



e-Government Program of the Belgian Social Sector

Crossroads Bank for Social Security

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Summary

In Belgium, there are a lot of partners in the social sector. A major business process re-engineering and computerization was carried out during the past sixteen years by about 2,000 Belgian public and private actors in the social sector from different levels (national, regional and local), under co-ordination of the Crossroads Bank for Social Security (CBSS) - <http://www.bcsc.fgov.be>.

Their close collaboration firstly led to the implementation of a network for mutual electronic service delivery. All actors connected to the network can mutually consult their databases and exchange up to 190 different types of electronic messages in a secure way. In 2006, 511 million messages were exchanged, which saved as many paper documents. The mutual data exchange guarantees the unique collection of data from the citizens and their employers by the social sector as a whole, and enables the automatic granting of social benefits.

Following the business process re-engineering between the actors in the social sector, integrated electronic processes between those actors on the one hand and companies and citizens on the other hand were put in place. An integrated electronic work flow has been developed between companies and actors in the social sector. Consequently all information needed by the social security offices for the calculation of all social security contributions and of all salary and working time related social security benefits is collected only once from the employers, at the moment that one of the following four types of events occurs: the beginning of an employment relationship, the three-monthly payments of social security contributions, the occurrence of a social risk (24 scenarios) and the end of an employment relationship. About 50 types of declarations to social security have been abolished; in the remaining 30 types of declarations, the number of headings has been reduced on average to a third of the previous number. In 2006 19,5 million electronic declarations have taken place. According to a study of the Belgian Planning Bureau, the rationalization of the data exchange processes between the employers and the social sector implies an annual saving of administrative costs of more than 1 billion euros a year for the companies.

In the meantime, social security offices have recently been working away on the installation of a growing number of transactions directly intended to facilitate the life of the citizens.

The electronic data exchange amongst the actors in the social sector and between those actors and the companies and citizens takes place by way of an integrated functional and technical interoperability platform, which complies with strict security standards and is based on modern technologies such as service and object orientation, component-based development, multi-channel service provision, communication from application to application wherever possible, and on open standards such as TCP/IP and XML.

A social security portal is available (<https://www.socialsecurity.be>) containing integrated services (information and transactions), organized according to basic themes (private life, professional activities, health, ...) or business episodes of companies (starting a company, recruiting personnel, ...). The portal is intended for companies, citizens and professionals of the social sector. It contains over 4,000 pages of information and at the present time 41 operational transactions for companies and 4 operational transactions for citizens.

An important event, which has been put forward by the national e-government policy, concerns the availability of an electronic identity card for every citizen (EID card). This tool will allow to speed up the offer of transactions to the citizens in a secure way. The Belgian federal government has also implemented an identification and authentication service, enabling citizens and companies to identify and authenticate themselves at all public websites and portals with the same user ID, password and token, providing they have followed a registration procedure. This identification and authentication service can be used as an alternative until the electronic identity card is available to all Belgian citizens. Beside it, an integrated policy enforcement model based on authentic sources is implemented for the authentication of characteristics (e.g. a capacity, a function, a professional qualification) and

mandates (between a legal or physical person to whom an electronic transaction relates and the person carrying out that transaction) and for authorisation management.

Finally, through the availability of detailed statistical information about such matters as employment, unemployment and inability to work in a data warehouse environment, the CBSS provides an important input for a better support of social and economic policies.

The Crossroads Bank for Social Security has won, in name of the network of the social sector, the 2006 United Nations Public Service Award in the category of "Application of information and communication technology (ICT) in Government : e-government".

The re-engineering of the processes between employers and social security offices was awarded the first Belgian E-government Award in 2004 by the employers federation Agoria, which is an association of approximately 1,300 Belgian enterprises in the technology sector. This award is an important recognition by the companies themselves of an improved service delivery to the employers.

The Agoria federation also granted the first E-government Champion Award in 2004 to the CBSS for the overall e-government achievements in the social sector.

The e-government program in the Belgian social sector was nominated as one of the 5 best practices (out of 500 projects) in the category "European, central and local public e-cooperation" at the second European conference on e-government which took place in Como in 2003.

In the fifth "Web based Survey on Electronic Public services - October 2004" ordered by the European Commission, the CBSS was presented as an important initiative which can increase the quality of services.

1. Timeframe

1.1. The environment

The Belgian social security consists on the one hand of 3 insurance systems (workers, self-employed workers and civil servants), that cover maximum 7 social risks (incapacity for work, industrial accident, occupational disease, unemployment, old age, child care and holiday pay - the so-called branches of social security), and on the other hand of 4 assistance systems (subsidies for the handicapped, guaranteed family allowance, minimum income and income guarantee for the elderly), that grant people specific minimum services after checking their subsistence resources. In addition, a lot of public institutions at the national, regional or local level, or private companies entrusted with missions of general interest (e.g. energy, water or public transport companies) grant complementary benefits (e.g. tax or price reductions, free passes for public transport, ...) to citizens based on their social security status. In total about 2,000 actors are responsible for the execution of the Belgian social security and social protection. More than 10,000,000 socially insured persons and 230,000 employers have very regular contacts with those actors to assert their rights, to furnish information therefore or to pay contributions.

1.2. The creation of the Crossroads Bank for Social Security and its mission

To improve the service delivery to the citizens and the companies, the Crossroads Bank for Social Security (CBSS) was created 16 years ago. The mission of the CBSS is to be the motor of e-government in the social sector, i.e.

- to stimulate and to support the actors in the Belgian social sector to grant more effective and efficient services with a minimum of administrative formalities and costs for all the involved; based on a common and concerted vision, the actors in the Belgian social sector benefit from the new technologies to improve and re-organize radically their mutual relationships and processes

- to promote the information security and the privacy protection by the actors in the Belgian social sector so that all the involved institutions and people can have justified confidence in the system
- to deliver integrated statistical information to the politicians and the researchers in order to support the social policy.

1.3. General overview

As a first stage, the actors in the social sector set up the entire technico-legal environment necessary for the development of a coordinated back office allowing them to exchange a growing number of electronic flows and to obtain integrated statistics in relation to the labour market and social protection trends in Belgium.

On the basis of this experience, these same actors then concentrated on the simplification, coordination and computerisation of the relations between actors in the social sector and employers. This important stage saw the development of electronic transactions meeting employer needs and involving rationalised transmission of the information necessary for the proper social security operation.

In parallel, the social security institutions developed the entire front office part, thus creating a single social security portal for employers, citizens and professionals of the social sector alike. Lastly, the recent technological developments in terms of electronic identification, authentication and electronic signature relating to the arrival of the electronic identity card are being used in a truly concrete fashion in order to offer citizens dedicated electronic transactions.

