eGovernment, work and welfare in Europe: case studies from France, Germany, Italy and the UK

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ABSTRACT

This report has been produced by the restructured Labour Market Changes and Welfare Perspectives In Europe (LAW) project which aims to examine the scope of labour market restructuring in the development of a European information society and the challenges this poses to European welfare systems.

In Workpackage 1 of the second phase of the project, the research partners carried out a summary of the changes taking place in European labour markets in association with the introduction of ICTs, the 'winners' and 'losers' from this process, the characteristics of the welfare systems operating in each of the five countries under study and the ways in which they have succeeded (or failed) to adapt to the restructuring of labour markets. It also summarised the policy debates about the future of welfare systems in the light of the European Lisbon agenda, firstly by conducting an overview of the European policy debates and then by following debates in each of the five countries under study.

Workpackage 2 analysed the ways in which each national welfare system currently addresses the needs of the groups at risk in the current restructuring of labour markets, the national policy debates and future plans. It focused particularly on ways in which ICTs can make a positive contribution to improving the delivery of welfare services and increasing social inclusion.

Workpackage 3 has taken this a stage further, adopting a case study approach to investigate good practice in the use of ICTs to address these challenges in the participating countries. This report summarises the results of this work in relation to eGovernment. It is one of three reports produced as part of this workpackage. The other two reports focus respectively on life-long learning initiatives and on initiatives developed to address the digital divide in New Member States.
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1. INTRODUCTION

The LAW project has been funded by the European Commission under its Information Society Technologies Programme to examine the impacts of Information and Communications Technologies (ICTs) on labour markets and on welfare systems in Europe.

In the first phase of the project’s work, national teams in France, Italy, Germany, Poland and the UK carried out an analysis of the ways in which national labour markets are being restructured in the context of technological change, the groups at risk as a result of these developments in each country, and the challenges posed for welfare systems as a result. In a second phase, the LAW partners carried out country studies focusing on the national welfare systems of each of these countries, with the addition of Sweden.

These country studies carried out an overview of the scale of the challenge posed to each national government by the groups at risk, including the numbers of claimants for each relevant benefit, the cost of providing these benefits and long-term trends.

Having identified the challenges, the studies then went on to summarise the ways in which these challenges are being met in each country, including national debates and policies about the ways forward. Here, there was a particular focus on the role played by ICTs in developing solutions to these welfare challenges, by improving information about and access to welfare services, by reducing the costs of delivery, or by developing entirely new initiatives to address problems of social exclusion.

Finally, the research partners carried out a series of case studies to identify innovative examples of the successful use of ICTs in the delivery of welfare services in these EU member states, and in tackling social exclusion. This report presents the results of the case studies concerning eGovernment initiatives that relate specifically to work and welfare.

Case study methodology

These case studies were carried out using a mixture of complementary research methods including literature surveys, secondary analysis of relevant statistics and documentation and face-to-face and telephone interviews, supplemented where necessary by email correspondence to clarify specific points. Interview respondents included academic experts, consultants and policy-makers as well as personnel actively involved in setting up and/or managing the schemes selected for study.

The aim of the case studies was not to provide exhaustive information about the history of particular initiatives. Rather, they aimed to:

- Identify ways in which specific challenges relating to the restructuring of labour markets and welfare systems were being met
- Investigate their strengths and weaknesses
- Assess the main costs and benefits as perceived by stakeholders with the ultimate goal of identifying features of good practice which might be transferable to other national or regional contexts.

The researchers were obviously not in a position to carry out a detailed evaluation of any given scheme; rather, their brief was to provide enough information about their key features to enable others to assess whether the scheme is of sufficient interest to warrant further investigation with a view to learning the main lessons for application elsewhere. Researchers studied both large national schemes and small local ones in order to reflect the wide range of initiatives that exist.

With this aim in mind, some of the more interesting schemes studied by the LAW partners have been featured in an eGovernment Briefing available from the LAW website, whilst others will be presented at the LAW final conference in Rome on November 4-5, 2005.
These case studies would not have been possible without the collaboration of a large number of informants in the participating countries, whom we thank.

**Definition of eGovernment**

The term ‘eGovernment’ is used in a number of different ways by different commentators, sometimes interchangeably with other terms, such as ‘eGovernance’. The European Commission defines eGovernment as ‘the use of ICTs in public administrations combined with organisational skills and new skills in order to improve public services and democratic processes and strengthen support to public polices’. The OECD uses a more cautious definition defining ‘the use of ICTs, and particularly the Internet, as a tool to achieve better government’. The United Nations (2003) definition recognises that ‘public administrations are in the process of transforming its internal and external relationships with the use of modern information and communication technologies’ and also emphasising that ‘eGovernment is justified if it enhances the capacity of public administration to increase the supply of public value, i.e. the things that people want’.

**Focus of the case studies**

ICTs can contribute to the enhancement of government in a very large number of ways. One of these is the general development of new ways to engage citizens in democratic processes and decision-making. A number of different terms have been coined to refer to aspects of this, including the concepts of ‘Netizens’, ‘digital democracy’ and ‘eGovernance’.

Secondly ICTs can also make a large contribution to the general efficiency and cost-effectiveness of public administrations, in much the same way that they contribute to increasing productivity and efficiency in the private sector.

Whilst recognising the importance of both of these aspects, and also acknowledging that they are mutually interactive and cannot entirely be separated from each other, this report focuses mainly on a third dimension: the use of ICTs to enhance the delivery of services to citizens. Government services of course cover a vast spectrum which it is beyond the scope of this project to address in full. Here we focus specifically on those services that contribute to the avoidance of social exclusion in the restructuring of labour markets currently taking place in Europe in the transition to a knowledge-based society.

Within this broad focus, case studies were selected in each country to exhibit as broad a range as possible of the innovative ways in which ICTs are being used to improve welfare and labour market participation in the participating countries. It should be noted here that the countries in question here are France, Germany, Italy and the UK. Although parallel research was also carried out in Poland, this is presented in a separate report in this series which looks more generally at ways in which the Digital Divide is being tackled in New Member States.
2. FRANCE

2.1. Introduction

On 10 July 2003, a few months after the presentation by the Prime minister of a ‘Plan for a digital republic in the information society’ (RESO 2007), the first interdepartmental committee for the information society in France focused on the importance of ICT development: by 2007, the digital divide must be reduced, both from a geographical and social point of view. A special structure was also created, the 'commission for the use of the Internet' (Délégation aux usages de l'Internet), to coordinate all Internet linked measures.

The eGovernment strategic plan (PSAE) for the years 2004-2007, which continues the former ‘RESO 2007’ Plan, focuses on several dimensions. It first introduces the general context of the State and public services modernisation: the emergence of eGovernment will take place at a time where a large number of civil servants will retire in the next few years (as the baby-boomer generation is reaching retirement). This means that the resources of the State and other administrations can be widely redeployed online to meet the expectations of the society, labour market forces, and government priorities, without reducing the service provided. According to the PSAE, there is a dual principle underlying the redeployment actions:

- to develop tasks and skills where human presence is essential (health personnel, teachers, police, fire brigade, reception staff, etc.), and to reduce office tasks linked with paper processing (management, accounting, registration, various support tasks);
- to lighten the overall cost of the civil service, wherever possible, by investing in the new priorities while reducing fiscal pressure.

The ADAE (Agence pour le Développement de l’Administration Electronique) will have to assist the various departments in seeking sectors of productivity and the distribution of the good practices achieved, in particular by promoting the cooperation of public agents.

The goals of the PSAE are:

- to propose user friendly services, available to anyone at anytime;
- to create the conditions of a better trust between citizens;
- to give more visibility to all the actors, in the short and in the long run;
- to contribute to the State reform;
- to contribute to a better control of public expenditure;
- to organise the work till 2007.

The PSAE aims to intensify the creation of new dematerialised (digital) services and to improve existing services so that they better answer public needs. The rate of on-line procedures (with electronic access), which is now 15%, must increase to 66 % by the end of 2006, and 100 % by the end of 2007. The Prime minister unveiled on 9 February 2004 the ADELE (‘ADministration ELEctronique) program: the governmental program for e-administration 2004 / 2007. This program coordinates the development of e-administration, and details 140 measures, concerning nearly 300 new services. The ADAE is directly in charge of the development of 30 of them.

In addition, the eGovernment strategic plan aims to contribute to promote a better implementation of decentralisation. The aim of the eGovernment strategic plan is also to set up a specific global approach to public service, whether provided by central or local authorities, or by the welfare institutions. In fact, the major public service for citizens is at town level where users’ requests are centralised and passed on to other services. This intermediary role is also that of the regional councils for welfare benefits.
The ADAE will also assist the local staff of the agencies that will be set up gradually throughout the country in order to help regional authorities master the new uses and tools of eGovernment and develop in partnership services for their users and for their own needs. This will mean that agreements can be set up between the State and the local authorities (Regional Councils and other local councils, possibly at the town level), to experience such partnerships concerning organisational, technical and institutional questions. Other institutions, such as the Caisse des Dépôts et Consignations, can also be involved in this process.

The eGovernment strategic plan also aims at carrying out experiments within partnerships between the public and private sectors. According to the Government, civil service bodies and public contracts may sometimes be unsuited to the method of developing eGovernment. New forms of partnerships between the public and private sectors must be sought in this area.

However, the public/private partnership raises a certain number of problems in the field of eGovernment. In fact, according to the Government, the following conditions must all be met for a private service provider to operate within a public information system:

- durability and stability of the firms involved,
- independence of the software tools used,
- certainty that personal data will not be used for commercial purposes,
- strict confidentiality clauses.

As an illustration of the paths that the Government intends to explore, the plan to strengthen the security of State information systems requires the setting up of qualification procedures for private service-providers with regard to security of information and networks, in particular consultancy and audits. It also provides for increased involvement of private partners in the work of evaluating and certifying security products.

The ADAE will carry out a comparative study of public/private partnerships at European and international level. Depending on what decisions will be taken, it will make contractual standard clauses available to the administrations which will be specific to the services under consideration and the categories of public contract.

Lastly, the PSAE aims at pooling resources in order to minimise public service expenditure. The multiple services that should be implemented require a considerable initial outlay, while the benefits will only emerge gradually. To be able to afford this investment within tight budget constraints, the Government intends to rationalise its ICT expenditure and make use of the beneficial effects of pooling. It will also ensure that the regional authorities and the welfare institutions are involved in this procedure.

**Within the civil service**

The Government has decided that the widest possible pooling will be organised between its departments, and summed it up in three principles: ‘if it has been done once, don't do it again; do everything possible jointly; make sure that what has already been paid for by public money can be reused at no additional cost’. This pooling will first of all concern across-the-board subjects, such as the definition of the terms of reference and standard or the setting up and operation of infrastructures (IT networks, coding management infrastructures, operation of common technical platforms, etc.). It will also cover projects for similar services led by State services, designed for users (registering for civil service recruitment, etc.) or for the departments themselves (human resources information system, civil service card, Solon project for the preparation and monitoring of legal texts, dematerialisation of public contracts, etc.).

The ADAE, acting jointly with the ministerial departments, is responsible for proposing, actions to be implemented in this context. For each project, a partnership between the ministries involved can be set up by the ADAE.

These joint projects will be funded by the contributions of the ministries involved, which will have a generous new fund, the ‘Interministerial mutualisation fund’ (FIM), which will
replace the interministerial modernisation fund. Thanks to this device, and in view of the issues for citizens, businesses, civil servants, and the administration, it has been decided that, as far as the State is concerned, the investment budget allocated to the development of eGovernment will be constant. In other words, the cost of the resources required to carry through a project within the framework of eGovernment is covered by re-using existing tools, pooling of resources, and reallocation of budgets.

Supporting the measures taken by regional authorities in terms of pooling

The pooling of resources will also be a potential source of major economies of scale for the other departments. It will also make it possible to link local services with national applications, a possibility when the number of technical platforms to be connected is in excess of a few dozen.

The representatives of the regional authorities will study, in partnership with the State and the Caisse des Dépôts et Consignations, the possible methods of a such pooling with particular reference to regional experiences. These considerations may relate to the development and setting in place of:

- a technical platform of on-line services made available to citizens via the websites of the regional authorities who want it, in particular the smallest ones. They will then have access, cheaply, and without making any major investment, to the infrastructures required for the high added value services of eGovernment for citizens, associations and businesses.

- a common infrastructure which can be used by regional authorities for their own needs. These joint services will enable authorities who so wish, regardless of their size, to dematerialise exchanges with their partners, (government departments, other authorities, NGO, etc.) at a reasonable cost and without having to make any major investment.

This pooling will allow authorities who so wish to focus their efforts on improving face-to-face reception at their counters, training officials in the revised procedures and tools made available to them, and possibly developing new services.

This pooling requires regional authorities, in particular the smallest ones, to be aware of the solutions available and current projects, and be able to raise their expectations and become aware of their constraints. The necessary exchanges of information will be carried out through the regional agencies, where these exist, and by representatives of the State at local level (correspondents in charge of ICT with the Regional Préfects and correspondents designated by the Préfect in the Département). The ADAE will provide information by publishing local projects and services on its website. In addition, it will make the monthly working party permanent by bringing together local correspondents and representatives of regional authorities.

Supporting and extending pooling within social security institutions

The very high level of IT expenditure by the various bodies in the health and welfare environment means that this sector must pool resources and prepare common services.

The Government will ensure that social security organisations continue and extend the actions they have undertaken for the development of common services supported by common investments, like the example of SESAM-Vitale or net-enterprises. In particular, the State will ensure that the services proposed are not duplicated and that no specific offer of service is launched or maintained by an organisation when a common offer exists. This is conditional upon clear understanding by the users of the offer of service, and prevents redundant expenditure.

Similar considerations apply in the health sector, in particular in hospitals.
2.2 Mapping of eGovernment strategy for different types of benefits

On 9 February 2004, the Prime minister presented the government’s new strategic plan for the development of e-administration, ‘ADELE’ (ELEctronic ADministration 2004/2007). With the 140 concrete measures of this plan the government wants e-administration to become a major tool of the State reform (http://www.adae.gouv.fr). The e-administration is defined in the following way: the users should no longer have to move from one counter to another. Electronic procedures of all ministries should be centralised. E-administration should also enable different administrations to communicate to each other some information concerning citizens, with the agreement and under the control of the concerned person. The e-administration is not limited to the Internet. Online services must of course be developed, but those electronic services must also be available through other channels such as an interactive terminal, a phone or face-to-face contact with a civil servant.

The ADELE project plans the allocation of 1.8 billions euros for 2004-2007, and the aim is to reduce by 5 or 7 billions euros the annual public budget from 2007 onwards. This means that the Government is expecting 7% to 10% productivity gains (annual State expenditure amount to 70 billions euros).

Controlling public expenditure is now considered to be a government priority. The emergence of eGovernment is seen as a mean to increase efficiency in all areas of public spending, and to improve services for the users. Even though eGovernment is regarded as a major source of savings, the potential savings and increased efficiency that should be generated by it are still very uncertain. Estimates are very crude, and ex post analysis of productivity gains is very difficult since these gains are often vague, buried under major operating expenses, or immediately reallocated (new tasks, increased flexibility of management at local level, etc.).

Some departments have carried out detailed studies on the increased productivity arising from online services. For example, a local authority (Conseil general des Yvelines) has studied the impact of setting up an online procedure for issuing and renewing the Council’s transport cards; in addition to the improved service for the users (speeding up of issue, bringing forward renewals, simplification in the event of change of district, etc.), the district operators of the welfare action district centres (CCAS) have also benefited from more comfortable working conditions (reduced mailbag, ergonomics of the online service, speed of handling cases, reduction in paper) and are now requesting other similar tools. In fact, for a project which cost 75 k€ to set up, plus a subsequent 20 k€ in annual running costs, the savings for the Council have been greater than expected: 25,000-30,000 fewer photocopies per annum, 2,000 fewer telephone calls, 7,500 fewer cheques to be processed, 8,000 fewer registered letters a year, a reduction of 40 to 50% in the number of storage boxes, and, in the long run, the whole process will be handled by one part-time job on the Council instead of three. The initial investment paid off in one year instead of the expected three. The advantage for the users is just as real, since the time taken to issue transport cards has been reduced from one month to 3 days. This example illustrates the variety of sources of savings, and also the need to redefine processes rather than only dematerialise existing procedures. Thus, the Inspection Générale des Finances (Finance Inspectorate) and the Cour des Comptes (Court of Accounts) consider that the savings linked with redefining the procurement function within the departments, combined with dematerialisation of exchanges, are between 5 and 10% of the 100 billion euros public expenditure, i.e. between 5 and 10 billion euros savings per annum.

