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INTERNATIONAL SOCIAL SECURITY ASSOCIATION

Technical Report 01

ICT, instrument of social security transformation

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The International Social Security Association (ISSA) is the world's leading international organization bringing together national social security administrations and agencies. The ISSA provides information, research, expert advice and platforms for members to build and promote dynamic social security systems and policy worldwide. An important part of ISSA's activities in promoting good practice are carried out by its Technical Commissions, which comprise and are managed by committed member organizations with support from the ISSA Secretariat.

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Executive summary

Survey

The International Social Security Association (ISSA) has a Technical Commission that focuses on Information and Communication Technology (ICT). The ICT Commission arranged a survey of ISSA member organisations to identify examples of the successful use of ICT to achieve service delivery transformation. The survey was wide-ranging and the respondents provided useful information on a broad array of topics.

The survey material can assist organisations, considering how they might use newer ICT to transform their service delivery strategies. Some core messages are presented in this report and the most important of these are listed below.

Main message

Expansion of Internet and multi-channel services requires fundamental changes on a number of fronts. Apparently, there is a slowing down in the provision of Internet and equivalent services. This seems to be linked to lack of progress in the provision of more integrated services, especially services involving collaboration with other agencies. Collaboration may be progressing slowly due to uncertainty about the best methods for tackling identification and transaction authentication in multi-channel and eService environments. Complex new technologies will be needed and this will mean a growing reliance on consultants, at least in a transition phase. The relationships with consultants however need to be put on a new basis and overall of course there remains the need for comprehensive and effective project management.

The findings in this report therefore focus on Internet, Integration, Identification and Consultancy issues.

Integrated services - the challenge of the future

Social Security organisations will have to undertake a more integrated approach, involving partners in other sectors and probably transnationally. PKI is a precondition for Integrated Services. Until concrete solutions to identification of customers interacting with social security organisations are in place it is clear that meaningful, secure and affordable service delivery improvements cannot be delivered. Without integration or collaboration the full potential of Internet services cannot be achieved but integration intensifies the need for very secure identification of all the players, including the claimant, in the processes.

Identification of customers is a precondition for new service paradigms

Political and legal infrastructures to support better Internet services exist in many countries. However, few countries are offering services that exploit the potential permitted by their environments. There may be an implicit acceptance that multi-channel service delivery is still unattainable due to identification, security and privacy

issues. Meaningful and affordable service delivery improvements cannot be delivered without concrete identification of customers. Therefore, the identification issue needs to be addressed as a priority; otherwise investments in eService are unlikely to be fully productive.

Consultants - "barbarians at the gate" or advisors and mentors?

The responses frequently refer to the problems in ensuring effective knowledge transfer from consultants. However, the responses also indicate that social security organisations generally are very aware of the technical and policy issues that underpin more effective use of ICT. There is a need to develop more collaborative relationships with key suppliers.

Greater collaboration by the ISSA community is essential

With increasing globalisation and migration, finding solutions appropriate to the concerns of less developed countries may entail greater levels of East-West and North-South collaboration within the ISSA community than has occurred in the past.

ICT and general administrative targets are aligned

The survey found that the priorities driving ICT approaches correspond closely to the general business administration challenges described by senior executives of social security organisations in the course of other research.

ICT Projects still risky

Many large ICT modernisation projects do not deliver all the promised business improvements at the budgeted cost and within the predicted timescale. Few ICT projects result in total and expensive failure. However, it is equally true that few projects perform fully as initially promised. This is particularly the case in social security because those projects typically have concentrations of the riskiest factors.

1. Introduction

This report offers insights into the technologies being adopted by many social security organisations to improve service delivery. It also illustrates some of the special challenges arising for less developed countries in successfully deploying ICT.

1.1. Working Group

A Working Group established by the International Social Security Association (ISSA) drew up this report.¹ ISSA has technical commissions that focus on areas of special interest to member organisations. One of these is the Technical Commission on Information and

¹ Details of the Working Group, its composition and Terms of Reference, may be found in Annex I.

Communication Technology (ICT Commission). The ICT Commission used the Working Group in question to undertake preliminary analysis and research that underpin this report.

1.2. ICT survey²

In 2005, the Working Group circulated a substantial questionnaire to ISSA member organisations to identify examples of the successful use of ICT to achieve service delivery transformation. In particular, the survey was undertaken to identify examples of newer ICT that is not yet widely used in all regions. The survey also sought views on ICT issues faced by countries at different phases of economic development. The questionnaire sought information on:

- eGovernment and eAdministration,
- technologies to improve service delivery,
- project management,
- role of consultants and outsourcing, and
- service delivery in a multi-channel environment.