1.4. Integrated network

Since 1991 a coordinated revision of the processes and relationships between the actors in the social sector is systematically being carried out. During this revision, the legal division of authority between all actors was respected. Information storage and management is not centralized, but executed in a coordinated way. A task sharing has been established indicating which actor stores which information as an authentic source, manages the information and maintains it at the disposal of the authorized users.

A secured network was expanded between all social security offices, which is based on the TCP/IP protocol. All social security offices are connected onto the network, which is managed by the CBSS, and have a legal obligation to request all information available in the network from each other electronically. The CBSS manages a reference directory, showing

- which persons/companies have personal files in which social security offices for which periods of time, and in which capacity they are registered
- which information/services are available at any social security office depending on the capacity in which a person/company is registered at each social security office
- which kind of information/service can be accessed, in what situation and for what period of time depending on in which capacity the person/company is registered with the social security office that accesses the information/service
- which users/applications want to automatically receive what services in what situations for which persons/companies in which capacity.

The CBSS uses this reference directory

- to ensure preventively that a social security office only gains access to data it is allowed to access, and on people who are known to it
- to route data requests to the social security office that can supply the data in question
- to transmit data reported automatically to the social security offices that can use the data in question to fulfill their duties.

The network access is progressively extended to other public and private bodies, amongst others the institutions of the regions and communities entrusted with social missions, the cities and the

municipalities, and the private companies which offer services of general interest and which need information about the social security status of their customers.

The network is linked in a secure manner to the internet and other TCP/IP based networks, including the interbank network and the joint municipal networks, and has a high penetration level with the citizens, their employers and the local governments.

The network forms the basis for the exchange of structured electronic messages in an XML format, as well as for mutual workflow and groupware applications.

1.5. Identification keys

In order to facilitate the exchange of social data about citizens and companies, a unique key for every citizen and company are used throughout the whole social sector.

Since all information systems of all actors in the social sector, all citizens and all employers use the same unique identification keys, information exchange can proceed much more easily and with a substantially higher quality.

- Citizens

Since 1991 each private individual has a single identification number. This single identification number is generally used as a common identification key by all government bodies.

Since 1998, each citizen in Belgium holding a single identification number has had a social identity card (the so-called SIS card). The SIS card is an official memory chip card, on which the single identification number can be read visually or electronically and which the citizen can use for identification purposes at each direct or indirect (e.g. through his employer) contact with the social sector. The SIS card (temporarily) also contains encrypted electronic information on the insurance status of the holder in the health care sector, that can be electronically decrypted and read by the health care providers, and frees them from encoding about 100 million paper certificates a year. The SIS card has been designed by the CBSS, and is distributed through the sickness funds.

Based on the experience of the SIS-card, a more general electronic identity card (EID card) containing private keys and certificates used for electronic authentication and the generation of electronic signatures is now being implemented. The distribution of the electronic identity card has started and by the end of 2009 all citizens should have one. The electronic identity card is a national project, initiated a.o. by the CBSS, and managed by the Ministry of the Interior and the Federal Ministry for ICT (FEDICT).

The importance of this initiative for programs such as this lies primarily in the fact that a reliable means of electronic authentication will be available for almost everyone in Belgium.

- Companies

Since 1 January 2003 all companies and their plants have received a single identification number, allocated by the Company Register. For those firms that already had a VAT number before 1 January 2003, the company number is the VAT number.

1.6. Security

During the design and the implementation of the e-government program of the Belgian social sector, special attention was continuously given to structural, organizational and technical measures related to information security and the protection of the privacy of the citizens. All actors have been developing a real information security and privacy protection culture.

An independent Social Sector Committee created within the Commission for the Protection of Privacy has been put in place. Its duties involve authorizing the exchange of personal data by actors in the social sector, formulating recommendations and advice concerning information security and the protection of privacy, processing complaints from people concerned and arranging external audits. All authorizations to exchange personal data are published on a website. An information security and protection of privacy consultant has been appointed at each actor in the social sector (for smaller actors, it is possible to have a shared information security and protection of privacy consultant), with a clear job description (including among other things the tasks of the data-protection official within the meaning of Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data) and status. A specialist information security service has been set up to support information security and protection of privacy consultants in fulfilling their duties. A Committee for Information Security has been set up, made up of information security and protection of privacy consultants from the various actors in the social sector. Each electronic exchange of personal data by an actor in the social sector is in principle (exceptions can be envisaged) preventively tested for compliance with their authorizations by means of the reference directory and logged by the CBSS. Minimum security standards have been worked out by the Committee for Information Security and approved by the Social Sector Committee. Each general manager of an actor in the social sector must declare annually that his institution complies with the minimum security standards established by the Social Sector Committee; a false declaration is forgery, with sanctions as a possible consequence. An integrated set of security policies has been elaborated through step-by-step refinement; directives, architecture, standards, procedures and techniques have been described to apply the integral set of security policies, in accordance with the priorities set by the Committee for Information Security. The policies are implemented by a set of concrete measures related to the several domains of the ISO standard 17799.

1.7. Information exchange processes amongst actors in the social sector

Gradually, the CBSS has been working on the development of information exchange processes allowing actors in the social sector to communicate electronically the social situation of a person to other actors in the social sector.

There are about 2,000 offices on five government levels concerned with social services and complementary benefits services based on the social security status of a person. The policy and funding of benefits in the social security domain is a duty of the Federal State. However, some service implementation is to be provided on the regional or local level. Those services concern regularly several government levels. I.e. even if the service provision is local, other government level offices had to be consulted to carry out the service; this concern mainly the verification of the applicant's data. Thus, the specific requirement concerning interoperability in the social security sector at local and regional level was to achieve interoperability between different stages of the supply chain.

A number of basic principles were stated in law, and a legal framework was created for harmonising basic concepts. Beside these legal issues, the development of the social security services was adhered to a Belgian interoperability framework. Apart from regulation for rather technical interoperability with focus on interconnection, information exchange and security, agreement on how to ensure functional interoperability and how to ensure that investments made by parties won't become worthless each time standards change, were acceded.

Therefore, the development of electronic data flows discharges the actors in the social sector from the obligation of establishing a large number of paper certificates and of sending them to the citizens or the employers, who have to pass them on to another institution, where the data that is reproduced on them has to be re-entered manually.

All data exchange processes have been implemented after the necessary business process optimization.