Another example, from the CNAV, shows that the cost of an online procedure is 100 times cheaper than the cost of a ‘paper procedure’.

Some special tools have also been developed to assess the added value created by e-administration projects. The Mareva method (Méthode d'analyse et de remontée de la valeur) and a software program have been specially developed for the ADELE projects, on the basis of the experiment of the Copernic program (Ministry of industry and finance) and examples from the private sector. The Mareva method aims at checking all aspects of a project: its strategic and economic success, an evaluation of different kinds of risk.
(human/technical/financial, for both civil servants and users) and the follow-up of expected results. For each project, the impact on the administration concerned, the gains for the user, the compulsory aspect (political, technical, and statutory) and the risks linked to the implementation will be evaluated. Through Mareva, the Ministry of Civil Service and State Reform has assessed that the direct productivity gains of the 40 most important projects of ADELE should amount to 490 millions euros for 2004-2007, whereas the investment amounts to 188 millions euros (of which 148 millions are funded by the ADAE budget). For 2006, the budget amounts to 73 millions euros, for 153 millions of expected savings. Just from the development of an online service for notifying changes of address, the government expects to save 2.8 millions euros.

Among the most important services of the ADELE project, some aim to simplify the citizens’ everyday life: the phone number 3939 ‘Allo, service public’, the personalised civil service (mon.service-public.fr), the service for signalling any change of address, and the electronic national identity card. Some other services affect the different fields of welfare more specifically.

### 2.2.1 Unemployment

The ADELE website (‘http://www.adele.service-public.fr’) lists all public websites available for people who are looking for a job, with information about both job offers and unemployment insurance:

Unemployed people can create their own page on the web site of the national employment agency (ANPE, ‘Mon espace emploi’). They can get some offers directly by e-mail, apply online, register a cv online and send it directly from the ANPE website, as well as managing the job offers received.

People can apply for jobs in the State administration that are posted on the site of the Ministry of civil service and State reform. They can register for some examinations for becoming civil servant in the Ministry of civil service and State reform, the Ministry of finance and industry (for customs officers), the Ministry of defence, the ministry of foreign affairs (employment in an international organisation for example), or in local government.

The site of the unemployment insurance (UNEDIC) contains many online services named UNIdialog. Once they are registered, and through their personal identification number, unemployed people can declare their employment situation and all other changes on a monthly basis (address, sick leave, employment) online. They can also consult their own personal file (amount of allocations, date of payment), and download their certificate. All this information is automatically transmitted to the national employment agency (ANPE).

### 2.2.2 Health-related benefits

One of the objectives of the current reform of the health insurance system is to reduce public spending by 15 billions euros. 3.5 billions of these economies should be the outcome of a better control over health expenditure (introduction of personal medical file, better coordination of health care expenses, spreading of good practices).

Improvements should be made to the electronic Vitale card, which has existed since 1998, with the development of new functions (firm authentication, encryption, digital signature). The renewed Vitale card should be implemented in the near future.

The health insurance funds offer online services concerning the attestations of rights, the declaration of theft or loss of the Vital Card, the modification of the personal and/or administrative situation and statements sent by e-mail.

The complete development of the personal medical file should be achieved in the middle of 2007.
A new thematic website for health and social security issues has been created (‘securite-sociale.fr’). This offers information on old age and sickness benefits, family benefits, and work injuries, on the basis of a very simple set of questions.

### 2.2.3 Old-age pensions

On-line services (http://www.adele.service-public.fr) are offered by the social security funds and the national retirement funds (Implementation: 2004 - 2008): access by wage-earners to their contribution accounts (for their whole working life) and simulations of pension rights.

### 2.2.4 Family benefits

Online services are offered concerning financial support for child care (http://www.adele.service-public.fr). Those who employ a childminder at home can register with a special service called Pajemploi, an online registration for the child benefit registration system (PAJE). Using their personal password, people can ask any questions by email about the amount of contributions, their declarations, the employment attestation of their employee and their own fiscal annual attestation (which must be linked with their tax declaration). People can also choose to receive online the detailed account of their monthly contributions and their annual fiscal attestation. All information is secure and confidential.

The family allowance office offers online services on 'http://www.adele.service-public.fr' which offers direct access to the files (payments, attestations), online resources declaration. Students can also fill in online the application form for housing benefit.

Online services (http://www.adele.service-public.fr) make it possible to calculate the increase of alimonies.

A website with general information for families has also been created (‘points info famille’ covering child welfare, child minding, handicap, adoption, marriage counselling, social security, etc.).

The ADELE program is also expected to create an Internet platform for registering any change in the family situation.

### 2.3. In–depth case study examples

#### 2.3.1 VITALE

**Description of the project**

Vitale 1 was originally a tool dedicated to the improvement of health administration. The innovative project consisted in the dematerialisation of the forms given by the doctor to the patient in order to modernise, simplify and accelerate the exchanges thanks to new technologies. Before the implementation of the Vitale project, insured people had to make an advance payment and were reimbursed after having forwarded these paper forms to the Social Security Fund. With the Vitale card, the aim was to make health reimbursements quicker and more reliable.

So, since the 1st November 2004, the electronic forms, exchanged between health professionals (doctors, chemists) and the health insurance funds, operate via a new remote transmission system: the SESAM-Vitale network.

With the ongoing evolution of the Vitale card, the aim is now to incorporate into the card more functional, storage and security functions (firm authentication, encryption, digital signature) and allowing for possible new uses of the card. The second version of the card will enable insured people to get the reimbursements from the health and Social Security funds at the same time, as well as from their supplementary health insurance scheme. The
new card will contain all the information needed for this simultaneous reimbursement. According to the organisation in charge of the development of the Vitale card, this new network should significantly reduce the cost of exchanges between health professionals.

Some features of the new functionality are still under study for the next version of the card. However, it is certain that Vitale 2 will be more secure and will contain a photo of the insured person, and a special section for emergency information (this point comes from the recent law passed in 2004 concerning the health insurance system). The photo is intended to avoid misuse and fraudulent uses of the card.

However, some questions still remain: should the photo be digitised or not? How will the photos be collected? The content of the emergency section has also not been established yet; a special decree will have to specify the nature of this emergency information, after a previous notice of the CNIL. The CNIL ("Commission Nationale de l’Informatique et des libertés") is a public institution in charge of supervising the use of personal data in electronic files in order to guarantee the protection of these data and to prevent any misuse of personal information. Last but not least, the link between the future personal medical file ("Dossier Médical Personnalisé" or DMP) and Vitale 2 (which is the access port to the DMP) is also not completely decided as yet.

Management and financing of the project

A special structure has been created to develop the Vitale card, the economic interest group Sesam-Vitale (GIE Sesam-Vitale).

The GIE Sesam-Vitale is a company providing services. Its missions are: technical expertise, project management and promotion of the Sesam-vitale program. The GIE Sesal-Vitale has been created by several actors of the health insurance system to develop common solutions adapted to all its members’ needs (the obligatory social security fund and the supplementary insurance schemes). Health professionals are represented in the executive authorities of the GIE Sesam-Vitale.

The Sesam-Vitale program links together 48 millions smart cards, a telecommunications network, 230 health software programs, 200,000 smart-card readers, 25 servers and 18,000 update points for the cards.

The GIE Sesam-Vitale cooperates with many partners from high technology and services industries including smart-card companies and industry associations, software editors for health professionals and service providers.

The cost of the Sesam-Vitale program is borne by the national health insurance funds. The latter is a private structure which is under the joint administrative supervision of the ministry in charge of Social security and the Ministry of Economy and Finance. Since 1996, there has been an agreement between the State and the national health insurance funds. This agreement details long term management targets and actions to be carried out. In addition to these contractual agreements between the State and the national health insurance funds, the Parliament or some specific administrative bodies have the possibility to carry out an audit of the funds, especially about costs issues.

Outcomes and impacts on participants

The Sesam-Vitale program has made it possible to reduce significantly the waiting period for insured persons to be reimbursed. The indicators show that this waiting period has decreased from 23.5 days (2002) to 15.9 days.

The Vitale-card now links 207,506 health professionals to the national health insurance funds. It has significantly reduced the number of reimbursement paper forms given to patients by doctors. It has also improved the payment terms for health professionals. Therefore, although many doctors’ trade unions were at first opposed to the Vitale-card, they finally admitted that it generates a better quality of service. Lastly, with the decrease in the number of paper forms processed by the national health insurance funds, costs have been reduced.
Official evaluation

In 2004, a report on the computer costs of the national health insurance fund was published by two public inspection bodies (IGAS and IGF). This audit was linked to the renewal of the agreement between the State and the national health insurance funds for the years 2004-2007.

This audit stated that more economical scenarios should be promoted for the evolution of the Vitale card. Nevertheless, the Sesam-vitale program was undoubtedly considered to be a great success. The audit also pointed out that some changes had to be further explored, such as for example the introduction of electronic prescriptions. Finally, the technical components and the concrete details of the implementation of the Vitale card were considered to be insufficiently detailed.

Costs

Very recently (June 2005), a commission in charge of auditing the Social security funds carried out an enquiry into health computer costs. Two Members of Parliament questioned members of the national health insurance funds’ executive staff in depth. One of the issues addressed in this hearing was the evolution of the human resources management of the national funds in relation to the development of the computer system. On that issue, the managers insisted on the expected productivity gains: one out of every two people who retire in the next few years will not be replaced (3,200 retirements for the period 2005-2009).

At the moment, it is still difficult to estimate the costs of the new Vitale card (Vitale 2). It should be included in the computing costs of the national health insurance funds, which will be fixed in the next agreement with the State (at the end of this year). The issue of the cost of the Vitale 2 is a rather difficult and controversial one. According to the audit assessment, the development of Sesam-Vitale 2 and all actions of the group GIE Sesam-Vitale should cost between 400 and 500 millions euros. These figures are not very different from the ones estimated by the national health insurance funds. This means that the project should cost approximately 100 millions euros a year during the next 4 years (the period for which the agreement between the State and the health insurance funds will be concluded). But this amount is still under discussion.

For the electronic card only, the public agency for e-administration (ADAE) estimates that each card should cost 4 euros (60 millions cards should be distributed in the years 2006-2007).

Lastly, the cost of the personal medical file - the DMP is closely linked to the Vitale 2 development - will depend on the specifications that should be set very soon by the public interest group (GIP) in charge of the DMP. According to the Government, the DMP should make it possible to reduce hospitalisations due to medicine abuses (128 000 estimated hospitalisations a year). Another aim is to avoid redundant medical examinations (today, 15% of them are duplicated, at an estimated cost of 1 to 1,5 billions euros, according to the national health insurance funds). However, the primary aim of the DMP is not to reduce costs but to improve the quality and the coordination of medical care.

SWOT-analysis

Despite the complexity and the diversity of the French welfare system, the experience of the Vitale card shows that it is possible to simplify the delivery of medical services and, at the same time, to improve the quality of the service to the insured people. Some consider that this is the main successful result of the project.

Strengths

One of the strengths of the Vitale project came certainly from a strong will of the State to develop the Vitale Card, and to create all organisational tools needed. The State has also hired senior civil servants with high computing skills, in order to be the real contracting authority of the project from its beginning, in the 1990s.
Furthermore, the State is represented in all structures where the project is discussed (the GIE Sesam-Vitale in charge of the users’ ‘green card’, the public interest group - GIP - in charge of the professional card thanks to which health professionals can exchange information).

The agreement, already mentioned, between the State and the health national insurance funds, introduces clear objectives, strong requirements for results and a continuous follow-up of the project.

The Vitale 1 is now presented by the health ministry as technically obsolete. Vitale 2, that must replace it, is one of the major tools of the health insurance scheme. This is undoubtedly, as for Vitale 1, a major strength of the project.

**Weaknesses**

However, the State and the health national insurance funds have not yet managed to reach an agreement on the structure of the information system of Vitale 2 (we come back on this point later).

The main weakness of Vitale 1 will remain for Vitale 2: some health professionals (especially doctors) are reluctant to make use of this electronic card. One reason for this is that some professionals consider that this project might threaten their independence. But many health professionals are also opposed to the new procedure (‘classification commune des actes médicaux’, i.e. a ‘medical treatment common classification’) that should be introduced via Vitale 2.

**Opportunities**

With Vitale 2, there is a new opportunity to enhance the quality of medical practices via the creation of the personal medical file (DMP). Vitale 2 should allow for a better supervision of medical treatments to ensure that these treatments are justified and in line with good medical practices. To achieve this goal, a new organisation of the whole welfare system is needed. This will require that all actors (public institutions, health professionals, private funds in charge of the management of the welfare scheme) take part to the current debates. The high cost of the project also justifies the role of some independent authorities (special commission or public inspection bodies) for auditing the project.

**Threats**

The main question concerns the delay in the implementation of the Vitale 2. If this delay was the consequence of major difficulties between the project’s partners in reaching an agreement on the general orientation of this new version of the Vitale card, this might be a serious problem. The fact is that the invitation to tender for the supply of the new smart-cards, which was published in April, was stopped in July. Too many questions still remain about the final content of Vitale 2, and the practical steps of its implementation.

To answer this question, it is also necessary to have a clear idea of the role of the personal medical file in the future project. In this regard, the security and the confidentiality of the personal information are key issues. Since this personal information will be stored on private servers, some wonder whether this might not be a threat to individual freedom.

### 2.3.2 CEDRE

**Description of the project**

Since June 2004, the websites of the basic and supplementary pension schemes for salaried workers (www.retraite.cnav.fr, www.arrco.fr, www.agirc.fr) have provided access to a simulator named CEDRE (Calculateur Expert de Droits REtraite). This simulator makes it possible to calculate the pension that the workers should receive when they retire. It calculates the amounts of both the basic and supplementary pensions.
This tool is very user friendly. It just asks for a few questions (age, sex, date of first job, first wage and current wage) and requires choosing a profile for the worker’s career. Individuals may choose between four profiles. With this information, the simulator computes the pension that should be served at 60, 62 or 65... years according to the choice of the worker. At this stage, CEDRE is mostly useful in order to understand the rationale of the pension system, but it can also be very useful to take some decisions concerning his/her professional life. The accuracy of the result will of course depend on the assumptions made. At present, CEDRE only works well for typical careers and cannot be very useful for atypical workers and/or workers who are self-employed.

CEDRE is recommended for workers below 54. For older workers, it is possible to get estimates based on actual wages that are much more accurate.

The objectives of the CEDRE project are twofold:

First, it provides simulations of the future pension that could be received by the workers;

Second, it also explains the functioning of the pension system in a very pedagogic way. The simulator gives detailed explanations on the different parts of the total pension (basic and supplementary). When a worker simulates various ages of retirement, it is also a good way to understand the consequences of various choices. During the whole process of simulation, the worker is provided with various pop-up that can explain the legislation or give more detailed information.

Target groups

For the moment, the CEDRE project is only intended for wage earners working in the private sector. It works only for workers who have spent their whole career in this sector. These groups represent around 70% of the workforce. This is a high estimate, since the simulations do not give any reliable result for atypical workers, i.e. for workers who might have experienced unemployment spells and/or who have had a discontinuous career (for instance parents - in fact mainly women - who stopped working for a few years in order to raise children).

Project management and financing

The CEDRE project has been developed by the staff of the main pension funds, the national basic pension fund (CNAV) and the supplementary pension funds for private sector workers (ARRCO and AGIRC).

The national basic pension fund (CNAV) has also developed some services for workers. All people within the ‘Regime general’ can check their contribution period in this ‘regime’ on a website. This information is useful to find out at which age the worker is eligible for a full pension. However, it does not provide any detail on the level of this pension. For the moment, the CEDRE project does not make use of the information.

The website is hosted by a private company.

Outcomes and impacts on participants

Because the CEDRE project is a rather new one, there is no detailed evaluation of the outcome of the project. The only figure available is the number of people who have visited the website. In September 2005, it was estimated that the number of visitors of the website had reached over one million.

Costs

Because the project has been realised by the staff of the pension funds, it is not very easy to get a precise estimate of its cost. The experts who have developed the simulator estimate that 150 person-days were necessary to achieve the project.
The only monetary cost is the subcontracting cost linked to the maintenance of the website which is hosted by a private company, Atlantic Valley.

Problems and difficulties
Experts who have developed this project faced two main difficulties. The first difficulty was to make clear to the users that the simulator could deliver some simulation of the pension that should be received in the future, but that this calculation should not be taken as an estimate of the actual pension that could be received. In other words, it was necessary to draw attention to the limits of the project. This has been addressed by adding many pop-ups on the website to warn users.

