ICT IN THE FINNISH SOCIAL SECURITY ADMINISTRATION

Markku Kiiski Information Systems Manager The Social Insurance Institution of Finland (Kela) PO Box 78 FI-00381 Helsinki Finland Telephone +358 20 634 3404 Mobile +358 40 715 4164 Fax +358 20 634 3877 markku.kiiski@kela.fi www.kela.fi

1 Summary

The Finnish Social Insurance Institution (Kela) is responsible for carrying out the bulk of social security services in Finland. Information technology has played a crucial role in improving Kela's processes throughout its operation. Since the establishment of the institution in 1937, it has utilized current advanced technology in its operations. Punched-card technology was introduced as soon as it was financially and operationally viable for processing what were by Finnish standards large volumes of data. In 1959, as the first government organization in Finland, Kela brought in a programmable computer in the form of the IBM 650. Since then, programmable computers and data processing, in the myriad forms they have taken over the years, have been a key tool allowing Kela to carry out its duties. Punched cards, punched tape, magnetic tape, diskettes and others were used for various tasks until the 1980s, when the first display terminals connected to a centralized information system were introduced in Kela offices, and Kela moved to real-time benefit applications. Currently, there are two so-called main frame computers as well as several hundred different types of server equipment, and about 6,500 workstations in the Helsinki head office and offices around Finland.

Information technologies are currently utilized in Kela throughout the organization and for practically all operational tasks. Human resources, financial and materials management functions are carried out using an ERP system (SAP), which is integrated to other data systems. In its research operations, Kela uses advanced statistical software (SAS). In strategic business and financial planning, as well as in statistical and actuarial calculations, different types of complex integrated information systems are used. The most important and critical applications are, however, the benefit processing data systems, for which construction began in the 1960s, and whose development and ongoing maintenance form the cornerstone of the overall operations of Kela.

The theme of this seminar is the efficient and effective ICT Strategies to Support Pension Administration. The emphasis in this presentation is on the utilization of information and communication technology (ICT) in Kela's benefit processing operations and on its structure, evolution and near-future goals. The benefit processing applications and processes of Kela are comprehensive. As a result, the technical and functional solutions are to a large extent common to all benefits. Therefore, what is applicable to the processing of pensions is as a general rule applicable to all other benefits, and vice versa.

2 General

2.1 Background Information

A member of the European Union, Finland is a constitutional republic located between the 60th and 69th latitudes and flanked by Russia and Sweden. It has a population of some 5.5 million. The capital is Helsinki. The currency used in Finland is the euro (\in).

Kela is an independent public organization governed by the Finnish Parliament. Its main function is to deliver most of the statutory social security benefits available in Finland. It has a nationwide organization, which includes the central administration as well as five regional centers and over 200 local offices around Finland. Kela is currently the only government agency with a comprehensive nationwide customer service network. The number of offices in 2008 was 256 and their combined staff totalled 5,864 employees. In recent years Kela, too, has been compelled to undertake a critical review of the number of offices it operates. Kela seeks to maintain a reasonable level of service available to citizens by purposefully developing, on one hand, its own telephone and online services and, on the other hand, by developing in collaboration with various other authorities "common service points", which offer citizens access to the services of each of the collaborating authorities.

Kela administers over twenty different types of social security benefits from maternity and parental allowances to national pensions. Other benefits include unemployment compensations, housing allowances, and financial aid for students. In 2008, benefit expenditure amounted to approximately EUR 11.1 billion (about USD 15 billion ($1 \in = 1.4 \$$). This represents about 6% of Finnish GDP and 23.2% of total social expenditure in Finland. The average benefit costs in Finland per inhabitant were EUR 2,087 in 2008. Due to effective application of information technology, operating costs have remained at a moderate level, being in 2008 about 3.2% of the total expenditure on benefits. In 2008, Kela processed 67 million separate payments, of which about 24 million were effected through pharmacies. Kela collaborates very closely with six different ministries in administering benefits and in preparing and implementing legislation.

Over the recent years, Kela has been given several new responsibilities and benefits to administer. The most important of these is probably the realization of the national electronic prescription and electronic patient archive systems. In Finland, Kela is recognized as a cost efficient and reliable producer of social security benefits with a proven potential to take on new responsibilities and areas of operation.