All actors connected to the network can mutually consult their databases and exchange up to 190 different types of electronic messages. In 2006, 511 million messages were exchanged, which saved as many paper declarations or certificates. The data exchanges took place with a response time for the on line messages less than 4 seconds in 98,91 % of the cases. The description of all types of electronic messages can be found at the website of the CBSS. As examples can be mentioned (figures relate to 2006):

- 15,3 million electronic contribution certificates for the health care sector, replacing the paper contribution certificates for the health care sector transmitted annually by the citizens to their sickness funds to prove that they are insured, henceforth deducted automatically from the various databases available at the National Office for Social Security (NOSS), the National Office for Social Security for the Local Authorities (NOSSLA), the National Employment Office (NEO), the insurance funds for the self-employed and the Insurance Fund for Sailors (IFS), and transmitted to the sickness funds through the CBSS network
- 2,7 million electronic certificates coming from the NEO, intended for the family allowance funds, by which the status of the unemployed or people in a career break is communicated, in such a way that the family allowance funds can establish the right to (increased) family allowances.
- 3,3 million electronic certificates intended for the municipal and provincial authorities and for the Vlaamse Milieumaatschappij (Flemish environmental company), and for the Brussels-Capital Region, mentioning those of their taxpayers or people liable for dues that benefit from increased reimbursement of their healthcare expenses, so that the authorities concerned can automatically grant a reduction or an exemption of the taxes or dues to the interested parties, as envisaged in their regulations
- 7,25 million electronic certificates intended for the Federal Tax Administration, which indicates the people who come within the remit of the special social security contribution collected by the Federal Tax Administration on assessed household income, or which indicates the amounts to be deducted from the special social security contribution following the payment of an increased contribution to the social security system of the self-employed
- 4,8 million electronic certificates issued by the NEO and intended for the NOSS and/or the NOSSLA so that these institutions can check if the conditions for granting reduced employer contributions are met
- 16,2 million electronic certificates relating to periods of interrupted work coming from the sickness funds, industrial accident insurers, organisations for the payment of unemployment benefits and the Office for Occupational Diseases (OOD) intended for the other social security institutions in order to supplement the data of the multifunctional employers' declaration with the data of which the transmitting institutions are the authentic source.

At the European level the CBSS takes actively part in the implementation of the European network for the exchange of social data between the Member States. The Member States must be able to exchange data about migrant workers. In Belgium the CBSS assumes the role of forwarding point for the electronic exchanges of European forms coming from foreign social security institutions and destined to Belgian social security institutions and vice versa.

1.8. Data warehouse

The CBSS, in collaboration with some social security institutions, disposes of a data warehouse with integrated information about the labour market and social protection. The data warehouse allows establishing statistics that one single institution is not capable to calculate. The management of the data warehouse has been entrusted to the CBSS.

The information available in the operational IT systems of the various actors in the social sector and necessary for the support of the social and economic policy is copied at regular intervals into the data warehouse that can be used for compiling statistics incorporating coded or anonymous information. Recourse to a data warehouse makes it possible to answer the requests for data coming from the authorities and from research institutions more effectively, more quickly and more cheaply. By doing this, two types of application are offered: on the one hand, several basic applications where, according to a given frequency (by quarter, by six-month period, by year,...), a given number of statistics are

calculated and, in addition, certain ad hoc applications that are carried out at the request of the researchers.

This project enables integrated information to be obtained on (the trend of) the Belgian labour market and social protection by cross-referencing between them the information relating to employment, unemployment and social security allowances. The data warehouse incorporates new data every quarter.

1.9. Concept standardisation

In order to simplify the application of social security, and to guarantee the single collection and re-use of the information collected by all actors in the social sector, it has been necessary gradually to transform the way in which citizens and employers have to declare their social data. This transformation was accompanied by the standardisation, in successive legislative waves, of their underlying legal concepts.

The standardisation of the concepts used in social security was entrusted to a legal Task Force, run by the CBSS, and consisting of representatives of the various social security institutions. The proposals it develops are submitted at the end of each phase to the Working Group consisting of representatives of the relevant Ministers and the relevant actors in the social sector, as well as the National Labour Council.

Concretely since 1996, the Belgian social sector has redefined its concepts with regard to residence, salary, working days, days assimilated to working days, reference periods. These concepts were previously defined in very different ways across the various social security sectors.

The following methodology has been applied to do this:

- inventory of all documents (frequently) used for information collection
- inventory of information collected
- classification and clustering of the information collected
- breaking the information collected down into 'real life' information elements with descriptions of the attributes requested
- analysis of goals: what is every 'real life' information element or attribute used for?
- setting up simplification proposals (e.g. elimination of senseless different treatments of the same 'real life' information elements)
- based on the simplification proposals, fleshing out an object-oriented information model of information to be collected
- legislation revisions in order to introduce standardized definitions of information elements and attributes, and definitions of legal concepts that refer only to information elements and attributes that are being defined
- procedures to ensure consistency of the object-oriented information model in an ever-changing legal environment.

1.10. Information exchange processes between actors in the social sector on the one hand and employers on the other hand

After the expansion of the electronic data exchange between the social security offices, the basic conditions were present for also optimizing the processes of information exchange between the social security offices on the one hand and the citizens and their employers on the other.

In view of the higher level of computerisation at the employers, in comparison to the citizens, and since the social security offices were exchanging more data with employers than with the citizens, priority was given to a rationalisation of the information exchange processes with employers.

The processes for electronic data exchange have been integrated with the working environment of every employer to a maximum. Information must only be transmitted once by the employer and it is

subsequently re-used by all actors in the social sector. Information can be transmitted by the employers from application to application or by means of an integrated portal site.

The processes of the collection, the processing and the exchange of information for the calculation and the collection of social security contributions, as well as the determination of rights whenever a social risk occurs, have been thoroughly revised. For each event that can initiate an exchange of information, the information that had to be collected and the social security offices that had to dispose over such information were determined in detail.

To be able to assure the required co-ordination, these processes were first developed for those events where a large number of social security offices are involved, and thereafter for those where only one or a few social security offices were involved. Throughout all these information collection and exchange processes, use is made of standardised information. For example, all declarations of a social risk have the same joint basic structure, which is supplemented by additional elements that are specific to the involved risk. Care was taken to make sure that the logic in the development of these processes would facilitate an expansion to other processes at a later time.

The revision of these processes formed an ideal touchstone for testing the multifunctional character of the information collection. Each new process had to be able to work with the data in the available format.

The processes were also specifically designed for a maximum use of the possibilities of the existing network. For instance, it was made possible for a process to call up data that was already available within the network between the actors in the social sector.

Employers can use publicly available tools to check the quality of the information before sending it to the social security offices.

Information declared by the employers is validated once according to established task sharing criteria, by the actor that is most entitled to it or which has the greatest interest in correctly validating it, and electronically distributed to all interested social security offices via the network that interconnects their back office applications.