1.3. High level perspectives presented, not the full survey results

Many responses provide extensive detail that will permit a deep assessment of the many ICT issues that confront the sector in all regions. Many of the responses also outline potential case studies that may facilitate other institutions to assess the benefits and risks associated with specific technologies. Some of the responses focus on the issues and risks with particular relevance to developing and transition countries. This document does not attempt to present all the findings from the survey. More detailed commentary on the survey findings may be found in a PowerPoint presentation already available on the general ISSA Website.³ The individual responses, in particular the case studies, also offer important insights into the technologies being used, the challenges faced and the experiences already gained. These responses and case studies also are being made available to the members of the ISSA ICT network on the ISSA Extranet, with the agreement of their authors.

1.4. Why the survey was undertaken - Social Security Dynamics

The challenges facing social security are more dynamic now than at any time in the last hundred years. Populations are growing, ageing and migrating in unprecedented numbers. The concepts of a job for life or of a life-long marriage are no longer the norm for significant, and growing, segments of many societies.

² See the next Section and also Annex II for additional background on the survey.

³ <http://www.issa.int/pdf/marrakech06/2o-shea.ppt>

Social security is no longer a financial safety net issue, offering subsistence or frugal comfort.⁴ In fact, many organisations offer proactive services aimed at facilitating self-sufficiency. The modern analogy therefore should be trampoline instead of safety net.

- Modern social security goes far beyond income replacement and may include issues such as housing, education, rehabilitation, job-search and retraining and many other welfare dimensions.
- Retirement, illness and employment are no longer neatly compartmentalised and many workers change jobs, sectors and countries more frequently than in the past with globalisation accelerating trends in migration.
- Furthermore, services are expected to be accessible by those with greatest need and to be proactive as well as dignified but also secure, both in terms of protecting the privacy of the citizen and in preventing fraud and waste.

- Family structures are more volatile and demographic changes mean new concepts are needed to finance pensions and other benefits.
- Greater linkages are needed: with income taxation systems, to combat fraud, for more effective targeting of resources to greatest need, and to reduce administrative burdens.
- Integration and coordination of social security operations with labour market activities and policy-making are essential, and similarly with education, housing and health care.
- Operational environments change rapidly as the private sector offers new ways of doing business. However, this may lead to unrealistic expectations and demands for integrated transactions when the public seek assistance in coping with typical life-events: for example, loss of employment, retirement, marriage, education, etc.

While the business challenges are becoming more complex, the ICT risks remain significant, indeed may also be growing. According to one study:

- 31 per cent of projects reviewed in 2001 were cancelled before completion;
- 53 per cent had significant cost over-runs - many were double the initial estimate;
- only 16 per cent completed on budget and on time.⁵

1.5. Appreciation

This report is only possible because of the generous contributions of time and insights by many people. The Group, therefore, wishes to thank the many respondents to the survey, the many participants at various regional and other meetings where the survey and the results were discussed. The Working Group would also like to record their appreciation of the valuable and patient support provided throughout the process by Mr. Francois Kientzler of ISSA. A special word of thanks is offered to Dr. Chris Gibbon, Vice President of IBM (*Global*

⁴ Such as contemplated by Bismarck and others in the 19th Century, see for example the Encyclical Rerum Novarum of Leo XIII in 1891.

⁵ Source: CHAOS study by Standish Group.

Social Segment) for his company's sponsorship of one of the Working Group's participants and other contributions towards the costs of publication of the results.

2. Survey - context and scope

2.1 Origins of this study

The detailed context for this study was set during the preparation in 2005 of the Moscow Conference on Information and Communication Technology. That conference focused on ICT as an enabler of social security transformation and considered various case studies as well as on a manual on ICT project management presented in Beijing in 2004.⁶ The case studies discussed in Moscow in 2005 dealt with such issues as (i) partnership and cooperation to achieve integration of service delivery, (ii) holistic view of clients to facilitate clients seeking information and sharing of information among agencies, and (iii) cost-effective shared or uniform service delivery.

Following the conference in Moscow, the ISSA ICT Advisory Board reiterated the importance of ISSA member organizations sharing information and experiences in the field of ICT and asked a Working Group to suggest arrangements to assist the sharing process. The Working Group was then mandated to undertake the research summarised in this Report.

The ISSA Information and Communication Technology Advisory Board discussed the preliminary findings during a conference in Marrakech in 2006.⁷ There were a number of Working Group meetings during 2004-2007 at which the direction of the research evolved. This Report presents the original findings adapted to incorporate the views of delegates at the Marrakech conference and other inputs since received.