2.2 Pensions system in Finland

Social security systems differ considerably from country to country in terms of their internal structure, financing and management models. In Finland social security is based on the so-called "Nordic model", whereby all residents are entitled to at least a basic minimum income. The principal elements of the system consist in insurance against specific eventualities such as old age, disability, loss of a parent, illness or unemployment and in provision for maternity and the care of small children.

The Finnish pension insurance consists essentially of two statutory pension systems: earnings-related employment and entrepreneur pensions and the national pension. They provide old-age and disability pensions as well as survivor benefits in the event of the family breadwinner's death. Elderly employees are also eligible for unemployment pension. In addition to these two systems pensions are also paid on the basis of industrial accident and traffic insurance (liability insurance). Individual voluntary pension insurance policies are also very popular.

2.2.1 Earnings-related pensions

The purpose of earnings-related pensions is to ensure the previously achieved level of consumption after retirement. The size of the pension is affected by the length of the individual's career and amount of earnings. The scheme is statutory and mandatory. It applies to all workers and to farmers and other entrepreneurs. Financing of the earnings-related employment pensions is mainly (75%) based on a PAYG system, and the organizations implementing the system will ensure, if necessary mutually, that pensions are paid.

Earnings-related pensions are payable as old-age, disability, unemployment and survivors' pensions and as early old-age and part-time pensions. The earnings-related pension scheme was last reformed in Finland in 2005. A similar reform of the public-sector pension and entrepreneur pension took place at the same time. The system became essentially more flexible. It makes it possible to retire on old-age pension between the ages of 63 and 68 years, but also encourages people to continue working, rewarding longer careers with additional

pension. The rate of pension accrual is 1.5% of annual earnings for ages 18 - 52 years, 1.9% between 53 - 62 years and 4.5% between 63 - 68 years.

The fundamental features of the earnings-related pensions have been agreed between the labour-market parties and are enshrined in law. The administration of earnings-related pensions in the private sector has been assigned to private pension companies, foundations and pension funds. There are several earnings-related pensions companies and they most often take the form of mutual insurance companies. The decision-making power in these companies is in the hands of policyholders and representatives of labour market organizations. There are dozens of earnings-related pension foundations in Finland. Foundations are enterprise-specific, while pension funds cover usually a wider sector.

The pension providers are supervised by the Financial Supervisory Authority, and ultimate authority rests with the Ministry of Social Affairs and Health. The central body for earnings-related pension schemes is the Finnish Centre for Pensions. This agency maintains collective earnings registers in which information is collected concerning all pensionable earnings and employment relationships. The pension is paid by "the last institution", meaning the one in which the pensioner was last insured. The Finnish Centre for Pensions calculates and sorts out the financial obligations of each institution, depending on how the recipient has been insured during their careers.

The Finnish Centre for Pensions provides implementation guidelines, gathers statistics, conducts research and is the central body for the development and maintenance of common information systems.

2.2.2 National pensions

Kela has the responsibility to carry out the national pension scheme in Finland. Persons resident in Finland are entitled to the national pension. Finnish citizens have the right to a national pension if they, after reaching the age of 16 years, have lived in Finland for at least three years. The same regulations apply to refugees and stateless persons, as well as to the citizens of the EU and the EEA countries and citizens of certain other countries which have signed a social security agreement with Finland. In some cases citizens of another country can be accorded the same treatment if they have moved between EU countries. The basic objective of the system is to guarantee a basic income to persons who do not have other pension income or only a small pension.

National pensions are paid as a retirement pension, disability pension or unemployment pension. The retirement age is 65 years. National pensions may be granted earlier under certain conditions to persons between 60 and 64 years. Disability pension is available as an ordinary disability pension to 16 - 64-year-olds and as an individual early-retirement pension to 60 - 64-year-olds. Unemployment pension can be granted to 60 - 64-year-old long-term unemployed persons.

The national pension is proportional to the recipient's income from employment or civil service pensions and other similar entitlements. If the recipient's earnings-related pension is at least EUR 1075 - 1207 per month in 2009, the national pension is not paid at all. The full national pension in 2009 is EUR 518 - 584 per month.