At present the social security offers 41 transactions to the employers; a number of them are presented in detail below:

- the immediate declaration of recruitment and discharge (DIMONA-declaration)
- quarterly multifunctional declaration of wages and working times to the National Office for Social Security (NOSS)
- quarterly multifunctional declaration of wages and working times to the National Office for Social Security for the Local Authorities (NOSSLA)
- correction of the quarterly declaration to the NOSS and the NOSSLA
- consultation of the work force register
- consultation of the directory of employers
- integrated electronical declaration of building yards
- consultation of overdue payments of social security contributions by an employer
- declaration of temporary employment of foreign employees in Belgium (LIMOSA)
- declaration of temporary unemployment
- consultation of the holiday database
- declaration of an industrial accident, monthly report and resumption of work after an industrial accident
- immediate declaration of serious industrial accidents to the Federal public service Employment, Labour and Social dialogue
- simplified declaration of an industrial accident
- declaration of the beginning of a part-time job with retention of rights to unemployment benefits
 - o private sector

- education, municipalities or provinces
- monthly declaration of part-time work for the calculation of guaranteed income payments (unemployment sector)
 - private sector
 - education, municipalities or provinces
- monthly submission of work as an employee employed in a protected workplace (unemployment sector)
- monthly submission of work in the framework of an activation programme (unemployment sector)
- declaration for the establishment of young people's vacation rights (unemployment sector)
- monthly declaration of young people's vacation hours (unemployment sector)
- annual submission of temporary unemployment
- monthly submission of hours of temporary unemployment
- authorized request for the temporary removal of a pregnant employee (sector of professional diseases)
- request for a social risk declaration and declaration in case of incapacity for work, maternity leave, complete or partial leave from work as a measure to protect motherhood, leave for fatherhood and leave for adoption
- electronic declaration of resumption of work after a period of incapacity for work
- annual electronic declaration of public mandates in private or public institutions
- The immediate declaration of recruitment and discharge (DIMONA)

Since 1999, at the very beginning of an employer-employee relation, the employer must enter an immediate electronic declaration of recruitment by which he communicates specific data (e.g. identification of the employer, identification of the employee, worker's starting date). At the end of an employment, i.e. when the employee is dismissed or whenever he leaves his employer, a similar obligation of immediate declaration of discharge applies. This immediate declaration of recruitment and discharge thus proves (also legally) the existence or (in the latter case) the ceasing of an employer-employee relation. The employer enters his declaration electronically to the NOSS or the NOSSLA. The NOSS(LA) receives and confirms reception of the declaration. The NOSS(LA) verifies the identification data, gives a unique number to the declaration (DIMONA's number) and adds data needed by the employer. When all is validated, the employer receives the result via a DIMONA notification (push system). The newly created unique employer-employee link enables the employers to gradually get access to the social security network. Indeed, they can run an electronic consultation of the NOSS(LA) developed database on their workforce and possibly download their own data (call system). If necessary, the employers can also correct their declaration. Through the social security network, these data are automatically sent to the actors in the social sector that need them. These institutions can also consult the data. Thanks to the unique DIMONA guarantee of identification and validation, control processes need not be repeated several times and data exchange is processed in a more dynamic and interactive way. DIMONA is a key to a uniform and correct identification of employees, used by all actors in the social sector. At the time being, recruitment formalities are completed electronically for 98% of employees. This represents an enormous saving in terms of time and paper for companies. This declaration allowed for the first time, a real interactivity between the employers and the public administration.

On the basis of the DIMONA declaration, a database containing all employer-employee relationships is available. Each employer has access within this database to his list of staff through transactions at the social security portal and can get an electronic list of his staff by file transfer in XML format, so that he no longer needs to keep a private staff register up to date.

- Quarterly multifunctional declaration of salary and working times (DMFA)

Until 1989, the data relating to the salary and the working time of employees, for establishing social security contributions, was collected almost exclusively on paper. With effect from 1990,

employers have been able to submit their quarterly declarations to the NOSS electronically. This development has enabled the employers' administrative work and the risk of error to be reduced.

With effect from 1990, information coming from employers was recorded in an NOSS database, the database relating to salary and working time (the LATG Bank), which since its creation has been accessible to the annual holiday sector institutions and to the department that keeps the individual pension accounts up to date. Previously, these institutions received only paper copies of the NOSS declarations and had to enter them into their computers for processing.

The LATG Bank was then integrated within the network managed by the CBSS and governed by precise agreements as regards the allocation of the control and data processing functions between the institutions concerned. The electronic processing of this data has had many advantages in terms of efficiency and timesaving.

Thanks to the co-ordination work on the legal concepts (see above), the quarterly NOSS declaration acquired a multifunctional character for social security as a whole at the beginning of 2003, and was no longer used only for calculating the social security contributions on earned incomes, the keeping of the pension accounts up to date and the calculations in relation to holiday pay. The data relating to salary and working time appearing on the NOSS declarations could from now on also be used to calculate all social security allowances based on salary or working time data, such as for example allowances in case of incapacity for work or unemployment benefits.

Since 01 January 2003, each employer has to make his quarterly NOSS declaration (DMFA) electronically. As of the first quarter of 2005, the multifunctional declaration of salary and working times was also introduced at the NOSSLA, where it is used in the same manner for the transmission of electronic declarations with salary and working time data.

The data that is thus made available within the social security network no longer has to be requested from the employer when a social risk arises. Consequently, the introduction of the multifunctional declaration has enabled 50 forms, which were used more than a million times per annum, to be eliminated, and 27 forms, which were used more than 5 million times per annum, to be limited, on average, to a third of the headings.

- The Social Risk Declaration (SRD)

When a social risk occurs that can give rise to benefits in case of incapacity for work, of an industrial accident, of an occupational disease or of unemployment, or to guaranteed income allowances or pay subsidies, the employer or the citizen or a mandated intermediary must declare it to the appropriate social security institution.

All social risks declarations have an identical structure. Each social risk declaration is indeed composed, on the one hand, of a set of data - common to all sectors - enabling the employee and the occupation in question to be identified, and on the other, of data peculiar to the envisaged social risk and finally, if applicable, of the latest data relating to salary and working times that is not yet available within the social security network.

The employer should thus declare in a social risk declaration only the information that is strictly necessary and not yet known within the social security network.

This project, today partially operational, has the vocation of offering a fast, quality service to the employers and to the citizens by reducing the administrative formalities to be accomplished in the matter as far as is effectively possible.

For the delivery of the DIMONA, the quarterly DMFA declaration or the declaration of a social risk, the employer or his mandatory can use a variety of channels:

- all declarations of the beginning and the end of an employment relationship have to be made electronically, either by exchanging XML messages between applications, or through transactions available at the social security portal, via SMS, or over a voice server; declarations can be amended electronically; each employer has access to his list of staff through transactions at the social security portal and can get an electronic list of his staff by file transfer in XML format, so that he no longer needs to keep a private staff register up to date
- all quarterly declarations of salary and working time data have to be made electronically, either by exchanging XML messages between applications or through transactions available at the social security portal; declarations can be amended electronically
- all declarations of social risks can be made either on paper or electronically, either by exchanging XML messages between applications or through transactions available at the social security portal.