2.2. Survey objectives

The Working Group proposed a survey approach to identify examples of successful use of newer technologies by social security institutions, particularly for newer ICT that is not yet widely used in some regions. The process involved the use of a substantial questionnaire that was circulated to member organisations seeking information on their ICT experiences. The objectives of the survey are to help organisations identify what types of solution are being used elsewhere, what problems were encountered and how these problems were tackled by pathfinder organisations.

⁶ The Manual (<http://www.issa.int/pdf/IT/2IBM.pdf>) set out guidelines on managing ICT project risks under the following headings:

Project definition	Managing human resources
Project Manager	Project management and risk management
Stakeholder involvement	Technology
Communication strategy	Project control and monitoring
Training	Assessing project progress - project review

⁷ That conference dealt with the implementation of information and communication technologies in the social security organizations in Africa.

- The public sector is often the pathfinder in the use of new ICT, particularly where the ICT involves large-scale systems and collaboration between agencies.
- Social Security organisations may be the first public sector institutions to grapple with the early difficulties that arise with new ICT.
- They may also be among the first to identify the best approach to technologies that are not yet widely used in any sector in their own countries and regions.
- Estimating and specifying the effort, methods and support required from suppliers and consultants always present challenges. The difficulties increase where new ICT is being used. Furthermore, the pioneers usually face a shortage of experts to advise or participate in the project.

2.3. Scope of survey

The questionnaire sought information on:

- Progress made in eGovernment and eAdministration and on technologies considered most relevant to initiatives for improved service delivery to clients;
- Project management, and role of consultants and outsourcing in managing the risks in newer technologies;
- Service delivery transformation in a multi-channel environment;
- Specific technologies relevant to the above areas where experience indicates special risks and problems; and
- Major differences in the issues faced by countries at different phases of economic development in addressing these ICT challenges.

2.4. Points to note

The level of response was encouraging, with many respondents supplying extensive detail permitting a deep assessment of the many ICT issues that confront the sector in all regions. Many of the responses suggest potential case studies that may facilitate other institutions assess the benefits and risks associated with specific technologies. Some responses focus on the issues and risks most relevant to developing and transition countries.

Some social security organisations did not respond to each section. This was expected and the structure adopted aimed to compensate for this by presenting similar questions in different contexts to facilitate the response process for organisations that were unable to offer comments and answers under each major heading.

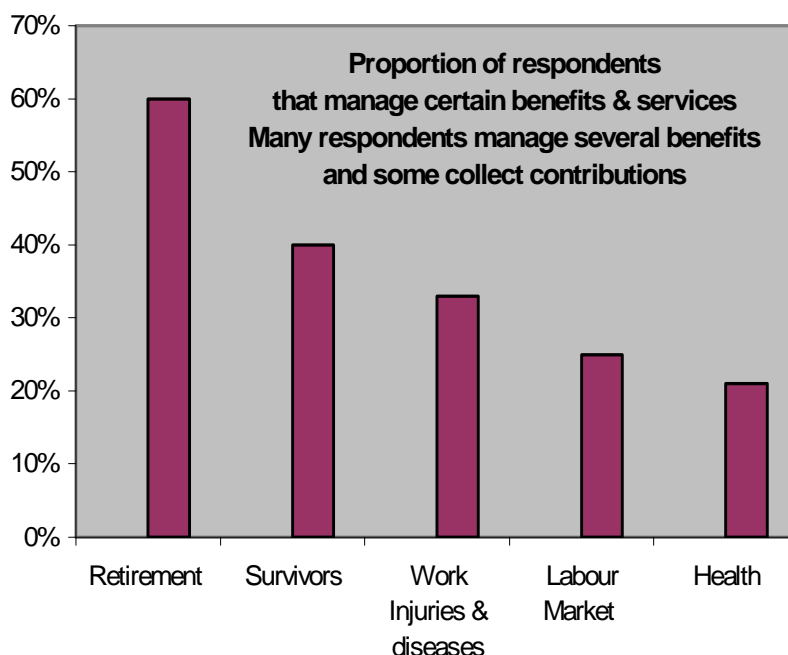
Neither the authors of this report nor ISSA are suggesting that any of the cases summarised in *Annex VII* is superior to any of the other case studies or that any case study represents best practise in other situations. ISSA does not accept any responsibility for decisions that might be based on consideration of any of the case studies mentioned in this report or made available on the ISSA Extranet.

The findings are partially based on summarised interpretations of substantial amounts of information that was not sought (nor could be easily provided) in a structured format. Accordingly, the findings are not intended to offer statistically precise findings but rather to show indications of significant trends.