3 Implementation of social security programs by Kela

In order to meet the challenges arising from the external environment and to keep up with technological needs for development, Kela has carried out a complete overhaul of benefit management and customer service processes. The aim has been to improve customer service by bringing the services closer to customers and to make them more accessible, to streamline internal practices and to make better use of internal and other government databases. The key structural elements are comprehensiveness, multi-channelling, improving network services; and developing contact centers and various service delivery chains with other agencies. In terms of the ICT applications this change has meant continuous development, adopting new methods and technologies, developing new information systems and applying them to different new service channels, as well as the need to integrate them more and more closely to the multi-channelled service delivery framework.

The focus of the development has been on the institution's own internal processes, in which we have made a deliberate transition to a front-office/back-office model in the daily customer service and claims processing and in the related information systems. The change has been very extensive, and will take many years to complete. The process is slowed by the fact that the reform must be accomplished simultaneously with ongoing operations and in an environment of continuously evolving legislation. Other areas that have seen development in recent years have been the large-scale adoption of e-services and the development of automatic application-to-application data transfer methods needed in process-chains for information-sharing between agencies.

3.1 Developing customer service

Kela has in the 2000s made a particular investment in the improvement of customer service. Since 2007 the vision has been to provide customers with the "best service in the public sector." The year 2005 was named as a customer-service theme year and during 2005-2006 the entire staff, nearly 6,000 people, participated in customer service development seminars, which aimed to improve and integrate Kela's services. The seminars produced plenty of proposals for service development. Detailed analysis of their feasibility and work on carrying out the best of them are still in progress.

In 2006, a working group was set up to prepare a completely new service strategy for Kela. The group's task was to define new customer service guidelines: not just small improvements, but permanent changes and entirely new procedures.

The new customer service development program was completed in 2007. The program was approved in the same year as an institutional strategy for the coming years.

3.1.1 The principles of customer service

In the customer service development plan, 'customer' is defined both as an individual person and an employer customer. Kela has a large number of partners as well, who play an important role in the production of services to customers. In the customer service development program, the focus is on the improvement of service for individual customers.

The program is based on the following idea:

We seek to offer our customers close and convenient access to services through multiple channels.

The convenience of access may mean such things as simplifying the application process for benefits. The forms must be clear and understandable. The benefit processing must be managed so that the customer is inconvenienced as little as possible. Any additional information needed from the customer is requested primarily by calling the customer, and the information received over the phone is used to complete the application. Convenience is improved by automation and a direct compensation procedure. It also means that customers are encouraged to use the customer service channel that is most appropriate for them.

The idea of close access to customer service means the availability of alternative service channels and a wide service network. Personal transactions in offices are changing into multi-channelled Kela transactions. Benefit matters can be handled increasingly at home or at work – closely and conveniently.

3.1.2 Customer service channels

In the development plan, Kela's service channels are defined as online service, telephone service, office-based service, direct compensation, mail service and common service points. Each of these channels requires its own ICT services. The true implementation of multi-channel services means integrating all information systems into one functional whole.

Traditionally, customer interaction at Kela has taken the form of personal visits to a local office. Today, the expectations and contact methods preferred by customers are changing. The number of customers visiting a local office has started to decrease and more and more wish to take care of their benefit matters on the Internet, by phone or otherwise, without having to visit an office personally (eg, direct compensation). (graph)

According to the development plan Kela will invest over the next few years especially in call centers and Web services. Online services will be added, so that by 2010 online applications will be a reality for all of our key benefits. There are defined objectives for the use and development of Web services in the annual balanced score card of Kela.

Phone services will be built into a genuine alternative for office and online services. Contact-center operations expanded to cover the whole country during 2009. Starting in 2010, uniform service numbers will be open to customers nationwide on weekdays between 8 am and 6 pm.

Because of the multi-channel processes it is expected that the local offices will in future take on customers in more demanding life situations. In order to find the time needed for individual service, the customer can make an appointment for face time with a customer service specialist. A country-wide uniform appointment system will be introduced in 2010.

Customers are guided to suitable service channels through effective communications and marketing. In addition to traditional brochures and newspaper advertisements radio advertising has been used with good results.

