovernment at the federal level and the local levels.

The infrastructure

Infrastructure and tools to interact with citizens and businesses

The eGovernment services are available through the Internet, via the Web interface by using a simple navigator, from any PC or from secure public terminals. Access is made via the regional website (www.bruxelles.irisnet.be), managed by the C.I.R.B. since 1997. A new version of this site is under development. This new version will bring fundamental changes in terms of technologies (CMS, dynamic pages, data bases...), in terms of design and of course in terms of

structure and drafting of the contents. Some services are accessible through public terminals in the city. The C.I.R.B. deployed 3 terminals in the subway stations, in October 1998. Citizens could access the Web sites and the telematics services in the irisnet.be domain (the official domain of the Brussels Region). Thanks to this pilot project, the C.I.R.B. was able at the time to note a certain number of dysfunctions related to the technology of these terminals. Thus, the C.I.R.B. felt that a deployment on a large scale of the terminals would be a failure, being given the amount of maintenance needed. At the time of the deployment of the high bandwidth network IRISnet, the C.I.R.B., in partnership with the IRISnet consortium (France Telecom and Telindus), relaunched in October 2000 the deployment of the IRISnet terminals. The design features of these terminals allows them to be installed not only in subway stations, but also in town halls, cultural and sport centres, post offices, or any other public place accessible to the citizens outside the opening hours of the administration.

In partnership with "La Poste" and via its subsidiary company Certipost, the C.I.R.B. proposes the secure electronic desk "IRISbox" characterised by two major elements:

- A secure messaging service with procedures allowing identification of the sender and the receiver of a message (provided that they are both Certipost subscribers). The electronic message is electronically signed and has a "virtual" seal of the Post office certifying that it was delivered to the good recipient.
- Intelligent electronic forms allowing citizens to introduce in a structured way a request to an administration. A control of the forms and the on line payment makes it possible to select only the duly supplemented forms with accepted payment. Data under XML format can easily be integrated in the back-office of the concerned administration. The filing of these forms is also envisaged.

This e-desk offers secure identification and a user-friendly payment system enabling therefore the Brussels Region to overcome the two most important obstacles for the implementation of eGovernment services. Today, more than fifty administrative forms and nine official certificates are available.

Training and help tools are available for the users. Within the framework of the secure e-desk IRISbox, the on line electronic forms have a specific help menu. Certipost, the partner for IRISbox, has a "call centre" open weekdays from 9:00 to 21:00 and Saturdays from 9:00 to 17:00. The C.I.R.B. provides continuous training for administrations (IT and digital cartography), and is approved as an organizer of continuing training by the Professional Institute of the Real Estate Agents (IPI - www.ipi.be). This training provides real estate agents an overview word of online services meeting the needs for the real estate sector and the evolution of eGovernment.

Tools measuring customer/citizen/company satisfaction are planned: one of them will be a form the user can fill on line, anonymously, to express his satisfaction. However, the tools allowing the citizen to check the state of his request are not a priority; the idea of a complete tractability of a file is not considered in the future, only that of a notification to the citizen when the advance of his file undergoes a change of stage.

Infrastructure and tools to interact between public administrations

The C.I.R.B. is, since 1997, the supplier of access to Internet for the public organizations of the Brussels Region. Security and filtering mechanisms have been implemented. To conclude its mission of network connection, the C.I.R.B. manages the domain name "irisnet.be" and is approved as Local Internet Registry, which enables him to distribute IP addresses.

The generic web portal tool developed by the C.I.R.B. (based on the Open Source application ZOPE), is designed in order to be able to delegate, in a structured way, the development and the maintenance of a Web site to the qualified services (design, database management, communication, information, contents). The experience gained by the C.I.R.B. in the management of sites known as "portal", enables it to distribute with its partners the tools necessary for a dynamic, user-friendly, coherent and, especially, easily maintainable Web site:

- Distinction between the public information intended for the anonymous visitors and private information accessible after authentification
- Management of the contents of the information, according to the accreditation of the manager, on the basis of model of which the structure is induced (no IT expertise necessary)
- Portability: use of various data base formats (Access, Excel, Oracle...) under different OS (Windows, Linux)
- Sharing of information (inter-departmental and hierarchical) by ensuring coherence of the design and by avoiding data redundancy
- Management of the modifications by version (allowing to test a modification before public diffusion and/or to reactivate an old version when the new installation has a problem).

The telematic infrastructure used is the broadband network IRISnet of the Brussels Region, conceived to simplify telecommunications between the various administrations of the Region. This broadband network uses an advanced technology and allows simultaneous transfer of voice, image and data. Each site has a single connection, with only one single point of contact and only one on line help service for the whole of the users and the services. This complex telecommunication infrastructure uses optical fibre cables and commutation nodes between the buildings of the local and regional administrations of the Region.

In order to provide interconnection of all the databases between various public services, the creation of an UME (Universal Messaging Engine) is needed. This interaction offers an integrated service, which enables to create a file while directly seeking information in the databases of the other public services, instead of taking this step manually.

In the Brussels Region, the pilot study for the UME is finished, the EMU is in phase of realisation since March 2003. This UME connects two databases with data relating to companies.

Re-engineering of processes due to eGovernment

Technology ensuring the security of transactions and payments was possible within the localities thanks to the implementation of IRISbox. Payment will be carried out directly on the Web, thanks to the services of an online payment integrator, Ogone, a young Belgian company specialized in online transactions. Ogone proposes a payment infrastructure without resorting to the bankcard, and without purchasing specialized equipment. After checking the payment, Ogone notifies the locality and redirects the customer towards it. The receiver of the locality must-connect to the Ogone site to manage his payments. Ogone allows secure payment by using the services of various Belgian banks (ING, KBC, Dexia) just like Visa card and Mastercard, if the locality concludes an agreement with each one of these financial organizations. This situation allows the locality to benefit from its direct relations with the banks and to negotiate itself the fare. IRISbox proposes for this service an annual fixed price, according to the number of inhabitants of the locality.

Certipost uses technology allowing the authentication of citizens and/or companies as well as secure transactions. The user of the services of the IRISbox desk therefore has a digital certificate of signature, a class three certificate provided a face-to-face procedure. This strong identification, on the Net surfer's side and on the administration's side, allows to further consider many other applications, towards the citizen, other administrations and even within the administration itself.

In order to facilitate interoperability between eGovernmental services, an eGovernment cooperation agreement has been signed on March 23rd 2001 between the federal state, the Regions and the Communities regarding the development and the exploitation of a common e-platform. http://www.cirb.irisnet.be/ci/Document/Library/Documents/Cahier20/Cahier20.pdf

The text proposes different guidelines:

- agree on a common navigation structure allowing the user to find his way towards adequate information whatever portal he uses. A first concrete realization on this level is the federal portal (http://www.belgium.be/) inaugurated in November 2002. Its navigation structure - life lines "citizen" and "company" - is the result of a consensus between the federal State, the three Regions and the three Communities of Belgium the implementation of a security infrastructure, an in-house PKI (Public Key Infrastructure) also for the Belgian citizens via the project of the electronic identity card BELPIC (Belgian Personal Identity Card). This card will contain two private keys, one for the identification of the citizen and one for the digital signature
- a common engine of transactions, the UME (Universal Messaging Engine), which will allow the structured exchange of data and documents between back office and front office
- the unique identification numbers for the citizens (on the basis of national register) and for the companies (on the basis of number of VAT)
- the authentic source of the data: each category of data will have an administrative service agent in charge of ensuring the storage and the update by taking into account as much as possible the needs for the other administrative services

Within the framework of the cooperation agreement, the C.I.R.B. works in collaboration with the FEDICT (http://www.fedict.be/), Federal Public Service of Communication and Information Technologies created in May 2001. Its mission is to develop a strategy aiming at turning federal Belgian authorities into an eGovernment pioneer and to support the various federal public services during the implementation of this strategy.

The Brussels Region developed many IT applications, which will profit quickly from the projects initiated at the intergovernmental level. Thus for example, the Ministry of the Brussels Region created a database of companies, which will be interfaced with the "Banque Carrefour des Entreprises". The regional institutions will be connected soon to the broadband network IRISnet that offers an increasingly broad range of services: mobile telephony, fixed telephony, and soon access to the national register. Anxious to include the local authorities in the eGovernment initiatives, the Brussels Region launched a call for IT project proposals for the development of a three-year impulse plan for the optimal use of the IRISnet network.

To ensure the implementation of the eGovernment project, several committees were set up.

- In Belgium:

The intergovernmental Technical Committee, with the " Architecture Workgroup ", "Content Management Workgroup ", the "Work group: assistance measures to companies ".

- In the Brussels Region:

The Regional E-Gov Committee, the Steering Committee of the E-Gov Circular, the Technical Committee of the E-Gov Circular, itself divided into study groups on the topics: Company Database, National Register, Legislation, assistance measures to companies, Databank of patrimonial information.

The integration of the "back offices" is done in particular via the Crossroad Bank of the Social Security (Banque Carrefour de la Sécurité Sociale) (http://ksz-bcss.fgov.be/fr/index.asp) and the future Crossroad Bank of the Companies. Directives of the BCSS concerning the protection of privacy prohibited the interconnection of the databases between them with consolidation. The principle of a functional distribution of storage and update of the data between the various institutions of social security is opposed to that of a centralized recording. The Crossroad Bank does not hold any fundamental social information. Unauthorized access to the Crossroad Bank cannot make it possible to get any significant private data regarding a person.

One of the weak points in the initiative eGovernment in general is the fact that the administrations "dematerialise" but the workflow is not basically modified. There is not a real modernization of the administration. Mechanisms managing the follow-up of the requests and the measurement of the performance of the system will be installed, but not in a precise manner (a solution of notification per stage will be more adequate), because of the non-transparency of the administrative follow-up.

Enablers

Leadership

First of all, the leaders must be users of the new technology. It is the case for the C.I.R.B. However, this is very often not the case in a lot of administrations where many civil servants do not use IT yet.

Regarding the management of the organisation, after an auto evaluation using the CAF method, the C.I.R.B. has set up a matrix system where, in addition to the traditional vertical hierarchical structure, a "transversal layer" was created, covering all the hierarchy horizontally: the functional support departments.

Moreover, continuous effort is put into the management of relations with the political world. Indeed, politicians do not always understand the complexity of implementing an eGovernment project.

Strategy and planning

A "small steps" strategy is pursued by the C.I.R.B.. Implementing an eGovernment project requires small projects, sometimes of low added value, but operational within a reasonable time. Large global projects are avoided, because it can be very demotivating never to see the end of one and very expensive to give up such projects. Implementing a series of small projects, carried out in coherence with the global strategy - itself updated continuously - is the key to success of an eGovernment programme. Within sight of the very fast evolution of technologies and the practices, which result from them, adapting strategy very quickly needs great flexibility in planning.

Human resource management

The key is flexibility in human resources, especially regarding knowledge. A levelling of knowledge is needed following the evolution of projects. A paradox lies in the fact that the organisation must stress the concept of a project (creation of flexible and moving working groups) within public administrations, synonymous with stability and rigidity. Combining both is very difficult. In the case of the C.I.R.B., the possibility of hiring easily offers a flexibility, which many administrations miss.

Partnerships and resources

The C.I.R.B. is permanently aware of market needs. They collaborated with key partners related to European projects. These associates are important actors from industry (Olivetti, Sun, Alcatel, Nokia, Mobistar, etc.). The role of C.I.R.B. is to integrate existing products, adapted to the customer's request. The C.I.R.B. makes the diagnosis of the customer's problem and once the objectives established, seeks the partner.

A database collects all the competences and expertise of the employees. Financial management uses a solution of cost accounting in order to hold account of all the costs.

The management of technology uses the concept of benchmarking: a permanent technological and strategic survey is carried out, focussing on eGovernment solutions. A full-time employee is in charge of benchmarking selected technological solutions.

Change and process management

This is one of the most delicate points of an eGovernment project. In many cases the processes do not evolve, and e-services on the Internet are only a window without modernisation of the processes, which support them. This is due to the fact that the administrative culture does not support transparency and the pooling of knowledge, an essential condition for optimising processes. However, by empowering agents, especially with the implementation of projects, it is possible to trigger an initiative spirit and to initiate a culture of change. Curiously, the higher levels of hierarchy are in fact those most often refractory to change.

Results

Customer/citizen oriented results

Checking the use factor of the online service can measure satisfaction. The simpler the service (but with a real added value), the higher the use factor. The difficulty lies in communicating the existence of these Web services. Advertisement is very difficult to make.

People (employee) results

It is important to note that today employees know the advent of IT will not make them lose their jobs. It is the structure which is rigid and which refuses the change, more than employees.

A lack of employee satisfaction could be measured by their degree of mobility, of job change. It is not the case; the CIRB does not detect an increase in the rate of job change at the time of technological changes.

Society results

The findings do not indicate a "digital divide" given that there is no identification on a social scale related to the fact that one has or not a computer.

However, obligation for students in higher education to use a computer daily (which involves in fact the need for having one), can be perceived as hindering access of the higher education.

Key performance results

The objective laid down ten years ago is reached: to avoid the queues at the counter and to convince population and politicians of the benefits of the system.

However, an adequate financing of new technologies in the administration remains a delicate question. The politicians' decision to deal with eGovernment was linked to an overall trend of the times, but they didn't realise the means that this requires. Tomorrow's true challenge is modernising the public service, and eGovernment is one of the tools – providing the needed means are available.

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5. Common set of eForms within the Danish Regions[9]

Introduction and Summary

At the regional authority level Denmark has fourteen Counties. The main responsibilities of the Counties are :

- Hospitals
- Health care
- Care for the multi-handicapped and the disabled
- Secondary schools
- Adult education
- Regional economic development
- Protection of nature and natural resources
- Protection of rivers, lakes and seaside
- Environmental control of polluting industries
- Regional planning (land use)

9 This case has been written by Mr. Birger Kjer Hansen, Mrs. Bodil Lolle and Mr. Peter Hove, Copenhagen County.

- Major roads
- Public transport
- Culture

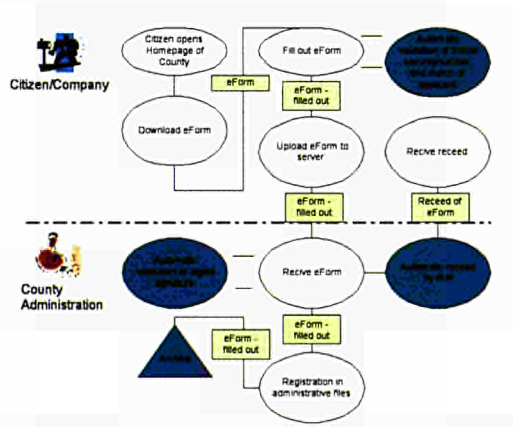
Among a handful of Counties a project concerning a set of common application eForms for use by both citizens and other public authorities has been initiated. The shape and content of specific forms are meant to be independent of County jurisdiction.

The idea of a common set of application eForms is based on two very different purposes:

1) Each regional authority will eventually be able to handle categories of information from citizens and other authorities more efficiently if standard information is digitalized and handled 100% as such. If a citizen can find the relevant form on the Internet, fill in the needed data and send it (back) to the correct public authority in a digital form, there will be less administration and the information can be directly transferred to the relevant database and the costs by handling each piece of information will be reduced by using the citizens social security number. The eForms will be validated automatically in several public databases which contains information on names and addresses etc. during the process.

2) Depending on the legal framework for each respective area of responsibilities, Counties are generally meant to provide an equivalent service to the citizens. By using an identical set of forms as basis for (public) service an important parameter in supporting eGovernment, best practice could be established.

Fig. 1: Processes in using common eForm



A working party was formed in the Summer of 2003 under the leadership of the Danish Regions association to co-ordinate the cross-regional co-operation on eGovernmental matters at the regional level. The working party has so far recommended that future efforts amongst others would be to concentrate on researching the possibilities for developing an eForm-solution and making it operational. Priority is given to eForms turned to the external level (citizens). A pilot-project including a few different eForms has been started and depending on the outcome of the pilot-project a larger scale project might be initiated within a few years.

The following comments are related to the CAF-model, and represent experience partly achieved so far and partly to be foreseen:

Leadership

Until 2003, development and use of common eForms has been carried out at individual local level, County by County. Each County itself has that way carried the costs of development, implementation and support – even though the eForms have been of similar substance and structure. If the Counties would use the same eForms, resources might be saved and efficiency in serving the citizens could be increased.

To motivate and drive the process of implementation the originators have formed the project in a common forum; the "Danish Regions Association". The Danish Regions Association has released newsletters on the project and formed subgroups manned by representatives from Counties.

When the pilot-project has come to an end the initiation of the main-project will have to be approved by the Board of Directors before it could be carried out.

Strategy and Planning

A prototype of the eForm has been produced, which shows the utilization of the application behind the different templates. In addition a hearing will be organized among the Counties to find out which forms should be digitalized in the beginning. Examples of forms could e.g. in the environmental and building sector be licences for private persons or industries etc.

The eForm-project is organized in an interactive manner. The vision of the project is that communication between citizens and the authority shall be supported in a digital way through common databases containing information of names, addresses etc.

Next to the hearing a pilot-project will be initiated. Strategy and planning will be extended and adjusted along the way. Finally the main-project will be carried out bit by bit, so the most needed eForms can be developed as priority. Priority and controlled steps are important issues.

Human Resource management

The design of the eForms, the business cases and the processes of implementation are carried out by employees of the Counties. The employees are chosen on the basis of their special knowledge and dedication for developing new IT-solutions dedicated to different specialised areas of County operations. The employees are physically working at their everyday workplace, but can meet with one another whenever needed.

In order to facilitate HR competencies of the employees, it is possible for the employees to participate in courses about the eForm-technology at different levels. There will be courses in composing eForms by the use of wizards at lower level. Other employees will be trained in composing eForms form scratch. Employees participating in the project should be not only IT-specialists.

Partnership and resources

In order to develop key partnership-relations, the Board of Directors has placed responsibility of project management at the County of North Jutland, which has substantial experience on the subject. Representatives of Counties are grouped in work parties. The smaller Counties that do not have the immediate resources and/or needs have the possibility to join the project at a later stage.

To maintain a high level of information and communication between the interested parties the project is managed and exposed – result by result – on a special website.