Another difficulty was to keep the tool as simple as possible and to gather, at the same time, enough information to achieve good simulations. After the tests that have been carried out in order to finalise the project, the solution was to ask only the first wage and the current wage, and to give the workers a choice between four career profiles. According to informal discussions with some users, this seems to be a good compromise.

Main advantages of the project
The main advantages of the project are the following:

- Despite its limitations, the project covers a large part of the working population (70%);
- The simulator is very simple and user-friendly;
- The results of the simulations are computed very quickly;
- Details about the results may be obtained step by step, allowing for a very gradual learning of the functioning of the pension system (which is rather complex in France).

Future developments
CEDRE is a first step towards a more elaborate simulation tool. The major improvements that are foreseen are:

- to better simulate atypical careers;
- to collect more detailed information about the career;
- to offer a wider range of choices for the future.

CEDRE should become an essential part of the information system on pensions. It will thus greatly contribute to one of the objectives of the law on pensions passed by the French parliament in 2003. According to this law, workers should have the right to information concerning their future pensions.

Other information systems will supplement the CEDRE project. As a consequence of the 2003 law, a public organisation has been set up in order to provide workers with detailed information on their pension rights. This public body (GIP 'Droit à l’information') should provide workers with some specific information:

- a summary of the individual account (RSI, ‘Relevé de situation individuelle’);
- a global estimation of the future pension (EIG, ‘Estimation indicative globale’).

The objectives of the Government for delivering this information are summarised in Table 2.1.
Table 2.1 Government targets for RSI and EIG

<table>
<thead>
<tr>
<th>Date</th>
<th>Age of the workers</th>
<th>RSI</th>
<th>EIG</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.07.2006</td>
<td>Upon request of the worker</td>
<td>50</td>
<td>57</td>
</tr>
<tr>
<td>01.01.2007</td>
<td>45 and 50</td>
<td>56 or 57</td>
<td></td>
</tr>
<tr>
<td>01.07.2008</td>
<td>40, 45 and 50</td>
<td>55 or 56</td>
<td></td>
</tr>
<tr>
<td>01.07.2010</td>
<td>35, 40, 45 and 50</td>
<td>From 55 up to the age of retirement</td>
<td></td>
</tr>
</tbody>
</table>

Source: CEDRE

In addition to these objectives, the public body in charge of the information of workers will also develop a universal simulation tool that is intended to cover all workers (private sector workers, civil servants and the self-employed). This simulator will deliver information very similar to that currently computed with CEDRE.
3. GERMANY

3.1 The German government’s general eGovernment strategy

In recent years the German government has made great efforts to simplify and improve the government’s administrative processes in a comprehensive way by means of information and communication technology. For this purpose the first nation-wide eGovernment-initiative ‘BundOnline 2005’ was launched in September 2000. This initiative obligates the German Government to offer all services of the Federal Administration that are Internet-compatible online. An implementation plan concluded in November 2001 aims to reach this goal by the end of the year 2005. At the time of planning, the costs for implementation were estimated to reach roughly 1.65 billion Euros in the period between 2002 and 2005.

In the meantime two more major nationwide governmental initiatives have been added. First, the eGovernment project of the Federal Ministry of Economics and Labour, ‘MEDIA@komm’ and ‘media@komm-transfer’. For the initial period from 2001 to 2003 a nation-wide cities’ competition (‘MEDIA@komm’) was put out to tender for large communal pilot projects developing innovative local eGovernment, funded with around 8 million Euros by the Bund and roughly another 7 million Euro by the participating companies. At the moment the results obtained there are being advanced and diffused by the follow-up project MEDIA@komm-transfer by being applied and adapted in another 20 model regions (transfer regions). Those 20 regions were chosen by an independent jury from 100 candidates participating in a communal competition. By merging the communal and regional initiatives into a Länder-wide eGovernment network, the transfer of best practice examples and know-how are facilitated, standards are further developed and the process of self-organisation for further extension is initiated.

As a latest and most important initiative the German government initiated ‘DeutschlandOnline’ (‘GermanyOnline’) on the basis of a decision taken by the heads of government of the Bund and Länder in June 2003. By this initiative the German government bundles and standardises all the existing projects, initiatives and activities to spread eGovernment. The above-mentioned federal initiatives ‘MEDIA@komm-transfer’ and ‘BundOnline 2005’ are integrated in this initiative.

The initiative ‘DeutschlandOnline’ aims very high, since the intended simplification and standardisation of administration processes by the instrument of IT presents a huge challenge because of the very high heterogeneity of the ITscene of the Bund, 16 Länder, more than 300 regions and 13,000 communes in Germany. At the moment, the Bund and Länder operate more than 7,000 Internet portals and access points, the majority of them still not integrated.

For this reason the initiative DeutschlandOnline does not aim to create a fully integrated eGovernment service in Germany until 2010. In June 2004, the Federal Chancellor and the governors of the Länder decided upon the following primary four mandatory targets by 2008:

- By the end of 2005 all authorities in Bund, Länder and communes have to adopt access to electronic communications.
- By the end of 2006 all DeutschlandOnline projects decided upon in 2003 shall be available on the Internet.
- By the end of 2007 all authorities will also mutually communicate electronically
- By the end of 2008 all adapted administration processes will be available online in Germany.
The fulfilment of these targets, however, was accepted only on condition that budgetary funds are available.

The basis of this decision is a five-pillar eGovernment strategy whose first task is to address twenty mutual and priority tasks. The following five pillars are the basis of the entire strategy decided upon by Bund, Länder and communes and are summarised in Figure 3.1.

Figure 3.1 The Five Pillars of the Initiative DeutschlandOnline (Agreement as of 17.06.2004)

<table>
<thead>
<tr>
<th>Pillar I: Service Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bund, Länder and communes electronically provide the most important administration services to citizens and organisations. Priority is given to user-intensive services and services with a high bureaucratic effort for organisations.</td>
</tr>
<tr>
<td>Main pilot projects are, e.g.: registration and civil status affairs, official statistics, Federal Act on Promotion of Vocational Training (Bundesausbildungsförderungsgesetz - BAföG), geological data and construction trade.</td>
</tr>
</tbody>
</table>

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<tr>
<th>Pillar II: Association of eGovernment Portals</th>
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<tbody>
<tr>
<td>Bund, Länder and communes create an association of their Internet portals. This harmonises and cross-links the structure of about 7,000 existing offers. A planned online competency-finder then supports organisations and citizens to rapidly find diverse authorities via the Internet when needed.</td>
</tr>
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<tr>
<th>Pillar III: Infrastructures</th>
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<tbody>
<tr>
<td>Bund, Länder and communes create mutual infrastructures to facilitate their data exchange.</td>
</tr>
<tr>
<td>For this purpose, the utilisation and expansion of, for instance, electronic signatures will be developed within the scope of the Digital Signature Act on the basis of uniform standards.</td>
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<tr>
<th>Pillar IV: Standards, Data and Processing Models</th>
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<tbody>
<tr>
<td>On the basis of a mutual project establishing eGovernment, Bund, Länder and communes will create defined standards, data and processing models for highly efficient communication and transaction structures. In particular, XML-based technologies will be utilised as for this purpose.</td>
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</tbody>
</table>

<table>
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<tr>
<th>Pillar V: eGovernment Co-ordination and Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bund, Länder and communes will improve the co-ordination of eGovernment by setting up a steering group in the scope of DeutschlandOnline. This will accelerate the transfer of exemplary eGovernment applications.</td>
</tr>
</tbody>
</table>

Source: DeutschlandOnline

An interesting detail of this initiative, especially within the European context, is the agreed upon procedure in accordance with the so-called Principle of 'some for all'. According to this principle mutually decided projects are organised on the basis of a regional division of labour, i.e. each project, as a rule, is developed by only some Länder and communes and then adapted by the others. The nine projects of Pillar I: Service Portfolio illustrate this principle as an example.

The online procedures of Pillar I 'Service Portfolio' to be developed by Bund, Länder and communes in accordance with the Principle 'Some for All'
Records of justice (responsibility of North Rhine-Westphalia/Bund)
Records of organisations (responsibility of Bavaria and Baden-Württemberg)
Registration affairs (responsibility of Bavaria)
Civil status affairs (responsibility of City of Dortmund)
Official statistics (responsibility of Bund)
Motor vehicle affairs (responsibility of Baden-Württemberg)
BAföG (responsibility of Baden-Württemberg)
Geological data (setup of overall information systems concerning authorities; opening up of new markets for geological data; responsibility of North Rhine-Westphalia)
Construction trade (responsibility of Hanseatic city of Bremen)

Thus one or more regional partners are in charge of each project, as for example Bavaria and Baden-Württemberg for online business records; the other Länder then have to adapt and adopt this system. The German government considers this principle of regional division of labour for the development and implementation of eGovernment standards and has proposed that what is practised here at a national level could offer a possible model for an equivalent co-operation on European level.

The first results hitherto of overall eGovernment co-operation on which the further development of DeutschlandOnline can count on are summarised Figure 3.2:

![Figure 3.2 First results of the initiative DeutschlandOnline (status: December 2003)]

Bund, Länder and communes agreed on the introduction of electronic procedures in the field of wages tax.

With support of the Länder, the Bund has realised an authorities’ database and a communities search within the administrations’ portal www.bund.de. Individual Länder have already linked their administrations’ portals to the services’ portal of the Bund.

The Bund-Länder-portal www.statistik-portal.de provides central access to basic statistical information.

TESTA Germany is a communications platform accessible for all Bund, Länder and communes.

Bund, Länder and communes have agreed on the first mutual XML standards. As an example, XML will in future offer a continuous data exchange between the registration offices in the Länder.

The OSCI-standard (Online Services Computer Interface) was agreed upon as a nationwide standard for the authorities’ secure and signed transactions. The OSCI management in Bremen co-ordinates the corresponding projects.

Bund, Länder and communes have worked on a mutual project establishing eGovernment and adopted it. SAGA, the German eGovernment standard, was also included.

Bund, Länder and the communal area have opened a project office for the coordination of eGovernment projects with mutual relevance at the Central Office for Data Processing in Hess.
3.2 Impact of the Government’s IT activities within different benefit areas

The following five areas of the government’s welfare services have been investigated by the LAW project: unemployment, health-related benefits, old-age-pensions, family benefits and guarantee of sufficient resources. Basically all five areas are affected by the above mentioned comprehensive eGovernment initiatives of the German Government. Especially in these welfare areas the general efforts to improve, accelerate and effectively manage the administration processes via the current possibilities of IT have had a positive effect since a large part of activities performed here are typical telematics activities such as: data and information exchange; filing, registration and compensation of demands; administration of transfer services, etc. For this reason a separate description of effects of the current IT and eGovernment development in specific welfare areas gives little new understanding.

Leaving aside these general issues, there are, however, two areas where the use of modern IT applications exceeds the ‘pure’ simplification and effective management of administrative action and creates new services, that show a qualitative alteration for the citizen. These are the areas of unemployment and health-related benefits. In the first field, especially, online accessible job exchanges have created a new quality of service provision. In the latter the introduction of the electronic health card has brought about a qualitative change. Both of these fields are described below.

3.2.1 Case-study 1: the Federal Employment Agency’s relaunch of its online job exchange

One of the most important services the government administration renders to the unemployed - apart from the entitlement to and payment of benefits and the awarding of qualification measures - is placing people into employment. In Germany the government performs this important service through its 180 public employment agencies as long as the unemployed are entitled to unemployment benefits (Arbeitslosengeld I). As a rule, the period of eligibility for claiming this benefit is (the first) 12 months. With regard to long term unemployment in Germany the communes or, since beginning of 2005, the job centres financed by the communes in co-operation with the Unemployment Agency have been in charge of both the granting of means tested unemployment assistance (Arbeitslosengeld II) and further efforts to bring the unemployed persons into employment.

For many years this governmental employment exchange has been supported by various software programmes, database systems and online accessible job exchanges. However it was burdened with a legacy of diverse and incompatible IT systems, many of them 30 years old. In the course of recent reforms of the employment market (Hartz Reform) that included a comprehensive re-organisation of the Federal Employment Agency (Federal and regional headquarters, local agencies and JobCentre), a very ambitious IT project to modernise the old online job ex-changes was launched. A completely new and integrated system, the so-called ‘virtual labour market’ (Virtueller Arbeitsmarkt - VAM), was planned to replace the old co-existing systems. VAM is part of the eGovernment initiative BundOnline 2005 launched by the German Government.

The virtual labour market concept

Soon after Federal Chancellor Schröder introduced the new concept on the C-BIT 2002 the virtual labour market won the German eGovernment prize in the category ‘administration-citizen’. This concept comprises a web-based data base that is available to all labour market partners for free, especially to

- All registered job seekers
- Employers / organisations
- Placement officers of the Federal Agency for Labour
Private job agents
Temporary work agencies
Other, commercial job exchanges

On its introduction in December 2003 VAM was seen as the largest job exchange in Europe, expected to handle 600,000 vacancies and roughly 2 million applicants. At present (status: April 2005) VAM already offers roughly 384,000 vacancies and reaches about 2.7 million job seekers. The vacancies offered by the 400 active commercial job exchanges in Germany, however, account for only 82,500 job offers.

The virtual labour market includes altogether four elements:

- Internet appearance
- Online job exchange
- Job robot
- Internal exchange, counselling and information systems (Vermittlungs-, Beratungs- und Informationssystem – verBIS)

The job robot searches the Federal Agency’s job exchange as well as the Internet and evaluates roughly 420,000 homepages of organisations per night. However, it does not access the vacancies offered by commercial job exchanges and newspaper publishers. So far, the results of the job robot are only available to staff of the Federal Agency.

Besides its comprehensive linking with the other mainly commercial job exchanges, the detailed internal databases of the Federal Employment Agency and the integration of the total system into the exchange activities of local employment agencies and JobCentres, VAM is especially distinguished by two innovative features.

The first of these features is a matching function. In order to support the process of exchange and to adapt the integration into the labour market to the altered conditions the virtual labour market does not employ a classic search machine to match job seekers and job offers but a matching procedure. The approach is completely different from traditional searching techniques. The result of a classic search refers to a yes/no system, i.e. all data fulfilling the search criteria are listed, other data not completing the search criteria are not displayed. The matching employed by the VAM system, by contrast, shows how close each data gets to the searching condition. When considering similarities, more criteria can be included in the matching process.

For example, a client who searches for employment as a graduate chemist in Nürnberg might be offered a job vacancy as an environmental chemist in Nürnberg or as an inorganic chemist in Fürth as well. This ensures that some results are available in most cases. Where a comparatively high numbers of criteria are involved (as in the virtual labour market) a more stringent set of criteria would be likely to produce a null result for many clients; this way, a wider range of choices can be considered.

The second innovative feature is the use of soft skills. When drawing up the profile of clients and vacancies it is not only the usual ‘hard’ skills such as knowledge and abilities, mobility, etc. That are are included and considered by the matching. Also, and, at least as far as the government’s job exchanges are concerned, for the first time, personal and social competencies, the so-called ‘soft’ skills, are also taken into account for both the job applicant and and employer’s profile. The employer can choose from a list of 36 soft skills to describe the employee he searches. For example, the menu options include competencies such as:

- Perceptive faculty
- Flexibility
- Sociability
- Customer orientation
The job seeker also has a differentiated catalogue at hand to describe him or herself. The system automatically proposes abilities corresponding to the educational/ professional title choosing from a comprehensive catalogue of competencies. This catalogue of competencies defines features of abilities that are characteristic for the job according to the jobseeker’s educational and occupational capacity. The list of competencies can be extended by individual occupational and cross-professional features that can be chosen from the entire catalogue. And individual features can also be blotted out. A free-text entry, however, is not possible since personal abilities are included in the matching process. For each feature the degree of ranking can be chosen in order to obtain an individual application profile by defining features and their corresponding ranking.

The demand of the other party is taken into special consideration. If an applicant, for example, searches a job, vacancies are not only displayed in sequence of highest preference, as usual. But at the same time, it is taken into consideration how well the applicant meets the requirements of the employer. Via this bi-directionality, the chances of a successful job exchange are increased.

The introduction process

Despite its evident success in many ways, the introduction of this service was beset with problems.

When the public heard in 2003 that the development and introduction costs would rise from the originally planned 65 million Euros to a total of 165 million Euros and no possibility existed to oblige the appointed company to reduce its costs or to terminate the contract, a considerable amount of criticism was expressed, over an extended period. Added to this the system broke down continuously and important options were not available in the first weeks due to the immense number of accesses in the initial phase.