3. Overview of responses

3.1. The views of typical organisations were obtained

The responses give the views of a representative sample of social security organisations from around the world. Questionnaires were issued to ISSA member institutions. The questionnaire represented a considerable amount of work for respondents. The level of response (over 80; see list at the end of the report) indicates that the issues were considered very relevant for respondents. This was also borne out by the contributions made during the conference in Marrakech in 2006. Countries from all regions empathised with the survey findings presented at that Conference and it was clear that most, if not all, participants felt that valuable lessons could be taken from the findings. The types of benefits administered are very representative.



The administrative arrangements of the respondents are also typical.

- 80 per cent described themselves as public sector organizations with the typical constraints on recruitment, purchasing, wage levels etc.
- A few were regulatory bodies, Ministries or research bodies. Most have a network of offices.

- The largest had 88,000 employees; the smallest had 19 employees (the average was 9,000).
- The typical annual administration budget for social security organizations paying benefits was about 3.3 per cent of total spending.
- ICT spending varies as a proportion of administration spending with the average agency spending about one-fifth of the administrative budget on ICT.⁸

3.2 Regional representation

One third of respondents offered views on the special challenges facing developing countries and countries undergoing other transitions. Two major issues emerged. They may face special difficulties in adopting leading-edge technology where there are few equivalent installations in their own countries resulting also in a shortage of suppliers, including consultants, offering competitively priced support.⁹ A second major constraint is the difficulty in importing technology, due to uncertainties in exchange rates and in terms of getting the necessary approvals promptly.

Other constraints, typical of the difficulties arising in many developing regions, were repeatedly mentioned. These include:

- Poor Telecommunications Infrastructures
The telecommunications infrastructure challenge may be solved, in part, by wireless telecommunications, but costs will be a significant constraint. In any event, nationwide telecommunications coverage would also require widespread access to other services such as electricity, suitably qualified staff and ICT training. Nevertheless, important innovations are mentioned in the case studies and some of these may offer guidance to developing countries.
- No reliable national ID systems to verify identities of insured workers and claimants.
Repeated references to the absence national Identity databases by less developed countries may merit further research. Many countries have successfully implemented comprehensive social security systems without integrated national ID systems.
- Fears that consultants might abuse access to personal data and other sensitive information.
Concerns about allowing consultants to work with personal data warrant further consideration. Very many countries have used consultants and bureaux for many years and there have been very few instances of abuse, arguably less abuse than has occurred when staff members have used data improperly.

⁸ Considerable variation was observed as would be expected, for example labour intensive services cost more than stable long-term pension arrangements that require little ongoing intervention.

⁹ Mentioned by a third of responses on this issue.

It is worth noting that the business challenges summarised in this section were described as having particular relevance for developing regions. However, several of them were also frequently cited as important issues generally.

3.3. ICT challenges listed are aligned with business vision

The ICT survey was undertaken independently of separate, more broadly based, research undertaken by ISSA dealing with the Needs and Priorities of ISSA Member Organizations.¹⁰ Both research projects obtained consistent views on the major challenges that member institutions perceive themselves to be facing over the next three to five years.

In other words, top management now sees ICT as part of the solution and not as part of the problem as often was the case in the early years of ICT. The ICT survey results can, therefore, be seen as a summary of practical ideas on how member organisations can use ICT to:

- Deliver sustainable, accessible services that pro-actively adapt to new challenges and build more inclusive societies and productive economies,
- Improve the quality and positioning of social security services,
- Enable new social security developments and increase social security coverage,
- Take a proactive role in developing social security delivery and new forms of partnership,
- Achieve greater administrative and operational efficiency,
- Proactively support the planning and implementing social security reform,
- Address the demographic evolution, and
- Extend social security coverage.

3.4. Typical business challenges identified by top executives

ISSA Updates (Numbers 2 and 3) show that the most frequently cited general business challenges were:

¹⁰ Survey of needs and priorities of ISSA member organization, and Programme orientations for 2008-2010 - New ISSA: Promoting dynamic social security, URLs: <http://www.issa.int/engl/newissa/2update-may06.pdf>, and <http://www.issa.int/engl/newissa/2update-jul06.pdf>

% of Total Possible Points	The Challenges	Points
12.4	Planning and/or implementing social security reform	488
12.1	Need to achieve greater administrative and operational efficiency	473
11.8	Demographic evolution	461
10.0	Labour market situation	392
8.7	Adequacy of financial resources in your institution	343
8.0	Improving adequacy of the level of benefits provided by your scheme	313
7.8	Positioning your scheme in the development of social security in your country	305
7.6	Change in your institutional and/or political environment	297
7.4	Need to extend social security coverage	292
7.3	Tailoring benefits to evolving needs	287
6.9	Adequacy of human resources in your institution	272
Total		3 923

Extract from Survey of needs and priorities of ISSA member organisations

The ICT responses listed analogous issues and broadly indicated the same relative priorities.