The licences covering the eForm-solution are planned to be based on a general agreement with the IT-Contractor. The more Counties participating in the realization of the main-project, the lower the costs will be for each participant.

To manage technology the IT solution is based on standard software. The distribution is planned based on .NET technology and common Danish XML standards.

To manage Equipment it is planned to offer the customers/the Counties to use either an IT solution, which is based on Application Service Providing by a Contractor, or a solution, which is placed by the County.

Process and Change Management

The project has formed a working party especially taking care of mapping the key processes within the use of eForms, all according to common standards of Business Process Re-engineering (BPR) and documentation of IT-processes. The processes are designed to improve the applicability of the eForms by validating the data filled in forms by citizens compared to public databases of citizen-data. This process is done by analyses of BPR diagrams.

The development-process is structured as a pilot-project, which is planned to be evaluated before initiating the main-project. The results of the evaluation of the pilot-project will then have to be an integrated part of and implemented in the main-project.

Results

The project is still at the beginning. However the first sub-goal has already been achieved when the Board of Directors of the Danish Regions Association agreed to initiate the pilot-project as an inter-regional task within the framework of achieving better eGovernment by digital means.

At a later stage an indicator of success will of course be whether the eForms are being used the way they are supposed to be and thereby creating better and more cost effective eGovernment.

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6. The Generalitat Valencia

(http:// www.gva.es).

The Generalitat Valenciana is the Regional Government of Valencia, a Spanish Mediterranean region covering an area of 23.305 square kilometres, with a population of almost 4.000.000 people. The Generalitat has around 110.000 public employees, and has an approximate annual budget of 7.800 million Euro.

The powers of the Regional Administration are high. The Generalitat has jurisdiction over a wide range of matters, such as health, education, administration of justice, social services, culture, employment, and certain taxes.

From the point of view of telecommunications and the Information Society, the Generalitat has a long record, starting in 1996 with a Modernization Strategic Plan that included a Steering Plan for Telecommunications and Information Society, a working document for structuring and planning the Generalitat's activities in those fields.

The Steering Plan was founded in the belief that Regional Administrations have a crucial role in the process of modernization of the economic and social frameworks, as well as for administration and government activities, through the promotion of the Information Society.

The initial objectives of the Steering Plan were:

- The efficient use by the different bodies of the Regional Administration of the Information Society tools in its management and administrative duties, providing them with a set of institutional telecommunications services at a matching cost
- Enabling the promotion by the Generalitat, together with the concerned socio-economic stakeholders, of the Information Society within the Valencia Region.
- Providing the Generalitat with the legal and procedural tools required to carry its responsibilities as a Regional Government towards an armonic development of Telecommunications and Information Society within the Valencia territory, taking into account the rights and duties of both users and providers, in the framework of a free competence.

In this same line, the Generalitat has launched its Second Plan for the Modernization of the Valencia Region in 2000, which is based on the previous experiences and structured as a set of projects with the common purpose of "changing" the way the Administration works, internally as well as in its relationship with citizens and companies.

The responsibility of carrying this Plan lies with the Direction General for Telecommunications and Modernization. The Direction General has the authority to promote, manage and execute the policies of the Generalitat directed to the modernization and innovation of the Region through the use of information technologies and, as a consequence, to carry out the required changes in the organization and procedures of the Public Administration. It is also its duty to promote and monitor the projects focussed on the incorporation of the Valencia region into the Information Society.

The infrastructures

The pillar which supports the whole technological infrastructure is doubtless constituted by the Corporate Telecommunications Network of the Generalitat Valenciana, pillar which supports the global strategy defined for the whole competence field of the Generalitat Valenciana. The Corporate Telecommunications Network of the Generalitat Valenciana is the greatest corporate net of the Spanish Administration from the point of view of the competence field, which it embodies, and of the technological functionalities, which it allows. By means of integrating voices, data and multimedia equipment, a complex service net is guaranteed. The Corporate Telecommunications Network of the Generalitat Valenciana is a fully operative reality. Some of its characteristics are:

- Scope of the whole Generalitat Valenciana and integration of all the departments and institutions.
- 2 ways to the Internet at 34 Mb.
- More than 400 integrated routers Cisco.
- connected premises
- RTC lines, more than 4000 RDSI lines, more than 6000 lines of mobile phone network.

As totally operative initiatives, the existence of the Institutional Portal of the Generalitat Valenciana, Portal GV (http:// www.gva.es) must be underlined. Its main aim is to promote the Generalitat Valenciana Portal as the only access point for information and services of the Generalitat Valenciana as well as other administrations, institutions, and public law entities. Portal GV offers all the information service and citizen service through the Portal PROP, and, in the near future, the Generalitat Valenciana will render interactive service to society by means of the net taking a step forward in the field of Electronic Administration besides the fact of providing information.

There will be access to the Public Service Catalogue of the Generalitat Valenciana, developed in the framework of the project "Generalitat on the Net" (Generalitat en Red). This project is conceived with the main objective of approaching Administration to the Valencian Society by using Information Technologies, thus turning into the catalyst of the Internet usage in the citizen/company relation with Administration and it has two different phases:

1. A phase of consultancy to identify the public services which are capable of being managed through the Internet, and
2. A development and implementation phase in order to design and develop an overall platform of telematic processes.

Another initiative which is fully operative is DISEMINA, by which the necessary infrastructures have been developed to provide access to the Generalitat Valenciana information in rural areas, thus avoiding the absence of information by establishing 200 access points in public buildings: Libraries and Cultural Centres of rural placements, small tows or disadvantaged areas.

The INFOVILLE 21 platform, at the Valencian Community level, integrates public and private services and has as a main objective the building of a huge virtual Autonomous Community by installing the Generalitat Valenciana platform in local contexts, which eases the interchange of administrative information, personal information, interpersonal relationships and economic activity on the basis of telecommunication and computing.

Every application is developed taking into account its design, the information and on-line assistance.

The entire project web pages contain FAQ to inform about frequent questions.

There are different interactive mailboxes.

A system of information and telephonic citizen service – 012 - complemented with Interactive Vocal Answer technology.

A training platform by the Internet: e-Training (*e-Formación*).

In the short term, an ICC (Internet Call Centre): An assistance service for Web pages enquiry of the Generalitat Valenciana for Citizens who are surfing the Internet, which allows them to "call" via text chat an operator through an Internet connection which has already been established. In this way joint surfing between the Citizen and the operator takes place.

Because of the existence of Service Letters, as improving tools of quality of public services, Valencian Society can measure the degree of accomplishment of commitment of services acquired by the Departments of the Generalitat Valenciana.

In relation to the management of files and within what is called Electronic Administration, a citizen mailbox is being developed inside the project *Generalitat en Red*, which will allow citizens to follow the current state of their processes.

The communication and interactions between public institutions

The Telematic Proceedings Platform designed in the project *Generalitat* en Red, has as objective to support the architecture, which allows the beginning of proceedings via Internet in a general way.

The Telematic Proceedings Platform contains the following modules:

- **WEB Catalogue for Telematic Services**: A system, which registers the services to be proceeded by means of a thematic functional classification oriented to the final user (citizens-companies). It allows the search and location of telematic services and connects with the specific information systems and the proceeding module.

- **Telematic Proceeding Module**: A system, which allows the user to complement forms related to procedures and attach the required documents. It includes the Digital Signature Module on the part of the applicant.
- **Signature and Register Module**: It registers the application form in the systems of Entry Register generating the Register Receipt signed by the Telematic Register Unity.
- **Process Module for the Telematic Register**: It establishes a link with the management systems of the Departments, which are the ones that manage the proceeding.
- **Register Module for Starts and Notifications**: It allows the inclusion of Notifications Signed by the Proceedings Units and arranges the process of Citizen Notification.

Every system is developed under open J2EE environments using the PKI platform of the Generalitat Valenciana, which is totally operative, to offer the citizen identification services, authenticity and digital signature, based on the digital certificate.

The Generalitat Valenciana has been constituted, as Certifying Authority, following the legal community state guidelines. By means of the e-Signature GV project, the PKI infrastructure has been created.

Within the *Generalitat* en Red project, the development of the Telematic Proceedings Platform has established a set of measures and good practices to provide Web solutions. All the institutions, which intend to offer services through the Internet in the Generalitat Valenciana, will have to follow these procedures.

The Technical Committee for the Development of Information Systems of the GV (Generalitat Valenciana) Administration (CODESI) approves all the standardization recommendations and proposals.

Changes of the Internet treatment procedures (Workflow) within the administration, linked to the introduction of eGovernment

The creation of a payment bridge (still being developed) which allows citizens, professionals and firms to pay telematically taxes, fees and rates of the Generalitat Valenciana in the Collaborator Entities.

By means of the e-signature GV project the Generalitat Valenciana started to build, from November 2000 onwards, the Public Key Infrastructure (PKI) for Valencian Public Administrations.

The Generalitat Valenciana is constituted in the **Certification Service Lender** after the Royal Decree 87/2002, on May 30th, of the Valencian Government, through which the usage of electronic signature created in the Generalitat Valenciana is regulated.

A Citizen Mail box of the *Generalitat* en Red project is being developed.

Operative processes:

- A system of information and telephonic citizen service – 012 –.
- *Infocentre*: Management Centre for Telematic Computer Services of the Generalitat Valenciana.

Modernization and rationalization in Public Administration and the spreading of the Information and Knowledge Society constitute a priority and commitment task of the Valencian Government. The actions and strategies of the Generalitat Valenciana related to e-Government,

are written down in "The Second Plan for Modernization of the Valencian Community, Moderniza.com" (2° Plan de *Modernización de la Comunidad Valenciana*, Moderniza.com), integrated by 107 projects oriented to the improvement of the Administration.

The *Generalitat* en Red project tackles the eGovernment problems from the perspective of telematic proceedings in an overall way for the whole Generalitat Valenciana, thus establishing Best Practices regarding teleadministration in a general and individual way.

Factors of success and results

Leadership

The leaders of the organisation have reflected the support and guidance given to create and disseminate the Information Society through the Agreement on 22nd of December 2000, of the Valencian Government, because of which "The Second Plan for Modernisation and Rationalisation of the Public Valencian Administration, *Moderniza.com*", is approved.

The mission of *Moderniza.com* is based on adapting the Public Valencian Administration running according to the possibilities of modern information and communication technologies, thus easing and spreading its scope internally and externally.

Its strategic objectives are based on innovation, rationalisation and transfer of technology and knowledge. They are achieved by means of:

The *Disemina* Project (that facilitates access to the Information Society of the town with access difficulties); e-Training (by restructuring the training platform and contents of public servers, favouring not only the Administration for self-training, but also the external customer/citizen); the e-Signature project (that allows electronic authentication for citizens and public officers, enabling safe use of technologies inside and outside the Generalitat Valenciana); e- Portal GV, which develops a common unique Portal in Internet giving access to information and services of the Generalitat Valenciana. As a consequence of the creation of these projects, co-ordination among them is necessary and this fact is embodied in the *Generalitat en Red* project, achieving a better usage of resources and results directed to society.

Within the *Generalitat en Red* project, a methodology relevant to the Generalitat Valenciana has been designed. It facilitates the strategic identification of the procedures of its competence, which may be managed on the Internet.

Moreover, a Telematic Proceedings Platform has been developed to establish a set of measures and good practices to provide Web solutions.

The Technical Committee for the Development of Information Systems of the GV (Generalitat Valenciana) Administration (CODESI) approves all the standardisation recommendations and proposals.

Due to the fact that it is a project structured at horizontal level, which affects all the Departments and Institutions of the Generalitat Valenciana, the General Secretariats of every department must tackle constant effective communication and there is a weekly meeting of the Autonomous Secretaries.

A Communication Plan from the General Directorate has been established, sending introductory letters of the project which are signed by the high direction and addressed to Ministers, Heads of Cabinets, General Secretaries, people in charge of institutions at the Generalitat Valenciana and members of the Technical Committee for the Development of Information Systems of the GV (Generalitat Valenciana) Administration (CODESI).

Numerous conferences have been held to present the project to the General Directorate for Telecommunications and Modernisation and to the CODESI, apart from the appearance of different articles in the magazines "*Moderniza.info*" and "*Moderniza.com*". The evolution of the Project can be seen in a transparent way through Internet and the Intranet of the Generalitat Valenciana.

Strategy and Planning

Nowadays, there are some necessary ongoing actions, which facilitate the approach of the Administration and Valencian Society through the Internet, by increasing the functionalities of the Web channel. This fact will offer further possibilities for the information services. Such actions, within the *Generalitat* en Red project, are the following:

- Designing a methodology to identify procedures of the GV, which may be arranged through the Internet;
- Co-ordinating the initiatives of the different Departments of this Autonomous Administration as electronic administration;
- Developing a suitable corporate platform in order to show this new Administration to Society;
- Defining and promoting the necessary corporate and regulation framework to show these public services and allow the beginning of telematic proceedings.

The project arises from the necessity of joining efforts concerning eGovernment made by the Generalitat Valenciana from the perspective of telematic proceedings and teleadministration. The project was designed and methodology related to the identification of strategic services elaborated as well as a catalogue of public services of the Generalitat Valenciana to be proceeded telematically. Moreover, a comparative analysis of best practices developed about public services proceedings through Internet has been carried out. They show national and international portals, taking into account Public Administrations with competence in the central, autonomous, regional and local fields and applying the conclusions of this analysis to the project.

An Overall Technological Platform has been developed and the implementation strategy defined. A Catalogue of services on the Internet has been published. From this point on, there will be an establishment of methodologies to be applied, which guarantee the autonomy of the Generalitat Valenciana and the installing of Internet services.

Human Resource Management

Due to the philosophy of the project, telematic proceedings in the Generalitat Valenciana require a change of culture in organisation achieved in a gradual way and depending on the degree of implementation of services related to telematic proceedings. Being trained to use computer introducing communication tools involves public employees, so they are able to know and analyse its advantages.

Partnership and Resources

Co-operation with external agents for the development of the Project: Contract with the UTE formed by the firms *Deloitte & Touche España* S.L and *Indra Sistemas S.A.*

A really relevant aspect, which leads to a great success, is that it is integrated in other projects developed by the Generalitat Valenciana within the "The Second Plan for Modernisation and Rationalisation of the Public Valencian Administration, *Moderniza.com*". These projects, which may be already concluded or in force, but always related to Teleadministration, are considered "critical resources" leading to the success of the *Generalitat en Red* project:

MASTIN: A Workflow System to manage files. With an Entry/Exit register unified in the whole Generalitat Valenciana, the implementation of MASTIN consolidates and homogenizes a common follow-up mechanism of administrative files in all Departments and Institutions.

Portal GV: Its objective is fostering the Generalitat Valenciana portal as a unique access point to information and services of the GV and other Administrations, Institutions and Public Law Entities related. By using it, one will be able to accede to the Catalogue of Public Services of the GV developed in the *Generalitat en Red* project.

e-Signature GV: The Generalitat Valenciana has been constituted, following the legal community state guidelines, as the Certifying Authority. By means of this project, the PKI infrastructure has been developed. The platform developed by the *Generalitat en Red* project uses the mechanisms provided by e-Signature GV in order to offer citizens the identification services, authenticity and digital signature, based on the digital certificate.

CV Mail: Creation of a Data Basis of Citizens of the Valencian Community (CV) from which a distribution of electronic mail accounts can be made to achieve proceedings through teleadministration in an efficient way, seen from a legal point of view.

S.D.A: Organisation and beginning of an administrative system with the suitable resource endowment, infrastructure, technological tools and management rules to improve the management of the Generalitat Valenciana documents.

INFOVILLE 21: This project has as objective to build a huge virtual Autonomous Community by installing the GV platform in local contexts, which facilitates the interchange of administrative, personal information, interpersonal relationships and economic activity about computing and communications.

Knowledge Management: Design and implementation of a general-nature information system, which turns information and knowledge handled by people developing projects or managing powers in the Generalitat Valenciana into a source of "corporate know-how", thus permitting the transformation of individual knowledge into corporate one as well as the interactive dynamic contribution of experts' knowledge, organisations or groups interested in specific areas defined.

The Generalitat Valenciana has at its disposal measurement elements regarding the acceptance degree of these new forms of relation among citizens and companies with the Administration through Infobarometers prepared every six months by CEVALSI (Valencian centre for Information Society).

Process and Change Management.

The *Generalitat en Red* project considers a highly strategic first phase previous to the implementation of services in Internet. This analysis and selection phase is the optimum offer in Internet, which the Generalitat Valenciana must give, and it improves all the factors taken into account in the implementation process of interactive Web services (resources, integration technologies, ordering of initiatives and offers, corporate image and impact in society.)

By producing the Catalogue, what has been achieved is a filtering measurement methodology for public services from some indicators which have selected a group of 300 public services among an offer over 1.700 ones.

The Generalitat Valenciana is creating a Telematic Register based upon a technological platform common to all Institutions. This configuration and regulatory framework related to the creation of the Register constitute "best practices" about teleadministration.

All public services, which require identifying citizens who start proceedings, will employ the Advanced Electronic Signature. The Generalitat Valenciana, as the Certifying Authority, has at its disposal its own PKI emitting certificates for citizens in need.

Customer/Citizen Oriented Results

People Results

Valencian Service for Employment and Training (Servef):

- Enquiry and modification of *curriculum vitae*.
- Enquiry of employment offers which are covered with difficulty.
- Enquiry of labour profiles of applicants inscribed in *Servef*.
- Enquiry of available training courses.

Society Results

- The Methodology related to identification of strategic services.
- The Catalogue of public services of the Generalitat Valenciana, integrated by each one of the catalogues of the Departments.
- The Overall Telematic Proceedings Platform.
- The Catalogue of Web Services.

The services started, which have been included in this catalogue, related to the Departments, are:

Industry, Commerce and Tourism Department.

- Automatic sealing system of electrical connections (SAUCE)
- Automatic sealing system of water bulletins (SAUCA)

Economic, Treasury and Employment Department.

- Assistance system for the generation, presentation and payment of ceded taxes (SARA)
- Telematic application and achievement of citation documents in the Service of Mediation, Arbitration and Conciliation, because of dismissal requests and other reasons (e-Smac)
- Telematic distribution of annual deduction certificates to professional dealers in the Generalitat Valenciana.

Valencian Tourism Board.

- Information Service intended for companies that exploit tourist resorts discharges leaves and modification (EEAT-i).