The elements included in the XML schemes have been defined uniformly in all declarations; the XML schemes per declaration can be downloaded from the social security portal; each three months, a new version of the XML schemes is made available, with a note of amendments compared with the previous version, taking any regulatory changes into account.

The delivery of XML message files can occur via several different physical channels, such as the internet or the interbank network, to which most employers are already connected for their banking transactions.

Concretely, 98% of the electronic information exchange takes place by way of a direct communication of XML messages between the information systems of the employers and those of the social security offices; 2% takes place by way of portal applications.

A fact that is worth reporting, with regard to the multi-channel service provision, is the combination possibilities that are at the disposal of the employer. He can, for instance, make a declaration by transmitting XML messages between applications, after which he can consult and amend his own data via the portal. Those declarations that are prepared by mandated intermediaries can be consulted and amended by the employer, and vice versa.

The advantages of this approach are that the employer can integrate the provided services in an optimal manner in his own structures and processes. Furthermore, the employer can invest in his own ICT infrastructure, in accordance with a rhythm that he judges as opportune. If a personnel administration software is available to him, which can transmit XML messages and can link up to the applications of the social security offices, then transactions can be processed between applications; in the other case he can use the existing applications of the portal.

To obtain information about the data exchanges with the social security offices, the employers and their mandataries can use a variety of channels. All useful information with regard to the data exchange, the message formats, the information model and similar items, is available on the social security portal. Furthermore, the employers and their intermediaries can contact the multimodal contact centre Eranova, by filling in a Web form, via e-mail, via telephone, or by letter or fax. All contacts are handled by a customer relationship management tool. Independent of the selected channel, the employer is supported at all times on the basis of the entire contact sequence.

While providing such support, the staff of the contact centre has access to all data that the corresponding employer or his mandated intermediaries have declared.

The employer obtains systematic feedback in all instances, with regard to whether a declaration was received and, if so, whether the declaration fulfils the quality requirements. A notification of relevant errors is sent to the employer if a declaration does not fulfill the quality requirements. If necessary, the contact centre Eranova will support them with regard to a correct interpretation of the error message and correcting the errors.

1.11. Integrated portal environment based on the user's logic

In October 2001, the CBSS network, which interconnects the actors in the social sector between themselves and which thus constitutes a coordinated back office environment, is opening up to the outside world by means of the internet. The social security portal (front office) that has been set up thus offers a single main front door, via which all social security information can be communicated.

The social security portal (<https://www.socialsecurity.be>) provides all citizens and companies with complete, structured and up-to-date information on all aspects of social security (with links to the sites of the individual social security institutions).

The portal contains integrated transactions and an integrated information model, instructions, glossaries, XML-schemes and test scenarios for all electronic transactions with all social security institutions.

Gradually, the portal is evolving into to a personalised provision of services for each user (citizens, employers, certain categories of social security sector professionals, and so on) who takes account of his or her specifics, either on the basis of a profile that is communicated by the user him or herself, or on the basis of an analysis of his or her social security situation. Thus for example, each employer has a personal page.

1.12. Services for citizens

Firstly, the automatic granting of benefits based on the social security status of a person is being generalized; indeed, a recently published law states that people who are entitled to complementary benefits on the basis of their social security status, must not be asked anymore to submit a certificate; they are allowed to refuse the delivery of a certificate without losing the benefit; the institution that grants the complementary benefit has to consult the CBSS to get information on the social security status.

So, for the socially vulnerable (persons with a handicap, those entitled to welfare, the long-term unemployed, those on incapacity benefit, etc.), particular efforts are made to ensure that all complementary benefits (such as tax exemptions or reductions, rebates on energy prices, free public transportation and telecommunication) are automatically granted, without the individual having to submit separate applications.

Furthermore, social security offices have recently been working away on the installation of a growing number of transactions directly intended to facilitate the life of the citizens. The delivery of the electronic identity card to all Belgian citizens is an important catalyst for the secure use of electronic transactions by citizens.

Since 2004, the “e-Gofso” application, accessible via the social security portal, has been enabling the victim of a company closure (for example, a bankruptcy, a liquidation or a discontinuance of business), whose employer or official receiver no longer pays any allowances (back pays, holiday pay, severance pay, and so on), and which lodges an intervention request with the Company Closure Fund (CCF), to consult his or her file via the internet.

Since August 2005, thanks to the “Communit-e” application, the municipality can henceforth introduce, via the internet and with protected access (use of the electronic identity card), requests for allowances for handicapped persons or medical recognition requests for handicapped persons directly into the Social Security Department’s IT system.

Since November 2005, the “E-LO” application enables an employee in a career pause or with time credit to consult his or her file (status, payment).

Since April 2006, the “Holiday Pay and Period Consultation” application enables employees to consult their holiday pay and period.

Since March 2007, young Belgian jobseekers, under the age of 26, are able to apply on-line for a 'first job' card.

1.13. The application Front office employment

As part of the employment policy there are numerous measures to support employment in general and the employment of unemployed persons in particular. These measures imply among others a labour costs reduction and a reduction of the employers' social contributions. The measures can only be efficient if the employers, the workers and the job-seekers have a clear understanding of these mechanisms and if they can get an idea of the financial benefits these measures offer. The project Front Office Employment aims to meet this need.

Through the project Front Office Employment the following information is delivered:

- an integrated overview of all labour cost reducing measures in a particular situation,
- the prior conditions to qualify for these measures,
- the application procedure.

The application is a guide in the search for information about employment measures provided by the Belgian authorities and institutions. It offers an easy and integrated access to all the available information about the existing federal and regional measures for the promotion of employment.

All these measures are explained on a specific website, www.aandeslag.be, which is frequently updated. A content management system is used to feed this website. The application was conceived in a way that it can be integrated into the different web environments of the participating institutions. The application is available on the social security portal and on the portals of the Regions and Communities. The information will also be available through the portal sites of civil society organizations like the unions, the health insurance funds, ...

In the long run, these portals will give access to an application for the calculation of the concrete financial benefit for an employer or job-seeker in a specific situation. For this calculation the data available in the network will be used as much as possible. The application will also allow to make a simulation or to submit an electronic demand.

1.14. Contact center Eranova

Eranova, an integrated contact centre, was established in July 2001. Employers, their mandated intermediaries and citizens are welcome at the contact centre with all their technical and content questions, which concern the social security system.

Up to the current time, this contact centre has helped several hundred users every day. The contact history with every employer, mandated intermediary or citizen is stored within the CRM tool. Statistics about the questions that have been asked are used as input for a permanent improvement of the service delivery.