Because of the enormous rise in costs and the detailed public description and discussion about the deficiencies of the virtual labour market, the supreme federal authority for government auditing in Germany (Bundesrechnungshof) became involved and compiled a comprehensive report on the deficiencies of the scheme. Their report on the virtual labour market especially criticised defects in commissioning, cost control and project steering as well as numerous other deficits in the development of the job exchange.

Since the assessment by the Bundesrechnungshof in July 2004 significant improvements have been made for the virtual labour market. In the meantime almost all planned features are working and the remaining faults are expected to be corrected by the end of 2005, when the new internal data processing system verBIS will be introduced into all Employment Agencies.

Conclusions

The large-scale ‘virtual labour market’ IT project by the German Federal Employment Agency described above as an example for eGovernment in the field of services for the unemployed is very illustrative. It shows that by the use of new IT, on the one hand, a new quality of service is actually possible and can therefore have a positive impact on strengthening the welfare of the individual as well as the entire welfare system. High-performance online job exchanges improve the matching between job seekers and job offerers. On the other hand it demonstrates that the introduction of new IT systems is not without risk. Initial difficulties can cause significant problems in acceptance and the cost-benefit output is very difficult to calculate. The high investment sum of 165 million Euros for the introduction of the virtual labour market since 2003 can at this point by no means be regarded as amortised. So far these costs face no visible effects. Up to now no remarkable success in job exchanges due to the virtual labour market can be seen, neither has there been any evident simplification of administrative processes for the Federal
Agency. Only in the long run is it likely that the great efforts for installing the virtual labour market will possibly pay off.

3.2.2 Case Study 2: The forthcoming launch of the electronic health card

Health care is one of the sectors in which IT deployment is driving a comprehensive process of modernisation. As well as facilitating better services for the public, telematics is also opening up huge potential for rationalisation in the healthcare sector since 20 to 40% of health care services involve communication and data management. This high figure demonstrates the extent of the rationalisation potential which could be economised in the near future, but is currently mainly being wasted.

In some areas of the health care sector, especially general practitioners’ use of the Internet, Germany still has a lot of catching up to do. This rather critical appraisal does not only reflect the LAW project’s point of view, but mirrors the quite prominent German government’s self critical assessment regarding that issue as well. In its brochure ‘Information Society Germany 2006’ (released in 2004) aiming at presenting the current ’master plan for Germany’s road to the information society’, the two Federal Ministries involved recently wrote:

‘Although Germany’s health care system is highly advanced in terms of technology, this sector, which looks after human beings’ most important asset - their health - is prone to overlapping activity, media incompatibility and non-compatible types of documentation. The sectoral structure of our care system is reflected in its IT too. In the German system, each institution, though it may have a totally state-of-the-art solution, stands alone. At the moment, the ‘IT boundary’ often begins where the institution’s boundaries end.’ (p18)

‘This potential [of eHealth] is opposed by considerable introduction problems, as e.g. a lack of standards, as yet a lack of networks between doctors’ consulting rooms and hospitals, financing and investment problems, questions relating to liability and data protection, organisational structures aggravating the introduction of efficient communication processes. It is true that, on the one hand, Germany has a technologically highly-sophisticated health care system. Today computers can increase the efficiency of almost any imaging technique and also extend their potential performance. On the other hand, in the sector occupied with health, the most valuable possession of man, there is duplicate work, discontinuity of media and non-compatible documentation.’ (p. 65)


As a result of this negative assessment of the sophistication of Germany’s current eHealth practices, the German government is now strongly engaged in this sector. It has accepted that the infrastructural conditions for the use of telematics have to be improved, and that important key applications such as the electronic prescription have to be boosted. Great expectations are attached to the introduction of the new electronic health card, which is expected to comprehensively promote the nationwide use of health telematics in Germany. Since the introduction of the electronic health card is the most prominent and promising, but also the most contentious issue of the current eHealth activities, it is being described as Germany’s decisive eGovernment strategy within the health area discussed in more detail below.

The electronic health card concept

The electronic health card is going to be introduced by 1 January 2006. All necessary legal requirements for its launch have been fulfilled. It will become the electronic key to cross-institutional co-operation between the stakeholders in health care, interlinking more than
80 million patients with about 270,000 physicians, 77,000 dentists, 2,000 hospitals, 22,000 pharmacies and more than 300 health insurance funds.

The main features and advantages of the electronic health card being introduced in Germany in 2006 are that it will

- increase transparency in the health care system, as well as securing economic efficiency and effectiveness within the system,
- avoid unnecessary duplicate examinations,
- make it possible to quickly identify undesired side-effects of pharmaceutical products, and
- strengthen data security and enhance the use patients make of their data.

In its function as a second-generation patient chip card, the electronic health card is going to replace the electronic health insurance card now available. Its technology and functions will be extended, and it will be offered to insured persons for use as a health card. For this purpose the health card should be a microprocessor card which is suitable for electronic identification, encryption and digital signatures. In this way the best possible reliability and security of the data can be guaranteed.

The use of the new card as a health card is voluntary. Accordingly, every insured person receives a new electronic health card with its administrative functions, but it is left to his/her discretion whether he/she wants to make use of the additional functions, i.e. the medicinal part, or not. The use of the administrative part of the electronic prescription, however, is obligatory.

The electronic health card has particular significance for enhancing links between the different records of patients’ data which are distributed and documented at several different places. In its function as a link between the electronic prescription and the electronic patient record it also improves emergency medical treatment and/or drug and therapy safety. New applications of telematics are being developed or may occur.

The electronic health card is a communication interface between the various responsible bodies within the German health care system. Holding their cards, and on the basis of their authorisation, the patients may decide for themselves on whether and which additional information is stored and who may be given the right to access. The implementation of the rights they already have to access the documentation themselves and to receive hard-copy printouts and/or copies of it, will be facilitated. In connection with their personal signature card bearing a qualified signature, they may also handle their personal data or data made available to them by their physicians in attendance in a separate personal folder.

One of the essential preconditions for the acceptance of the card is a convincing data security concept. During the last legislative term the amendment of the Digital Signature Act provided an important prerequisite for secure communication within the health care system. Apart from a few controlled exceptions, the use of the electronic health card is, as a rule, only possible in connection with a health professional card (HPC) bearing a qualified digital signature.

**Conclusions**

Whilst it is too early to evaluate the success of this scheme, we can conclude that the electronic health card serves as basis and thus also as a lead-in to other applications of telematics, such as the electronic patient record. Within an infrastructure of telematics and on a medium-term basis, the electronic patient record is an important patient-related information link for the various bodies responsible for health care in the non-institutional, institutional, rehabilitation and nursing care sectors. It provides the informational basis for integrated health care and disease management programmes.
3.2.3 Case Study 3. The ‘Pilot Project Care’ on real-time and veridical data collection and efficiency improvement within care services

Description of project: framework, project partners, targeting

With regard to the continuous growth of requirements on the subject of quantity and quality of service documentation in the context of care services, the AOK Baden-Württemberg (AOK is the largest compulsory health insurance fund in Germany) in cooperation with IBM-Germany and the Federal Ministry of Health and Social Security implemented and tested a new technique for speech pattern recognition within the care services in line with the D21 pilot project.

In the past, care personnel were obliged to document their work by manuscript. With the introduction of the new speech pattern recognition technique a real-time and veridical data collection became possible that enables the care personnel to invest more time in care and support at the bedside. Thus, care and support of old and sick persons could be improved altogether within a short time. By 1 August 2003, the programme for speech pattern recognition developed by IBM had been tested for nine months in five care institutions. Altogether 30 nursing staff members were included.

During the pilot phase, this new documentation system was tested for the course or care report, respectively. The developed prototype was seen as an add-on for integration into the already existing documentation background (using manuscript and supported by system techniques). User tests were designed to show whether mobile speech pattern recognition is practical and practicable in the care sector, or not. Moreover, tests should show whether or not the utilisation of this innovative technology brings the expected efficiency potential for the documentation; whether the quality and quantity of care documentation can significantly be improved, or whether the satisfaction with working conditions for the nursing staff and thus finally the job’s attractiveness can be enhanced.

In all five of the selected care institutions additional training was carried out alongside the introduction of the new user-adapted technology. In addition, the nursing staff were given close coaching so that experiences, feedback as well as requests for improvement - including technical improvements - could be integrated continuously. The indicated proposals for further development of the training as well as improvement of the prototype were continuously realised.

The pilot study of the project was financed by IBM, the pilot phase and practical implementation was funded by the Federal Ministry of Health and Social Security. The project is sponsored by the AOK Baden-Württemberg, including attendance and ideal promotion.

Conception and Implementation of the Project

The project’s conception relies on three important aspects for a successful introduction of mobile speech pattern recognition:

- Implementation of training in the five participating institutions alongside the introduction of the new user-adapted technology.
- Accompanying of nursing staff by close coaching and integration of actors into an audit, i.e. integration of experiences, feedback and requests for improvement.
- Evaluation of experiences from audit, feedback and the requests for improvement to further develop the training and thus continuously improve the prototype.

The project is divided into the following three phases:
1. Technical Preparation: includes provision of hard- and soft-ware, installation and testing of the prototype as well as preparation of technical instruments for the pilot phase taking account of the experience gained regarding the necessary adaptation of the prototype and its functionality.

2. Project Implementation: includes the construction of project organisation and management system. Moreover, the competency of responsible persons and contact partners in the institutions were defined and the schedule for training in the pilot project’s institutions co-ordinated with the work schedules of the nursing staff.

3. Conception of training and coaching modules: this has been of central importance to the actual pilot work. For every participating institution a training and coaching concept was individually tailored, and adapted to the prevailing conditions.

As a rule, nursing staff do not have any formal IT skills, and reluctance or scepticism towards IT based forms of working are common. Thus the ‘human factor’ of promoting competencies and acceptance was basically the most precarious and decisive risk for the project. Figure 3.3. below shows the training and coaching concept implemented here.

**Figure 3.3. Training and Coaching concept used in Pilot Project Care**

**Training:** With regard to the scarce computer skills of the nursing staff, a flexible training concept has been implemented in order to meet the requirements of individual needs and carefully introduce the new technology to the participants. Typically, the training consisted of three flexible modules:

1. Basic PC-training to get acquainted with and acquire security in using a PC (half-a-day).
2. Prototype and speech training as well as implementing a speech profile to get acquainted to independently using the prototype (one day).
3. Practice in using the prototype and the speech input tool (one day).

**Coaching:** The constant coaching made a significant contribution to motivating the nursing staff, clarify questions and discuss personal topics (such as, fears, restrictions, speech hindrances, etc.). The coaching schedule was co-ordinated in the spare time of the nursing staff by the IBM/SerCon employee. Besides the motivating support of nursing staff, the coaching further served to win knowledge for the improved speech recognition.

**Source:** Pilot Project Care

**Structure of Participation**

In order to find a potential connection between user attitude or competency and certain personality traits of nursing staff that would be of importance for further implementing the speech recognition tool, certain structural aspects of the participants were analysed with regard to their relevance for the speech recognition’s efficiency and handling. Sex, age, language proficiency, technological familiarity and motivation of participants were analysed.

**Sex and age.** Altogether 27 persons of nursing staff participated in the pilot project, among them four male participants (15%). Among the 27 participants, the group of persons aged 30-45 years was the strongest, comprising 12 participants (44%), while 10 participants (37%) were aged more than 45 years and 5 participants (19%) were aged less than 20 years.

Perception: The project’s course showed that the aptitude for using speech recognition was independent of sex and age after training and practice. The decisive criterion was the individual motivation and certainty of how far speech recognition is an efficient support to work.
Structure of language. The language characteristics within the project included a broad spectrum of dialects and included some East-European accents. Almost half of the participants were not able to speak standard German.

Perception: A central challenge for the further technical development of speech recognition is that the tool has to take language proficiency into consideration. After all, good results have to be possible with the recorded speech profiles even if they differ from standard German because they are, for example, affected by dialects or accents.

Technological familiarity. Altogether great differences appeared with regard to the participants’ experience and fears of handling new communications technologies. Whereas almost all participants were used to handling a mobile phone, the percentage of participants with knowledge of the Internet use was relatively low. In particular, this is so far due to the lack of necessity to use computers at work. According to personal statements, 17 participants (63%) were used to working with a PC, 14 participants (52%) were familiar with using the Internet and 11 participants (41%) with e-mails and their use.

Perception: Before employing speech recognition as a working tool, sufficient knowledge of the participants has to be guaranteed. Therefore, the equipment was brought to the institutions on time (here: 1-2 weeks) and before the beginning of training to enable the employees to easily practice the use of this new technique. This informal offer was taken up partially: although no participant had any previous knowledge with dictaphones, five participants (19%) had already dictated before the first training and ten participants (37%) had used a dictaphone.

Motivation. The participant’s overall motivation to partake in the project was very high, although accompanied by various fears and restrictions towards the new technique. At the beginning, the unfamiliar exposure to computers or dictaphones was an obstacle for many participants. In particular, the operation of function keys and dictating and hearing their own voices hampered confidence. All participants without exception, however, were looking forward to participating in the pilot project as well as to actively integrating speech recognition into their every day work life. 23 persons (92%) out of 25 interviewed participants were certain that their volume of documentation could be increased with the assistance of speech recognition. Twelve persons (60%) out of 20 interviewed participants confirmed that speech documentation helped them to save time, whereas eight participants (40%) disagreed.

Perception: The results show a high motivation at the project’s beginning. This motivation should be kept up or supported by coaching during the actual pilot phase.

The outcome: documentation of Care Activities

Within the scope of the pilot project, two alternative documentation variations were tested: one based on manuscript, and the other on electronic data processing. For both variations, speech recording was done with dictaphones that the nursing staff carried around with them. The recorded text information was entered into the PC by cabling the dictaphone. The care documentation system operates on a SQL-based database; in addition free text input is possible. The care documentation system employs a 13-level AEDL-model (‘Aktivitäten & existenziellen Erfahrungen des Lebens’ - ‘Activities & Existential Experiences of Life’) to portray the care process; this model is already being utilised in many care institutions to totally organise the care planning and documentation. As a result, the process-orientated programme implementation and the data model are adapted to it.

Figure 3.4 summarises the main categories used to structure this model of the care process.
Figure 3.4 The primary categories of the AEDL-model by M. KROHWINKEL

1. to communicate,
2. to move,
3. to maintain vital life functions,
4. to take care of oneself,
5. to eat & drink,
6. to excrete,
7. to dress,
8. to rest and sleep,
9. to be busy,
10. to feel and act as a man or woman,
11. to guarantee a secure surrounding environment,
12. to secure social areas of life,
13. to handle existential life experiences.

By the end of the pilot project, the following significant results and individual findings could be noted:

Documentation by speech recognition is often completed in the resident’s room or close to the resident’s room directly after the nursing service.

As a result, the place of documentation can be freely chosen. Out of 50 nominations, places where documentation was carried out were ranked as follows: 10 for the bathroom, 15 for the resident’s room, 9 for the corridor and 16 for the charge office.

With the assistance of speech recognition, documentation is completed directly and in real-time after the nursing service. The percentage of persons who directly document after the service increased from 46% to 70%. As a result, this provides veridical documentation since less is forgotten in the course of documenting.

Regarding the considerably increased documentation volume, the actual time for documentation was decreased, and therefore shows a significant reduction in effort. Thus 73% of the interviewed persons say they saved time significantly when documenting with speech recognition. The effort to input dictation and the time for correction, however, can still be considerable and has to be reduced in future.

Within the context of the topic 'documentation' more than 93% of participating employees regard the application of speech recognition for documentation as easy to operate. 90% of nursing staff say they would want to continue working with the prototype or a similar system. 85% of the interviewed persons prefer documentation via speech recognition to other documentation methods. An operating speech recognition backs documentation so various implementation of speech recognition - exceeding the compilation of mere course reports - is feasible.

70% of nursing staff say the volume and quality of documentation notably increased when performing documentary work by speech recognition. This impression was confirmed by the respective heads of care institutions.

After a careful analysis of these results, it was estimated that under favourable conditions an efficiency potential of 20% is feasible. On one hand, the institutions certainly have to prepare the required conditions regarding
matters of organisation and implementation, basic computer knowledge, documentation and dictating. On the other hand, there is also a need for intensive training and communication as well as certain technical preconditions.

Another important aspect is that implementation of computers and operating of speech recognition opens up new possibilities for the individual development of each member of the nursing staff. The implementation of this new technology offers new perspectives to the work of nursing staff and ‘upvalues’ it; at least, their work becomes more interesting and diversified. Consequently, the broad implementation of mobile documentation including speech input opens up new perspectives for the future of the entire documentation in the caring sector as well as for the individual development of a branch of profession. The utilisation of electronic speech recognition, therefore - as a positive side effect - makes a contribution to reducing the digital divide.