Key Performance Results

There is a development for the Valencian Government in the field of Electronic Administration.

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7. eVienna

www.wien.at

Background

According to international studies, Vienna is one of the most attractive business locations in Europe. These location-related qualities are based on several factors: generally speaking, the educational levels of universities and research institutes are very high. Vienna's workforce is considered well qualified. The economic structure is characterised by a high share of future-oriented small and medium-sized enterprises in the service sector.

These factors combine two seemingly contradictory tendencies: on the one hand, the opening-up of the Eastern and Central European countries and their reforms to establish a market economy have placed Vienna in the immediate vicinity of particularly dynamic markets. On the other hand, the city continues to benefit from a socially, legally and politically very stable society, which inspires confidence in investors. For these reasons, many worldwide corporations and international industrial enterprises have chosen Vienna as their European headquarters.

This specific geographic position and the body of know-how concerning the economies of the CEEs is to be used increasingly to boost the city's own economy.

Due to the positive results obtained so far, protecting and developing Vienna as a business location in a Europe of cities and regions remains a central task. The main points of emphasis for future development lie in three areas of sectoral specialisation: an active policy to attract enterprises will establish an industrial and research cluster in the field of telecommunication, biotechnology and medical technology. The development of urban and environmental technologies, which have already met with great international acclaim, will be speedily continued. Last but not least, the City of Vienna relies on its outstanding reputation as a centre of tourism and venue of numerous conferences.

Today cities and urban regions are fighting for relatively location-independent investors. All players have understood that urban and regional development is only possible on the basis of a prospering economy. However, this can only be achieved through a long-term, systematic strategy. The best possible qualification of the workforce, well-planned and regionally fine-tuned marketing measures and effective co-operation structures in the cities are essential to attain this goal.

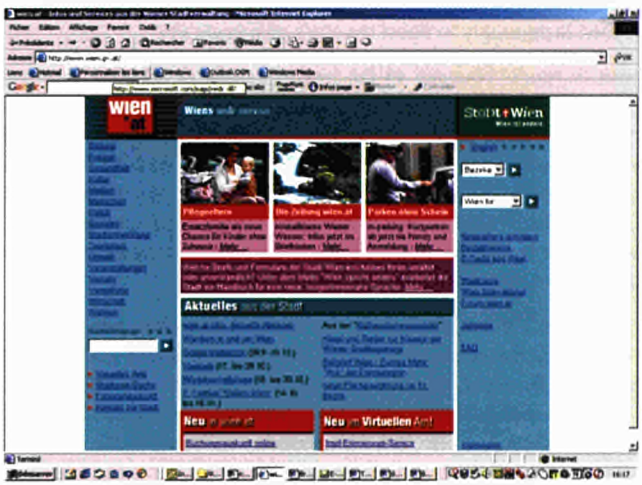
The eGovernment projects of the Municipal Administration of the City of Vienna, Austria's capital with 1.6 million inhabitants, have been shown by the PRISMA project to be a good case for best practice on several levels:

- two successive strategic programmes to implement eGovernment services (*WELCOM and eVienna*),
- advances in real applications of innovative service delivery,
- the user centred design of its web portal *wien.at*,
- special achievements in social inclusion, among others through multi-channel delivery by offering Public Access Points (kiosk system).

Objectives

eVienna, the current umbrella project for eGovernment of the Municipal Administration of the City of Vienna has started at the beginning of the year 2001 with the goals of "citizen orientation, support for the economy, and administration simplification" (Binder 2001). It is a practical framework for implementation of eGovernment solutions and is the follow-up project of *WELCOM - Wiener (Viennese) Electronic Commerce*, the former umbrella project for e-commerce and eGovernment applications and services. This project had been created as a basic platform for innovative eGovernment and e-commerce transaction services during the time period from January 1999 to December 2000 containing all single projects of transaction

services of the Municipal Administration of the City of Vienna (MDI Wien 2000). WELCOM also started to offer rather early transaction services for businesses, especially for SMEs, like electronic municipal tax return filing for trustees of commerce, electronic business licensing, procedures for e-procurement or billing and the delivery of forms for other business-oriented services. Online transaction services provided for citizens include, for example, the electronic order of a voting card and a parking sticker (the annual parking allowance for residents of certain Viennese districts), purchasing digital maps, and dog registration.



A fundamental part of *eVienna* is www.wien.at, the main web portal of the Municipal Administration of the City of Vienna. By 1997, it covered about 3000 pages and by July 2001, already about 9500. *Wien.at* has already developed towards technically more elaborated solutions for transaction services acknowledging user's privacy. Most of the connections are secured through SSL (Secure Socket Layer) and partially a PIN and user ID are given, especially to business partners of the Municipal Administration. The *virtual administration guide*, which can be accessed from *wien.at*'s homepage, entails "administration procedures", PDF forms for download as well as electronic forms and contact links to administration departments. In the near future, over 30 applications are planned to be implemented, a dozen of these are online already and about 15 will be completed within the year 2001. Of especial importance is the planned online registering of residence. Police offices are issuing this document until now (Binder 2001). Soon, the responsibility for registering of residence will be overtaken by the municipal district's departments, and an online form will be available through *wien.at*, too.

This web site's offerings include a far-reaching social inclusion concept by providing also special content for teenagers and women as well as for people with special needs, like the handicapped and elderly. Additionally, *wien.at* contains an English edition, especially created for and used by tourists and English speaking international residents. To reach even a larger number of citizens, about 50 Public Access Points[10], public kiosks, are offered on public places within the Viennese city area operable via touch screens. The terminals were awarded a European prize for their design in 1999.

10 http://www.wien.gv.at/ma14/access.

A study conducted by an institute of the Vienna University of Economics and Business Administration together with Unisys Austria among 300 businesses that was published in February 2001 showed that 65% of all Austrian businesses know the web site *wien.at* (IMM 2001). Current usage evidence shows that the percentage of citizens using the information service offered by *wien.at* is high and there is some reason to expect also a gradual increase of interest in communication and transaction services.

eVienna is especially outstanding in its realisation of multi-channel delivery. To allow access to *eVienna* to people who cannot afford such access, a multi-channel-delivery approach is especially important to assure the social inclusion of such "special" user groups. *eVienna* can indeed offer a far reaching multi-channel delivery concept. The access to the single *eVienna* services is provided through:

- Public Access Points (kiosks),
- One to two call centre/s shall be built up,
- One-Stop Shops of district municipal departments,
- De-centrally established Citizen Services,
- Different electronic media – phone, fax and e-mail to contact the municipal departments, municipal district departments and other institutions of the Municipal Administration.

Infrastructure

Infrastructure and tools to interact with citizens and businesses

The City of Vienna has set up a total of 308 public terminals, including 52 Vienna Access Points (based on current technology) and 7 Community Service Points (older technology). 18 public terminals are so-called ELWIS points, which only provide information on housing in Vienna. 231 PCs with Internet access are available in public libraries. Additionally, private operators have set up 39 Vienna City Terminals and 20 Telecom payphones. An M-Parking pilot project has been scheduled for autumn 2003 to test an SMS-based payment system for short-term parking fees in restricted parking zones.

The Web services offered by the City of Vienna at http://www.wien.at are available to all citizens and businesses 24 hours a day, 7 days a week. FAQ are answered at http://www.wien.gv.at/faq/cache/. The City of Vienna's Web Style Guide sets out the minimum requirement that the e-mail address of the person in charge must be provided at the bottom of every Web page. Moreover, a service called Central Citizens' Request Management (*Zentrales BürgerInnenanliegen-management*) allows every person in Vienna to make complaints, suggestions or requests to the Vienna City Administration and follow the course of the matter within the City Administration: http://www.wien.gv.at/english/vcrm/

Surveys among the local population are held on a regular basis in order to find out whether users are satisfied with the Web services and eGovernment services available, and to identify the needs of citizens and the business community.

Infrastructure and tools to interact between public administrations

The Austrian public authorities have established working groups on inter-institutional data exchange. XML and SOAP are used in this context. Further information is available at http://reference.e-government.gv.at.

Currently there are two types of data exchange infrastructure for public authorities in Austria. The older one uses a Web-type infrastructure based on frame relay technology with specific provider-independent Internet addresses, which are not routed via the Internet. The second, more modern solution essentially establishes a VPN-type infrastructure based on SSL connections from reverse proxies in the authorities. For further reference, see:

http://reference.e-government.gv.at/Portalverbund.233.0.html

The eGovernment Reference Server offers ample information on the topic of Use of open standards. There are working groups and recommendations based on open standards for all issues mentioned, as well as intensive inter-authority discussions on open source software. The standards mentioned above (XML and SOAP) equally apply to infrastructure used for the data storage and access, provided that their application makes sense in a federal system. For special requirements such as central registers, however, the concept of Application Service Providing (ASP) has proven more effective in Austria. The central resources can be accessed via open APIs.

Re-engineering of processes due to eGovernment

In general, standard Internet procedures are used to ensure transaction and payment security:

SSL (Secure Socket Layer) and TLS (Transport Layer Security). Austria has introduced a legally binding concept for the introduction of a "citizen card" (Bürgerkarte), which also applies to Vienna. The privacy statement and credits are accessible to users directly on our homepage: http://www.wien.gv.at/index/privacy.htm-http://www.wien.gv.at/index/credits.htm

Almost all services of the City of Vienna have introduced the ELAK [Electronic File] system, which – of course – also provides for electronic and paper documents to be accorded equal importance. The Vienna City Administration uses online ticketing systems for the follow-up of service calls and requests. Alternatively, users may forward requests via ELAK. All measures are based on the Principles for ICT Use, the ICT Strategy, the Guidelines for the Development of eGovernment Applications, and other ICT provisions.

Resources: Public Access Points

The public Access point initiative was founded to offer free Internet access to eGovernment services of the Municipal Administration in public. At this moment four generations of such access points can be distinguished:

First Generation: ELWIS (Electronic Housing Information System)

In 1993/94 the Municipal Administration of the City of Vienna started offering public terminals for information on housing offers (ELWIS: Electronic housing Information system).

Second Generation: i4U

These terminals were developed in the framework of Infosond. Therefore, a browser had been developed by the Municipal Administration, which was sold to the private providers of the access points. This Browser had been created before the invention of the Internet Explorer.

Third Generation: Public Access Points

The Public Access Points initiative was founded in 1998. Altogether 50 Access Points have been implemented until now. Of these, by the beginning of 2001, three terminals for handicapped people (with wheel chair) were opened (by providing a trackball or a radio-mouse) and are still to be tested. All Public Access terminals are positioned in public departments, hospitals and schools, and offer voice and touch screen commands. There is also the possibility to send e-mail. The user gets the response to the e-mails through personal e-mail address or traditional mail. The service is free for all citizens. The use of a printer is only possible at the EDP-Department of the Municipal Administration, but not in other locations. The information services on these public kiosks systems are *wien.at*, *Help.gv*, job information through search function[11], housing offers through ELWIS, the electronic phone book of Vienna, electronic city map search and *senior.online*. The public access points have been developed by the joint venture APC (a Phillips and LB-data joint venture who provides the software and hardware) in cooperation with the Municipal Administration[12]. The Public Access Points will stay as they are now for a while. Perhaps in the future they will be integrated with the City Terminals (see below).

Fourth Generation

Now there are three kinds of terminals placed in the area of the city of Vienna, all provided by the joint venture APC:

City Terminals: a private-public partnership between the Municipal Administration and the joint venture *APC* and *GEWISTA*. APC provides the software and hardware, and *GEWISTA* provides the shell. The same Web technology as with the former generation access points is used here. These new interactive postal pillars are free of charge and financed through advertising (classic-outside-advertising and out-of home -advertising) and about 20% content partnerships, for example with Tiscover and Wiener Einkaufsstrassen (Vienna City Malls). The first interactive poster pillar was located on the Mariahilfer Street, a highly frequented shopping street in the City of Vienna. By now, there are ten city terminals located in the Vienna City area. At the end of 2002 realistically there will be between 150 and 200 in the area of the Vienna City. The usage of the postal pillars works through touch screen. A mixture of content and communication services is offered: eGovernment information, communication and transaction services are offered through the services of the Municipal Administration (*wien.at*) again. There is also a button for e-mail and SMS messages. Depending highly on the location, about 90-100 users are using one city terminal per day, about 50-70 e-mails per days are sent through one terminal. The number of SMS is even a little bit higher.

11 http://www.ams.or.at.

12 http://www.wien.gv.at/ma14/access/zukunft.htm.

MultimediaStations: These are payphones cells provided by the joint venture *APC* and *Telecom Austria*. At the moment they are placed at nine locations within the area of the City of Vienna: four of them within the first district (the centre of the city), and the others on the 6th district (Mariahilfer Straße), three in other Vienna districts, and one at the Vienna Schwechat Airport. In 2002 the number shall grow to 30 stations. Besides traditional telephony, other communication forms are possible: Net surfing, e-mail, SMS, and video conferencing with simultaneous audio and video transmission. Further services available are Internet shopping and games. Besides "simple Internet searches", there are "current local establishments of local ticket ordering, including automatic account debits". eGovernment services are offered through *wien.at* and *Help.gv*. Besides the transmission of sports events through ADSL/ISDN connection, "and integrated Webcam makes live video telephone transmission between multimedia stations. Another favourite feature is the taking of digital photos, which may be sent to friends and e-mail"[13]. The usage of these stations costs 1 Austrian Schilling per minute. Payment can be made by cash or credit card.

Techno-Points: are a joint venture between post offices and APC. The current stage is a pilot project running with about 10 such Techno-Points. The first Post-Box, a new integrated store at highly frequented places allowing receiving post and financial services by passing by, started on the Vienna Mariahilfer Straße, by now especially for post products and service delivery, like sending letters electronically and to be received through traditional mail. This means that official letters can be sent via e-mail and are then received by the addressed person by traditional mail. Other services are: Internet information services concerning tourism and business, and eGovernment (wien.at), online transactions and electronic communication tools. Payment is pursued through debit card.

Activities

eVienna for Special Groups

Special groups had not been an extra focus at the beginning of the development and implementation of the Web portal wien.at. Between the re-launches of 1998 and 2000 there was very much progress in this regard: like, providing a special service for senior citizens. Now on wien.at's home page there is the link "Vienna for handicapped people, women, youth and senior citizens":

Senior Citizens

The special user group of senior citizens is slowly enlarging and especially important to wien.at. There is also a certain senior link on wien.at already. The Press and Information Service is planning to conducting a study on senior users, e.g., what do they criticise on wien.at, what seems too difficult to them to use wien.at, etc. Concerning the usability, for senior citizens there exists a larger font on wien.at. There is also the already mentioned EDEN-project SeniorOnline that is based on Web for Groups groupware and community tools, which were adapted to the needs of senior citizens. Online classes for senior citizens, handbooks for PC and Internet, etc. are offered here.

13 http://213.229.10.214/apc/cgi/frame_site.asp?p=g_uid_48&l=en.

Youth and Children

Wien.at's average users are between 30-39 years old, and therefore, one generation above the average Internet user (20-29 year olds). But wien.at also wants to provide a service that is children and teenager friendly. As wien.at is especially an information service, they cannot reach so many teenagers. What is planned are meetings with youth organisations to have a look what the wien.at team can do for teenagers within the wien.at responsibility. For teenagers wien.at offers under "Youth Internet and CO" links to "understanding the Internet", an "Internet handbook", information on "producing web pages", "HTML-introduction", "searching tools", as well as "Viennese schools on the Internet". Also, the initiative "Wiener Bildungsnetz - Jugend ans Netz" (Viennese Education network - Youth to the Net") within the eVienna project realised that by the end of 2000, 402 Viennese schools had a broadband data network and over 6000 PCs. Until the end of 2001, 194 other youth organisations, libraries and schools for further educations (Volkshochschulen) were networked. In the first step in each primary class two PCs and one colour printer were established and in secondary and other schools pro 12 classes one EDP class. In September 2000, 350 schools of the City of Vienna had Internet access and the necessary hard- and software. This meant that about 94.000 pupils and 9.400 teachers had access to the Internet. Also important is here, that the administration of schools is linked through this Viennese Education Network. There are four focuses:

- School administration,
- Further education for teachers ("Lehrernetz"),
- Kidsnet,
- Elternweb (Parentweb).

Women

For women several links are provided directly to institutions of the Municipal Administration of the City of Vienna, like to the Women's Office of the Municipal Administration, and the Office for Equality, and other departments dealing with violence or sexual violence against women or children, women's health, etc. Additionally, there are especially virtual (external) links listed, like "CeiberWeiber women's online magazine, frauenweb.at the field of the Internet for women only for women and other women's networks. Finally, there are search engines listed for special women's concerns: FeMiNa and WWWomen!

Handicapped People

Besides that wien.at offers a list of links that can be helpful for handicapped people, with the new W3C directives for optic accessibility that will have to be realised by wien.at, too, handicapped people are becoming even more a special target group. For blind people, the problem of not being able to read wien.at can be solved through the writing of the adequate programme that is able to be read by a so called screen readers that reads the text allowed to the user. Such screen readers are "user agents (e.g. browsers and assisting technologies such as (as said already) screen readers, Braille displays, etc.) to present the information to the user. Non-text equivalents of text can also be helpful to non-readers. An auditory description is an example of a non-text equivalent of visual information. An auditory description of a multimedia presentation's visual track benefits people who cannot see the visual information". Wien.at fulfils already a main part of the W3C criteria explaining "how to make Web content accessible to people with disabilities" also including the coding rules that blind people can also "read" such content. The new style guide that had been introduced in autumn 2001 includes all points

that had been missing before. It is important that as many browsers (1-2 earlier generations) can be covered as possible. If Web products are made too complicated, less information for people with optic disabilities are given. Well-done pages mean here pages with few or no graphic elements, and navigation made not through graphic design, but through text elements. The problem is that this is not so easy to be achieved because many technical municipal departments tend to develop more playful and funnier texts. As a result, the implementation of such a style guide entails a potential of conflicts.

Foreign Citizens

Pages that are especially important to foreigners shall be offered in Serbo-Croatian and Turkish. Just when this will happen is unclear. Overall, it must be said that this group, though it is a large and growing group living in Vienna, is still neglected.