4. General findings and conclusions

4.1. General commentary

In this section some general conclusions are offered on the relevance of the responses analysed. More technical conclusions are offered in subsequent sections dealing with Internet, Integration, PKI and Identification and Consultancy issues.

4.1.1. Greater collaboration will become essential

With increasing globalisation and migration, finding solutions appropriate to the concerns of less developed countries may entail greater levels of East-West and North-South collaboration within the ISSA community than has occurred in the past.

4.1.2. ICT projects still unacceptably risky

ICT has long been an essential tool in Social Security, managing vast amounts of data and the large transaction volumes involved. However, the new demands, amplified by new social security philosophies, increasing volatility and growing volumes, require greater reliance on ICT and the ICT itself is more complex to introduce and to manage. This is a major reason why ICT projects for social security are now more likely to be partial failures than was the case 30 or 40 years ago. The dangers increase if projects are conceived and managed in the

traditional way. This topic was discussed in detail in the report on project management published by ISSA at the General Assembly in Beijing in 2004.¹¹

Many large ICT modernisation projects do not deliver all the promised business improvements at the budgeted cost and within the predicted timescale. Few ICT projects result in total and expensive failure. However, it is equally true that few projects perform fully as initially promised. In fact, most ICT projects have been only partially successful, judged against initial estimates of time, cost and promised benefits. This is particularly the case in social security because those projects typically have concentrations of the riskiest factors: that is, large distributed systems, legacy environments, multiple service channels, diverse users and constantly changing requirements.

Software is now exotically complex, often relying on products and layers from a variety of vendors who may not be as "open" as their marketing suggests. Technology layers include operating systems on different hardware platforms, Database Management software, Telecommunications, Internet, Security and auditing software, Java etc.

<p>95% of heart transplants are successful but only 29% of IT project merit that word!</p> <ul style="list-style-type: none"> - Average cost over-run is 56% - Average time delay is 84% of initial time e-plan <p>High performing organisations spend less time maintaining systems and more time building new systems</p> <p><i>Survey of 200 CIOs by Accenture (Bob Suh, Chief Technology Strategist, Accenture, July 2005)</i></p>
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4.1.3. Special challenges facing social security organisations

Social Security organisations often face additional ICT challenges. They may need to import legacy data spanning many years and from a variety of agencies. They frequently need prolonged co-existence with inflexible legacy applications. There is often reliance on leading-edge technology to support more complex, distributed and collaborative service delivery models. Therefore, public sector ICT systems may require project management and technical skills beyond the levels covered by traditional public sector grading and pay conditions. Adding to the risks are other public sector constraints, such as rigid budget frameworks and aggressive legislative deadlines linked to political considerations rather than business needs.

¹¹ <http://www.issa.int/engl/reunion/2004/GA/2beijing.htm> - see also footnote number 6.

4.2. General findings

4.2.1. Responses were received from a good cross-sample of organisations

The fact that the ICT strategies and business strategies are closely aligned gives confidence that the ICT survey received input from a representative sample of organisations. The survey results, therefore, provide a good insight into ICT approaches that are most relevant to current and future business needs

4.2.2. Major business priorities are widely shared

The general strategic business issues do not vary much from region to region. Typical priorities include:

- Administrative cost reduction, Improved service delivery and better ways of managing financial risks such as benefit fraud are clear priorities.
- Improving "presence" and public perception are both important.
- Transnational collaboration in social security is a growing challenge.

4.2.3. ICT priorities generally correspond with the business strategies

The priorities driving ICT approaches to these challenges correspond closely with the general business administration challenges described by senior administrative executives of social security organisations.

4.2.4. Business strategy priorities are not influenced by the level of development

The level of economic development is not a reliable indicator for deeming certain challenges to be more or less valid for any country or region.

4.2.5. ICT and strategic business vision - aligned in direction but not in pace

An important finding is that ICT directions and strategic business visions are well aligned. Senior business executives have visions for their organisations that will only be achievable using the latest forms of ICT. ICT executives have demonstrated in the responses that they understand the strategic pressures and intend facilitating the changes envisioned.

Paralysis by analysis**The best is the enemy of the good**

However, it is not always clear that the ICT progress will achieve progress at the pace implied by the strategic visions. This may be due to too strong an emphasis on achieving perfection too soon or by implicit decisions to wait for the technology being offered to stabilise. There may be a "wait and see" policy as regards adopting some new ICT arrangements. However, there are no grounds for believing that the pace of technological development will slow down. All the evidence shows that the pace of change is accelerating.