3.1.3 Customer segmentation

In the customer service for individual persons a segmentation model in utilized, in which the customers are approached according to their life situation, and not from the perspective of a specific benefit. In this approach, the support Kela provides in different life situations is arranged into the following categories:

- Families with children
- Students
- Military service
- Illness
- Rehabilitation
- Disability
- Unemployment
- Housing subsidies
- Seniors
- Death of a provider
- Kela card, European Health Insurance Card
- Moving to or from Finland

This practice-oriented approach will facilitate the online and telephone service. Still, the approach requires further development. The segmentation does not take sufficient heed of the interests of customers at different life stages or different ages, or address the different needs for services in such situations as unemployment or rehabilitation. The segmentation of employer-customers also requires additional work.

3.1.4 Operating model for customer service

The development plan defined Kela's operating model, which means a uniform standard of customer service. The deployment of the model began in 2008.

The goal of the standard service model is to produce a "one-stop shopping" approach to contacting Kela with a uniform customer service experience regardless of the type of contact or office which the customer contacts.

No matter which service channel they choose, customers should receive uniform service. The goal is to ensure that the customer service process continues smoothly even if the channel changes. The promise of one-stop shopping is realized if the customers, after having contacted Kela, know how their case will progress in the future and what they should do next.

In practice the introduction of the service model means specialization and a division between different roles for the office staff, as described above. These roles comprise, on one hand, customer service, and on the other, benefit processing and claims determination. Besides the traditionally required skills in claims determination, an entirely new form of special expertise, that of a customer service specialist, is created. It means managing customer service situations according to the customer's life situation.

Specializing in different roles (customer service or benefit processing) clarifies the job descriptions of the staff. Customer service specialists work in an advisor role, which requires knowledge of the customer service situation, alongside a broad knowledge of benefits and skills with professional tools. Similarly, benefit processing specialists are presumed to have more in-depth knowledge of benefits and also skills with professional tools.

The introduction of the service model and the specialization has required not only extensive training but also the adoption of ICT systems for customer service background support and the development of customer service tools.

3.1.5 Customer service tools

Customer service advisors need different ICT tools to support work in customer service situations. One of them is the Customer Service Portal on Kela's intranet. It contains all relevant information necessary for customer service in a single location.

In addition, customer service advisors can rely on a customer service back-up support system, which was introduced in autumn 2008 and runs on purpose-built software. Back-up support is available nationwide, but it is so far organized regionally. Customer service advisors contact the back-up support telephonically. Each case is handled in the customer's presence and in consultation with the customer. The back-up support is provided by benefit experts. Access to the regional back-up support leaves staff time to carry out their own benefit processing tasks in an environment with fewer distractions.

The third tool for customer service is the appointment system. The need for such a system is especially acute when handling rehabilitation and pension cases, but it is also useful in other individual benefit cases dealing with customers' different life situations and requiring in-depth analysis. By making an appointment customers can avoid queuing and can come to the office when it suits them best. A country-wide appointment system is currently under construction. The appointment system will be introduced first to Kela staff in 2010, allowing customer service advisors to make appointments for customers. The second stage will see the opening of a special customer website for making appointments

3.1.6 The customer service network and common service points

Kela's customer service network refers to all physical offices and other service channels where the customer can access the services provided by Kela. Customer service network is therefore a broader concept than the local office network. Alongside Kela's offices, services are available also at other locations, such as part-time offices, common service points, labour service offices and so on.

In future, Kela's customer service network will mean a multi-channelled service model in which the office network is complemented and in some cases replaced by other channels, services and contact modalities. The importance of cross-agency service is growing, so Kela must have clear guidelines on how and under what conditions it will participate in the development of collaborative services with other organizations.

Cross-agency government service is one of Kela's six service channels. It is a way to provide public services from a single location. A common service point means a service point in which Kela is present with other public agencies such as the police, the local registry office or the employment office. Another form of common service is service co-operation, in which Kela, for example, rents its office space to the police or local registry office as a base from which to provide customer service.

Cross-agency government service entails the co-receipt and release of documents, counselling concerning the initiation and handling of benefit matters and providing end-user support for electronic services. The development vision for the nationwide cross-agency service is that the most common of the regional and local government services will be delivered to customers through common service points. The aim is that by using the common customer service, and effectively using common ICT technology a high-quality and comprehensive service network throughout the country can be guaranteed.

Cross-agency government service is a challenging environment for ICT applications. We can expect questions to arise concerning the potential for joint use of information systems, the administration of user IDs and rights, and ultimately guaranteeing necessary information security.