Outputs/results

The world's first interactive advertising pillar

Among the latest innovations in Vienna are Access Points, user-friendly and easy-to-servicepublic Internet terminals provided at 300 locations in all parts of Vienna. Citizens can useAccess Points to send e-mails or SMS messages, order tickets or submit applications and requests (e.g. for parking permits) to municipal authorities. Thanks to an e-cash payment system, it will even be possible to pay the municipal fees for these applications and services directly via the Access Point. Based on this technology, Vienna is now introducing interactive outdoor advertising pillars. To this end, the City of Vienna has launched a public-private partnership with apc, the developers of the new application, and GEWISTA; a Vienna-based media and advertising enterprise.

The first interactive advertising pillar has already been set up in Mariahilfer Straße. The new terminal boasts touch screen technology and bilingual software.

INFOSCREENS in underground trains

Public transport passengers in Vienna have already got used to the 33 INFOSCREENS provided in 8 underground stations throughout Vienna. So far the screens have shortened the wait for passengers on underground platforms, but now the new information medium is also entering the trains.

Every underground compartment is to be equipped with 6 screens. The 15-minute programme is updated continuously and features daily news, previews of cultural events, information on public transport in Vienna, short cartoons, weather forecasts and advertisements. By the end of 2001, more than 1,200 screens will be provided in the trains of underground lines U1, U2, U3, and U4.

The first library accessible via WAP

In a spectacular and unprecedented initiative, the Vienna City Library has opened its doors to WAP technology. WAP (Wireless Application Protocol) is a standardised protocol developed to provide a wireless Internet connection for cell phones and similar portable devices. Since May 8, the Vienna City Library has been the first library worldwide that can be accessed from any WAP compatible cell phone or palmtop. More than 300,000 titles have been made

accessible. Under http://wap.wstlb.at/, users may search for books and magazines in the library's catalogue and even reserve books they wish to read at the library, although WAP does not support e-mail to date.

The Vienna City Library offers more information on the Web than most other Austrian libraries. The poster collection, comprising some 43,000 titles, and even pamphlets from the 1848 revolution has been added to the library's comprehensive catalogue of books and magazines. The catalogue of hand-written historical documents is currently being prepared for Web access. Additionally, 2,800 pages of summaries have been made available, including 17 complete exhibition catalogues, in full-text and with all pictures.

The Vienna City Library constitutes the official public library of the City and Province of Vienna. In 1999 it launched an initiative for the creation of a joint Internet platform of provincial libraries in Austria. As a result, the catalogues of all provincial libraries can be searched under http://www.lbb.at/. Soon this joint catalogue will also be available via WAP.

Integrating disabled persons in Vienna

Integrating disabled persons is a first priority in Vienna. Vice-Mayor Grete Laska underlined that ATS 37 million are spent on early support in Vienna. There are 88 inclusive nursing schools in the city and 535 schools where special needs children are included in the regular classroom. 10 specialised schools for pupils with disabilities aim at integrating non-disabled pupils. Wiener Linien (Vienna Public Transport) policies relate to the integration and mobility of disabled persons via the provision of accessible buses, elevators for all underground stations and special guiding systems. In 1999, Wiener Linien furnished more than 80 per cent of underground platforms in Vienna with a tactile guiding system for blind and hard of seeing passengers.

The City of Vienna will also implement special employment measures for disabled persons and aims at employing a total of 700 persons with disabilities.

Enablers

LEADERSHIP

Management aims and objectives to be implemented by 2005 are published. This includes clear guidelines (corporate policy) for the individual departments, which implement management aims and objectives.

The individual departments increasingly receive more responsibility in accordance with the principles of New Public Management. Centralised offices are responsible for strategies and coordination tasks. There are several senior management offices such as a separate office for organisational issues.

There are employee orientation sessions on a regular basis. Employees continuously assume more responsibility and take on new tasks. Employees are asked to make contributions, e.g. a corporate system with financial incentives to submit suggestions for improvement.

A contract management system is established. Co-operation with and surveys among stakeholders, citizens, business organisations, and other clients of the Vienna City Administration are organized.

STRATEGY AND PLANNING

Surveys are carried out, standardised contacts are established, and opinions are continuously exchanged.

Reports are regularly submitted with comparable figures, which are the basis for decisions.

A contract management system is established. Basic administrative aims and objectives to be implemented by 2005 are published with implementation guidelines (corporate culture).

HUMAN RESOURCE MANAGEMENT

Separate offices such as the Chief Executive Office for Personnel Management and Promotion as well as the Chief Executive Office for Internal Auditing and Human Resources Planning plan, manage and improve human resources with regards to strategy and planning. The skills, abilities, and efficiency of employees are continuously evaluated. A job exchange system, which is also available in the form of an "online job market" is established. Intranet pages provide information about personnel management issues.

Employee orientation sessions including employees and executives are carried out. Further training measures are offered. A decentralised system of suggestions for improvement in the individual departments is established.

PARTNERSHIP AND RESOURCES

Co-operation with interest groups is organised taking advantage of public private partnerships as contact and exchange with superior institutions (e.g. Austrian Association of Cities and Towns, etc.)

Co-operation with Viennese district councils, associations and self-help groups, is setting up.

There is a separate office for knowledge management in the senior management level of the Vienna City Administration. Employees are provided with a very extensive Intranet offer.

Contract management to agree on tasks are implemented in the framework of the set guidelines and budget regulations as well as the Vienna City Statutes and other regulations.

There are separate offices for ICT matters and urban planning, which issue strategies and framework conditions.

The City of Vienna has separate departments for building and facility management as well as real estate management.

PROCESS AND CHANGE MANAGEMENT

It is included in contract management and quality management into the individual processes.

Customer surveys, citizens' participation, and citizens' meetings are organised involving district councils, establishing public terminals and a central citizens' request management (see http://www.wien.gv.at/english/vcrm/).

The City of Vienna participates in benchmarking processes, organises and participates in conferences, market research, and cost-benefit-analysis.

Results

CUSTOMER/CITIZEN – ORIENTED RESULTS

Continuous evaluation of customer surveys and citizens' requests has shown that citizens increasingly perceive the City Administration as partner (see central citizens' request management: http://www.wien.gv.at/english/vcrm/).

The quality of the requests, demands, and suggestions submitted by citizens is increasingly constructive and less critical.

PEOPLE RESULTS

Employees have increasingly participated in the corporate system of suggestions for improvement. Employees are increasingly interested in and also demand further training measures. Further indicators are absence from work, employee turnover, and error ratios.

SOCIETY RESULTS

New technologies are increasingly used. Internet access in households, schools, and at work has been increasing continuously. 60% of the Viennese have Internet access. Citizens appreciate e-government applications. Public terminals are frequently used.

Targeted measures as well as regular reports on equal opportunities and women's advancement have raised awareness in the field of gender mainstreaming.

KEY PERFORMANCE RESULTS

One of the major management aims and objectives of the City of Vienna is service and customer orientation. The City Administration also places particular emphasis on administrative reforms.

Efforts are made to achieve a balanced budget.

Lessons and conclusions

As the fourth generation public access points i.e. City terminal, multimedia Stations and Techno-points are all pilot projects or projects in their starting phase no clear conclusions can be drawn by now. One lesson is that multiple public-private partnerships and joint ventures are able to develop a more far-reaching multi-channel-delivery approach. Also, the combination of different kinds of services - information, communication and transaction services – not only regarding eGovernment, but other areas, like entertainment, tourism, media, etc seem to be attractive. SMS as communication form seems to be especially promising. So, the traditional 3rd Generation Public Access Points by offering besides e-mailing not only, but above all eGovernment content is transformed into the fourth generation multi-channel delivery also meaning multi-technology and different kinds of payment, multi-service (information, communication and transaction) and multi-content approaches. Which of the newer forms of these multi-channel-delivery approaches will survive will be seen in the nearer future.

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8. ARTESI Ile-de-France

www.artesi-idf.com

Description of ARTESI Ile-de-France

Towards an information society in Ile-de-France – As part of Ile-de-France's regional policy, and by working with its partners and regional public and private players, ARTESI Ile-de-France promotes the emergence of the information society in Ile-de-France and contributes to appropriation of Internet technology and of information technology.

Set up on the initiative of the Regional Council of Ile-de-France and of public and private partners, ARTESI Ile-de-France (formerly "Téléport") has played a leading role in numerous projects for equipping Ile-de-France with high-capacity telecom infrastructures (setting up of local loops, metropolitan network, antenna site, etc.). ARTESI Ile-de-France also acts as Project Manager for European programmes and projects.

In 1998, ARTESI Ile-de-France focussed its actions towards developing New Information and Internet Technologies in Ile-de-France and it set itself three main assignments:

- to promote the development of an information society in Ile-de-France;
- to establish the Ile-de-France Region in the eEurope initiative and to facilitate the setting up of European projects; and
- to make it possible for as many people as possible to have access to the services proposed via the Internet.

In order to facilitate the emergence of the problems to be addressed and the search for innovative solutions, ARTESI is organised into two "colleges:" the college of regional councillors and the college of investors, users, local authorities, and others. The committee (councillors and members) is made up of equal numbers from the two colleges.

The college of regional councillors: Eric Chevaillier, Président et Jean-Pierre Alix, Hervé Benessiano, Thierry Bergeras, Jean-Félix Bernard, Daniel-Georges Courtois, Pascal-Michel Delmas, Christian le Scornec, Florent Longuepée, Jacques Salvator, Nicole Touquoy-Morichaud, and Henriette Zoughebi.

The members: Conseil Economique et Social Régional (Regional Economic and Social Council), Caisse des Dépôts et Consignation, France Télécom, RATP/TELCITE, Sat-If-Marne, Association des Maires d'Ile-de-France (AMIF), Cyberdeck, Institut d'Aménagement et d'Urbanisme de la Région Ile-de-France [Institute for Planning and Development in the Ile-de-France Region] (IAURIF), Association des Internautes Territoriaux [Association of Local Government Web Surfers] (AIT), Agence pour la Maîtrise des Protocoles de Données Alimentaires [Agency for Controlling Food Data Protocols] (AMPDAA), Association des Professionnels du Net [Association of Internet Professionals] (APRONET), Association de Promotion et de Préfiguration du PRISM (A3P), Mission Ecoter ("Ecoter" Mission), VECAM.

ARTESI Ile-de-France is thus the regional agency in charge of promoting the development of the use of information and communications technologies in Ile-de-France society, with a more marked focus on the citizen's Internet. Its assignments are well defined: to heighten the awareness of local authorities and of citizens of how the Internet is used, to identify the good practices so as to disseminate them, and finally to participate in formulating methods and know-how that are reproducible and suitable for being disseminated to the local authorities.

ARTESI Ile-de-France has focussed to a large extent on heightening the awareness of local councillors and players in Ile-de-France. In addition to setting up a portal site for giving information on new information and communications technologies in Ile-de-France (www.artesi-idf.com), which proposes regional news in the sector and a local events and projects watch, ARTESI Ile-de-France has: since 1999, organised an annual competition idf@net which rewards the best new information and communications technologies initiatives launched during the year, and ARTESI Ile-de-France leads the club of webmasters of municipal sites in Ile-de-France, for promoting exchanges of experience and organisation of common events. In addition, ARTESI Ile-de-France has signed an agreement to co-operate with the Association of Ile-de-France Mayors (AMIF) for co-organising two or three annual encounters for heightening the awareness of local councillors and also for providing expertise in assisting the changes in progress. It reinforces seeking and identifying local experiences and municipal web sites that are innovative, in order to disseminate good practices and in order to work on the "organisation and methods" side to the experiences so as to facilitate, within the municipalities, the deployment of a panoply of minimum basic services to the population. ARTESI Ile-de-France participates in the e-Europe project, and is assigned to helping local authorities to set up the projects at European Commission level.

The association is made up of a team of five permanent staff: its delegate-general, three "chargés de mission" (press, Projects, events), and one administrative head.

ARTESI Ile-de-France does not finance projects directly, since its budget does not enable it to (annual budget of 500,000 euros), but it can examine certain dossiers for the Regional Council. In which case, the beneficiaries of a grant receive it directly from the Regional Council.

Description of the @Netville programme

Context and Objectives of the Project

As part of Ile-de-France's regional policy, and by working with its partners and regional public and private players, ARTESI Ile-de-France promotes the emergence of the information society in Ile-de-France and contributes to appropriation of Internet technology and of information technology.

Set up on the initiative of the Ile-de-France Regional Council and of public and private partners, ARTESI Ile-de-France has focussed its actions on developing information and Internet technologies in Ile-de-France, and has directed them mainly towards local authorities.

Context and origin of the project

ARTESI Ile-de-France is a place of encounter between the various Ile-de-France players, and it leads various networks with a view to circulating information, to initiating think workshops, and to developing information bases accessible to everyone.

Since 1999, ARTESI Ile-de-France has been leading the network of Ile-de-France municipal site webmasters. These encounters have involved think workshops and have made it possible to highlight the areas for action by the local authorities in the field of information and communications technologies.

A schedule for all the services that should ultimately be proposed by the local authorities in three fields of activity: Administrative and Social, Associations and Culture, and Economy and Tourism was drawn up and has made it possible to develop a first tool that is accessible on the ARTESI Web Site.

For each of the services identified, a datasheet makes it possible to describe the service, and the mode of implementation, and ultimately to list the service providers capable of proposing the service. In addition, each of the datasheets includes the list of all of the municipalities that offer the service, with direct links to the datasheets of the municipalities.

An analysis of all of the existing municipal sites is performed and makes it possible to establish a datasheet describing the services offered to citizens by the municipality via their site. The heads of the site validates this datasheet.

With this tool, ARTESI Ile-de-France has monitored the progress of the expectations of local authorities, and this has led it to propose the @NetVille programme for homogeneously developing municipality portals in Ile-de-France.

Objectives and issues

Over the last two years ARTESI Ile-de-France has met local players and has led numerous meetings to define a schedule of the various services to citizens accessible via the municipal Internet portals. On the basis of that schedule, all of the Ile-de-France municipal sites are regularly analysed to verify the new services put on line and developments in them.

On the basis of those analyses, the heads of the agency have drawn the following conclusions:

- In the majority of Ile-de-France local authorities, the Internet culture is not sufficiently integrated to be able to consider developing an information society.

- Genuine services to citizens making it possible to perform administrative or local formalities in full will not be achievable until an identification and electronic signature system (e.g. a digital identity card) has been distributed massively.
- Over the coming three years, municipal portals will essentially provide information (presentation of services, procedures to follow, presentation of local players, etc.) and news (what is happening in my area) and promote local democracy (consulting on local projects, neighbourhood committees, surveys, etc.).
- Putting such portals in place requires improved interactivity:
  - firstly with local players who might be contributors in order to enrich the portal with local information; and
  - secondly with County ("département"), regional, or national bodies interested in disseminating information while supplementing it with local elements.
- To make the municipal portals efficient, by avoiding having to re-enter existing information, it is necessary to define rules for use and interchange that are common to all of the municipal portals.

Promoting the setting up of municipal portals in all local authorities or groups of local authorities is an opportunity to develop this Internet culture which is essential to generalisation of future services to citizens.

ARTESI Ile-de-France, as a relay between Ile-de-France municipalities and regional bodies, offers its expertise for co-ordinating the establishment of such rules for use and interchange in the form of "services" modules.

Description and organisation of the project

The 2nd exhaustive analysis of the Ile-de-France municipal sites and of their services has highlighted the efforts that remain to be made in order for the local authorities to enter into the era of the information and communications society.

Out of 1,281 municipalities in Ile-de-France	Number of municipalities with sites	% relative to the number of sites	% relative to the number of municipalities	Definition of each category from the showcase site to the citizen's portal
	251	100 %	19.6 %	
Showcase site	87	34.6 %	6.8 %	These are first-generation sites produced with very simple means, and their sole object is to present the municipality in the Internet environment. This mode of site is still in the majority
Enriched showcase site	95	37.8 %	7.4 %	More information on the local authority, its councillors, and its services, and news updated at least once a month. Increasingly large numbers of HTML pages, which requires increasing care in presentation and browsing options

Out of 1,281 municipalities in Ile-de-France	Number of municipalities with sites	% relative to the number of sites	% relative to the number of municipalities	Definition of each category from the showcase site to the citizen's portal
News site	58	23.1 %	4.5 %	The second generation of local authority sites is the news site which is an emerging model. Often designed externally, it progressively integrates real-time publishing technologies, and is based on databases.
Dynamic, cooperative and interactive site	10	3.9 %	0.7 %	The various areas (town hall, town hall annexes, and cultural, sports, social, and school areas, etc.), and players (councillors, services, associations, miscellaneous, etc.) of the local authority are on line. These areas can directly bring their contents and their news on line.
Citizens' portal	1	0.4 %	0.1 %	This is the site of incorporation of the contents, be they internal to the municipality or external. It no longer accommodates elementary publishing modes, and implies the use of databases and interoperability between them.

Source ARTESI Ile-de-France – October 2002

This table shows that only 20% of the local authorities have Internet sites, and that 75% of the existing sites are first-generation sites incapable of accommodating the services of the future.

Municipal portals should thus develop within an overall policy that is both regional and national, and that integrates firstly information made available by organisations (tourism, administrative, social, and cultural bodies, etc.), and secondly local information by associating the producers of contents, publishing and public access to the Internet.

The players in the project

This project is being led in close collaboration with the Prefecture of the Region, and with the Association of Ile-de-France Mayors (AMIF).

In addition, in the context of this project, the main players can be grouped together in three families: regional or national players (information holders), publishers and service providers (goods or service proposers), and pioneer local authorities for validating the approaches.

The regional and national players

Various partners who have indisputable legitimacy in the Ile-de-France Region have shown interest in this project, which is naturally open to any other entity that might carry forward a "Service" module.

In a first stage, together with the Regional Council, and with ARTESI Ile-de-France, the AMIF, the Regional Tourism Committee (CRT), the Community of Municipalities (CdC), la RATP (Paris Transport Corporation) and the newspaper "le Parisien" have shown their interest in the @NetVille project.

The publishers and service providers

The proposes of solutions for local authorities are invited to take part in the programme, and their products will then be approved insofar as they satisfy the minimum functionality constraints, and are capable of accommodating the services modules.

The pioneer local authorities

Local authorities who have initial experience in putting in place an Internet site are invited to take part in working meetings in order to develop the @NetVille method designed to accompany putting in place and running the Citizens' Internet Portals.