During the pilot phase, various potentials for improvement that could be considered for a broader implementation in future were identified with the assistance of the nursing staff. This included a functioning and easy-to-operate mobile assessment instrument, the guarantee of a good speech recognition rate for the care sector (as for example, by referring to care-specific technical terms) as well as insensitivity towards background noise during the process of recording and re-recording for all phases of care. Moreover, the instruction and training effort to implement speech profiles and to work with the new technology will need to be rolled out to the bigger institutions and perhaps eventually to all nursing staff.

Results of evaluation

After the pilot phase, the project’s success was evaluated by means of a questionnaire given to the nursing staff that had participated. The following results of evaluation were noted:

Satisfaction with the training was assessed by the following evaluation criteria: atmosphere during training, temporal possibilities to clarify questions, training on computer and dictaphone as well as acquired knowledge in various fields of application. The Basis for evaluation was a four-level scale (++, +, -, -). Overall, the training was seen as success: all 22 interviewed participants stated the training met their expectations; among them 13 participants (59%) awarded it the second-best mark ‘+’, the remaining 9 participants (41%) gave the best mark ‘++’.

Organisation and Implementation of training were positively evaluated without exception: the participants only awarded best marks ‘++’ and ‘+’ on all questions concerning the training atmosphere, temporal possibilities to clarify questions as well as hardware training. Every time, the best possible mark ‘++’ was awarded more often (i.e. between 59% and 88%) than the second-best mark ‘+’. Altogether, the participants gave the organisation and implementation of training the predicate ‘exemplary’.

Training Contents. Regarding the necessity of training, the participants were without exception satisfied. They were largely confident to manage the new technique. Yet the participants evaluated their own knowledge more critically than the quality of the training organisers. To every question concerning their own knowledge, most of the interviewed persons (between 59% and 88%) awarded the second-best mark ‘+’. Regarding their knowledge of Speech Profile Training (14% of interviewed persons answered ‘++’) and Proficiency to Compile Course Reports with the Prototype (‘++’: 26%), however, all participants were confident without exception. The participants were most certain on the question of what is important for speech recognition (‘++’: 44%). Slight insecurity was felt only regarding the more complex application of
individual participants were slightly uncertain whether they would recognise the prototype’s functions (8% of interviewed persons answered '-' or not; and if they would manage to compile course reports with dictaphones and the prototype (‘-’: 5%).

Feedback was also sought from the Pilot Phase (Coaching). Here, some of the participants’ experiences on speech recognition, documentation process, pilot adoption and implementation as well as dictating or dictaphone, respectively, can be summarised as follows:

Speech Recognition. Technical terms from the medical and care sector are very important. A large portion of these terms, however, are not included in the vocabulary of speech recognition. A quiet background improves the sound quality of recording, whereas a sore throat, huskiness, uncontrolled movements of the head, varying distance between head and microphone or ambient noise hampers it.

Documentation Process. Recording in the resident’s room, for example in the wet room, seems very practicable. Dictation seems easier the less fatigued a speaker is. In comparison to manuscripts, dictation is an advantage for untrained writers. On the whole, documentation is more precise and concentrated than during writing: energy is concentrated on dictation and not distracted by writing, so that thoughts can be fully focussed on patient and surrounding.

Dictation or Dictaphone. It was agreed that read-out dictations are better to read and therefore outmatch manuscripts. The practical implementation of modern techniques is perceived by the users as saving time, giving practical assistance to the work, helping team work and providing the motivation to pronounce words clearly. There was some criticism of the high sensitivity of the microphones: the slightest background noise provoked by pressing of buttons, e.g., is transformed into characters and the quite frequent dropping of the device drew attention to the non-existence of a suitable holder (as for example, a clip).

**Summary / Transferability**

The project’s results clearly argue for the implementation of mobile speech recognition for care documentation. In the context of the increasing requirements of the work and lack of nursing staff, there is a need for productivity improvements and this technology can contribute to the development of a high-quality care service. High efficiency potentials exist both in institutions that operate with manuscript documentation and in those technically more progressive institutions that already employ care documentation systems; a potential the mobile speech recognition can benefit from.

Factors supporting the success of implementing mobile speech recognition and permitting a broad utilisation and transfer of this modern technique to other fields of application are the following:

- Hardware has to be light, shatter-proof and easy to operate,
- Speech recognition software has to be appropriate for multiple speech profiles, react not too sensitively to background sounds and include a text correcting function, if possible,
- The administrative or integration tool has to include a digital port that allows import of the digital data recorded by the device via digital channels and repeated play-back of recorded dictations, also selectively,
- Training has to show a high organisational and didactical quality, and
- Coaching in the scope of change management has to be implemented to continuously permit adaptation of the project’s process.
After the conclusion of the project, the mobile speech recognition and documentation system was implemented at one of the participating care institutions as a prototype for regular use. According to information from the software company, the project’s results were considered very promising, which is why some more application models for local or centralised utilisation have been developed. But despite having achieved series-production readiness, the grand launch of the application has not yet taken place. This is in the first instance due to the fact that most of the care institutions are not generally working with an IT-based administration and documentation system yet. Almost all institutions still document their care activities on the basis of paper and pen lists and file cards. But the existence of a general IT-based administration and documentation system is an essential prerequisite for the implementation of a voice-controlled recording module. Thus, since most of the care institutions have not been ready to invest in the changeover to a general IT-based organisation and documentation system, they are even less ready for demanding the undoubtedly advantageous voice-recording module.

The one care institution involved in the pilot project that did implement the module is a particular exception to this. This is an organisation that started some ten years ago establishing and running relatively small care homes with up to 25 places at most and now operates about 20 of these homes. This institution has been obliged by its special approach to work with a completely IT-based administration system for many years – a financial necessity in order to provide an efficient and marketable performance in competition with the ‘big players’ in the care business. Already having implemented an IT documentation system the additional introduction of a voice recording system was then a relatively small step.

We can conclude that the launch of the voice recording care documentation system may still take some more years, until more care institutions will have changed generally to IT-based administration and documentation systems. However it is indisputable that a technology that can reduce bureaucracy and facilitate care work is already available and will surely soon be adopted in other medical contexts, such as in hospitals.

### 3.2.4 Case study 4. Volunteer agencies: Online databases for voluntary exchange services

Volunteer agencies have been growing in Germany for about the last ten years with the principal aim of improving the commitment of volunteers in Germany by information and mediation. At the same time they attempt to develop a new image of honorary posts. ‘New honorary posts’ are a concept that, in addition to the traditional meaning of commitment in churches, unions and parties, show (or should show) their forms in increasingly unconventional ways: neither religiously nor ideologically bound, with a flexible input of time and a higher personal responsibility. The ‘new volunteer’ orientation turns away from a mainly serving-altruistic form towards goals such as: meeting people, gaining further qualifications, finding appreciation and acknowledgement. Characteristics of the citizen’s new volunteer exchange services are: joy at the appointment as well as self-development rather than subordinate and service.

Up to now, jobs and information in this field used to be mediated by paper and pencil and record cards. Vacancies and the requirements of organisations were collected on record cards, and the interested party were notified of the details by phone or during a counselling interview. Counselling interviews are still an important part of the service of volunteer agencies. But computer based databases have now taken a leading role in this field, although on very different levels of sophistication. Among other things the appearance of online job exchanges by the volunteer agencies has made access to volunteer exchange services available to a new and different clientele.

These relatively new services have been studied as best practice examples for eGovernment in the fields of welfare, because they:
Give an example of how the adoption of IT – here in the form of online databases information and mediation services – can basically change and improve already existing offers and services in the field of social welfare production.

Are often run in co-operation with or even (partly) financed by the local authority, therefore being directly under political initiatives; or, being run / financed by charities which in Germany are integrated to a very high degree into the government’s welfare benefits or the benefits guaranteed by the state respectively. Thus in Germany volunteer service agencies represent a very characteristic field of social welfare production, located between governmental and non-governmental institutions.

Volunteer service agencies therefore give an innovative impulse to a field of welfare production that so far has been characterised mainly by traditionally oriented action. Especially regarding the intensive debate concerning the enlargement and professionalisation of the citizens’ commitment in Germany, tribute has to be paid to their work and the successful approach developed there has to systematically be encouraged and expanded. The enlargement of the personnel bases for volunteer services gives reason for much hope regarding the ability to maintain a welfare level as high as possible despite the demographic development and the scarcer material resources of the welfare state.

In Germany, altogether roughly 180 agencies are organised in the Federal Association [www.bagfa.de](http://www.bagfa.de), but most of them lack a professional system. Only half have their own homepage with an online information and job exchange. And only some, about ten, offer more than merely mediation services such as project work in the field of voluntary services for communes, unions, organisations, such as Voluntary Service Day, further training, project development, or public relations work.

Volunteer agencies have very different structures for financing. A few agencies finance their activities by merely honorary appointments. Others, usually the more professional agencies, also employ regular staff. The costs for personnel are (co-)financed very differently, partly by the communes or city foundations, partly by charities. Additionally projects are temporarily financed when, for example, a concept of ‘corporate citizenship’ is developed for a company, expertise is provided for unions and foundations, or a project day is implemented for a city.

Typically, most volunteer agencies have been financially supported by the communes. However these means have been more or less reduced over recent years. Today only a small number of volunteer agencies receive means from the communes. For the most part charities or church institutions have assumed the financial support or the co-financing. Quite a large number of agencies are financially self-responsible, i.e. depending on honorary support. Thus, this aspect of eGovernment - the support and co-ordination of citizens’ voluntary commitment - has been taken away from the responsibility of the public authorities and given to the non-governmental organisations.

In the following two very well equipped and obviously most professionally organised volunteer agencies are being introduced. As best practice example they demonstrate very clearly the potential for innovation in the Internet-based service of volunteer agencies.

**Volunteer Agency Bremen**

Eleven years ago the volunteer agency Bremen ‘Zeit-Weise’ (roughly ‘at times’) was founded as a subdivision of the association ‘Sozialer Friedensdienst Bremen’ (‘Social Peace Service Bremen’).
Since the beginning of the 90s this agency has supported, trained and encouraged volunteer commitment in Bremen. The emphasis of their service is set on the following three fields of activity:

**Mediation:** The volunteer agency Bremen informs and assists persons who want to make a commitment. The agency places them into institutions, organisations or projects in which they would like to assist. For this purpose the union has comprehensive consulting resources as well as a complete and continuously updated database that is accessible online. Since May 2002 the volunteer agency Bremen has had a homepage handling this important aspect of their service. On this homepage, non-profit organisations from Bremen have the possibility to offer their services to the volunteers by means of especially developed job profiles. Interested volunteers can then find a suitable activity. At the moment roughly 200 organisations with more than 250 business profiles take advantage of this possibility.

**Further Training and Assistance in Organisation:** The volunteer agency Bremen assists organisations in their voluntary service especially with suitable offers regarding further training, organisational structure and project development; in particular for ‘volunteer co-ordinators’. This also comprises the consulting and assistance of persons working in honorary posts in order to enable them to more successfully and satisfactorily assist in the non-profit concerns of their organisations. Since 1996 the agency has offered annually further training for volunteer services and, together with the VHS Bremen, carried out a Training Day in form of a seminar on the theme of ‘Ohne Geld - aber nicht umsonst’ (roughly ‘Without needs - but not needless’). Recently the topic ‘Volunteer Commitment’ has been dealt with and even offered as educational leave.

**Public Relations Work and Lobbying:** Moreover, the agency contributes to a local culture of commitment. They organise events, do public relations work and lobbying for non-governmental organisations with the aim of promoting a favourable climate and an adequate general framework for citizens’ commitment in the town. Development and implementation of innovative projects is another area of activity. Within this context the ‘market of possibilities’ at the town’s hall became a tradition, an annual exhibition of volunteer commitment in Bremen. In recent years, 35 to 60 organisations have become informed here about their volunteer services. Recently the so-called ‘voluntary day’ has also been implemented. Here roughly 50 organisations offer interested persons from Bremen the chance to informally give the volunteer services a whirl for a couple of hours. During the past year roughly 300 interested persons have called or mailed, 150 persons made use of the offers and about 70 became committed and continued working for the organisation they got to know in this way.

At the moment, 20 persons work for the Bremen volunteer agency: one regular employee (manager), two more as honorary personnel (graphs / web design and supervisor / trainer). At present the agency receives town subsidies for the personnel costs up to the amount of a half year’s budget. The other half is financed by projects, sponsoring, participation in competitions and other services.

2. Importance and Role of IT

In 2002 the Bremen volunteer agency had its essential break-through when the homepage including a job exchange for honorary posts was implemented. Alongside numerous and comprehensive public relations work by the agency the number of users of the Internet portal increased by leaps and bounds from roughly 9,000 accesses in the first year to 12,000 and 40,000 in the following years up to 100,000 in the past year. This strong increase can be attributed to word-to-mouth advertising among the volunteers and in particular to the increased linking of the portal to the homepage of the volunteer organisations, as well as to a comprehensive appearance on all the district’s homepages of the city; supported by an intense ongoing public relations campaign by the agency.

However the homepage is more than merely an exchange service. For example, during the three weeks of a public relations campaign about voluntary service, the access increased.
from about 300 hits per week to 5,000. On one side persons visiting the homepage were informed about the participating volunteer organisations as well as the possibilities for commitment offered by them. On the other hand they background information could be accessed. In other words, the Internet service of the agency became a platform for a comprehensive exchange of information and job offers in the field of citizens’ commitment. In a developed market economy this form of social participation is of increased importance and of particular significance for the social welfare production regarding the chronically overloaded public social budget.

At present three professional computer specialists take care of the databases as volunteers. Three to five additional volunteers are in charge of continuous database maintenance, input of latest offers and information (insofar as far as this is not done by the organisations themselves), and removal of offers that are no longer valid. In addition the organisations perform the necessary up-dating of offers every three months.

Besides the certainly existing yet empirically not provable quantitative increase of volunteer service in Bremen the qualitative change caused by the Internet exchange is of great importance. The Internet exchange addresses persons who so far could not be regarded as typical clientele of volunteer organisations: younger persons, more men, or ‘modern’ persons. The agency was able to find out about this tendency through feedback from the voluntary organisations. They noted that the persons contacting them via Internet exchange are often very ‘interesting’ and open persons whom they would have been unlikely to hear from by general methods.

It is noteworthy that a wider range of people have access to the volunteer service via the Internet because access to information regarding the volunteer service is so much easier for young people who are accustomed to computers (akin to an open door), easier than, for example, a first contact by personal talk at the agency’s information and counselling point at the town hall. The possibilities of contact via the Internet and databases expand the spectrum of recruiting for voluntary service.

**Münster Volunteer Agency**

The Münster volunteer agency was founded in 1999, by an edict of the city council and as a result of an expert hearing on reinforcing citizens’ commitment carried out the preceding year. This hearing concluded that the citizens’ commitment in the city of Münster could be effectively strengthened by establishing a volunteer agency and, as a result, recommended the implementation of such an agency following the example of already existing agencies in other cities. The Münster volunteer agency was therefore set up as pilot project for a period of three years and staffed with 1.1 positions. Financing was eventually provided by a communal foundation. Since the first three years showed a positive and satisfactory effect, the agency was supported for another five years with a total of 1.6 full time positions. Given that means are still provided by the foundation and spent by the volunteer agency according to the foundation’s charter, i.e. to promote the social affairs of the city, and that the city continues to be most satisfied with the volunteer agency’s activity, the agency is expected to operate beyond the year 2007.

The Münster volunteer agency is, therefore, in a very comfortable and comparatively privileged situation since only a few volunteer agencies in Germany benefit from an equally complete and future-proof funding. Most of the roughly 180 volunteer agencies face a permanent fight for financial survival and try to keep their head above water by continuous acquisition and implementation of projects (see below).

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1 The quantitative effect can not be measured due to the ‘contra-factual situation’, i.e. the question of how many citizens would commit in case the exchange did not exist, cannot be (re-) constructed or answered, respectively.
As described above for the Bremen volunteer agency the emphasis of the service is focused on the following three fields of activity:

- Public relations work to strengthen the volunteer service in the city.
- Counselling of citizens and mediation of interested persons into the volunteer services.
- Assistance in organisation and volunteer management for organisations employing volunteers.