3.1.7 Services for special groups

According to the service program, Kela will develop its services also by designing new kinds of services, including services targeted at specific groups. A good example of such a targeted service is the InTo Finland - service point, which opened in autumn 2008 at Kela's office in Helsinki. The service point was established together with the tax authorities and is aimed at immigrants who come to Finland for purposes of work but are not familiar with the Finnish tax and social security systems. Another example of services targeted to specific groups is the nationwide interpretation service. Setting up this service will become Kela's responsibility in 2010. The goal is to provide interpretation services for disabled persons using ICT technology. Video and other ICT-based methods make the processing of benefits and customer service possible even in situations where the customer, the customer service advisor and the interpreter are physically all in different places.

4 Benefit processing: Operational principles

Kela has in Finland virtually a monopoly in social security services. Only a limited number of basic income security-related services are provided by the municipalities. To this must be added the earnings-related pensions system, which, as noted above, is mainly carried out by private pension insurance companies. Still, in practice about 80% of applications for earnings-related pension are channelled through Kela's offices. One reason for this is Kela's nationwide office network, which allows citizens to communicate face-to-face with Kela staff also about earnings-related employment pension issues.

There is a set of common basic principles which have a major impact on how new tasks and changes to existing tasks are met.

Cooperation with government agencies

Provision of social security services in Finland means close cooperation with other public authorities. Benefits are generally taxable income for recipients, which makes close co-operation with the tax administration necessary. Implementation of unemployment benefit programs requires close co-operation with the Ministry of Labour, while the student financial aid system involves continuous co-operation with universities and other institutes of higher education. In basic terms, benefit processing requires updated demographic information, which is provided regularly in an electronic format by the official register administrator, the Population Register Center.

Shared databases

Inter-organizational ICT cooperation is often based on advanced use of common databases, with each party in the process chain maintaining its own basic data sets. The most important and biggest databases are at the moment copied for technical performance-related reasons from one authority to another. The long-term goal is to adopt, as widely as possible and throughout the various authorities involved in the process, a method to

transfer data automatically between agencies at the application-to-application level. Sharing information, however, requires significant development in data transfer and process automation technologies. Kela for example makes each day about 8,000,000 transactions in its data systems, most of which refer to personal and tax information. Responding to such heavy demand would require from the database maintainer much more efficient server and database capacity. This has not been possible so far for cost and performance reasons.

Common and uniform application interfaces

In order to achieve efficiency and fluidity in benefit processing, Kela uses a uniform application interface in all data systems as far as possible. This means that, irrespective of the benefit application, the internal logic and operation model of a process always follows the same structure. This simplifies things for the application's user and facilitates the adoption of new programs. The consistency makes it possible for the application designers and programmers to use common structural components and modules. This reduces work and improves the reliability and functionality of applications. Intra-dependencies between applications are also easier to manage in the integrated systems design.

Direct compensation

A major cornerstone of customer service and the fluidity of benefit processing at Kela is the so-called direct compensation system. Used particularly with compensations for medical expenses, it means that Kela makes a contract with a service provider (such as a medical centre, dentist, pharmacy, etc.), whereby the service provider deducts the Kela compensation from the bill it presents to the customer and claims it from Kela afterwards. The direct compensation system is electronic customer service at its best: the service is entirely transparent to the customer.

The direct compensation scheme requires service providers to have agreements with Kela. Further, the information systems they use must be tested and approved by Kela. The exchange of compensation data between the local system and Kela naturally takes place electronically and, of course, as automatically as possible. The current situation is that more than 90% of drug reimbursement data is managed using the direct compensation procedure. Direct compensations for doctors' fees are at the implementation stage. The current level of direct compensations is about 20%. Kela's goal is to increase the share of direct compensations of doctors' fees to approximately 60% by 2010.

In another ongoing project, we are working on making it possible for pharmacies to check a customer's right to special compensation for pharmaceutical costs directly from Kela's database. This will make it possible to provide the pharmacy with up-to-date information and to keep the customers updated on their accumulated medicine expenses.

Centralized payment

All Kela payments related to benefits are made electronically directly to the recipient's bank account. By using centralized payment of benefits Kela ensures that benefits are always available to the customer immediately on the date of payment. Benefits are paid each business day. Electronic payment data are sent each night to banks. Kela abandoned cash payments about ten years ago because of high costs and labour requirements.