The services proposed

The @NetVille programme is based on two essential components: a platform for testing and demonstrating a Citizens' Internet Portal, and a methodology for putting in place and running such portals.

Testing and demonstration platform

The @NetVille project has a genuine test and demonstration platform for all local authorities who wish to put in place municipal portals.

A call for tenders was launched at the beginning of July 2002 to about twenty service providers for developing the @NetVille portal. The portal put in place enables the local authorities to familiarise themselves with this type of tool and identify the genuine priorities of a portal: generating contents and mobilising the players who are likely to supply such contents.

As regards the services modules, and to avoid a proliferation of standards and interfaces, an object of the @NetVille project is to guarantee coherence and consistence in developing them, and to promote distributing them to the municipal portals.

In a first step, a decision was taken to work with the main regional or national bodies (CRT (Regional Tourism Committee), RATP, CdC, CRIPS (Regional AIDS Prevention and Information Centre), CARIF (Centre for Leading Resources and Information on Training in Ile-de-France), etc.), who are major gatherers and disseminators of information, in order to develop with each of them a "Service" module that will be proposed to the local authorities for integration into their municipal sites.

Each "Service" module integrates at least two major components:

- Specifications for the modes of interchange with each body, based on the XML protocol. Those specifications should make it possible for all of the portal providers to integrate the modules into their products, and for the local authorities that already have portals to make the corresponding adaptations.
- A software module making it possible to integrate the "Services" modules into the @NetVille portal for testing and benchmarking.

@NetVille methodology

Under this project, in order to assist the local authorities in putting in place and running Citizens' Internet Portals, ARTESI Ile-de-France is developing a methodology called the "@NetVille Method."

A working group, made up of about fifteen local authorities who already had initial experience in managing a municipal site, was set up to establish and validate the various steps of the method.

Once the method is validated, the municipal portal leaders who are interested will be grouped together in groups of from 10 to 15 in order to implement the method, with, for each group, 4 to 6 meetings scheduled over a period of 6 months.

The @NetVille method for developing and running a Citizens' Internet Portal is made up of 10 stages:

1. Calling for bids from and choosing a service provider
2. Clarifying the environment of the project
3. Defining the mapping of the correspondents
4. Developing the identity of the local area
5. Constituting the base structure of the portal
6. Collecting the administrative information
7. Communicating about the portal
8. Co-ordinating the internal departments
9. Leading the external structures
10. Identifying and implementing new services

The public who will benefit

The @NetVille programme is being put in place to help local authorities to develop the information society in their areas.

The programme is mainly intended, initially, to convince local councillors of the issues of introducing these technologies into their organisation, and, subsequently, to help the local government employees to implement the various tools necessary for such a development.

Implementing the project

The project is in progress, it was launched in early 2002, and stages 1, 2, and 3 are complete. It is to run to the end of 2004, by which time the objective is for the majority of the Ile-de-France local authorities to have adhered to it.

The implementation stages and the methods used

The programme was launched during the first quarter of 2002, and is to run for three years, with the following main stages:

Stage 1: Inventory of locations of the municipal sites in Ile-de-France: Using the tools that were put in place in 2001 for observing all of the Ile-de-France municipal sites, a detailed analysis was conducted by ARTESI Ile-de-France, in early 2002, in order to establish a topology of the services proposed by each municipality having an Internet site. In September 2002, another analysis was conducted, mainly focussed on the level of interactivity of the sites in order to put them into five categories, from the showcase site to the portal site.

Stage 2: Drawing up the programme and seeking partners: this step took place during the first quarter of 2002. ARTESI Ile-de-France built on the actions that it had conducted previously with the heads of municipal sites and on the results of the various observations made by the sites observatory that it had put in place.

In addition, ARTESI Ile-de-France consulted the main regional bodies having information bases that could be made available to citizens via the municipal portals.

Stage 3: Calling for tenders and putting in place the @NetVille Citizens Internet Portal: this step took place during the 2nd quarter of 2002. On the basis of standard specifications, a call for tenders was put out to companies capable of proposing municipal portals. Using a selection scale, three service providers were chosen: one for the site generator based on the product Mairie-EnLigne by BYS Promotion, one for the graphics charter, and one for the hosting.

Stage 4: Developing the @NetVille methodology with the pilot local authorities: this step is scheduled for the year 2003. A working group made up of about ten local authorities that already have experience in this field has been set up. ARTESI Ile-de-France is leading this group whose mission is to develop and validate each stage of the method.

Stage 5: Drawing up the specifications for the "service modules" and testing on the @NetVille platform: the modules will be developed and tested during the 1st half of 2004. With each regional partner and with the help of specialists in XML protocol, specifications for the service modules will be drawn up and they will be developed for the purpose of being tested on the @NetVille test platform.

Stage 6: Applying the @NetVille method to a majority of local authorities: this step will take place during the 2nd half of 2003 and over the year 2004. This phase is the culmination of the @NetVille programme and it will then be necessary to identify local relays (County council, community of municipalities, Chamber of Commerce, etc.) in order to deploy the method to the majority of the municipalities in Ile-de-France.

Communication about the project

For promoting the programme, ARTESI Ile-de-France is mobilising the various communication means at its disposal:

- Its Internet site: www.artesi-idf.com which, at the end of 2002 had 40,000 visits per month, and the site specific to the project: http://www.anetville.com/
- Its newsletter which is sent out every two weeks to nearly 3,000 subscribers
- Regional encounters which bring together from 200 to 250 participants, organised every six months
- The "TC" day organised with the AMIF (Association of Ile-de-France Mayors) at their annual congress.
- Participation in conferences and debates
- Specific and targeted communications actions in favour of the councillors and the communications heads to encourage them to adhere to the approach.

Assessment and prospects

The objectives set for 2002 (inventory and putting in place the platform) have been achieved, and the method is being formulated, with the pilot group being formed and the first working meetings being held.

The elements of the assessment

Stage 1 which consisted in conducting an inventory was facilitated by the prior work accomplished at the various meetings with the site heads for identifying and putting into classes the services proposed to citizens. The topology established in this way made it possible to analyse all of the sites by applying the same scale of analysis, and above all to perform the analysis every six months to measure progress, as regards both numbers of sites and level of services proposed. This service, on line on ARTESI's site, constitutes a genuine observation tool, which has considerably facilitated developing the @NetVille programme.

Stage 3, which consisted in launching a call for tenders for the setting up of a Citizens' Internet Portal, made it possible to establish the state of the art as regards commercial supply. The proposals received were detailed and showed the interest aroused in software and services firms and in web agencies for producing municipal sites or portals.

They also showed that, with a few exceptions, the majority of the solutions present and operational on the market for local authorities do not integrate the technologies that are already in wide use in other sectors of activity.

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9. Derwentside District Council: An ICT Centre of Excellence

http://www.derwentside.gov.uk/

Derwentside is a district, which faces many challenges. Formerly an area dependent on the steel industry and coal-mining, continued intervention by the local authority and its partners has been necessary to develop the local economy and society from the nadir of the early 1980s. Intervention has sought to address problems associated with a declining and ageing population, problems of long-term limiting illness resulting from the legacy of heavy industry, and has encouraged a diversified economy coupled with efforts to enhance the local skills base.

However, one of the most important interventions has been the investment in new technology. Over the last decade, Derwentside District Council, working in partnership, has been proactive in ensuring that Derwentside is at the forefront of Information and Communications Technology (ICT). Being strategic and forward looking enabled them to identify very early its importance. It was quickly realised that ICT was a prerequisite of the future knowledge-based society and for securing a better future for the area. Its proactiveness is perhaps best

demonstrated by being the first authority in the northeast region of the UK to install a Municipal Area Network. Part of a corporate strategy, the MAN enabled derwentside not only to attract new industry, but also provided firm foundations on which to build the local National Grid for Learning and connections to National Health Service's NHS Net.

From the very beginning the central concern of Derwentside's IT work was to enable access to the benefits that new technologies bring. They realised that ICTs can offer an equality of opportunity and they worked hard to ensure that its deprived communities were part of the digital society. Therefore, having initially created an extensive Community Infonet, they also carried out substantial work in exploiting ICTs to deliver better services and to promote social inclusion. Derwentside Council's work has earned them a reputation of a regional Centre of Excellence and they supply IT services and support to other public bodies in the North East (over 60,000 users). Their reputation has now gone beyond regional borders and earlier this year they were awarded Beacon status for Social Inclusion through ICT. The Beacon Council Scheme is a UK Government award recognising excellence in local government services.

Derwentside District Council has applied their expertise and has taken full advantage of their broadband network by developing a range of projects to address community objectives. The following list gives a brief outline of the type of work undertaken.

- A District-wide network of **CCTV cameras** is being constructed to reduce both the incidence of crime and nuisance and also the fear of crime, making Derwentside a safer community.
- **Community Access Points** – over 80 sites on-line with ongoing projects to increase public access to services.
- **SPICE** - Youth Project to develop and encourage community/school involvement to promote citizenship and democracy through ICT.
- **Education** – Working with BT on connectivity and supplying computer equipment, broadband internet and e-mail to schools, community centres and domestic dwellings to help residents access learning and employment opportunities.

In this report, however, we will concentrate on Derwentside District Council's partnership work in the health sector and how ICT can provide successful solutions for the benefit of the community. The following projects represent examples of best practice in the area of ICT and local government.

HPAC (Health Promotion online Access Catalogue)

HPAC is the only fully transactional online Health Promotion Library catalogue system in the UK. It has been developed in partnership by Durham and Chester-le-Street Primary Care Trust and Derwentside District Council to enable a faster and more cost-effective Health Promotion Library and Information service. The Library service is free at the point of access to support the health improvement programme across County Durham and Darlington.

HPAC uniquely enables open access to virtual resources for members of the public, while also enabling people and organisations working to improve health access to physical resources held by the Library. HPAC also provides all Library management functions.

This Internet application was officially launched by Alan Milburn, Secretary of State for Health in 2001.

Users of HPAC include health professionals, schools, colleges, local government, community and voluntary organisations. It enables quick access to brochures, leaflets, health promotion videos, books, journals, teaching packs, and virtual resources. Primary Care staff, including GP Practice Nurses and Health Visitors are among the largest users. HPAC's interface enables users to immediately see if an item is available, place an order, view their account and shipping status etc.

HPAC now has more than 2,100 registered users and in 2001-2 requests were received and filled for more than 500,000 health information leaflets alone. The efficiency of the system has enabled these requests to be filled by the equivalent of one fulltime Library employee.

It has recently been featured as the National Electronic Library for Health's "Document of the Week." The application has attracted interest from other NHS organisations in both England and Scotland. A version of HPAC has been purchased by Ayrshire and Arran Health Board and was launched by Frank McAveety, Scotland's Deputy Minister for Health and Community Care, in August 2002.

Broadband network gets X-rays online

Derwentside District Council's network is enabling local health centres to exchange x-rays and patient records at the push of a button. If you're a patient in rural Derwentside, you need never worry again about lost notes or missing X-rays. Since 2001, patient care has been revolutionised in the area by using the council's broadband network to convey records and images made available through PACS (Picture Archiving and Communication System) and EPR (Electronic Patient Records). PACS provides access to X-rays and scans, and the EPR system provides comprehensive patient notes, including test results. The data is electronically available at every health outlet across the area and can be put on the system almost the minute it is produced.

Information at the touch of a button

"One of my patients says it's like magic," observes Dr Neil Munro, clinical director for medicine at the University Hospital. "One touch of a button and you can pull an MRI scan onto your screen. The days of scrabbling around to find lost X-rays before an outpatient clinic, or rushing to convey them somewhere by taxi, are well and truly over. It's difficult to believe they ever ex

"Now, if an on-call junior doctor is not sure how to interpret an X-ray or scan, he can phone me wherever I am in the hospital and, within 30 seconds, I can see it on my screen and offer an opinion. The same, broadly speaking, applies to blood tests – you can quickly track what's happening to a patient without even needing to look at their notes. It's a very secure system as well, with varying levels of access. Only authorised clinical staff are permitted to use it."

Nursing clinical analyst Roy Whitehead – who provides technical help to staff – agrees totally. "Many clinical staff say this is the most significant change they've seen in their working lives".

By providing them with on-the-spot access to information, it enables them to make crucial decisions about patient care at the point where that care is carried out.

Everybody gains

"It means that a community hospital like South Moor, which is much loved by patients but relatively old, can sustain diagnostic and outpatient services it might otherwise have lost. Patient throughput has become faster and tempers are less frayed! Everybody gains as a result."

A unique partnership between the council and the local health trust has enabled it all to happen. "We provide the trust with high-speed connectivity at a very economic rate," says Alan Hodgson, director of eGovernment at Durham County Council – and continuing head of ICT for Derwentside under a service level agreement. "We've even extended our infrastructure to cover the whole trust area. We, in turn, get help with our network running costs. PACS and EPR are two of the best systems I've ever seen. Combined with our network, they offer a truly amazing service."

SWIFT Project (USer oriented and Workflow Integrated FederaTion of service providers for the elderly and disabled)

SWIFT was a successfully completed EU funded research project, which involved more than one European Country – Derwentside District Council – Co-ordinators (UK), Omega (Italy), DLR Remscheid (Germany), Health Systems Co-ordination Oxford (UK). Each partner had a number of local partners working with them. In Derwentside the local partnership comprised Durham County Council, North Durham Health Care Trust and Co Durham and Darlington Health Authority.

By using the latest information technology, the aim was to identify innovative ways of delivering services, sharing information and providing management of workflow by creating a fully integrated, cost effective, quality, home-based service, to improve the quality of life between older/disabled patients/carers and professionals.

The main objectives included: facilitating communication between different service providers, enabling instant access to shared information about elderly/patients/clients, developing systems to assist in the management workflow within the social, health and welfare services and to help elderly people and their carers to gain easier access to information and support. This in turn will avoid duplication of information, forms and other items of paperwork being lost between services. (The information given will be encrypted and the system carries security certification so that information is only accessible by the relevant authorised personnel).

Due to the high interest shown in the Project from older/disabled persons, their carers, voluntary groups and other social, health and welfare services. Derwentside District Council has been working closely with Durham Social Services to further develop SWIFT, through a pilot scheme using an internet based user-interface for both the "care for the older/disabled persons" service providers and the older clients to allow them access to the SWIFT system. It will continue to carry on working in partnership with the social, health and welfare services to secure "live data", to "ensuring at all times that the proper steps are taken at all times relating to ethics and confidentiality" and allow the user/client to be kept informed of all procedures at all stages

How does it work?

An older/disabled user could use the system to access their daily planner which will provide information on who will be visiting their home (photos), at what time they will be visiting i.e. Meals on Wheels, Community Nurses etc. It will also allow them to add or cancel services as and when required with a simple click of a button. There are ongoing discussions with GPs and the Derwentside Primary Care Trust with a view to allowing the user to obtain repeat prescriptions, appointments and access to community nursing on line.

As a professional the system can be used to monitor service provision to individual older persons/disabled persons (and Carers). This in turn will assist in co-ordinating their work with other service providers in order to avoid problems associated with the unavailability of client, double bookings, bed blocking. It will help them to view their regular users, select a service, get client details, view client notes in short it will allow them to add, delete, alter and update appointments. They will have access to the SWIFT search catalogue services where they can select a service, make a subscription request and view subscription status.

This system would provide a more independent service for the older/disabled persons allowing them to have the knowledge that everyone is informed of their whereabouts, ensure a less stressful return to their home after being hospitalised and prevent the extra worry of what is happening to their property whilst in care.

Contact:

For more information on Derwentside District Council's ICT work please contact Nick Tzamarias, Senior Policy Officer (tel. 0044-1207-218243, e-mail: n.tzamarias@derwentside.gov.uk) or Cath Rafferty, Beacon co-ordinator (tel. 0044-1207-218430, e-mail c.rafferty@derwentside.gov.uk) at the Council's, Civic Centre, CONSETT DH8 8TJ, Co. Durham, England

10. City of Tampere, Finland

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www.tampere.fi

www.etampere.fi

For some seven years the City of Tampere (200.000 inhabitants) has worked on developing the means and methods for the information society. It has been able to build on a transparent and innovative local government, a strong skills base as a university town (15 % of our population are university students) and a business sector that in many ways is especially strong in communications and information technology.

eTampere: Working together for the present and the future

A special programme, eTampere, for the promotion of the development of the information society, was launched at the beginning of 2001. The programme partnership includes the local authorities, Tampere University of Technology, University of Tampere, Tampere Technology Centre and Technical Research Centre of Finland. Individual projects include a wide range of other participants, including businesses and NGOs. The targeted budget for the five-year programme is 132 million euros.

The eTampere programme is based on certain assumptions concerning the development of the information society. We believe that technology is going to lose its absolute value, the instruments of media and the developers of content are going to integrate, and the information society will pervade the everyday life of the citizens and societal functions. This means that development is going to require some solid co-operation. Citizen-orientation and citizens' participation is important.

The eTampere programme has three mutually supportive dimensions: strengthening the expertise base of research and education, generating new businesses connected to the information society, and developing the digital services of the local government and making them accessible to the entire population. Together, technology, research, education, content production, business and public service procedures will add value to the lives of the citizens and help shape the future.

eTampere contains six independently operating sub-programmes, of which the Infocity has the closest connection to eGovernment. Such sub-programmes as the Information Society Institute (ISI), the Research and Evaluation Laboratory (RELab) and the eBusiness Research Centre (eBRC) also deal with issues related to eGovernment. Infocity is run by the local authorities. Its aim is to develop public services on the Internet and improve the computer and Internet skills of the public. In November 2001 Infocity received an "eGovernment-label" from the European Commission as recognition of one of the best practices of eGovernment in Europe and in spring 2002 a wide benchmarking exercise KEeLAN selected the City of Tampere to he one of 50 best practices among European municipal web sites. In October 2002, Tampere gained the 13th position in the first European eCity Award competition.

Infocity: on-line services, access possibilities and training

Infocity comprises three dimensions: content production or developing digital services, access facilitation, and computer instruction. All these dimensions must be attended to if we want to implement the citizens' information society on an equitable basis. It is also of utmost importance that the citizens' skills and attitudes develop on a par with the technological progress and the innovation of governmental operating models. Plans for the information society cannot be carried out on technical innovation only, or without a review of service processes. Additionally, it is important to bear in mind the importance of equality. The information society must not be a highway to social exclusion but must offer an improvement in obtaining services and participating in society.