4.3. Conclusions

4.3.1. eServices, Integration of Services and Consultancy are key issues

The purpose of this report is to present a few key messages, rather than the detailed findings of the survey. This will draw attention to the Survey material and the associated case studies. Hopefully, this approach will assist organisations in identifying sets of case studies relevant to their unique combination of needs and their cultural, political and economic constraints. Certain issues due however appear to have widespread relevance and these are discussed in Sections 5 to 8.

4.3.2. Collaboration North-South or East-West will be a two-way trade.

In any event, the objectives of customer service and fraud prevention will increasingly depend on fast, accurate and secure interchange of relevant data between organisations in different countries subject of course to widely accepted principles of data protection, in particular where transnational flows of data arise. Accordingly, collaboration is likely to offer mutual advantages.

4.3.3. ICT still high risk - this needs explicit recognition

ICT projects will continue to be risky ventures. The risks can be managed better but this will require new approaches. Organisations need to recognise the internal constraints that they cannot change, and adopt suitable strategies to counteract the issues that prevent change. This is likely to mean greater reliance on external expertise and the use of frameworks or customisable solutions that are already proven and well supported.

4.3.4. Do not wait for ICT development to slow down

Delaying strategic ICT developments in anticipation of a more stable environment will prejudice strategic business visions.

5. Internet issues

This section deals with Internet issues. Some findings are presented and some conclusions are offered. Internet services imply greater levels of integration: that topic is discussed in Section 6.

5.1. Internet issues - commentary

Politicians and the general public are often influenced by popular claims that eShopping and eServices are readily and reliably offered by commercial firms. They may therefore demand radical changes in delivery mechanisms with ambitious delivery target dates and offering the wider paradigms for customer service that eBanking and eCommerce systems appear to provide. The reality is often less than appears on the surface and there are important "*business*" differences. For example, eBanking is availed of by a limited subset of the population and the issues involved in proving identity across the Internet are therefore more manageable.

Many respondents indicate that the political, financial and legal infrastructure to support better Internet services exist in their countries. However, relatively few respondent organisations are offering services that exploit the potential apparently permitted by their environments. Related to this, almost half say that earlier targets set by Government have not been achieved.

The majority of respondents expressed a view that the Internet services offered are "about right" for their clients but many respondents also say that they have no concrete information on how their clients perceive the service. This raises a number of questions - firstly if the user reaction is not measured, organisations will find it very difficult to offer attractive Internet services that will adapt as society evolves. Secondly, the ambivalence about Internet deployment may reflect uncertainty about methods for managing identities. This uncertainty is possibly due to a mixture of technological and political (including financial) considerations.

5.2. Internet issues - selected findings

5.2.1. Regional variations in the reliance on Internet transactions

The organisations (25 per cent) with the more advanced Internet facilities are mainly in the "older" EU States. The second group (45 per cent) spans some of the most developed countries

and some emerging economies in Africa, in Asia as well as in nine of the States that most recently joined the EU. The group (30 per cent) offering only general information are all in regions that could be considered as in transition, emerging or developing.

Information provisions and requests can be handled using eSolutions	25%
Internet provides customers with Information that relates to them	45%
Internet provides customers with general information	30%

5.2.2. Slow progress in meeting service improvement objectives

A third of the respondents indicate that they have not improved the level of Internet services in more than two years. This starkly contrasts with the finding that most respondent organisations believe that the present arrangements are about at the right level for their clients. The responses also show that two-thirds of social security institutions do not have concrete information on how their clients access Internet services.¹²

The slow rate of Internet development means service delivery channels are still predominantly the traditional methods of personal callers to offices, post and telephone. While Internet and eMail are already being deployed, only half of the respondents reported that Internet was available for at least 10 per cent of clients. A smaller proportion (40 per cent) offers eMail access. Against this backdrop it is not surprising that the justifications for recent ICT changes included reduction in administration costs (85 per cent), faster service (80 per cent), introduce new services (60 per cent) and increase take-up of existing services (40 per cent). Achieving the necessary efficiencies will require more than just front-office technology.

5.2.3. Multi-channel strategies for the future

Looking to the future, 76 per cent of respondents have a multi-channel service delivery strategy with the majority of these (61 per cent) involving back-office re-engineering to exploit the benefits of multi-channel approaches. The technologies being used to achieve multi-channel oriented objectives include Internet, Java, Call Centre and Workflow Management. About a fifth of the projects described will include eSignatures, eForms and Document imaging.

Recent ICT project objectives	
Development of service oriented-architectures	50%
Implement basic integrated and/or e-government service options	55%
Improve service and quantify the in terms of efficiency and effectiveness	65%
Offer additional channels to citizens and other customers	55%
Integrated or seamless view of legacy data in several legacy databases	35%

¹² The questionnaires did not seek information on how customer satisfaction is gauged.