5 What is eKela

The guiding principle of Kela's information systems is customer orientation. This means that the production of services is structured and managed and that information systems are designed to meet the needs of different customers, while taking into account the increasing demands to provide services efficiently and cost-effectively.

One service channel that has recently seen significant development is the electronic transaction over the Internet, implemented largely as a self-service. According to the customer surveys we have carried out, people continue to expect more and more from online services. At the same time, the need to develop data transmission methods between Kela and our partner organizations is constantly increasing. We are answering these service demands with a service concept called eKela.

eKela is the general name for an ICT service concept developed by Kela. The concept includes, first, an assortment of multi-channelled services for both individual and organizational customers. Secondly it involves

developing tools and processes for Kela's own staff. A third component is developing and raising the level of automation in data transfers used in the benefit process-chains between Kela and its external partners. The service principle is comprehensive, aiming to combine traditional office and telephone services with online transactions, including the self-service that goes along with it. By constructing an integrated and comprehensive service concept Kela wants to ensure that its separate components complement each other and form an integrated whole. The components can also be used to streamline business processes and information systems and to reduce the amount of construction and maintenance work, as well as to facilitate and harmonize the communication between customers and the customer service specialists at Kela.

<u>SAHA</u>

Introduced in 1996 and expanded to the entire organization in 2003, the SAHA system (Electronic Document Management) can be considered as the first major step towards moving Kela's services online. Its fundamental principle is that all of the documents needed in benefit processing are scanned into electronic form and the benefit processing work is based only on electronic documents. Paper documents are no longer used in the process.

The SAHA system brought dramatic changes primarily to the internal processes of offices, but to a lesser extent also to work management throughout our organization. At the local offices, the potential for situations where customer files were temporarily lost, on route from point A to point B, or on another staff member's desk was eliminated completely. The archiving of documents became obsolete, which meant substantial savings for archival facilities. At the organization level, access to documents in an electronic form made it possible to reassign work and thus balance work loads between different sites within the organization. For individual customers, it no longer made any difference whether their case was determined at the office nearest to them or at a completely different office. Job queue monitoring at the benefit level became possible throughout the country, and in different regions and offices in sparsely populated areas in Northern and Eastern Finland.

The SAHA system also enabled the establishment of telephone contact centers and their efficient operation. The caller's file is available to the contact center staff member, who can therefore respond to the caller's questions much more competently and provide practical guidance and advice.

The basis for the introduction of the SAHA system was the growing internal migration within Finland. The working age population moved from Northern and Eastern Finland, which already had low population density, to find work in the urban areas of Southern Finland. This development produced an imbalance of demand for various Kela services around Finland. At the same time it also created huge regional differences in the demand for benefits. In the south, demand for unemployment, parental and educational benefits was great, whereas in the rest of the country the focus was more on health care and pension benefits.

Currently, hundreds of man-years of workload are being transferred within the Kela organization. The results have been very encouraging. Job queues have become shorter, as have the average claims turnaround times, and regional differences in claims determination standards have been reduced considerably. It can be argued that without the SAHA system Kela would be unable to meet its responsibilities.

Centralized databases

The key structural component of the ICT activities are centralized databases. This means that Kela has constant access to up-to-date relevant information needed in benefit processing or online self-service concerning benefits, customers' life situations, housing, taxation, etc. Comprehensive databases create the conditions for a truly comprehensive customer service.

A key factor that makes it possible to use centralized data bases is that all people living permanently in Finland are covered by a comprehensive system of unique personal identification. Every child born in Finland receives immediately a personal identity number. Even foreigners resident permanently in Finland can have their own personal number to be able to deal more easily with authorities. The Finnish ID is 10 characters long and consists of the date of birth, a consecutive number and a check-digit. The personal identification system was created back in the 1960es and it forms the basis for all information processing concerning the citizens of Finland.

Electronic Services

The development of web services was identified a few years ago as one of the priority areas of customerservice development. This decision was informed by surveys indicating clearly that an active part of the population had an increasing willingness and ability to deal with Kela over the Internet without the constraints of time or place. On the other hand, when developing electronic services one must always be mindful of the"digital divide", ie, the fact that all potential customers do not wish or are unable to access resources available over the Internet. Such user groups can best be served by offering multi-channelled services.