1.15. Installation and use of consultation platforms

The whole E-government program of the Belgian social sector was prepared, developed and implemented in close co-operation between all involved actors. Use was made of existing formal consultation organs within the social sector for this purpose, such as the National Labour Council, the highest consultation organ between the social discussion partners, and the General Co-ordination Committee of the CBSS, in which all actors in the social sector are represented. Furthermore and specifically for some projects within the program, a number of ad hoc consultation platforms were established between

- the representatives of the involved Ministers and the general managers of the involved social security offices
- the general management of the involved social security offices, the employer organisations, the trade unions and the mandated intermediaries of the employers
- the ICT experts of the involved social security offices, the employers, trade unions and the mandated intermediaries of the employers

- subject matter experts from the actors in the social sector for each concrete process revision.

1.16. The future

On its own initiative or on demand, the CBSS will continue

- to extend her services to all actors in the social sector
- to stimulate the re-engineering of service delivery processes by creating value chains for the citizens and the companies based on a combination of back office integration and a user friendly front office
- to assist the federal government and FEDICT in the further development of e-government.

More concretely, the following projects are being executed

- the back office integration is continuously being extended to all public social welfare centres, to the sectoral complementary pension funds (private schemes supplementary to the legal old age schemes), to the institutions of the communities and regions entrusted with social missions, to the municipalities and cities and to the health care professionals; about 40 new types of electronic messages are planned
- the CBSS has proposed to the federal government the concept of the prefilled tax declaration of the natural persons; concretely, the tax declarations would be partially completed on the base of the data available in the social security network before being sent or presented on a portal to the natural persons; this would be a great step forward into administrative simplification
- new electronic transactions will be developed for 3 target groups: the citizens, the companies and the professionals of the social sector (e.g. the health care professionals); the transactions will be put at their disposal in an application to application mode or via portal sites; about 30 new transactions are planned, such as the on line consultation of files and the on line calculation of benefits; in that respect the electronic identity card will be used for electronic authentication and putting electronic signatures
- the service delivery to citizens and companies will become multi-channel enabled and be based on an integrated customer relation management; the services will be more personalized and self-service will be promoted
- electronic payment facilities will be integrated in the service delivery
- the use of the actual SIS card by all health care professionals will be promoted; the connection of the health care professionals to the network will also be stimulated; once these connections will be generally implemented and the electronic identity card will be delivered to all citizens, the SIS can be abolished; the identification function will be taken over by the electronic identity card and the insurance status will be accessible via the network; at this, the CBSS will promote the evolution towards an electronic cooperation in the health care sector, based on the experience of the social sector (Be-Health platform)
- a career planning system will be implemented : such a system offers to citizens and employers the possibility to consult their rights in the field of social security, job schemes, time credit, pensions et al, and to simulate consequences of certain choices in their career on building up their social rights
- an integrated e-workspace will be developed for the personnel of the actors in the social sector supporting among others knowledge management, document management, work flows, program and project management, e-communities, e-learning and the labour relation; the e-workspace will be accessible to authorized users from anywhere and at any time by the use of a web browser
- in close co-operation with FEDICT, an integrated e-government platform will be implemented between all Belgian government levels, and integrated with European e-government initiatives.

2. Narrative

2.1. Background

About 2,000 actors are responsible for the provision of social security in Belgium. More than 10,000,000 citizens and 230,000 employers have very frequent contacts with those actors to claim their entitlements, provide information and pay their contributions.

About 16 years ago, an in-depth analysis of the functioning of social security proved that

- the organization of social security offices' business processes was not very customer-oriented and was certainly not coordinated among the various offices
- each social security office had its own set of paper forms with accompanying instructions, on the basis of which information was requested that was specifically necessary to calculate the particular contributions or grant the entitlements in the light of the particular social risk; in total some 80 different paper forms were used for data exchange between citizens and employers on the one hand and social security offices on the other with a total of about 2,000 pages of instructions
- no possibility existed for an interactive exchange of data between the citizens and employers on the one hand, and the social security offices on the other
- a direct exchange of electronic data was also not possible between the personnel administration software of an employer and the information systems of the social security offices, which led to an unnecessary and error-prone manual re-input of information
- social security offices very often asked the citizens and their employers to request information that was already available at another social security office in the form of a paper document, and to produce that document, rather than exchanging the information directly among themselves
- citizens and their employers thus had to inform many social security offices of a single event, following different legal concepts and administrative instructions each time
- since the exchange of data occurred on paper, processing was expensive and time-consuming
- citizens and their employers themselves had to claim their entitlements throughout the social security system and could not count on the automatic granting of all entitlements on the basis of a single declaration
- citizens and their employers did not have the necessary tools for checking the quality of the information before this was reported to the social security offices; this resulted in a relatively high percentage of errors and numerous subsequent contacts for the correction of errors, which could have been avoided
- this all led to a very heavy administrative load and accompanying expenses for employers, which resulted in a brake on entrepreneurship, a smooth economic development and growth in employment.

2.2. Priorities and purposes

The overall goals of the e-government program of the Belgian social sector are

- to grant effective and efficient services with a minimum of administrative formalities and costs for all the involved
- to improve and reorganize radically the service delivery processes amongst the actors in the social sector, and between those actors on the one hand and the citizens and the employers on the other hand
- to promote information security and privacy protection by the actors so that all the involved actors, citizens and employers can have justified confidence in the system
- to deliver integrated statistical information to the politicians and the researchers in order to support the social policy.

More concrete objectives are

- ensuring that information collection at the citizens and their employers occurs only once throughout all actors in the social sector
- the promotion of a maximum of mutual data exchange between the actors in the social sector

- the streamlining of the information exchange between the citizens and their employers, on the one hand, and the social security offices, according to five types of events
 - o the change in the status (birth, decease, ...) or life conditions (move, ...) of a person
 - o the beginning of an employment relationship
 - o the requirement for three-monthly payments of social security contributions
 - o the occurrence of a social risk
 - o the end of an employment relationship
- the maximization of the electronic data exchange between actors in the social sector on the one hand and citizens and companies on the other, preferably by way of a direct communication between the information systems of the citizens and the companies and those of the actors in the social sector, or otherwise by way of an integrated portal site
- the standardization of the basic legal concepts, the information components and the instructions with regard to all information exchanges throughout the social sector, so that the electronic data exchange is multifunctional to a maximum degree
- a reduction in the number of different forms required for the exchange of information, as well as the number of headings that occur on these forms
- an improvement in the quality of the information and a diminution of the number of contacts made between the citizens and the companies on the one hand and the actors in the social sector on the other for the purpose of correcting errors
- a maximal automatic granting of social rights to the citizens and of reductions of contributions to their employers
- an integrated and customer-oriented service delivery to citizens and companies
- the re-use of basic components, such as for instance the user and authorisation management system or the personal electronic mailbox, for the support of electronic service delivery by the government bodies to citizens and companies in other domains than social security
- the use of modern technologies in support of these goals.

2.3. Strategies

2.3.1 Strategic use of information

The e-government approach within the Belgian social security sector is based on a clear vision of the use of information as a strategic resource.