5.2.4. Most countries are adopting appropriate legal and political frameworks

Based on the responses, most countries have adopted appropriate legal and political frameworks for Internet and similar eServices and public organizations could, therefore, offer of electronic services.

Framework issue	
eTransactions are acceptable in evidence	65%
Political commitments to eGovernment are published	85%
Resources committed	79%
Government gives proactive support	68%
Earlier targets met	45%
Targets monitored	74%

5.2.5. Potential not yet exploited

When asked about the level of Internet activity actually supported, the majority of respondents (75 per cent) say that their systems do not support the levels of interactivity that the political and legal frameworks would already permit.¹³ No respondent indicated that they could yet offer fully integrated electronic transactions.

5.3. Internet issues – conclusions

5.3.1. Internet extension requires progress on Integration with other services

The provision of Internet services appears to be slowing down, perhaps even stalling. The reasons for this are not immediately evident. Internet services are proliferating in other domains, banking, shopping, airline reservations etc. It appears that social security services need to be offered in a more holistic way, this means greater levels of collaboration with partner organisations, with employers and even internationally. This in turn means offering more integrated services. This topic is discussed in the next Section.

5.3.2. Internet services will continue to expand

Almost all countries already use or will soon use Internet style services to improve service channels. Progress in recent years appears to be slower than was widely predicted some years ago despite an improved environment that theoretically should have permitted faster and more extensive deployment of eServices for social security purposes.

¹³ Almost a quarter of respondents did not provide sufficient information to allow their level of Internet support for customers to be assessed.

5.3.3. Wireless communications will be used more extensively

In many countries, Internet and eServices will remain of limited use for some time until communications technology offers affordable wireless access in remote and undeveloped areas.

6. Integration of services

Section 5 concludes with a suggestion that Internet services will not develop fully without a more integrated approach to social security services. This Section discusses integration issues and concludes that integration will necessitate greater reliance on PKI and on other identification approaches - PKI is discussed in Section 7.

6.1. Integration – commentary

6.1.1. Defining integration

Integration of services can have a number of meanings in social security. In the context of this Report it is used as meaning collaboration, seamlessly in the customer's experience, by different units or organisations dealing with different aspects of a person's needs. For example, an unemployed person in addition to getting income benefits may need training for new employment opportunities, there may be a housing need and perhaps an elderly family member may need some support if the person takes up employment. In many countries different agencies deliver these benefits and services but there is a connecting thread in that all the entitlements are interdependent and require similar information from the claimant.

6.1.2. Transnational integration

With growing movements of workers citizens between countries and regions, to work, to retire or simply as visitors, there are growing demands for interchange of information between social security organisations on a transnational basis.

There is no reason to suppose that the movements of people between countries and regions is a temporary phenomenon or that it will reverse. The opening up of trade and factors such as ageing, and shrinking, populations in some countries suggest that the present growth in movement will continue indefinitely. Organisations are already grappling with the implications for their national systems: see *Annex V* for two New York City examples of Chinese language forms. The issue affects big and small countries. For example, Ireland reports significant increases in the numbers of non-nationals in recently published Census figures.¹⁴

¹⁴ <http://www.cso.ie/statistics/popnclssbyreligionandnationality2006.htm>. The data show that non-nationals are now more than 10 per cent of the population of Ireland, and increase of almost 90 per cent in the last 20 years. Data for many other countries show similar features.

6.1.3. Standards are needed

A question to be considered is whether some set of international (or at least regional) standards should be evolved to facilitate this level of integration or collaboration in the years ahead. Getting agreement on standards within countries has been painfully slow. Conceivably as in many other ICT segments, fundamentally different national standards will emerge making transnational co-operation difficult to attain. It may be worth considering whether the ISSA community could take some initiative in defining some high level standards for transnational exchange of data and process interaction.

6.1.4. Transnational integration of data and services is not new

Integration is not a new or emerging issue. It has been part of the social security landscape for many years. What is new is the growing volumes and the additional complexity arising from greater levels of migration and more transient migratory patterns, whether as workers, tourists or seeking services (eg health, dental etc) in other countries.

6.2. Integration - selected findings

In assessing and understanding the Internet service issues, the survey sought information on progress achieved or planned towards offering integrated services.