Lately there has been increasing emphasis on the volunteer agency’s activity since many organisations have been added, especially smaller ones and initiatives, that like to call on the services of volunteers yet do not associate well with volunteers. Often important requirements for a long-term and (for all parties) satisfactory volunteer service are missing, as for example one steady contact person for volunteers, insurance for volunteers while exercising their activities, good relations between volunteers and permanent employees, possibilities for further training or competent instruction of volunteers, and certification of activity reports for volunteers. The definition of volunteer management includes all points mentioned above as well as other points, all being important for an effective and stable or reliable volunteer service. Concerning the above the volunteer agency sees to that at least a minimum standard for the organisations is observed. A minimum standard for the volunteer management definitely includes a steady contact person and insurance for the volunteer service.

**Importance and Role of IT**

In 2003 the Münster volunteer agency posted their databases with job offers of the social organisations onto the Internet that so far had only been used internally for consulting purposes. On the Internet they introduced job specifications and background information (mostly via an Internet link) of roughly 210 social organisations that offer volunteer service. Annually about 8,500 accesses to the job exchanges take place and roughly 15,500 persons visit the information pages of organisations. (Status of 2004; Münster has round 280,000 inhabitants). Since the beginning of 2003 the frequency of use has increased significantly.

As in Bremen, those responsible in Münster have the impression that (no reliable empirical verification is possible at the moment) the Internet offers, especially the online job exchanges, has expanded the spectrum of persons interested in volunteer service not only quantitatively but also qualitatively. In particular more younger, male and ‘modern’ persons are attracted who are more difficult to win via the usual method of personal contact by phone or counselling dialogue. Often the Internet research for opportunities offered in the job exchange is the first step towards distanced contact (a kind of open-door) to the field of volunteer service that in a second step leads to a more intense counselling by the volunteer agency or to a direct contact with the social organisation. As a consequence, the Internet exchange forges links to the volunteer services for a new group of clientele.

The comparatively high costs for implementing an online job exchange could only be met because the volunteer agency Münster won, in co-operation with the public relations office and other city organisations, the 2003 eCommunity Prize 2003 of the German Government for exemplary citizen’s integration via the Internet. The continuous maintenance of the online exchange is, by comparison, a small job. The information of the social organisations arriving per day by e-mail or phone concerning the modification in vacancies is immediately put in the database. Basically, the corresponding up-date of the online exchange happens daily over night. The permanent up-date of the stock of information, i.e. the advisory database of the volunteer agency, was similarly necessary before the online launch 2003.
Conclusion

The volunteer services contribute to a high degree to the maintenance of the German welfare system. Their contribution is of increasing importance in both quantitative and qualitative aspects. As regards the obvious financial problems of the social security systems in the developed market economies that consensus of politics and economics is unanimous.

Consensus likewise exists that the volunteer agencies make an important contribution to strengthen and steady the citizen’s voluntary commitment in Germany, especially in the social area that ranks among the genuine fields of the state’s welfare production. Its ‘catalytic function’ to quantitatively extend and qualitatively improve citizens’ commitment in Germany is beyond dispute. The latest indication of the increasing attention being paid to the work of the volunteer agencies is the recent assumption of the patronage by the Federal President Horst Köhler of the Federal Association of Volunteer Agencies that represents roughly 180 of the substantial volunteer agencies.

The patronage by the Federal President strengthens the position of the volunteer agencies and revaluates them within the scope of the various organisations and associations that, in Germany, divide between them the responsibilities for the delivery of governmental and quasi-governmental (welfare) services. Yet, despite this political recognition, the financial support from government was or is successively withdrawn. This is due to the tight budget especially of the communes and Länder that so far have contributed to the financing in some places - insofar as volunteer agency have received any public financing at all. Since the social budget of public administration shows high deficits, and no alleviation is in sight, the communes and Länder cannot or do not want to afford further resources for the work of volunteer agencies. The welfare associations (charities) that have so far been supporting the volunteer agencies are in a similar position and have mostly withdrawn from their financial responsibility.

This financial retreat of the public administration and the charities from the aid for volunteer agencies is self-explanatory from the micro-perspective of each organisation’s and administration’s budget since no directly measurable return on invest is expected from the financial support of the volunteer agencies. Financial discharge or almost self-financing enhancement in quality by the volunteer services, however, can be rather localised for the social insurance agency, for example, the care insurance and the welfare institutions that perform the welfare services by order and means of the public authorities.

We can conclude that the budgets of those public administrations that have been ‘in charge’ of the financing of volunteer agencies (especially Länder and communes) follow a different logic from those financing systems that benefit most from the volunteer services (social insurance agencies, associations). From the over all economic perspective however the retreat of public authorities from the aid of volunteer agencies may be considered short-sighted and counter-productive. Without doubt only the fortification of volunteer service by the volunteer agencies contributes to a nearly self-financing quantitative and qualitative improvement of welfare services performed by governmental organisations or by order and with the resources of public authorities. Volunteer agencies, however, can only perform their important function correctly and effectively when they have been co-financed on a small scale. In comparison with the quantitative profit volunteer services bring to the welfare sector, the adequate financial promotion of the volunteer agencies as quasi ‘recruiting offices’ for citizen’s commitment is a negligible factor.
4. ITALY

4.1 eGovernment Improvement in Italy

The eGovernment action plan adopted by the Italian Government in the year 2000, was strategically designed around the decentralisation of responsibilities, articulating the management on the ground, in proximity to the users of the services. The widespread use of ICT has been the source of deep changes in the ways and means of delivering the main services of the social protection system. The objective is to provide more efficient, speedy and cost-effective services to citizens, firms, associations and other public administrations.

In other words, the objective is an interwoven management of databases, from the central, regional and local administrations, with the aim of eliminating duplications and redundancies, and improving the relationship with citizens and firms, thereby increasing the effectiveness of the existing but separate information systems.

With regard to the labour market and welfare provisions, two ongoing initiatives are particularly relevant. First, the development of a new system aimed to meet the demand and supply of work at the national level through an ICT interconnected system: the Borsa Continua Nazionale del Lavoro - National Continuous Labour Exchange. This is immensely important from the point of view of those citizens, who suffer major difficulties in the search for an adequate job, in particular those groups at risk of marginalisation, as is the case for most of the young, women, and older unemployed workers living in the southern Italian regions, where unemployment is considerably higher than in the rest of the country.

The second initiative related to the improvement of eGovernment in the field of universal social services is the implementation of a National services card, aimed at easing and improving the overall delivery of social services. In the following paragraphs we will explain the ways these two initiatives are being developed.

4.2 Case studies

4.2.1 Case study 1. BCNL National Continuous Labour Exchange

The BCNL (National Continuous Labour Exchange) is a new digital system aimed at improving the functioning of the labour market in Italy.

A new digital system is going to be implemented in regards to the labour market. The objective of this new system (whose full name is Borsa Continua Nazionale del Lavoro - National Continuous Labour Exchange) aims to improve the system for matching the supply and demand of labour. This online system of matching labour supply and demand can be freely accessed by citizens and enterprises as well as by authorised and accredited private and public operators, and is also linked with the network of services offered by the local authorities.

The system is based on an integrated set of tools, services, and data distributed across a network of digital systems and portals aimed at the labour market which are hosted by the regions. They permit workers, or those seeking employment, public operators, private actors who own the necessary authorisation and employees to access and utilise a range of services.

In this regard, the information system has been redesigned as a node of a larger service network for citizens which comprises bodies such as INPS and INAIL and where the public administrations are interlinked by a computer network, and interact thanks to an innovative, applicative cooperation system based on the latest generation of web services. This network, in which the Ministry of Labour and Social Policies forms the national base,
where it also performs a monitoring and technical control function, is based on information nodes certified by the regions, which act as service aggregators throughout the country, of which the BCNL is a strategic element. Furthermore, the BCNL will generate a new national labour market monitoring unit able to promptly supply detailed, accurate data to be used to decide active and passive policy measures in the sector.

The main stakeholders are, foremost citizens and firms (as end users), the local public administrations, (regions, provinces and municipal organisations), trade organisations etc. However different specific roles can be identified at the national and regional level. The overall goal at the national level is to define the national technical standards and the flow of the amount and type of data to be exchanged and the interaction between the regional systems - in essence defining the whole of the structure that will allow for effectiveness and transparency in the matching of the demand and supply of labour.

Furthermore, the BCNL system, beyond the linkage between the Ministry of Labour and the Regions, is also part of a wider network that connects services aimed at the labour market with other databases and services provided by INPS and INAIL, always with the aim of simplifying the processes for citizens and firms using public services.

Since early 2005, all aspects of the system have been experimentally up and running in the Veneto region, and the cooperation side of the system has been installed in the Lombardia region, as these two regions have been chosen to run the pilot scheme.

**The Employment Information System - SIL**

The basic infrastructure of the new digital system is the SIL - the Labour Information System. SIL is a network of Employment Centres which has been developed at a national level - a system comprising 527 centres located throughout the country which the regions are in charge of. The basic infrastructures at the local level are the Job Centres, which are dependent on the provincial authorities. Their goal is to improve the linkage between the demand and supply of work, implement active job policies, organise training programmes, and guide and advise individuals in search of work paying particular attention to weaker groups, such as the long term unemployed, women and immigrants.

The main goal, among its multiple activities, is to:

- facilitate the matching of supply with demand
- introduce a register of workers
- improve employability
- reduce the period of involuntary unemployment
- assist workers in their reintegration into the labour market

The network system involves a variety of actors at a local level and is a meeting point for active employment and social inclusion policies. To this end an agreement to develop the employment information system was signed between the state, regions and local autonomies during 2002. As an essential part of the network, dedicated services for the more vulnerable groups (disabled people, immigrants, women, etc.) have been set up in a number of centres which, in order to improve their service, collaborate with social services, help desks and specific organisations. The main objective is the integration of disadvantaged users into the workforce.

The end users of these centres are people in search of work as well as firms. The centres are committed either to assist individuals who declare themselves unemployed and are immediately available to work or, in particular, to take care of individuals who need specific assistance to be enabled to attain a job, as is the case of late teens and under 25 year olds, the long-term unemployed and women who ask to go back to the labour market after a period of absence.

It is thus clear that the implementation of these multiple functions needs considerable amount of investment in ITC technology, with the addition of an innovative work organisation and adequate training. Where the implementation of the new procedures is
more advanced, it is possible to perform through the Internet all the procedures concerning the work relationship, starting from the hiring process through to the end of the relationship, including any changes of work condition during its existence.

These changes have reached different degrees of implementation from region to region, therefore the current commitment is to generalise the best results at the national level, with a particular attention to the more problematic labour market of Mezzogiorno (the macro area of South Italy) where unemployment levels are twice the national average, and with a special focus extended to groups at risk, particularly women, the long-term unemployed and young people. In order to improve the matching of demand and supply, the centres provide firms with multiple information for instance regarding typologies of contracts, possible form of incentives and training opportunities.

4.2.2 Case 2. Carta nazionale dei servizi (National Services card)

The National Services Card (CNS) is a recent innovation within the objective of the introduction of eGovernment, and its diffusion is rapidly increasing. On 31 January 2004 around 3 million CNS had already been assigned. The target is to reach 9 million cards by the end of 2005.

The CNS is an instrument provided by the public administrations to allow an interested citizen to obtain requested services through the Internet. It anticipates the electronic identification card (carta d’identità), which, because of its advanced characteristics, will be able to accommodate a digital signature (firma digitale).

In practice, the CNS has adopted all the conditions of security which make up the certifications and documents of reference, as well as any individual information needed for the provision of related public services.

Of course, digital identification is particularly useful within the environment of social services delivered via the Internet, bypassing the ordinary procedures of identification (userID and password), and at the same time adding the possibility of enlarging procedures which contain information of a more sensitive nature, principally in the health field, where higher standards of security are required.

To give one example, current experiments of CNS in the health field involve either the administrative aspects, such as medical prescriptions along with the specialist consultations and their booking, or the possibility for surgeries and any other specific medical health centre to have access to a patient’s medical history, with the aim to have an exchange of information and the most appropriate and prompt care.

In this framework, it is particularly important that the card can be used by the weaker groups of citizens, who are entitled to the provision of some specific benefits, which are means-tested, dependent on their social and economic condition, or any other reason - regarding issues such as specific illness, acquired educational qualifications and so on.

4.2.3 Case 3. INPS

INPS’ ICT network, which has achieved a level of 95% of automated processes, today represents one of the most advanced ICT users within the Italian public administrations.

The key role of INPS within the new structure of the labour market is first and foremost testified by the fact that it manages the accounts of 23 million insured workers. The widespread and intense use of ICT allows it to receive and elaborate data with high speed and quality. It is in this context that INPS developed its relationship with intermediaries whose task is to ease the relationship between welfare providers and citizens. Out of the 32 million services provided online, 5 million have been delivered directly to citizens, 12 million to firms and 15 million through authorised intermediaries, like the Patronati, CAF (Fiscal Assistance Centres), and other specific associations.
In order to respect privacy, around one million PIN (Personal identification numbers) have been assigned. The availability of a variety of forms online allows users to fill out the necessary documentation and mail it via the Internet. For example, during the year 2003, more than 4.5 million information requests were processed.

**INPS and Firms**

ICT has also played an important role in the simplification of processes in supporting INPS’s relationship with firms, by permitting a significant reduction of their administrative costs. In fact, firms must communicate on a monthly basis, the amount of the mandatory contributions relative to employees, which consists of a yearly flow of around 15 millions positions.

It is worth adding that small and individual firms can utilise intermediaries as consultants, advisors, or trade associations, CAF and Patronati, who are linked to INPS through the Internet. The Patronati, are particularly important for citizens, and especially for groups at risk, such as the elderly, who often lack ICT abilities and need to be in touch with providers of social services.

A structured database is also available for other services, such as the Contact Centre set up with the cooperation of INAIL, live 24 hours, which guarantees, for example, a phone service through an automatic system or operators (inbound and outbound), and through fax or mail. The system allows a multiplicity of functions, such as:

- answering specific questions coming from users;
- sending necessary documentation to users;
- receiving documentation sent by users;
- giving assistance to users who utilise web services.

**INPS and the assistance of groups at risk**

In 2003, INPS processed more than 600,000 online requests from citizens who were socially and economically disadvantaged, for a series of welfare services.

There were also around 5 million requests delivered through Patronati. This is mainly because, as intermediaries, they have a privileged access that permits them to acquire all data regarding the different types of provisions, such as old age and invalidity pensions, integration to minimum pension, payments towards the family allowance, unemployment benefits, and so on.

The opportunity for end users to interact with INPS has been further expanded by work undertaken by local public administrations. In 2003 more than a million services were delivered on-line to citizens by Communal administrations, while these same administrations have sent via the Internet, more than 400,000 pension and social security payment requests to INPS.

INPS also allows some users (firms, labour consultants, chartered accountants, CAF, other associations) to interact with its systems in order to offer its own front office services at the local level. In such a way, it is possible to assist, for example, some segments of the population who are digitally illiterate (digital divide) about their fiscal situation. Using this same channel it is also possible to maintain the Company Registry, the ASIA database (the archive of active companies), using the National Statistics surveys, which has made it possible to accomplish important results in the struggle against the underground economy and irregular labour.

In conclusion, we can observe that in order to achieve these results and at the same time reduce administrative costs, INPS had to introduce huge technological innovations in the back office areas, aimed to implement a new management and work organisation in the field of acquiring, archiving, keeping, elaborating and distributing data.
4.2.4 Case 4. INCA

The Patronati are a specific Italian institution with a mission to assist citizens in their relation with social security providers. They were originally founded by workers’ organisations, principally trade unions, to give a service to the membership. Later whilst still remaining close to the trade unions they evolved into autonomous organisations enlarging their services activity to all citizens. The INCA service provides free assistance to all citizens who need it to access welfare provisions.

INCA* (Istituto nazionale confederale di assistenza), linked to the CGIL* (General confederation of Italian workers), founded in 1945 is the most important among 25 Italian Patronati. INCA has 900 local bureaux in Italy and abroad with some 1,700 operators. This broad spread gives INCA a presence in small towns and rural areas as well as large cities. In addition to helping Italian residents, INCA also assists Italian immigrants living in other countries who previously worked in Italy, by helping them in tracing their past contributions through links to the relevant databases in Italy. During 2002 INCA assisted 52,000 migrant workers in claiming benefits provisions from INPS.

The first level of service involves providing information to individuals regarding the provisions to which they are entitled in relation to unemployment, family and pension, benefits. Often they know that the law establishes a benefit, but they are not aware if they are eligible. This is especially the case for workers who live in areas where work is more precarious and the risk of unemployment is higher. Of course, theoretically, information is available also on the website of the welfare institutions, but they rarely possess the necessary IT tools or competence to acquire the information they need online.