- Information modelling

Information is modelled in a coordinated way so that the model fits as closely as possible to the real world. By doing so, changes to the information model due to changing legal environments are avoided. This modelling takes into account as much as possible the expected use cases for the information. It can be extended and adapted flexibly when the real world or the use cases of information change.

- Unique collection and re-use of information

Information is only collected by a social security institution for well-defined purposes and in a proportional way to these purposes. All information is collected only once, as closely as possible to the authentic source. This way of proceeding avoids the frequently repeated identical questioning of the citizens or the companies by several actors in the social sector. The collection occurs via a channel selected by the person from whom the information is collected, but preferably in an electronic way, using uniform services such as single sign on, notification of receipt for each message, etc. Information is collected according to the information model and on the basis of uniform administrative instructions operating throughout all actors in the social sector. Ideally, the supplier of information has the possibility of controlling the quality of information before its transmission to an actor in the social sector. This requires the public availability of software to check this quality. The collected information is validated once in compliance with an established distribution of tasks, by the most entitled

institution or by the institution that has most interest in a correct validation. Information is shared with and re-used by the authorised users after the validation process.

- Management of information

A functional task sharing is established indicating which institution stores and manages which kind of information in authentic form and makes this available to all authorized users. Information is stored in compliance with the information model. Information can be flexibly assembled according to ever changing legal concepts, which have to refer to the information model. Each institution has to report probable improprieties of information to the institution that is designated to validate the information. Each institution that has to validate information according to the agreed task sharing, must examine the reported probable improprieties, correct them when necessary and communicate the correct information to every known interested actor in the social sector. Information is only retained and managed as long as there exists a business need, a legislative or policy requirement or as long as it has historical or archive value and then it is preferably presented in an anonymous or encoded way.

- Electronic exchange of information

Once collected and validated, information is stored, managed and exchanged electronically to avoid transcribing and re-entering it manually. Electronic information exchange occurs using a functional and technical interoperability framework which evolves permanently but gradually according to open market standards, and is independent of the methods of information exchange. Electronic information exchange can be initiated by the institution that possesses information, by the institution that needs information or by the institution that manages the interoperability framework, in this instance the CBSS. The available information is used proactively for automatic granting of benefits, for prefilling when collecting information and for providing information to the persons concerned.

- Protection of information

Security, integrity and confidentiality of information are ensured by integrating ICT measures with structural, organizational, physical, personnel screening and other security measures according to agreed policies. Personal data are used for purposes compatible with the purposes of the data collection and are only accessible to authorized institutions and users according to business needs, legislative or policy requirement. The access authorization to personal data is granted by an independent committee, after having checked whether the access conditions are met. The access authorizations are public. Every concrete electronic exchange of personal data is previously tested for compliance with the applicable access authorizations by an independent institution managing the interoperability framework, in this instance the CBSS. Every concrete electronic exchange of personal data is logged, to be able to trace possible abuse afterwards. Each time the information is used for a decision, the information used is communicated to the person concerned together with the decision. Each person has the right to access and to correct his own personal data.

2.3.2 Integrated approach

The e-government program of the social sector is situated within the global e-government policy of the Belgian government. This policy tries to provide the users of governmental services with an integrated service offer that covers all governmental bodies and which is organised according to events during the life cycle/business episode of the customer. The provision of electronic services is therefore linked to a customer-oriented re-engineering of the service delivery processes. The co-operation between the various government levels and government bodies is promoted. A number of the above mentioned basic principles on the strategic use of information were cemented in law, and a legal framework was created for harmonizing basic concepts.

2.3.3 Installation and use of consultation platforms

The whole e-government program of the Belgian social sector was prepared, developed and implemented in close co-operation between all involved actors, and with the support of political decision makers at the highest level. Use was made of existing formal consultation organs within the social sector for this purpose, such as the National Labour Council, the highest consultation organ between the social discussion partners, and the General Co-ordination Committee of the CBSS, in which all actors in the social sector are represented. Furthermore and specifically for some projects within the program, a number of ad hoc consultation platforms were established.

2.4. Changes resulting from the achievement(s)

2.4.1 Efficiency gains

The system described leads to efficiency gains for all concerned parties and this in several respects:

- in terms of cost: services are delivered at a lower total cost due to
 - o a unique information collection using a common information model and administrative instructions
 - o a lower need to re-encoding of information by stimulating electronic information exchange amongst actors in the social sector and between these actors and citizens and companies
 - o a drastic reduction of the number of contacts between actors in the social sector and citizens or companies
 - o a functional task sharing concerning information management, information validation and application development
- in terms of quantity: more services are delivered
 - o all services and information are available at any time, from anywhere and from several devices
 - o services are delivered in an integrated way according to the logic of the customer
- in terms of speed: the services are delivered in less time
 - o social security benefits can be allocated much quicker because information is available much faster
 - o waiting and travel time is reduced
 - o citizens and companies can directly interact with the competent actors in the social sector with real time feedback.

2.4.2 Effectiveness gains

Still more important than the efficiency gains are the gains of effectiveness. The use of ICT helps the social security system to enhance the realization of its objectives.

Firstly, the implemented system makes it possible to deliver services according to a higher quality standard. The service delivery is more correct, because of the implementation of validation procedures on information and the automatic communication of changes of data to all interested actors in the social sector. The service is delivered in a more personalized and participative way. The service delivery is more transparent to the customer, who has the possibility of executing a control on the service delivery process by accessing his own files. Security and privacy protection is more guaranteed by the implementation of adequate organizational, technical and legal measures.

Secondly, a number of new services can be delivered. Social security benefits are granted automatically and information concerning social security contributions and benefits is being sent automatically to companies and citizens taking into account their specific situation. Active search of non-take up of social benefits using data warehousing techniques is being started. Personalized simulation environments are being developed.

Thirdly, social policy is better supported by integrated, cross-sectoral statistical information and simulation models.

2.4.3 Concrete results

More concretely, the introduction of this system led to the following:

- about 190 types of paper documents which citizens or their employers had to request from one social security office to pass to another social security office have been abolished and replaced by direct electronic data exchanges between the actors in the social sector; in 2006 511 million electronic messages were exchanged
- about 50 types of social security declaration forms have been abolished
- in the remaining 30 social security declaration forms the number of headings has been reduced on average to a third of the previous number
- many declarations are made directly and electronically from employers' staff administration software packs and accountancy software packs
- citizens and their employers can make all social security declarations on the basis of standardized concepts and standardized instructions, and need to report data to the social sector as a whole only once
- the number of contacts between the citizens and their employers on the one hand and the social sector on the other, has been drastically reduced, with a significant time gain as the result
- personal services to citizens and companies are offered
- a huge number of social benefits and subsidiary rights are automatically granted without citizens or their employers having to make declarations anymore
- hospitals and pharmacists are freed from encoding about 100 million paper certificates a year concerning the insurance status in the health care sector; they now can read it electronically on the social identity card
- according to a study executed by the Belgian Federal Planning Bureau, the rationalization of the data exchange processes between the employers and the social security offices implies an annual saving of administrative costs of more than 1 billion euros a year for the employers.