Two out of three of all Finnish people have used the Internet. In Tampere 73 % of citizens use the Internet at least sometimes (December 2002). When asked about their usage patterns, most users mention entertainment, e-mail, what's on -information and banking services. Some already use the Internet for shopping or political participation. In a user survey conducted among the visitors to the website of the City of Tampere, the principal reasons for entering the site were to deal with the authorities and to obtain services (August 2002). These user surveys are carried out every year (so far six times) to find out the needs of our customers. Residents' responses are also gathered through general feedback from various sources. Moreover, there are many research reports providing information for the city government. These all are used in designing user-friendly services and citizen-oriented eGovernment.

The web pages of the City of Tampere at www.tampere.fi are already accessed over two million times a month. The principal target group of the services is people living in Tampere. An extensive range of ordinary services provided by the local authorities is available on the Internet 24 hours a day. The bulk of the material on the website is still informative in purpose, but the share of participative opportunities, interactive services and formal correspondence with the local authorities is increasing.

General information about Tampere and about all city services:

Among the most popular sites are events calendars and bus timetables. You can also request the departure time of your next bus on your mobile phone as a short text message. Interactive on-line services and final transactions exist in the most comprehensive way on the library website: the client can check directly from the library database whether a book or other piece of material is available, and reserve it by using a personal identification number. Additionally, he can sign up for an e-mail alert service on new library acquisitions in specific fields. Reservations will be answered via e-mail, mobile phone or ordinary letter. Among other things, it is possible to view the housing market on the Internet and apply for rental housing by e-mail. After moving to Tampere, a resident can file his or her notification of change of residence with the officials digitally, and join the electricity-, water and waste collection systems. It is also possible to monitor your electricity and water consumption over the web.

The information network as a support to democracy

A resident of the city can participate in local decision-making via the Internet. All agenda and plans by the local authorities are available on the Internet, and it is possible to comment about them, officially or unofficially, by contacting the planners and decision-makers digitally. For four years now, Tampere has launched the plan for the municipal budget by surveying the citizens' priorities. The results of the surveys are taken into account in determining the priorities of the budget. For the sake of equality, the same survey has even been conducted in paper form, but the Internet survey has clearly been more popular, and its results are easier to analyse. We have even tried a survey with authentication so that we could have been sure that the participants live in Tampere and thus are the right persons to participate. In two residential areas we have carried out a "zoning game" that helps residents to roughly check out how different construction solutions would influence their neighbourhood. For the local authorities, this has been an opportunity to gather suggestions and opinions from the present and maybe even future residents, and incorporate them into their plans.

Discussion platforms have been opened for topical issues, and opinions gathered this way have been appended to the preparation process. Feedback and debate opportunities are complemented by the questions and answers booth that aims at finding answers to the questions received from the public within a few days. With the help of an electronic identification system it will be possible to forward official documents without signing them on paper. You can also follow the progress of your document via the net.

The most enthusiastic virtual citizens may join a neighbourhood community and utilise instruction and server space provided by the local authorities and the university for local content production and group communication. Such services are even available to immigrants and ethnic minorities.

In addition to generating digital services, it is important to attend to their availability and the citizens' skills in using them. The City of Tampere has placed more than one hundred computers with free Internet connection in various kinds of public places. In addition to those computers, all schools and some shops maintain Internet computers in public use. The local authorities run one net cafe. There are connections available for senior citizens at day centres and community centres, and in the suburb of Hervanta a EU-funded project is running a project to fight social exclusion with the help of Internet skills and opportunities. A service point for the visually disabled was opened in 2002.

The Internet education of the inhabitants of Tampere is intensified during the eTampere programme. There is already a wide range of courses available provided by the local authorities, church parishes, NGOs and private businesses. Some very interesting results were obtained from the training of the elderly with the help of peer tutors: it seems that the threshold to going on line can be lowered to a remarkable degree by choosing teachers that are on an equal footing with the learners, people who are of the same age and who speak the same non-technical language.

Our netmobile Netti-Nysse offers all this in a wireless form on wheels, wherever people are, in an unhurried and cosy atmosphere. The bus itself has already run millions of kilometres along the bus routes of Tampere as an ordinary city bus. Refurbished into an instrument for the information society, it functions as an outreach tool for the City Library, transporting skills and knowledge to the suburbs, gatherings, or maybe to neighbourhood parties. There are twelve computers in the bus, plus printing facilities and a small auditorium. And there is always someone present to help and instruct the users along the information superhighway.

Purposeful development on the terms of the citizens

Ongoing projects and future plans of eTampere-program and Infocity-sub-program include multi-purpose smart card, eHealth and expanding eDemocracy, eLearning and mobile services.

The City of Tampere has committed itself to the development of the information society at the highest level. The strategic plan of the municipality is based on the idea of a citizens' information society. This will be implemented even at the most concrete levels.

Public administration cannot, however, progress ahead of the citizens. All development must take place on the people's terms. Traditional service forms must be maintained alongside their digital alternatives. Digital service must not reach beyond the technical and other skills of their users. One of the aims of digitalising public services may be cost effectiveness. This cannot, however, be the principle aim. The principle aim must be improving services and the quality of life of the citizens. What is really challenging in this, is to combine identification methods providing security and democracy to user-friendly applications ensuring the use of these services. A huge task is also to integrate different public authorities' back office systems and databases together and with the customer surface.

Above the technical development, there is a strong need for development in the workflow of public sector and training of both the authorities and the citizens. And still: you cannot force anybody out onto the information superhighway, but you can make sure that going there is easy and perhaps even fun.

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Key recommendations

In order to synthesize the results of this best practice survey on local eGovernment, ten recommendations are described and presented according to the following ten key points:

the enablers:

1. Political leadership
2. Strategy and planning
3. Human resources management
4. Partnership and resources management
5. Process and change management

the results on:

6. Customers/Citizens
7. People (employees)
8. Society
9. Key performance results

And finally:

10. Technical aspects

The enablers

Political leadership

Political leadership is probably the initial key point to succeed in an eGovernment project. The political leaders must be committed and convinced; they must also be receptive to change. It is important that they use information and communication technology (ICT) on a day-to-day basis. However, it is not necessary that they are IT specialists but they must have a vision. As mentioned in the Conclusion of the Como Conference "*It has been widely acknowledged that without a vision, eGovernment is "mission impossible". Integrated eGovernment is a vision, which will help eGovernment achieve its full potential for innovative change*".

Strategy and planning

The strategy and planning problems in eGovernment are due to the fact that it is necessary to implement the vision of an integrated eGovernment in a comprehensive strategy on a relatively long period of time. For instance, the strategic planning of the Walloon Region for an integrated eGovernment[14] runs until 2011. However, it is essential to implement the strategy in small steps to achieve small concrete achievements as soon as possible. The strategy and planning must also be very flexible due to quick context and technological evolution. Eventually, the vision must be translated into clear strategic objectives, which can vary depending of political priorities.

14 http://egov.wallonie.be/

Human resources

In terms of human resources, flexibility is the main characteristic. As mentioned above, strategy and planning request a lot of flexibility which must be implemented also in the human resources management. In some cases, a matrix organisation is needed, with a vertical hierarchy common in the public sector, but also with a horizontal team managing specific projects. This type of organisation offers much more flexibility. As an integrated eGovernment modifies completely all the processes and workflows, employees must be ready for change. In this context, a management by objectives allows a better motivation and matches much better with the flexibility requested at all levels of the organisation.

Partnership and resources

As mentioned in several cases, eGovernment demands a lot of resources and in some cases, much more than initially forecasted. Therefore, it is necessary to evaluate well the necessary resources before starting such a project. An interesting way to obtain the requested resources is through Public Private Partnership. The Bremen Online case showed how all the stakeholders could benefit from this type of approach, a real win-win scenario being the key to the success of the partnership[15].

The processes

An integrated eGovernment requests a reengineering of the main processes; eServices on the Internet cannot be only a few web pages without modernisation of the processes, which support them. This reframing process is the key to reach a real modernisation of the administration. It is clear that change costs money and requests enough resources in the short/medium term. Therefore, it would be helpful to go through a risk assessment before starting the project, implemented in small steps and starting with pilot projects. Another important question is communication. It is very important that the final eGovernment beneficiaries (citizens, enterprises, intermediaries) are aware that the service exists or will be implemented. In many cases, there is a lack of communication around the new "eServices" and therefore a low degree of use from potential beneficiaries.

The results

People

Generally, there is a large satisfaction from the employees of the administration in charge of an eGovernment implementation. They enjoy very much their job and have the feeling of participating in a strategic step towards the modernisation of the administration. Often, they received the best equipment from the administration and benefit from much more flexibility in comparison with their "traditional" colleagues. EGovernment is not perceived anymore as a threat. However, only a category of employees can adapt to change in a short period of time; it is important to choose the appropriate people for pilot projects and the first steps of implementation. Moreover, training of large groups of employees has to be envisaged in the short to medium term.

15 See the guidelines for successful Public Private Partnership published by the DG Regio http://europa.eu.int/comm/regional_policy/sources/docgener/guides/guide_en.htm

Citizen/company

The case of Bremen showed that the impact of eGovernment is much more immediate on professionals (enterprises and intermediaries) than on citizens. The professionals save money, time and stress with eProcedures. The citizens request much more time to change and must be aware of the existence of the new eServices. The added value in the "e" is obvious for professionals but it will take more time to convince citizens of the real added value of eGovernment. It will be easier to communicate the advantages of eGovernment when the eServices will be available on familiar media such as smartphones and televisions.

Impact on society

It is at this level that the impact of eGovernment could be the most fundamental. As pointed out by Douglas Alexander, the British Minister responsible for eGovernment, the Internet presents a major challenge for politicians. "The Internet has the potential to produce an information-rich world in which all citizens are able to communicate, educate and legislate in a way previously considered impossible". In a new book entitled "Open Source Democracy" Douglas Rushkoff mentioned that this was due to the interactive nature of the Internet. Interactivity means that people are not passive receivers of information any more, like with "old" media. This offers exciting possibilities for new social networks, which are enabled – but not determined – by digital technology. The spirit of this - exchanging news and views without a centralised control - shows the potential for a new kind of democracy based on more direct discussions of political issues.

The technical aspects

It is difficult to give recommendations on the technical aspects, which are quite complex and require an in-depth assessment case by case. Two main issues seem nevertheless to appear from the cases analysed.

The first is the adoption of existing products from the market, which allows economy of scale, simplicity and liability. However, the use of commercial products raises the question of dependence of commercial firms.

On the other hand, it appears that a strong movement to Open Source solutions helps to avoid all dependency toward commercial products. At a local level, the cities of Amsterdam, Munich and Vienna are working on Open Source software solutions.

The European Commission's initiative eEurope – *An Information Society for all* is supported by a first Action Plan dated June 2000. One entry within the plan addresses the topic of Open Source Software and sets the target that: *"during 2001 the European Commission and Member States will promote the use of open source software in the public sector and eGovernment best practice through exchange of experiences across the Union (through the IST and IDA programmes)"*. In general, governments consider Open Source solutions alongside proprietary ones in IT procurements. Contracts are however awarded on a value for money basis.

"Linking up Europe: the importance of interoperability for eGovernment services" a working paper from the European Commission, aims to obtain acceptance from key decision and policy makers in Europe on the need for interoperability both within and between administrations and

with the enterprise sector. It describes what is required to ensure that the back-office systems of Europe's public administrations are sufficiently interoperable to allow seamless pan-European eGovernment services[16].

Conclusion

To conclude this survey, we would like to compare the results of our case studies with the Communication from the Commission on the Role of eGovernment for Europe's Future[17]. They are, in fact, quite similar.

The Commission points out that "the sophistication of online services (that is, going beyond mere information provision and also supporting interactivity and transactions) has made more progress in business services than in those to citizens"[18]. We reached the same conclusions with **the case of "Bremen Online"** an eGovernment award winner, which provides online transactions and payments in a secure and legally binding way for citizens, businesses and intermediaries (lawyers, tax consultants, etc). Significant savings have been achieved in delivering services to lawyers, companies and administrations.

The Commission emphasises the role of regional and local administrations which "are often at the forefront of the delivery of on-line public services" as shown in our survey by the "3 Island Partnership" case, providing electronic services to both citizens and businesses in remote islands in Scotland with sparse populations, avoiding extensive and expensive travel. The Commission mentions also that "eGovernment development at regional and local level has become an increasing programme priority of the Structural Funds, representing about 30% of information society expenditure in Objective 1 regions and 20% in Objective 2 regions".

The question of accessibility is also a key matter. "Participation can be improved if services can be accessed through a choice of devices, including PC, Digital TV, mobile terminal, or public Internet access points, alongside the usual physical, offline service provision... The related eEurope 2005 target is that by end 2004, Member States should have ensured that public services where relevant, exploit the potential of multi-platform access". **The case of eVienna** shows the implementation of this principle.

"The transition from narrowband networks to broadband networks is an important step towards more responsive public services that offer richer, more information interaction". It is indeed a key question for regional authorities especially in rural territories. **The case of Asturia** illustrates well the effort to cover such territory with sometimes the assistance of Satellite connections.

Interoperability is another key issue. "Exchange of experience in the use of open standards and open source amongst administrations should be promoted amongst others through relevant EU programmes". Open Source Solutions seem to be more and more considered in eGovernment project implementations around Europe. "But interoperability is not just a technical issue of linking up computer networks: it also concerns organisational issues, such as co-ordinating

16 http://europa.eu.int/ISPO/ida/jsps/index.jsp?fuseAction=showDocument&parent=news&documentID=1475

17 Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions – The role of eGovernment for Europe's Future, dated on 26 september 2003

18 See : Cap Gemmini Ernst & young (CGEY) survey for the European Commission, February 2003

processes that not only span intra-organisational boundaries, but also interwork with partners organisations that may well have different internal organisation and operations". The question of processes remains one of the priorities of all the cases surveyed.

However "the introduction of ICT is only one ingredient of eGovernment. Organisational change and acquisition of new skills with a change of mindset are equally important. eGovernment often requires significant changes in the way public administrations operate, administrative processes are executed, policies are developed and budgets are controlled ... Reorganisation within the administrations may require process and procedure redesign, training of personnel, the development of new skills and competencies, adaptation of local rules and legislation and new employee management tools". All of the cases in this hand-book emphasise the importance of this **Business Process Reengineering**.

It is also interesting to point out that "The European Public Administration Network (of Ministers of Public Administration) will propose organisational recommendations and will enable the exchange of good practices". For this issue "the Directors-General of Public Administrations in the EU have also made available the **Common Assessment Framework (CAF)**, which is a tool for organisational self-assessment with a view to quality management" and which is precisely the tool used for this survey.

GLOSSARY OF eGOVERNMENT TERMS

This glossary is a mixture of technical and administrative terms and terminology, it is a shortened version of le eGovernment Glossary available on the IDA (Interchange of Data between Administrations) website.

http://europa.eu.int/ISPO/ida/

http://europa.eu.int/ISPO/ida/export/files/egovo/1348.doc

A

@ Symbol used within email addresses that divides the user part from the host part of the address.

ACCESS (to a system, to data, to a software process) in general, the right to enter or make use of. In a computer context, entry granted to a software path that establishes the right to use a system and its resources; to read, write, modify, or delete data; and/or to use software processes with various capabilities, (v.) to achieve the status of having access.

ADSL (Asymmetrical Data Subscriber Line) Asymmetric Digital Subscriber Line (also known as xDSL) a technology that allows the use of a copper line to send a large quantity of data (e.g. a television picture) in one direction and a small quantity (e.g. a control channel and a telephone call) in the other.

ALGORITHM AND KEY LENGTH the combination of cryptographic algorithm and its key length(s) often used to establish the strength of an encryption process.

ASYMMETRIC CRYPTOGRAPHY (also public-key cryptography) – cryptography based on algorithms that enable the use of one key (a public key) to encrypt a message and a second, different, but mathematically related, key (a private key) to decrypt a message. Asymmetric cryptography can also be used to perform digital signatures and key exchange.

AUTHENTICATION (OF IDENTITY) an adjunct step to identification that confirms an asserted identity with a specified, or understood, level of confidence. Authentication can be used to provide high assurance that the purported identity is, in fact, the correct identity associated with the entity that provides it. The authentication mechanism can be based on something that the entity knows, has, or is (e.g., a password, smart card that uses some encryption or random number for a challenge-response scheme, or a fingerprint).

AUTHENTICATION OF A MESSAGE the process of adding one or more additional data elements to communications traffic (or files) to ensure the integrity of the traffic (or files). Such additional elements are often called "message authenticator(s)" and would be an example of an integrity lock.

AUTHENTICITY a security service that provides a user with a means of verifying the identity of the sender of a message, a file, a computer system, a software process, or even a database or individual software component.

AUTHORISATION determining whether a subject (a user or system) is trusted to act for a given purpose, for example, allowed to read a particular file.

AVAILABILITY the property that a given resource will be useable during a given time period, for example, that an encrypted file can be decrypted when necessary.

B

BACK OFFICE SYSTEM (or BACK END) computer infrastructure within an organisation, which supports core business process applications but has no external interface with costumers (unlike a Web site or portal)

BANDWIDTH a measure of the amount of electronic data that can be transmitted, either down a telephone line or through an individual radio channel. In analogue systems, it is measured in cycles per second (Hertz) and in digital systems in binary bits per second. (Bit/s). The broader the bandwidth, the quicker the information can be transmitted (see also broadband).

BENCHMARKING a detailed analysis of an electronic reporting program to determine whether it can be used in whole or in part in another state or agency.

BEST PRACTICES methodologies that provide beneficial results. Some best practices are general in nature and can be applied to almost every industry; other best practices are industry-specific.

BPS (bits per second) in data communications, bps is a common measure of data speed for computer modems and transmission carriers. As the term implies, the speed in bps is equal to the number of bits transmitted or received each second.

BUSINESS-TO-BUSINESS (B2B) electronic commerce does not only refer to the relationship between business and consumer, but also to the economic connection between business and business. This means that a company that uses the Internet for ordering from its suppliers or making payments already takes advantage of e-commerce.