Kela's website at www.kela.fi was opened back in 200x. The site provides up-to date information about Kela and the benefits it offers in Finnish, Swedish and English. Customers can also fill in and print a variety of forms in paper format. The site draws about ten million visits per year.

Mere static pages are, however, not enough. More sophisticated services are needed. During the first stage of developing online services, Kela created online calculators that allow users to enter data to check their potential benefits. The next step in the development was to produce query transactions, which enabled citizens to check benefits and their payment status. For customers to access their own data, a sufficiently strong electronic authentication method is needed. Known as "Tunnistus.fi", this service was developed in cooperation with the Finnish Tax Administration and the Ministry of Labour. The service enables customers to visit the sites of these agencies using a single authentication (single sign-on).

Customers can identify themselves online either with their electronic identity card or their personal online banking keys. Currently, more than 99% of the services are based on the use of bank keys. The first transaction based on online identification, financial aid query for students, was opened in February 2004. There are currently on Kela's website a dozen online calculators, about twenty query transactions and fifteen or so benefit application transactions. One of the first electronic applications was the application for pensions produced in cooperation with the Finnish Center for Pensions. The spread of electronic applications is slowed down by the need to append, in the case of several of the benefits, a variety of attachments to the actual application. The attachments are often not in electronic form, which makes combining the online application and the scanned attachments challenging. The user volumes of Kela's online services have developed favourably. In 2009, the number of transactions based on identification is estimated to grow to about 5 million.

6 Future outlook

The eKela concept has been under construction for several years. As the results have been encouraging, the concept is continually expanded and fleshed out. As economic resources remain scarce and performance requirements continue to grow, it has become apparent that information technology is the only way to achieve the required productivity gains.

At the current stage of the development, new web services are being introduced for new types of benefits and existing services are developed and diversified. New features are being added such as personal authentication, which allows better use of existing data in self-service transactions. The possibilities to append attachments to electronic applications are studied at the same time as attempts are made through changes in the wording and interpretation of legislation to reduce the number of necessary attachments. This will increase opportunities to automate processes, and thereby speed up the process and customer service while reducing the number of cases handled in Kela's offices. The goal is to create a system that, by monitoring information in the databases of various authorities, would ideally alert customers to existing or arising rights to receive certain benefits. When conditions are met, the system would automatically inform the customers and provide them with a precompleted application. Customers would only be required to accept or reject the proposed application. Naturally, customers would always have the last word on matters relating to themselves.

Kela is under continuous pressure to develop its internal processes.. Last spring a three-year project was completed in which the personnel, materials and financial management routines were transferred to the ERP environment (Enterprise Resource Planning). The new SAP-based system will create the conditions to manage the work queues more efficiently. This means that the tasks in the queue are more effectively geared, both in terms of their content and the demands they pose, towards the expertise of the personnel, and that tasks referred for decision to individual staff members better match their personal knowledge profile. One part of

this general reform of processes is Kela's new self-created customer relations management system, which will go into pilot phase next year.

The existing benefit data systems are based on 1980s architectures and techniques. The tools for maintaining and developing the aging applications are themselves growing old. In order to meet the future challenges Kela has launched a major reform of its ICT technologies and applications. The future of benefit processing systems lies in browser-based applications built on Java [™] language, with a process-engine, SOA-architecture and other technologies that are expected and hoped to remain viable throughout the next few decades. The reform project is very demanding, because all of the existing services must remain operational and must be maintained to ensure customer service. The basic principles of the new architecture have been defined, and the first pilot applications are under construction and will be introduced in the coming year.

A major future-oriented task whose implementation has been entrusted to Kela is the national patient record archive and the electronic prescription system. This project started in 2006, and will be moved to a production environment over the coming year. Kela's role in this project is that of a technical implementer and maintainer. The implementation takes place under the guidance of the Ministry of Social Affairs and Health and will involve all public and private health care organizations and pharmacies in Finland.

Kela is also a key player in social security-related information transfer between various authorities in Finland and the European Union (EU). The EU is building a multi-national data-transfer system for social security matters in order to transmit information electronically between different member states. The EESSI project (Electronic Exchange of Social Security Information) has been underway since last spring and is due for completion in 2012. The principles of the system are: standard electronic documents, a secure closed network, a common data security policy and national access points.