3. Sustainability and transferability

The CBSS actively shares its experiences with interested institutions in Belgium and abroad. The approach has been described in several public documents and has received a Good Practice Label within the e-government Good Practice Framework set up by the DG Information Society & Media of the European Commission.

In 2001, the general manager of the CBSS was asked by the Belgian federal government to elaborate an e-government plan for the federal public services, based on the successful experiences in the social sector. This plan, that is now being executed and permanently updated by FEDICT, has extended the above mentioned vision of the use of information as a strategic resource to the whole Belgian public sector and contained, amongst others, concrete projects such as the delivery of an electronic identity card to all citizens, and the creation of a Company Register, of a federal service bus and of an integrated portal environment.

In addition to that, a number of components developed within the social sector, are re-used in the Belgian public sector in general. The following examples may illustrate this.

3.1. Unique identification numbers

Each citizen and each company has a unique identification number. This single identification number is generally used as a common identification key by all government bodies. The citizen's identification number can be read visually or electronically from the social identity card or the electronic identity card. The unique identification number is generally used for identification purposes at each direct or indirect (e.g. through his employer) contact of a citizen or a company with the public sector. The main identification data of citizens and companies can be consulted by the government bodies on the basis of the unique identification number within the National Register or the Company Register.

3.2. User and authorization management

The authentication of users and the administration of the access rights, for a system that provides electronic data exchange between tens of thousands of users, is an especially complex process.

The Belgian federal government has chosen to offer an identification and authentication service to other government levels if they so wish, enabling citizens and companies to identify and authenticate themselves at all public websites and portals with the same user ID, password and token, providing they have followed a registration procedure. This identification and authentication service can be used as an alternative until the electronic identity card is available to all Belgian citizens. The registration procedure has been worked out by CBSS, NOSS and FEDICT.

3.3. Public XML schemes, glossaries and common electronic dictionaries

The exchange of all electronic information occurs on the basis of XML messages. There is a large number of accessories available for facilitating this development. For instance, an XML validator is available on the social security portal, with which the electronic messages can be checked before they are transmitted, which has substantially reduced the number of incorrect information exchanges.

The defined XML schemes are documented in public glossaries, that describe the meaning and the format of the different data units, the integrity conditions and the control mechanisms that have been provided. These glossaries are administered in a coordinated manner on the basis of groupware.

All the information concerning the electronic data exchanges is standardized throughout the whole social sector. The use of the object oriented methodology, applied to the glossaries and the XML schemes, has led to the creation of original and innovative applications. Throughout the glossaries, each generic concept is defined in a unique way and is stored in a common electronic dictionary available on the social security portal. The documentation concerning the transactions is divided into different specific electronic dictionaries which inherit from the generic concept and can be enriched by specific information. According to the inheritance principle, each modification to one of the generic concepts is transferred to the entire documentation.

This system guarantees a coherent and homogeneous management of all the administrative processes of the social sector. The structured lists (postal codes, activity categories, ...) contained in the documentation are not only used in a documentary aim but also to test the declarations sent by the employers and saved in the database. The application was built according to the WOPM concept (Write Once, Publish Many) so that it becomes possible to generate automatically an identical structured table in different formats (XML, PDF, MS-Word, ...).

This methodology is gradually being implemented throughout the whole Belgian government.

4. Lessons learned

Do not look at e-government as a pure ICT event. Put the emphasis on an improvement of services and use a multidisciplinary approach. Have a good insight into the surroundings, the critical success factors and the stakeholders. Define a long term vision on integrated, customer-oriented service delivery, management of information as a strategic resource for all government activity and interoperability. Optimize processes within each government institution, at each government level and across government levels before their automatization. Standardize concepts and, where necessary, adapt regulation. Pay attention to change management, communication and training.

Combine a long term vision, profound process optimization and quick wins. Quick wins are useful to prove the efficiency of e-government and to motivate the public sector to change, but they have to fit with the long term vision. A race for quick wins doesn't stimulate development of well conceived

systems based on re-engineering.

Make the vision enforceable by citizens and companies and among government institutions, by formalizing it in regulation. Also adopt regulation to introduce uniform definitions of the information elements and attributes and the definition of legal concepts that refer only to the defined information elements and attributes, and to adequately regulate aspects such as privacy protection, information security, the protection against ICT crime, unique identification keys, the probative value of electronic information, the electronic signature, the equal access to public services, the transparency of administration, ...

Make sure that available ICT components and information are re-used to a maximum. Use already existing networks, means of electronic identification, authentication and authorisation, interoperability frameworks and their accompanying basic services, portal environments, and the electronic information that is accessible from validated databases inside and outside of government. Through this, the efforts can be directed towards developing services with an added value, which are based on process improvements, while the multifunctional use of the same components is assured for all.

Also develop multifunctional components yourself, in conformity with open standards that are based on a flexible, modular, expandable and service-oriented architecture, so that other developers of services can re-use your components.

See to a close co-operation with policymakers, other government departments, other governmental levels, users, mandated intermediaries and interest groups. Make sure that satisfactory consultations are held during regular contacts between the permanent representatives of the various stakeholders, so that a partnership is established.

Attune the service offer maximally to the needs and the logic of the users and involve them actively in the development of the services. Match the governmental processes with the own processes of the users. Assure user-friendliness.

Concentrate on a qualitative and interactive service offer, instead of a mere presence on the web. Support users in the implementation of quality controls of the data, before these are transmitted to the government authorities, and use the available data proactively for an automatic granting of rights, prefilling of information in forms during data collection and a targeted provision of information to the users.

See to a good project management. Work incrementally and with prototyping, and give special attention to the roll-out by providing test and simulation environments, training and coaching for the users, and a multi-modal contact centre for the personal support of end-users.

See to it that proper measuring facilities are available, so as to assure permanent monitoring and improvement. Define the critical success factors in the area of performance, availability, quality, volumes and effective use. Define the relevant measuring parameters for each of the critical success factors, the method and the frequency of such measurements for each indicator, and the reporting method. Assure that the measuring parameters are made available by the applications in the defined manner and in accordance with the frequency that was defined. Organise the follow-up procedures for measurement parameters, as a basis for permanent adaptation and improvement.

Make sure that the users have confidence in the electronic services that are provided. Develop an information security policy, which is designed to guarantee the availability, confidentiality, integrity, authenticity and auditability of the information systems. Give form to this information security policy in an integrated set of measures that warrant the basic principles with regard to information security.