The second level of service involves giving advice, for instance if an older person has established that they are eligible to receive a pension, they might need to know what this will be under various different scenarios and whether it would be better to ask for it straight away or wait until it has matured.

INCA started building up an IT system in the 1980s which has since developed considerably, involving highly automated back-office functions and extensive use of Internet links with social security institutes and between offices. Almost all bureaux are linked to the Internet through broadband lines which allow a speedy linkage to all public institutions with databases that are necessary for its activity. In 2004 INCA sent INPS almost 100,000 online pension demands and more than 120,000 claims related to unemployment benefits in the agriculture sector. It is noteworthy that the majority of the latter came from the Mezzogiorno, where there is a higher risk of unemployment and of falling into a condition of poverty.

It is evident that without ICT, it would have been very difficult, if not impossible, to manage such broadly spread activity and such a large mass of data. Through ICT INCA has been able to acquire not only information related to the position of their clients but also to send the necessary documentation and to keep in touch with the institutes for any possible enquiries. This has meant a reduction in costs for social security institutions, because INCA is, in effect, a trusted intermediary which carries out a large part of their activity. At the same time, and this the most important aspect their raison d’etre, INCA guarantees an important service to citizens who need it, and particularly, those who are at risk of being marginalised or excluded.
5. UK

5.1 The Development of eGovernment in the UK

In 2001 the UK came in fifth place in the UN eGovernment readiness index - behind the leaders - the US, Sweden, Australia and Denmark. However, in the eParticipation Index the UK came first, followed by the US, Canada, Chile and Estonia. This index gives an estimate of how engaging eGovernment services are towards citizens and their political participation.

A recent study (Torres et al 2004) benchmarked the local eGovernment services of 35 cities across twelve European Countries and found that British cities (Glasgow, Edinburgh, Dublin, Birmingham, Leeds, London and Sheffield) have implemented websites which interact the most with citizens. It was concluded that this strong emphasis on eDemocracy fits in better with the ‘Anglo-Saxon’ administration style. According to this study, the UK (representing the ‘Anglo Saxon model’) focuses highly on efficiency, effectiveness, underpinned by notions of private market, competitiveness and customer-centred service.

A research forecast (Kable 2005) predicts that across Europe total government ICT spending will increase from 87 billion Euros in 2005 to 94 billion Euros by 2007. UK spending is expected to represent 23% of the total European spending. The UK public sector spends about 40% more on ICT than its German or French counterparts. The report also highlights different governmental strategies, for example 37% of total UK public sector ICT spending goes to external services such as consultancy and outsourcing, well above the European average of 16%.

Highlighting these positive developments in the UK the table below shows some important indicators:

<table>
<thead>
<tr>
<th>Table 5.1 Selected Information Society Indicators</th>
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<tbody>
<tr>
<td>Proportion of persons using a computer</td>
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<tr>
<td>Internet usage by individuals</td>
</tr>
<tr>
<td>Internet usage by enterprises of 10+ employees</td>
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<tr>
<td>Household use of broadband connection</td>
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<tr>
<td>Usage of Internet by individuals for purchasing / ordering goods or services (excl. shares / financial services)</td>
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<tr>
<td>Enterprises having purchased via Internet</td>
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<tr>
<td>Enterprises having received orders via Internet</td>
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<tr>
<td>Internet usage by individuals for interaction with public authorities</td>
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<td>Internet usage by enterprises for interaction with public authorities</td>
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Source: Europe IDABC Factsheets quoting Eurostat Figures 2002/03

In 2000 the UK government published an eGovernment strategy entitled ‘e-Government: a strategic framework for public services in the Information Age’ (Cabinet Office 2000). The strategy’s key aim was to create a transformation of government services through the application of e-business methods throughout the public sector. The strategy incorporated the Prime Minister’s vision of offering all key public services online by 2005 with a £1 billion investment into development of all eGovernment services (UN 2003).

The 2000 strategy was build around four pillars:

Building services around citizens’ choices
Making government and its services more accessible, convenient and secure so that people can interact with government

Fostering social inclusion, reaching out to disadvantaged groups by providing online public services to people with disabilities and other language groups

Using information better through multi-agency working and stronger links between the private and public sectors

In 2005 the UK Government published a new national strategy, ‘Connecting the UK’. The report claims that a vision of a ‘digitally rich’ UK has been fairly successful - for example 99% of the UK population have broadband access.

However, the problem of a Digital Divide and levels of low take up of e-services remain and the Government promises to continue investing in improved ICT infrastructure. For example, efforts will be made to enable schools to purchase cheaper IT equipment, opportunities will be created for low-income families to purchase computers, the geographical spread of UK online learning centres will be continued and increased emphasis will be put on the provision service of people with disabilities.

This was described in an interview with Jim Fitzpatrick MP, Minister for Local eGovernment (quoted in eGov Monitor 2005) as follows:

‘The largest challenge facing the e-Government programme will be take-up of the new and improved channels and services. Although the adoption of e-Government brings immediate results, its major benefits will only be realised when citizens use e-enabled services in significant numbers. Local authorities need to improve the take-up of e-enabled services by designing services with the customer in mind and by having clear strategy for promoting the appropriate access channel to the right audience’

Importantly, Action 5 of this new strategy outlines the transformation of delivery of key public services. Plans include the improvement of National Health Service (NHS) online service delivery marked by an additional investment of £2.3 billion. This money will be spent on the provision of electronic patient records to guarantee improved health care services, replacing paper prescriptions with electronic prescriptions to minimise common prescription errors and electronic appointment booking across different NHS services.

Other efforts will continue to improve social inclusion. To achieve this aim an eGovernment Unit and the newly-created Council of Government Chief Information Officers (CIO) are tasked with setting out a vision of public service delivery enabled and delivered through technology, and to define a strategy by the end of 2005.

It seems that the UK has made good progress with implementing eGovernment infrastructure. The development of eGovernment services has been made a visible point in the UK agenda and has been given senior governmental support. However at the same time there is little critical information available that provides updates on the progress of eServices. Most of the services appear to be in pilot stages and the realised projects are mainly information-based. More complex services, based on transactions, such as the tax credits administered by the HM Revenue & Customs would be desirable to justify the high investments made so far in developing eGovernment services and to provide truly interactive services.

The government’s ambition to provide all key services online probably has not yet fully happened at a national level. However interesting ideas are emerging in individual local authorities or among other stakeholders.

The next chapter will present a range of UK eGovernment services currently available with some evidence of success and effectiveness, even though it should be noted that these have not all been fully evaluated and there is little critical evidence available.
5.2 Examples of key UK eGovernment Services

5.2.1 Direct Gov

Directgov is the Government's online portal for public services. It gives users access to a great variety of information (such as education, health, employment, crime & justice tax, travel, etc).

The latest figures from the Cabinet Office e-Government Unit show that in June 2005, Directgov's number of 'unique users' reached a number of 1,110,000 visits. This represents a 10 per cent increase on its previous record in January 2005. The total number of recorded visits to the portal also rose to 1,371,000, compared to 1,210,000 in the previous month (eGov 2005).

5.2.2 Government Gateway

The Government Gateway is the online portal facilitating a centralised access to UK online eGovernment services. Individuals, organisations and agents can register for several services at once using the same PIN number. These services include filing of tax and VAT (value added tax) returns, online council tax (local tax) payment and the land and property registry. Newly added services are the 'Job Warehouse' and 'Employer Direct Online' which are delivered by Jobcentre Plus and thus present an example how the joining up of services can be facilitated through new technology.

5.2.3 JobCentre Plus

JobCentre Plus is part of the Department for Work and Pensions and was launched in April 2002. JobCentre Plus brought together the Employment Service and parts of the Benefits Agency that delivered services to working age people. It offers a full job search facility enabling job seekers to look for jobs nationwide. Applicants have the choice to either seek advice in a local job centre or make use of Jobseeker Direct, a call centre assisting with job searches.

More recently, the Employer Direct Online and Job Warehouse facilities have been installed, these service are for employers or other job advertisers who wish to place vacancies with Jobcentre Plus.

Some progress has been made with the online delivery of social security benefits: JobCentre plus offers information for claimants of Jobseeker's Allowance online but is it not yet possible to actually file an online claim.

5.2.4 Department of Work and Pensions Payment Modernisation Programme:

The Department of Work and Pensions (DWP) can now facilitate direct payments of benefits into bank accounts instead of the older method of paying via order books. The Department also offers a variety of services online:

- Carer's Allowance - for individuals aged 16 or over who spend at least 35 hours a week looking after someone who is getting or waiting to hear about these benefits.

- The Pension Service - pensioners can request online forms and contact a call centre to receive further assistance with their claims.

The Department also offers an online State Pension Forecast: people who are 10 days before retirement can go online and calculate the pension contribution they are likely to receive.

There is little evaluative information available, e.g. information on levels of take-up or usefulness to claimants. A Citizens Advice Bureau review remarks that the DWP's services
online availability is useful to their work but that some forms are not easy to find or may be
out of date and are not very 'transactional' (by which they mean allowing for tracking or
progress checking online) which would be desirable in the future.

5.2.5 HM Revenue & Customs/ Inland Revenue

The Inland Revenue’s ‘Child Benefit e-service’ allows parents to send an electronic claim or
report a change of circumstances online. The claimant is directed to the Government
Gateway to do this securely. In addition, the site facilitates online filing of tax credits
(Child Tax credit or Working Tax credit) to a website allowing online calculation of
entitlement, submission of applications and viewing of a personal account. This seems to be
a step-up from purely information-based channels and represents one of the most
interactive central government services.

5.2.6 NHS Direct Online

NHS Direct Online provides health information and advice for the people of England (with
sister services in Scotland and Wales). It is supported by a 24 hour nurse advice and
information helpline and is also accessible through digital TV. The NHS (National Health
Service) is currently implementing an electronic booking system that will enable GPs to
book hospitals appointments electronically for their patients.

5.2.7 National Projects

As we have noted in a previous LAW report\(^1\), increased web-based delivery of welfare is
included in the proposal for the establishment of the UK National Projects Programme.

The National Projects provide the building blocks to help local authorities in England
deliver local eGovernment. The principle of ‘off the shelf eGovernment’ underpins the
development of National Projects products, which are designed to be taken up by any local
authority interested in achieving service improvements and significant efficiency savings.
The National Project’s principle is to offer ownership of each National Project to the
current lead authority. Each lead authority will then decide if it wishes to share its
programme with other local authorities.

The programme consists of 22 projects that have been developed and piloted by local
authorities. The piloting phase has almost come to an end and other local authorities are
invited to purchase these ‘off-the-shelf’ programmes and customise to their own needs.
The programme invested £80 million into the development of the National Projects and
strongly urges local authorities to implement them.

The beneficial nature of the project appears to be backed up by some research evidence
predicting that councils could save £356 billion a year if they implement at least six out of
22 national projects (Cap Gemini 2005). Cap Gemini was commissioned to quantify the
benefits for six of the National Projects and found that areas of saving include freeing up
resources for front-line services, delivering real improvements to the quality of service
experience for citizens and business and improving performance against key measures and
targets. The six projects were:

- Customer Relationship Management (CRM)
- Mobile Working (Project NOMAD)
- Planning and Regulatory Services (PARSOL)
- Enterprise Workflow
- Council Tax and Business Rates Evaluation (Valuebill)

\(^1\) D2.2. The challenges confronting welfare systems in Europe and how ICTs can help solve them.
This report can be downloaded free of charge from http://www.law-project.org/Phase_2/Results_and_Reports/
ICT_Development_and_Welfare_in_Different_Countries/Reports/LAW D2.2 for site.pdf
Local Authority Websites (LAWs)

The following section presents some examples of individual local authorities' projects

Online Benefits Calculator

Online Benefits Calculators are used by many local authorities. This facility provides an estimate of the amount a claimant is likely to receive. The most common benefits are Housing and Pensions forecasts.

The 'Out and About' Project

North Cornwall District Council in the South West of England has established an ICT infrastructure that supports a whole range of eGovernment initiatives including smart cards, web portals and CRM (Customer Relationship Management) systems.

As part of this wider restructuring of services, the Council has designed the 'Out and About' project. The project funds community workers who promote increased benefit take-up amongst the community. The project has developed a mobile service offering a one-stop shop facility accessible via the Council’s web portal. The project claims success as £285 000 benefits have been claimed over a period of twelve months (Local eGovernment Now, 2004).

Halton Direct Link

Another local council, Huntingdonshire District Council, has taken a proactive approach to delivering benefits in the Halton area by moving to 'where the claimants are'. This was achieved by developing 'Halton Direct Link' a service division offering access to multiple services, in addition a Benefit Express Bus, equipped with IT access to the back office benefit system, travels through the councils and offers face-to-face contact with people.

Reported outcomes include: centrally allocated one-stop shops offering access to all services and information; benefit and reviews can be carried out where the claimants are; speedier processing of claims; and other local public and voluntary organisations can use the facilities to provide more effective services. In addition, around 65 per cent of the council's claimants have been seen in their homes or the Benefit Express and paperwork has been reduced by 80 per cent. (Local eGovernment Now, 2004)

5.3 Case Study Examples

5.3.1 Case Study 1 The National eBenefits Project

The National e-Benefits Project is working towards a vision of the future where the benefits system:

- Is focused around claimants' needs, by providing a joined-up, accessible and seamless service.
- Provides benefit advisers with tools to deliver a positive customer experience
- Ensures that claimants are aware of their entitlements, irrespective of which department or agency is ultimately responsible for administering a particular claim.
- Allows a claimant to submit a single claim for a range of benefits irrespective of which agency administers the benefit.
- Encourages claimants to seek employment by providing tools to calculate their potential financial position in relation to any particular job.
Minimises claims that are made in error, calculated incorrectly or fraudulently completed

Is flexible enough to be customised to the requirements of each particular customer segment (for example integrated into a wider service for Third Age citizens)

The project is part of the National Projects sponsored by the Office of the Deputy Prime Minister. The eBenefit project is the largest of the National Projects and has received £7.3 million funding.

The project is led by Rotherham Metropolitan Borough Council and includes representatives from Tameside Metropolitan Borough Council, Sheffield City Council, Liverpool City Council, Derby City Council, Somerset County Council and the London Borough of Bromley.

The national picture in the UK demonstrates the problems the current systems is facing:

- £12.1 billion are spent on Housing Benefits and several billion pounds are spent on all welfare benefits.
- Fraud and erroneous calculation amount to 500 million pounds per annum.
- The Government target set for processing new benefit claims in 2003-04 was 36 days
- There is a low take-up rate of benefits - one person in ten is estimated to be under-claiming

The expected outcomes of the project for strategic stakeholder groups are an elimination of duplicated efforts and reduced paperwork and data input as the core eBenefit system facilitates a more centralised access point to access data. This could also minimise the risk of claims being made in error, calculated incorrectly or fraudulently completed.

For individuals who are claiming benefits this could result in greater awareness of their entitlements, irrespective of which department or agency is ultimately responsible for administering a particular claim.

It is also hoped that the scheme will make the application for benefits more accessible and streamlined for citizens. Particular target groups are children, young people, families at risk and older people.

Anticipated outcomes (tangible and intangible) in summary will be:

- Improved process efficiency - reduction in time taken to process claims
- Improvement in service level attainment
- Reduction in complaints relating to processing time
- Reduction in complaints relating to lost information
- Re-engineering of human administration tasks
- Improved and informed decision making that is location independent
- Ability to interface further with partners - e.g. the Department for Work and Pensions (DWP)
- Reduction in errors caused by lost or delayed paperwork
- Ability to measure performance and view the high-level situation in real time
- Well-trained and motivated staff

The project is still in its pilot phase. The e-Benefits software has been developed and is currently integrated with SX3 back office Benefits system and a document management system. At the end of 2005 a full pilot evaluation will be carried out which will inform further decision making.
In more concrete terms Rotherham Council expects a reduction of up to 25 minutes on E-2-E processing time per claim which otherwise averages 2 hours 30 minutes and further annual cashable saving expected of up to £200k on rolling-out of e-Benefits.

The Project will be delivered through eight work streams:

Work streams 1 to 3 cover functional work areas and consist of: A) Pensions, B) Housing Benefits and C) Jobs. Work streams 4 to 8 underpin the realisation of the other streams and relate to the development of a core e-Benefits Software, issues of information sharing and data protection, marketing and communication for the developed products and collaborations with other stakeholder such as the DWP and Inland Revenue (IR).

The 'Work' sub stream led by Sheffield Council consists of the installation of public kiosks. Sheffield City Council has built a network of 50 computerised public access kiosks located in various places around the city. The service delivers a wide range of information as well as progressively more interactive services (news both local and national, health information, information on Sheffield City Council Services, information about jobs and free email). The kiosks are accessible 24 hours a day.