BUSINESS-TO-CONSUMER (B2C) electronic commerce comprises commercial transactions, involving both organisations and individuals. From the technical point of view e-commerce is the processing and transmission of digitised data. E-commerce decreases the distance between producers and consumers. Consumers can make their purchase without entering a traditional shop.

BITS units of binary data. One byte consists of eight bits (each either a 1 or a 0). Bits per second (also known as Baud) are the units used in measurement of data transmission speeds (e.g.: 56Kbps modem or 56,000 Baud). Bytes are units used when describing memory and disk space (e.g.: 2 GB hard disk). One kilobyte is 1024 bits (1 megabyte is therefore 1,048,576 bytes).

BROADBAND A transmission medium that can carry signals from multiple independent network carries on a single cable, by establishing different bandwidth channels. Broadband

technology is used to transmit data, voice, and video over long distances and, because many different frequencies operate concurrently, more information can be transmitted more quickly that conventional telephone lines (in the same way that more traffic can flow on a motorway than a single lane road).

BROWSER client software for viewing accessing Web pages.

BYTE one byte of data comprises eight bits (binary digits representing either 1 or 0).

C

CD-ROM (compact disk-read-only memory) high-capacity, read-only memory in the form of an optically read compact disk

CEN and CEN/ISSS the European Standards Organisation based in Brussels. CEN's mission is to promote voluntary technical harmonization in Europe in conjunction with worldwide bodies and its partners in Europe. In Europe, CEN works in partnership with CENELEC - the European Committee for Electrotechnical Standardization and ETSI - the European Telecommunications Standards Institute CEN/Information Society Standardization System the mission of CEN/ISSS is to provide market players with a comprehensive and integrated range of standardisation-oriented services and products, in order to contribute to the success of the Information Society in Europe.

CENELEC the European Committee for Electrotechnical Standardization

CERTIFICATE MANAGEMENT the overall process of issuing, storing, verifying and generally accepting responsibility for the accuracy of certifications and their secure delivery to appropriate consumers.

CERTIFICATE REVOCATION LIST – CRL a database of all certificates that have been revoked by a Certificate Authority. This database should be checked by all persons relying on certificates issued by a Certificate Authority

CERTIFICATION the administrative act of approving a computer system or component for use in a particular application.

CERTIFICATION AUTHORITY a specially established trusted organisation or part of a larger organisation that accepts the responsibilities of managing the certificate process by issuing, distributing, and verifying certificates.

CGI (common gateway interface) an application that enables an HTML document to call an executable program, pass information to it, and display the output in a dynamically created document. CGI scripts are used to count Web site hits, handle database queries, etc.

CIRCA Communication and Information Resource Centre Administrator, for the IDA programme, is a WWW-based environment providing on-line services that offers a common virtual space for workgroups and networks, enabling the effective and secure sharing of resources and documents. The CIRCA service is available for users from Public Administrations and is accessible via the Internet and also via TESTA.

CLEARTEXT (also plaintext) the material entering into an encryption process or emerging from a decryption process. "Text" is used categorically for any digitised material.

CLASS LIBRARIES a collection of software object classes, or a set of pre-built and pre-tested software components that can be used as building blocks to develop applications. Class libraries are often provided by development tool vendors and may also be purchased from third-party vendors.

CLIENT (1) A computer program that relies on services provided from another software module to complete its intended function. A client, as it relates to an n-tier client/server programming environment, is not a computer or a human being. (2) A human user of a computer application (3) A workstation attached to a server on a network

COMMUNITY a constantly changing group of people collaborating and sharing their ideas over an electronic network (e.g., the Internet). Communities optimise their collective power by affiliation around a common interest, by the compression of the time between member interactions (i.e., communicating in real time), and by asynchronous "postings" which potentially reach more participants and allow for more reflection time than real-time interactions.

COOKIES small data fragments left on a user's computer by website that can be used to track web session. A building block of website personalisation.

COMMERCIAL ON-LINE SERVICE computer network that offers its members access to its own chat rooms, bulletin boards, and other online features on a monthly fee basis.

CONFIDENTIALITY the protection of information against interception or receipt by unauthorised third parties.

CONTENT MANAGEMENT SYSTEM – CMS a tool used to organise data. Some are very elaborate and expensive; some are free and easy to used.

CONTENT PROVIDERS people or sections within an organisation who contribute materials (in the form of HTLM pages, forms, documents, graphics files or PDF files) to the organisation's Web site or Intranet, controlled by a central unit.

COST BENEFIT ANALYSIS the economic and social justification for a proposed project.

CRAWLER a software program that visits Web sites to create indexes for search engines. Also known as spiders, bots and intelligent agents.

CREDIBILITY the ability to show that data have been collected, processed, stored, and disseminated responsibly.

CRYPTOGRAPHIC ALGORITHM a mathematical procedure, used in conjunction with a closely guarded secret key, that transforms original input into a form that is unintelligible without special knowledge of the secret information and the algorithm. Such algorithms are also the basis for digital signatures and key exchange.

CRYPTOGRAPHY the science and technology of keeping information secret from unauthorised parties by using a code or a cipher. Cryptography can be used for many applications that do not involve confidentiality.

D

DATABASE information maintained in a computer storage system.

DATE/TIME STAMP the date and time a transaction or document is initiated or submitted to a computer system, or the time at which a transaction is logged or archived. Often it is important that the stamp be certified by some authority to establish legal or other special status. Such a service can be provided by a cryptographic procedure.

DECRYPTION the cryptographic procedure of transforming ciphertext into the original message cleartext.

DENIAL OF SERVICE reducing the availability of an object below the level needed to support critical processing or communication, as can happen, for example, in a system crash.

DIGITALISATION the process of converting information in analogue form into digital form.

DIGITAL CERTIFICATE an electronic device, which is issued by a third party to attest to the authenticity of the issuer of a document. The combination of encryption techniques and the use of an independent third party prevent fraudulent documents from being accepted as genuine facilities secure transactions between, for example, a government agency and citizens using its services or a bank and its costumers.

DIGITAL SIGNATURE encryption process that validates the identity of a signer and ensures that a message has not been altered. It is not a digitised version of a handwritten signature. Digital signatures employ public key cryptography along with digital certificates.

DIRECTORY SERVICE a guide showing how to contact individuals or sections within an organisation via e-mail or the Web.

DOMAIN a domain is part of the naming hierarchy of the Internet. A domain name precisely locates an organisation or other entity on the Internet, for instance: http://www.europa.eu.int/. An address of the form http://www.europa.eu.int/comm/ is a sub-domain.

DOWNLOAD transfer of data from a server to your computer's hard disk. You can use your browser or an FTP program to download files to your computer.

DYNAMIC PAGES dynamic HTML is a collective term for a combination of new HTML tags and options, style sheets and programming, which enable you to create web pages that are more interactive and faster to download.

E

EC European Commission

E-COMMERCE selling products or services to customers using the Internet as the main means for communication and accomplishing transactions.

E-EUROPE eEurope - "An Information Society for all" – an initiative launched by the European Commission on 8 December 1999, to bring the benefits of the Information Society to all Europeans.

E-GATEAWAY a project initiated by the European Commission. The main objective of e-gateway is to support small to medium-sized enterprises (SMEs) to start up with and develop electronic commerce. This web site is targeting decision makers of SMEs who are less experienced in electronic commerce, but are planning to get involved with their company in this business. Due to this lack of experience a high-quality gateway to neutral electronic commerce information will be a useful key to successful project realisation.

ELECTRONIC FORMS forms available on a Web site or Intranet, which a user can complete on the screen and then both print off and post back, or submit on-line.

E-GOVERNMENT the carrying out of government business transactions electronically, usually over the Internet, but including all the related real-world processes. In our information society, customers increasingly expect government to be accessible and convenient. As customers' expectations increase, governments must adopt eGovernment strategies.

E-MAIL electronic mail - usually sent or received over the Internet.

ELECTRONIC TRANSACTIONS in ordinary language, dealings between people and organisations (such as finding out a piece of information, filling out a form, or making a payment) that take place using Internet and the Web.

ENCRYPTION a mechanism for coding or "scrambling" electronic documents or messages, to enable them to travel between networks securely without risk of them being read by third parties.

ENTR DG Enterprise, the Directorate General of the European Commission which houses the IDA programme

ETHERNET a method for connecting computers to a network using coaxial cable.

ETSI the European Telecommunications Standards Institute

EU European Union.

EUROCHAMBRES organisation which represents more than 15,000,000 enterprises in Europe. Organised in six departments, which undertake a number of projects and actions implemented by the European network of Chambers of Commerce.

EXTRANET a system for regular communication between an organisation and its main suppliers or implementation partners. Typically extranet are closed private computer networks that function at least partially over the public connections of the Internet, using encryption to ensure privacy. They are designed to give authorised outsiders access to an organisation's Intranet from outside its network by direct telephone dial-up from PC or by coming in from the Web trough a firewall.

F

FILE TRANFER PROTOCOL – FTP the standard Internet protocol for transferring files from one computer to another.

FIREWALL computer gateway (including hardware, software and procedures) that protects a company's computer network by filtering connections and transmissions between the local system and the Internet.

FREEWARE shareware that is openly available to the public without the requirement of user registration fee.

FRONT OFFICE SYSTEM (or FRONT-END) computer infrastructure in an organisation designed specifically as an interface for communicating with external costumers, such as Web sites or portals.

FUNCTIONALITY the functional behaviour of a system. Functionality requirements include, for example, confidentiality, integrity, availability, authentication and safety.

G

GATEWAY the technical meaning is a hardware or software set-up that translates between two dissimilar protocols, for example Prodigy has a gateway that translates between its internal, proprietary e-mail format and Internet e-mail format. Another, sloppier meaning of gateway is to describe any mechanism for providing access to another system.

G-COMMERCE eCommerce applied to government. Government as both purchaser and seller.

H

HACKING the term used to describe gaining access to private data or systems, without permission from their owner, typically using the Internet.

HTML HyperText Markup Language, the main language used to create Web documents. Secure HyperText Transfer Protocol (S-HTTP) employs public key technology to protect sensitive data.

HYPERLINK highlighted words or images on a web page that allow you to jump to another page.

HYPERTEXT text containing internal and external links or pointers to other texts or services.

I

ICC International Chamber of Commerce. ICC is the world business organization, the only representative body that speaks with authority on behalf of enterprises from all sectors in every part of the world.

IDA Interchange of Data between Administrations. IDA is a European Commission driven strategic initiative using advances in information and communications technology to support rapid electronic exchange of information between Member State administrations.

IETF Internet Engineering Task Force

IMPLEMENTATION the mechanism that (supposedly) realises the specified design

INFORMATION AND COMMUNICATION TECHNOLOGIES - ICT the application of computer science to ways of organising and storing information and facilitating its transfer amongst users.

INFOSOC DG Information Society, the Directorate General of the European Commission, which houses the Information Society Programme.

INTEGRITY the property that an object meets an established set of expectations. One example of integrity is that changes must be accomplished in a specified and authorised manner. Data integrity, program integrity, system integrity and network integrity are all relevant to consideration of computer and system security.

INTERACTION a two-way exchange of information or transaction.

INTERACTIVITY the extent to which someone can provide information to an organisation's Web site, as well as receiving information from it.

INTERNET PROTOCOL – IP the rules governing how computers on the Internet communicate and share information.

INTRANETS a network linking computers within a given organisation, which is closed to outsiders. Its structure and user interface are based on those of the Internet.

ISIS-MTT the preferred standard for PKI (Public Key Infrastructure) used in Bremen eGovernment infrastructure GOVERNIKUS

ISO International Standards Organisation

ITU International Telecommunications Union

J

JAVA a platform independent object-oriented programming language that enables software developers to create interactive elements (Applets), which can be attached to a Web page (or used in native mode).

JAVASCIRPT a scripting language, loosely based on Java, which allows web programmers to create dynamic content, such as interactive games, or search engines on their web sites.

K

KEY a sequence of easily changed symbols that, used with a cryptographic algorithm, provides a cryptographic process.

KEY DISTRIBUTION a secure method for two distant parties to exchange keys or to receive keys from a central authoritative source.

KEY ESCROW ENCRYPTION (also escrowed encryption) an encryption system that enables exceptional access to encrypted data through special data recovery keys held by an outside trusted party

KIOSK a booth or stand alone terminal in a public place such as a library or supermarket, where citizens can access the internet, including government services and information, via a touch sensitive screen or keyboard.

KNOWLEDGE-MANAGEMENT Techniques for maximising the ability of people within an organisation to find the critical information they need for intelligent decision-making in the most speedy, reliable and cost-effective ways. In the current period most knowledge-management focuses on providing improved ICTs and better training for staff.

L

LOG FILE record of web server transactions containing: date/time stamp, URL served, IP address of requestor, status code of request, user agent string, previous URL of requestor, etc.

LOGIN this is the process of registering your session on a multi-user computer operating system.

"LOOK and FEEL" the general appearance of an organisation's Web site or Intranet. A standard "look and feel" helps users to be aware pf which site they are in and gives them assurance that its features will work in a standardised way.

M

MAIL LIST or MAILINGLIST a (usually automated) system that allows people to send e-mail to one address, whereupon their message is copied and sent to all of the other subscribers to the mail list. In this way, people who have many different kinds of e-mail access can participate in discussions together.

MIME – MULTIPURPOSE INTERNET MAIL EXTENSIONS MIME supports the transmission of text and binary data (including sound and graphics).

MONITORING recording of relevant information about each operation by a subject on an object, maintained in an audit trail for subsequent analysis.

MULTIMEDIA sound and graphics files. Much of the popularity of the WWW is due to the easy integration of text and multimedia.

N

NETWORK a group of computers and peripherals connected to share files and devices.

NETWORK INTERFACE where two operators networks are interconnected, each must be able to understand the technical operation of the other in order for services to interoperate across the interconnection boundary. The technical characteristics that allow for that understanding are the network-to-network interface. Each network must provide an interface at the point of connection and only where these interfaces are compatible will there be interoperability.

NEWSGROUPS topical discussion groups that are part of the Usenet.

NON-REPUDIATION (of a signed digital message, data or software) the status achieved by employing a digital-signature procedure to affirm the identity of the signer of a digital message with extreme high confidence and, hence, to protect against a subsequent attempt to deny authenticity, whether or not there had been an initial authentication.

O

OECD Organisation for Economic and Commercial Development. OECD groups 30 member countries sharing a commitment to democratic government and the market economy. With active relationships with some 70 other countries, NGOs and civil society, it has a global reach. Best known for its publications and its statistics, its work covers economic and social issues from macroeconomics, to trade, education, development and science and innovation. The OECD plays a prominent role in fostering good governance in the public service and in corporate activity.

OFFLINE processes, which may be computerised, but not running on the Internet.

ONE-STOP GOVERNMENT important development within the current initiatives of e-Government. It refers to a single point of access to electronic services and information offered by different public authorities. Online one-stop Government requires all public authorities to be interconnected and that the customer (citizen, private enterprise or other public administration) is able to access public services by a single point even if these services are provided by different public authorities or private service providers. It further requires that the customer is able to access these services in a well-structured and understandable manner meeting his/her perspectives and needs.

ONLINE processes running on the computer system, and specifically, on the Internet.

OPEN NETWORKS networks which can be accessed openly and interface with other networks

OPERATING SYSTEM a program that runs on a computer whose purpose is to provide basic services that can be used by applications running on that computer. Such functions might include screen displays, file handling and encryption. MS-DOS and Windows 2000 are examples of operating systems that run on Intel microprocessors.

OPT –IN; OPT-OUT If you choose to receive information by e-mail or direct mail, you opt-in to be included on the mailing list. If you remove yourself from the list, you opt-out.

P

PASSWORD a sequence of characters or words that a subject presents to a system for purposes of validation or verification. See authentication.

PCI Projects of Common Interest under the IDA programme.

PDF Portable Document Format – A translation format developed by Adobe used primarily for distributing files across a network, or on a Web site. Files with a .pdf extension have been created in another application and then translated into .pdf files so they can be viewed by anyone, regardless of platform. (Adobe Acrobat Reader is free for download on the Web: http://www.adobe.com/)

P2P : PEER TO PEER Decentralised file sharing, computation, communication and more.

PIN Personal identification number.

PKI Public Key Infrastructure

PKICL PKI Client Libraries

PKICUG Public Key Infrastructure Closed User Group was launched in 1999 by the IDA programme, It provides a Certification Authority (CA) available to the members of the IDA projects of common interest (PCI)

PLAINTEXT a synonym for cleartext

PORTAL any well-used gateway to the Internet, especially those sites designed to serve as a "front door" and thus the first page that users see when accessing the Web. Portals typically provide large catalogues of other sites, powerful search engines for locating information, and e-mail facilities or other attractive Web services.

PLUGS-IN programs that can easily be installed and used as extensions to a web browser to provide additional functions such as audio, video and support for flashy graphics.

PRIVACY POLICY a statement about what information is being collected; how the information being collected is being used; how an individual can access his/her own data collected; how the individual can opt-put; and what security measures are being taken by the parties collecting the data.

PRIVATE KEY the private (secret) key associated with a given person's public key for a public-key cryptographic system.

PROTOCOL rules governing the exchange of data between computers networks.

PROXI SERVER a server between your browser and a Web server, which monitors all requests that pass through it. The proxy server intercepts all requests and checks that it doesn't already have the requested web page stored on its hard disk. If it has, then the proxy server returns the requested Web page from its own hard disk. If the proxy server doesn't have the requested page, then it forwards the request to the web server. Proxy servers speed up internet access for large numbers of users, and can also be used by companies to filter out requests for unsuitable web pages. They are also used as firewalls to isolate a local network (a company intranet, for example) from security problems which may arise from direct connection to the internet, such as hacking and viruses.

PUBLIC KEY the publicly known key associated with a given person's use of a public-key cryptographic system.

PUBLIC-KEY CERTIFICATE a statement, possibly on paper but more often transmitted electronically over an information network, which establishes the relationship between a named individual (or organisation) and a specified public key. In principle, it could (but need not) include other information such as mailing address, organisational affiliation and telephone number.

PUBLIC SERVICE AGREEMENTS (PSAs) Set out department's objectives for public services with measurable targets for their delivery.

R

REGISTRATION a number of website require registration. Usually registration is free and involves filling out a form and receiving or selecting a password.

RELIABILITY the ability of a computer or an information or telecommunications system to perform consistently and precisely according to its specifications and design requirements and to do so with high confidence.

S

SEARCH ENGINE a service that provides access to a searchable database of websites addresses and descriptions. Example: www.google.com

SECRET-KEY CRYPTOSYSTEM a symmetric cryptographic process that uses the same secret key (which both parties have and keep secret) to encrypt and decrypt messages.

SECURITY the collection of safeguards that ensures the confidentiality of information, protects the system(s) or network(s) used to process it and controls access to it. Hence, security safeguards impose appropriate access rules for computer information.

SET protocol developed by Visa/Mastercard for Secure Electronic Transfer of money.

SMART CARD transactional electronic technology capable of storing and updating authentication or account information about the user.

SMTP Simple Mail Transfer Protocol. SMTP is used to transfer e-mail between computers, as part of the TCP/IP protocol family

SOG-IS the European Commission's Senior Officials Group – Information Systems Security

SPAM unsolicited and usually unwelcome e-mail.

SPECIFICATION description of the desired behaviour of a system, as derived from its requirements. A specification is used to develop and test an implementation of a system. SPOOFING – illicitly masquerading as a legitimate company, party or individual

SYSTEM an inter-dependent collection of components that can be considered as a unified whole; for example, a networked collection of computer systems, a distributed system, an editor, a memory unit and so on.

T

TAKE-UP the extent to which electronic government services are available on line and are currently used by citizens or customers.

TECHNICAL REQUIREMENTS description of hardware, software, and communications requirements associated with the initiative.

TESTA I and II - Trans-European Services for Telematics between Administrations. The IDA TESTA project started in 1996 and entered its second phase (TESTA II) early in 2000. It envisages a European inter-administrative IP network, similar to the Internet in its reach and universality, but dedicated to inter-administrative requirements and providing guaranteed performance levels.

THIRD-PARTY ACCESS eavesdropping on or entry to data communications, telephony or stored computer data by an unauthorised party.

TOKEN when used in the context of authentication, a (usually) physical device necessary for user identification.

TROJAN HORSE a computer program whose execution would result in undesired side effects, generally unanticipated by the user. A Trojan horse program may otherwise give the appearance of providing normal functionality.

TRUST the concept that a system will provide its intended functionality with a stated level of confidence. The term is also used for other entities; e.g. trusted software, trusted network, trusted individual. Sometimes the confidence – also called assurance – can be measured but sometimes it is inferred on the basis of testing and other information

TTP Trusted Third Party

U

USENET a worldwide network of newsgroups (special interest groups) not on the Internet but often available via networked computer.

URL Uniform (or Universal) Resource Locator. A unique identifier of a page which is the standard address of files on the Web. The components of an URL are: protocol // domain : port / path / filename.

V

VIRUS software, usually originating in the Internet, that infiltrates a PC, makes something happen that the owner would rather not.

VULNERABILITY a weakness in a system that can be exploited to violate the system's intended behaviour. There may be security, integrity, availability and other vulnerabilities. The act of exploiting vulnerability represents a threat, which has an associated risk of being exploited.

W

WAP Wireless Application Protocol. A standard for mobile communications, it allows mobile devices to interact with internet-based applications. WAP can support e-mail, the web, news groups and Internet relay chat.

WEB-ENABLING the adaptation of existing ICTs so that at some stage Web-based technologies are employed – for example, creating a channel of communication with users or accessing information held on legacy systems using a browser.

WWW World Wide Web. The complete ensemble of graphics and text documents published on the Web sites and inter-connected via the Internet trough clickable "hypertext" links.

W3C The World Wide Web Consortium (W3C) develops interoperable technologies (specifications, guidelines, software, and tools) to lead the Web to its full potential. W3C is a forum for information, commerce, communication, and collective understanding.

X

XML Extensible Markup Language a schema, which defines the data and data format that can appear in a web-based form. Enabling definition, transmission, validation and interpretation of data between source: Webopedia. The standard agreed as the e-Government protocol for the exchange of data between different IT systems.

Y

Y-SPECIFIC (OR STAND-ALONE) CRYPTOGRAPHY PRODUCT an add-on product specifically designed to provide cryptographic capabilities for one or more other software or hardware capabilities.

APPENDIX

The questionnaire

This model aims to present a case of good practice in the field of eGovernment at the local and regional levels, which will be published by the Committee of the Regions in a good practice guide, translated into 11 languages.

To be able to present the cases of good practices uniformly, we ask you, firstly, to follow the model of the CAF, Common Assessment Framework, which is a model of auto evaluation developed for the public services and inspired by the EFQM (European Foundation for Quality Management) model.

Secondly we ask you to answer the questionnaire on the measure of the impact of the e-government initiatives on the relations with the citizens/users, between the administrative services and on the internal organization within each administration.

The exercise, which is proposed to you, consists in presenting your case of good practice

I. according to the enablers and results: in maximum 5 pages following the CAF model as described in the appendix (page 11). This case will be preceded by a presentation of your organization into 1 or 2 pages.

II. by describing the impact of this eGovernment initiative: by answering the questionnaire on the infrastructure and the tools implemented (page 7).

a. Common Assessment Framework model – CAF: a Benchmarking tool

There are different ways of carrying out a benchmarking exercise to emphasize good practices. To be able to compare practices and to emphasize the best of them, one needs a framework of reference allowing an analysis of the organisations on the basis of a single scheme. The CAF provides such a scheme. Its design rests on the following guiding principle: it is possible to design a logical "skeleton" which represents the important characteristics of any organisation (such as "leadership", "strategy and planning", etc.). While being based on this skeleton, it is possible to build a series of questions that tests the organisation in all the important fields and to provide a logical base to produce fundamental statements on the performance of the organisation in such fields, in this case, eGovernment.

Essentially, the CAF teaches us that the results regarding
- Customers/citizens
- People (employees) and
- Society

Are achieved by

- Leadership
- Strategy and planning
- Human resource management
- External partnership and resources management as well as by
- Process and change management

Leading in the end to the key performance results.

Criteria have been gathered in two categories: « Enablers » and « Results »

- Criteria relative to enablers deal with the way results are reached
- Criteria relative to results deal with what the organisation has achieved and is currently achieving

The CAF allows an evaluation of the organisation's situation and projects compared to these 9 criteria.

b. Benchmarking and the CAF

Benchmarking is a process through which an organisation finds other comparable organisations with which it can compare its own organisation and performance. The purpose of establishing benchmarking activities is to find better ways of doing things, based on better results achieved in other organisations. The technique can be a powerful and effective tool for organisational development, as it exploits sound basic principles such as "not re-inventing the wheel" and "learning from others". Finding the most relevant benchmarking must be oriented to finding the most useful comparisons. The point is not to find an organisation with a good reputation or an impressive general performance but which achieved impressive results in the organisation's aspects seen as a priority (in our case, in terms of implementing eGovernment processes). For example, an organisation having identified some weak points in its processes should ideally find an other organisation, engaged in similar activities, and especially performing in that field. Having such aims requires analysis tools which evaluate the organisation's performance according to different aspects of its activities, and provides standard measures enabling comparison with the other organisation. The CAF can be that tool as it has been conceived as a standard tool to be used in European public administrations. It can be a "bridge" in between different models used in the different countries.

The proposed exercise is to present a best practice case in maximum 5 pages using the CAF. This presentation will be completed with a description of the organisation in maximum 2 pages.

A few recommendations can be found regarding the presentation of the best practice case page 4, and regarding the description of your organisation page 6.

The Common Assessment Framework model, to help structure the presentation of the case, can be found page 11.

c. Recommendations for Best Practice description

The main purpose of the study carried out for the Committee of the Regions is to contribute to the development of best practices in the field of eGovernment at a regional and local level.

It is therefore essential to make sure the case descriptions refer to **best practices actually implemented** or **in the course of being implemented**, and based on **results obtained or**

foreseeable within two or three years. The descriptions useful for an exchange of best practices must explain the adopted **approaches** and **methods** which made it possible to reach the posted good levels of performance. You can find below some guidelines allowing to describe a "best practice", and what one must keep in mind when one wishes to give an account in a synthetic way of practices, process, results and tendencies.

1. Reference to the CAF criteria

Please recall the reference to the CAF criteria on which you wish to base the description of your best practice.

2. The approach

a. Please describe your processes by holding account of the following recommendations:

- Describe the « WHAT » and the « HOW »

Does the description show what was carried out and does one understand how this was done? It is important to give elementary information on what the key processes are and how they happen.

- Show that the **activities** are **systematic**.

Does the description show a systematic approach or does it simply provide an example? Systematic approaches can be repeated and use the data and information for improvement and training. In other words, the approaches are systematic if they integrate evaluation and training to progress in maturity.

b. Be concise, synthetic

Use flow charts, tables, graphs, drawings...

c. Refer to the Common Assessment Framework

with regard to the criteria and the under-criteria as well as to the terminology used.

d. Show the transferability of your good practice

We remind to you again that the interest of the study lies primarily in the fact of being able to take as a starting point the good practices presented, to be able to apply the most useful and the most adapted one to its own organisation.

3. Results

a. Concentrate on the most important results of the performances.

b. To describe your results efficiently:

- Show the evolution of tendencies and the speed of the changes;
- Levels of performance on significant scales of measurement;
- Possible comparisons with the results of other similar organisations;
- The extents of the results to prove that all the important results are mentioned.

c. Use a synthetic presentation: graphs and tables

Many results can be presented in a synthetic way by using graphs and tables. Take care to have the results in the most readable way. For example: by using standardized measuring units for the comparison of graphs, by choosing the most suitable measuring unit (ex: by 100 rather than per unit...).

To present the graphs effectively:

- The graph must be numbered to be referred to easily in the text;
- The axes and the measuring units must be clearly mentioned;
- Present the results for several years;

d. Integrate the results in the body text (not in appendix)

The discussion of the results and the results themselves should not be described separately.

Length of the description of the good practice: 5 pages max.

d. Recommendations for the general description of the organisation

It is a matter of giving an overall picture of the organisation, describing what is most important, the key influences on the operation of the organization as well as the localization of the organisation's direction. The general description of the organisation is the statement of what is relevant, important for the organisation.

The general description will include three parts:

1. Characteristics of the organisation

This part must provide basic information on:

- The nature of the products and services of the organisation;
- The size of the organisation and its localization;
- Principal fields of actions of the organisation (local, regional, national, international);
- Profile of the employees of the organisation: numbers and types;
- The main equipment, installations and technologies used;
- Lawful environment relating to the services provided by the organisation

If the organisation is a unit of a larger organisation (the "parent" organisation). For example, a direction of a ministry:

- a short description of the functional relations with the "parent" organisation as well as the percentage of agents which the unit represents would be useful.
- A brief description of which is the relation between the services provided by the organisation with those of the "parent" organisation.
- If the "parent" organisation provides key logistic services, the latter should also be briefly described.

2. The customers/citizens and/or the internal customers

The various customer-citizens groups will have to be distinguished if necessary, their requirements described by drawing the attention to the differences between these requirements, even the contradictions.

3. Suppliers and partnerships

Further information will be useful on:

- Possible partnerships with other public and/or private organisations;
- Types and number of suppliers of the most important goods and services;
- Limits, special relationships or special requirements with these partners or suppliers (if necessary).

The general description of the organisation is limited to 1 or 2 pages maximum.

II. Measure of the impact of the e-governement initiatives on the relations with the citizens/users, between the administrations and on the internal organisation within each administration.

(This questionnaire aims to be rather exhaustive. All the questions do not necessarily correspond to your particular case.)

1. Describe the technological infrastructure and the tools installed regarding the communication and the interaction with general public.

(the part of the administration in direct liaison with its customers: citizens, companies).

Sub-questions

1.1. The telematic infrastructure used, the channels for the transaction (public terminals/access points in the city, via Web sites, mobile terminals (phones, PDA...)).

1.2. Applications and software used, level of accessibility of the service.

1.3. Available tools for assistance and training of the user (FAQ...). Tools allowing the collection and the storage of questions, as well as the communication of answers.

1.4. Tools measuring the customer/citizen/company satisfaction. Can the citizen check the state of his request?

Sub-questions	implementation level Planned : 1 Underwav: 2 Operational : 3	Description
1.1		
1.2		
1.3		
1.4		

2. Describe the technological infrastructure and the tools used regarding communication and interactions between public institutions.

(which requires an interface allowing the data exchange between the general application server(s) and the administration's own IT system(s)).

Sub-questions

2.1. The interface used for exchanging data between heterogeneous IT systems of other authorities and with Web sites or portals.

2.2. The telematic infrastructure used (intra or inter administration).

2.3. Use of standards and policies for the exchange and the use of information. (Use of open standards allowing an easy integration with other E-government applications, directives relating to the use of free software...).

2.4. The existence and the type of co-operation between the administrations providing similar services.

2.5. Infrastructure used for the data storage and/or centralization, access and update. (Type of database, monitoring systems and data base management to ensure data coherence, identifier...).

Sub-questions	implementation level Planned : 1 Underwav: 2 Operational : 3	Description
2.1		
2.2		
2.3		
2.4		
2.5		

3. Describe the technological infrastructure and the application of guidelines regarding the changes of the internal treatment procedures ("workflow") within your administration, linked to the introduction of E-government.

Sub-questions

3.1. Technology ensuring transaction and payment security.

3.2. Technology authenticating citizens and/or companies (common PKI environment...)

3.3. Guidelines established in order to enable standardization and interoperability between government services (metadata definition, use of XML...).

3.4. Guidelines on privacy issues linked to "back office" integration (data collection, access and update).

3.5. Processes managing the integration of the production of a paper document and an electronic document.

3.6. Processes managing the request follow-up and the monitoring system performance ("Ticketing...").

3.7. Are the various technologies and guidelines described above developed within the framework of a global E-government strategy?

Sub-questions	implementation level Planned : 1 Underwav: 2 Operational : 3	Description
3.1		
3.2		
3.3		
3.4		
3.5		
3.6		
3.7		

III. Appendix

Common Assessment Framework model

- Good practice criteria assessment -

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Enablers

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Results

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Criterion 1: Leadership

Criterion 1 assessment: What is the organisation's leadership doing to:

Sub-criteria

1.1. Give a direction to the organisation: develop and communicate vision, mission and values
1.2. Develop and implement a system for managing the organisation
1.3. Motivate and support the people in the organisation
1.4. Manage the relations with politicians and other stakeholders

Sub-criteria	Strong points Justifications	Improvement points Justifications
1.1		
1.2		
1.3		
1.4		

Criterion 2: Strategy and planning

Criterion 2 assessment: What does the organisation do to:

Sub-criteria

2.1. Gather information relating to present and future needs of stakeholders
2.2. Develop, review and update strategy and planning
2.3. Implement strategy and planning in the whole organisation

Sub-criteria	Strong points Justifications	Improvement points Justifications
2.1		
2.2		
2.3		

Criterion 3: Human resource management

Criterion 3 assessment: What does the organisation do to:

Sub-criteria

3.1. Plan, manage and improve human resources with regards to strategy and planning
3.2. Identify, develop and use competencies of the employees aligning individual, team and organisational targets and goals
3.3. Involve employees by developing dialogue and empowerment

Sub-criteria	Strong points Justifications	Improvement points Justifications
3.1		

Sub-criteria	Strong points Justifications	Improvement points Justifications
2.1		
2.2		

Criterion 4: Partnership and Resources

Criterion 4 assessment: Consider what measures are in place to ensure that the organisation:

Sub-criteria

4.1. Develops and implements key partnership relations
4.2. Develops and implements partnership with the customers/citizens
4.3. Manages knowledge
4.4. Manages finances
4.5. Manages technology
4.6. Manages equipment

Sub-criteria	Strong points Justifications	Improvement points Justifications
4.1		
4.2		
4.3		

Sub-criteria	Strong points Justifications	Improvement points Justifications
4.4		
4.5		
4.6		

Criterion 5: Process and change management

Criterion 5 assessment: Consider the evidence on how the organisation:

Sub-criteria

5.1. Identifies, designs, manages and improves processes

5.2. Develops and delivers services and products by involving the customers/citizens

5.3. Plans and manages modernisation and innovation

Sub-criteria	Strong points Justifications	Improvement points Justifications
5.1		
5.2		
5.3		

NB: From criterion 6 onwards, the field of the evaluation changes from "Enablers" (elements of an organisation which determine its performance) to "Results" (results or products which the organisation obtains). The assessment of the "Results" requires a different group of answers.

In this section, the assessment takes into account what was achieved, rather than the actions undertaken.

Criterion 6: customer/citizen – oriented results

Criterion 6 assessment: Consider what results the organisation has achieved in its efforts to meet the needs and expectations of customers and citizens through:

Sub-criteria

6.1. Results of customer/citizen satisfaction measurement

6.2. Indicators of customer/citizen-oriented measurement

Sub-criteria	Strong points Justifications	Improvement points Justifications
6.1		
6.2		

Criterion 7: People results

Criterion 7 assessment: Consider evidence of results relating to:

Sub-criteria

7.1. Results of people (employees) satisfaction and motivation measurement

7.2. Indicators of people (employees) results

Sub-criteria	Strong points Justifications	Improvement points Justifications
7.1		
7.2		

Criterion 8: Society results

Criterion 8 assessment: Consider what the organisation is achieving in respect of impact on society, with reference to:

Sub-criteria

8.1. Results on societal performance

8.2. Results on environmental performance

Sub-criteria	Strong points Justifications	Improvement points Justifications
8.1		
8.2		

Criterion 9: Key performance results

Criterion 9 assessment: Consider the evidence of trends in results being achieved for the organisation, in relation to:

Sub-criteria

9.1. Goal achievement

9.2. Financial performance

Sub-criteria	Strong points Justifications	Improvement points Justifications
9.1		

Sub-criteria	Strong points Justifications	Improvement points Justifications
9.2		

Committee of the Regions of the European Union

**Governance and ICT –
innovative eGovernment actions at local and regional level**

Luxembourg: Office for Official Publications of the European Communities

2003 — 138 pp. — 16 x 23 cm

ISBN 92-895-0277-0

Price (excluding VAT) in Luxembourg: EUR 15

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http://www.cor.eu.int/

QG-58-04-950-EN-C

EN

Price (excluding VAT) in Luxembourg: EUR 15

OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES
L-2985 Luxembourg

ISBN 92-895-0277-0

9 789289 502771