As a the project is still in its developmental phase, a small of new kiosks (four) have been in Jobcentre Plus offices and in a joint Jobcentre Plus and Housing Area Office. These give customers the ability to search for a job, check the effects of this against the benefit calculator, and use a web-based application form. The aim is to provide a ‘joined-up’ self service experience to the customer, encouraging return to work and the reduction of need for benefit. These kiosks give access only to the Jobcentre database and are only accessible during office hours.

Additional information that is in planning includes transport information, local maps and information on child care.

### 5.3.2 Case Study 2 Citizens Advice Bureau

The Citizen Advice Bureau (CAB) has been a leading charity in the UK since 1939. CAB offers free, impartial advice to individuals on benefit, pension, debt and immigration problems.

Citizens Advice Bureaux around the country deal with 6 million problems a year. As shown in table 5.1, the majority of queries are benefit-related; queries regarding employment issues are in third place.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>1,628,719</td>
<td>28.5</td>
</tr>
<tr>
<td>Consumer &amp; Utilities</td>
<td>1,194,057</td>
<td>20.9</td>
</tr>
<tr>
<td>Employment</td>
<td>601,227</td>
<td>10.5</td>
</tr>
<tr>
<td>Housing</td>
<td>573,056</td>
<td>10.0</td>
</tr>
<tr>
<td>Legal</td>
<td>460,158</td>
<td>8.0</td>
</tr>
<tr>
<td>Relationships</td>
<td>389,558</td>
<td>6.8</td>
</tr>
<tr>
<td>Tax</td>
<td>149,550</td>
<td>2.6</td>
</tr>
<tr>
<td>Other</td>
<td>721,240</td>
<td>12.6</td>
</tr>
<tr>
<td>Total</td>
<td>5,717,565</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: eGovernment Services, CAB report 2004

There are 2,800 CAB offices in England and Wales, with 25,000 staff working for the bureaux (of which 20,000 are volunteers). This wide coverage makes CAB an important player in the progressing of eGovernment services.

CAB has played a very active role in supporting and developing the UK eGovernment agenda by working closely with central and local government to improve services.
CAB sees real benefits that eGovernment can bring about for their advisory work: instant access to a wide range of information from government departments, and the ability to download, complete and submit various forms online, giving clients a faster, smoother service and take a lot of the frustration out of many processes for them and for bureau workers. They also note that electronic communications can save a lot of time compared with the telephone and the post.

Considering the scale and nature of CAB’s work, they are well placed to act as key intermediaries for citizens to access eGovernment services. In 2004, the Citizens Advice service received £20 million funding for a two-year programme called ‘Citizens Connect’ which consist of several components.

Firstly, a virtual private network (VPN) infrastructure for all bureaux in England and Wales was implemented allowing remote access, home visits and outreach sessions to take place. Secondly, a new, secure, electronic case-recording and filing system called CASE was developed to enable CAB advisers to record, find, update and convey client information to one another. CASE is also useful for capturing hard data, and providing feedback to Government.

CAB sees itself as an intermediary acting between the government and clients. CAB is well placed to bridge the ‘digital divide’ since socially excluded groups often approach it as it has strong links to communities through its local offices. The CAB eGovernment manager puts high emphasis on the fact that eGovernment is nothing extraordinarily new but another alternative channel of service delivery. Hence CAB’s strategy is to develop new technology that means quicker, better, and easier dealings with government since otherwise people will not make use of these new facilities.

Another component is the website Adviceguide.org.uk: a website that offers practical, reliable, up-to-date information on a wide range of topics, including benefits, housing, employment and debt, consumer and legal issues. The website offers advice in different community languages and users can print off factsheets.

**eGovernment kiosks**

The eKiosks is another important component in CAB’s strategy. This project is still in its pilot testing phase and so far around 25 PC/kiosk facilities have been installed in CAB offices. The cost per kiosk is around £7,000 (around €10,270) and during the pilot phase a variety of IT products from different providers have been tested. The kiosk network consists of several components: the kiosk and a printer, a firewall and a management server.

The kiosks provide access to online advice: clients can access various Internet sites such as CAB’s Adviceguide, Directgov or the website of the Department for Work and Pensions and HM Customs. It is thus a tool that helps clients with information gathering but clients can also print out anything that is useful to them (e.g. benefit forms from the DWP pensions website). Kiosks also offer additional information on local community issues.

Figure 5.1 shows the structure of the website

The kiosks include a reporting tool which enables tracking of the number of kiosks and web sites visited which is very useful in planning updates for the kiosk network.

Bureaux participating in the pilot phase were provided with detailed training materials for bureaux and the kiosks were used most effectively if a member of staff assisted customers with first time use.

Commonly clients fill in a questionnaire at reception which ask for their reasons for visiting the CAB. Bureaux with kiosks now have the option to direct a client to a kiosk if they think the client can find appropriate information there instead of seeing an adviser. Individual bureaux use the strategy to encourage clients to get information relating to their query from the kiosk before they see an advisor to save advisor time as the client is better informed. In an evaluation, 84 percent of clients felt better informed after using the kiosk.
The kiosks seem to be effective in helping to solve a client’s problem: 50 percent of users said that the information looked up helped partially and only twenty-nine percent felt using the kiosk did not solve their problem.

Findings from an evaluation study (CAB 2005) showed that over 90 percent of clients thought the kiosks were easy to use.

During the pilot period from January to March 2005, 589 visits were logged. This presents an average across all participating bureaux of two visits per hour. Government sites providing benefit and tax credits information together with CAB’s ‘Adviceguide’ site were the most frequently used sites. Clients’ experience with the Internet affected their use of kiosks: the majority of users were comfortable with computers and the Internet and fell mainly in the age group of 25 – 34 and over 50 percent of the clients reported having Internet access elsewhere.

Evidence from an evaluation of the pilot seems to show that eGovernment services are effective in front-office areas and have a positive impact on some back office activities (i.e. not needing to see an advisor). There is also an acknowledgement that kiosks are more
useful to provide information rather than assisting with more transactional processes such as filling in benefit claims. Progress towards a self-servicing approach to claiming benefits is still very much in its infancy. Important issues that remain to be tackled, in dialogue with other stakeholders from central and local governments, is electronic authentication and the availability of more transactional services. If Bureaux had access to online facilities to track the progress or status of a claim instead of having to telephone for such information it would speed up their advisory work. Thus being able to verify a CAB adviser’s or client’s identity electronically would be the next step to enhance the usability of eGovernment in this context.
6. CONCLUSIONS

6.1 National eGovernment Policies

Each of the Member States under study has made significant strides towards the development of a national eGovernment strategy. Whilst developments have taken different specific forms in each national context, certain common features can be identified, albeit with different emphases.

6.1.1 eGovernment as a tool of cost reduction

As the largest single area of government spending in each Member State (accounting respectively, for 26.1%, 27.6%, 30.5% and 30.6% of GDP in Italy, the UK, Germany and France) social expenditure is an obvious prime candidate for the savings eGovernment can bring in each of the case study countries. In France, eGovernment is seen as powerful means of reducing the cost of back-office services in order to devote more resources to front-line customer-facing services where human presence is essential. This motive also plays an important part in Germany, Italy and the UK.

6.1.2 eGovernment as a tool for joining up different government departments and levels

The goal of creating 'joined-up government' is particularly important in the UK, but also plays a strong role elsewhere. In Germany, this poses special challenges because of the strong tradition of devolution of government functions to the 16 Länder and, in many cases, to lower levels of government - the 300 regions and 13,000 communes that go to make up the totality of government administration. Here, as is also the case in France and Italy, there is a need for horizontal integration of the databases of different government ministries as well as vertical integration between different hierarchical levels of government.

The process of 'joining up' can only take place where certain conditions have already been met.

The first of these conditions is that the functions are already digitised. Here, joining-up can be regarded as a second step in a process which begins with the standardisation and digitisation of previously paper-based processes.

The second condition is that the systems are compatible. Here, ironically, it may be easier to introduce 'joining up' in situations where digitisation has been less advanced in the past, since it is possible to design in compatibility to new ICT-based systems. Where there is a substantial legacy of incompatible systems developed in isolation in different government departments and at different regional levels (as in Germany) linkages present major and costly challenges.

A third condition is that adequate data protection is in existence. All case study countries, like other EU Member States, have national systems in place to protect the confidentiality of sensitive personal data. However there remain some technical obstacles to the full adoption of digital signatures which act as a brake on the progress towards full integration of services.

6.1.3 Use of regional pilots
Another common trend across all four case study countries was the development of pilot projects which could then be rolled out nationally as a way of economising resources and avoiding ‘reinventing the wheel’.

In France, this policy is summarised in the words ‘if it has been done once, don’t do it again; do everything possible jointly; make sure that what has already been paid for by public money can be reused at no additional cost’. In Germany, under the Media@komm initiative, local government agencies are encouraged to tender for innovative local eGovernment pilot projects, with best practice then being transferred to other communes and regions. In the UK, a similar approach underlies the concept of ‘national projects’ in which local authorities, either individually or in small consortia, take a lead role in developing innovative eGovernment projects which, once developed, can then be offered ‘off the shelf’ to other municipalities and regions. The Italian ‘eGovernment action plan’ embodies similar principles.

6.1.4 use of multiple channels to reach citizens

Any eGovernment initiatives relies for its effectiveness on citizens’ access to the appropriate technologies and skills to communicate effectively with the service provider. A lack of access to these technologies and skills can therefore serve to exclude citizens from the broader knowledge-based society. Meeting the twin goals of inclusiveness and providing digital access to services is therefore a challenge to all government agencies. This challenge is particularly important in the case of social services since the groups most likely to be in receipt of these services (the elderly, the sick, the long-term unemployed, women, newly arrived immigrants etc.) are precisely those who are least likely to have access to the technology and - even when public access is available - least likely to possess the language and technical competences to use it effectively.

In different ways all the case study countries have addressed this challenge in a variety of ways. The UK has developed a number of initiatives to provide access to public services through media such as digital TV and mobile telephony whose use is more widespread than the use of PCs with Internet access. Another approach is to make use of intermediaries to ensure that even the most disadvantaged groups have access to information and services. Here, the Italian institution of *Patronati* and the UK’s Citizens Advice Bureau provide particularly striking examples of good practice that extend help to citizens whilst simultaneously reducing the costs for public administrations who no longer have to devote extensive resources to dealing with enquiries from the public and mistakenly filled-in forms.

6.1.5 Public debates about the cost of eGovernment

In a somewhat more negative, vein, each nation studied had also seen extensive public debate about the cost of eGovernment. Given the scale of expenditure on health and social services in each Member State and the huge size of the administrative systems required to deliver them, attempts to modernise them have inevitably involved very large contracts with external suppliers which have in many cases attracted considerable attention in the national press and in political debates. In some cases, specific schemes have proved controversial and generated a sense that eGovernment initiatives do not represent value for money for the taxpayer, even when it seems apparent that a longer-term evaluation would reveal clear benefits.

It can therefore be concluded that there is a need to develop clear indicators, both quantitative and qualitative to enable eGovernment projects to be monitored effectively over time so that cost-benefit analyses can be undertaken that reflect these longer term benefits.
6.1.6 eGovernment as a means of improving the customer experience

In addition to introducing eGovernment as a means of streamlining administrative processes and reducing costs, all the case study countries had also used the potential of ICTs to improve customers’ experience in accessing existing services and in some cases to develop entirely new services. The adoption of a ‘customer-centric’ approach to service delivery is normally only possible as the final stage of a process that begins with digitisation of processes and is then followed by a joining up of different databases, in turn followed by a reorganisation of the newly joined-up service.

Some good practices relating to social inclusion, labour market participation and access to welfare are summarised below.

6.2 Good practice in eGovernment initiatives relating to labour markets and welfare

Case study evidence from the LAW eGovernment report showed that considerable steps are currently being taken in all four countries under review to develop effective systems of eGovernment and that many of these are likely to lead to improvements in citizens’ access to labour market participation, information and welfare. There is considerable variety in these schemes; we focus here on some common features.

6.2.1 Innovative use of ICTs to improve job matching on the labour market

In various ways, each country studied has seized on the opportunities offered by ICTs to improve job matching on the labour market. Examples of this can be found in the Italian ‘national continuous labour exchange’ and the German ‘virtual labour market’ concept. Both of these have produced significant benefits both for job-seekers and for employers, as well as for the employment agencies involved. Critical success factors include:

- clear user-friendly interfaces
- search functions that strike an appropriate balance between the over-general and the over-specific
- taking account of ‘soft skills’
- providing complementary face-to-face human assistance

6.2.2 Innovative use of smart cards in the health field

The administration of health services is a prime target for eGovernment in most Member States for several reasons. First, it is by definition enormous in scale, involving the holding of individual records on every citizen from cradle to grave. Second, it involves highly sensitive personal data, presenting particularly strong data security challenges. And third, it may involve co-ordination between a large number of different actors including family doctors, specialist consultants, hospitals, pharmacies and in some cases (where health affects labour market participation) also national insurance agencies, benefit agencies and employers. The individual patient, and in some cases his or her parent or carer, are also, of course, included as stakeholders. Health administration, like other areas of government, is of course undergoing a continuous process of modernisation and adaptation. However this unique combination of characteristics makes it a prime candidate for the introduction of smart cards.
The LAW case studies included an examination of the French Vitale card and its planned update, the about-to-be-launched German electronic health card and the Italian Carta Nazionale dei Servizi (National Services Card) which is being experimentally extended to cover health information. Whilst it is too early to evaluate the success of the German or Italian examples, or the next stage of development of the French card (which is currently undergoing a major upgrading) it is clear from the first phase of the Vitale initiative that the use of smart cards in the health field produces clear benefits, including a speed-up of payments, improvements in cash flow for poor recipients (who no longer have to pay a percentage of their health costs in advance and wait for reimbursements), avoidance of duplicate examinations, avoidance of medical errors due to lack of information (e.g. about previous diagnoses or drugs taken) and savings in administrative costs.

6.2.3 Innovative use of ICT to provide on-line access to welfare information

The case studies also revealed a variety of innovative uses of ICTs to improve access to information about welfare benefits and make this often highly complex information easily comprehensible to citizens who may have limited education, poor language skills or disabilities that affect their communication abilities.

The Patronati in Italy and the Citizens Advice Bureaux in the UK provide examples of the use of intermediaries to ensure that advice and information reaches citizens in disadvantaged groups. In France, the CEDRE simulator provides citizens with easy-to-understand information about the pension they can expect to receive, which enables them to make informed decisions about when to retire. Several cases also involve the provision of kiosks in public places, sometimes with human helpers on-hand to give advice on how to use them, to enable direct access to online information.

A side-effect of all these schemes is that the more they are used, the greater is the reduction in administrative costs for public administrations.

6.3 Recommendations

It would of course be presumptuous of the LAW project to give general advice to Member States on their overall eGovernment strategies. However it does fall within the project remit to draw attention to those particular aspects which are particularly relevant for the improvement of labour markets and the avoidance of social inclusion.

Here, there are some clear lessons to be learned from the case studies that could usefully be built on.

Local and regional pilots are a good way to develop innovative good practice at minimal cost for subsequent national roll-out. It would be useful to investigate the extent to which this approach can be adopted at a European level, especially to facilitate a rapid catch-up in New Member States, without jeopardising distinctive national traditions and welfare models.

Many of the benefits of eGovernment schemes only accrue at the later stages of a project (once the initial processes of digitisation, ‘joining up’ and reorganisation have been carried out). It is therefore important that evaluation methods are developed that make it possible to set future benefits against immediate costs. This implies setting in place clear performance and indicators and reliable methods to record them from the outset.

The detailed qualitative research of some of the smaller pilot projects demonstrates the importance of paying attention to user needs and as well as the administrative priorities of the service supplier. This includes ensuring simple and user-friendly interfaces, ensuring that the location and surrounding...
environment of the access point is accessible and appropriate and taking care of the training and familiarisation of staff. In particular, the presence of human helpers alongside technological resources greatly increases the chances of success where socially excluded groups are involved. Attention should be paid to such details in allocating resources to eGovernment projects. Here, there is a need for further research, in particular to evaluate the usability of eGovernment initiatives from the perspective of those social groups most vulnerable to exclusion as well as from the perspective of staff working in service delivery.


Citizen Advice Bureau (2003) Electronic eGovernment services: key priorities for the citizen advice service, London


EGov Monitor (6 May 2005), Directgov breaks take-up records, http://www.egovmonitor.com/node/835