- Despite the fact that citizens in most countries seem to expect integrated electronic services, **40 per cent** of the respondents report that they have not implemented any form of integrated services with other organizations.
- Most social security institutions expect that eServices, eGovernment, Portals and Interchange of data will feature (prominently) in their future scenarios. However, only **13 per cent** of the respondents indicate that they have achieved significant integration.
- More than **95 per cent** say that integration will be part of their future service delivery scenarios.
- The ambitions (95 per cent) are supported by responses given under other headings, notably those dealing with business challenges relevant to Project Management and Managing Consultancy where the responses suggest that there is considerable effort being devoted to achieving more integrated services
 - **83 per cent** of respondents list Collaboration and cooperation with other institutions;
 - **62 per cent** list Sharing of information, processes and technologies;
 - **91 per cent** of respondents listed one or both of these challenges as relevant to them.

6.3. Integration of services – conclusions

6.3.1. Integration and Internet service extension are interdependent

Without integration or collaboration the full potential of Internet services cannot be achieved but integration intensifies the need for very secure identification of all the players, including the claimant, in the processes.

6.3.2. Integration requires PKI (or equivalent)

The slow rate of Internet expansion and other eServices may reflect practical and political difficulties in authenticating identities for and during eService transactions and contacts. While elaborate identification measures are not justified for every type of social security interaction, it seems evident that significant progress towards more sophisticated Internet transactions will not emerge until PKI solutions or equivalent are adopted. Similarly, it appears that integration of complementary services will not progress quickly, if at all until the identification issues are resolved.

6.3.3. Integration poses competitive threats but also opportunities

The responses suggest that Social Security institutions are not immune to competitive threats. Some competitive threats are explicit but many are subtle. Commercial organisations are seeking opportunities to have elements of social security privatised using arguments about the need to offer more integrated services and improved customer service generally. Social Security must, therefore, reposition itself to cope with changing needs. Integration can however assist organisations in coping better with a more globalised environment with increasing migration and cross-border collaboration.

6.3.4. Transnational integrated services will become essential

Relying on national ID systems (where these exist and where that approach would be legally permitted) may not be an adequate response to problems involved in the identification of large numbers of non-nationals who may also lack permanent addresses and other features typically used to establish identity. This factor may provide some momentum to collaboration transnationally to protect the social security of migrant and temporarily posted workers, tourists and other groups that seek services outside their home countries.

7. PKI and general identification issues

The initials **PKI** stand for Public Key Infrastructure. In this section some high level findings on the use of and plans for PKI are presented. PKI is one approach to dealing with problems of identification and authentication.

7.1. PKI and identification - commentary

Increasingly social security organisations wish to interact with their clients by eMail, over the Internet and by telephone in addition to the more traditional methods of paper-mail (including forms) and by personal attendance at local offices or by visiting the client at their home or place of work etc. Telephone communication, while it has many attractions, lacks security and there are risks that personation may occur or that sensitive personal information could be disclosed to a third party.

eMail and Internet style transactions are also prone to personation and unwitting disclosure of sensitive information but these technologies appear to offer the potential for a more secure environment. Systems can be put in place that give a high level of confidence that a caller or person otherwise being dealt with interactively is probably the person that the organisation needs to, and intends to, communicate with. These techniques are already used extensively by many commercial organisations and typically involve the person being able to provide information and passwords that would not be easily obtained by a third person. These measures are not 100 per cent secure but the risk of penetration and the consequences can be minimised.

7.1.1. PKI

Early attempts at data security in electronic computers eventually proved vulnerable to brute-force attacks. Public key cryptography has now emerged as the core technology for modern computing security systems. By associating a public key with a private key, many of the key distribution problems of earlier systems are avoided. The Internet public key infrastructure provides the secure digital certification required to establish a network of trust for public commerce.

A group that needs to exchange information could decide to share a single secret key and use it to encrypt and decrypt any exchanged messages. In this basic scenario the shared secret key is distributed to each user, who needs to manage a single key. A breach in secrecy of the key results in all communications among the group members being compromised. In a second scenario, each group could maintain a separate secret key and therefore would need to communicate it to each of the other members of the group. Multiple keys would therefore need to be stored and managed by each user. Compromising one key would result in exposing all the communications destined to that key owner. See *Annex III* for further comments and background on PKI issues

7.1.2. Identification - basic requirements

There are two essential dimensions to the identification issue. Firstly, persons interacting with the system across any channel must be able to establish who he or she is. This can often be

established readily face-to-face and in verbal communication by telephone by asking simple questions that establish an adequate level of probability about the identity.¹⁵

The second dimension is to avoid asking customers for the same data repeatedly where the data is, or should be, already easily available. In fact a combined approach to these aspects tends to provide the most efficient as well as secure service because the ready availability of data provided at an earlier time can be used to validate the current contact more precisely.

Where the contact is not face-to-face or verbal, additional challenges arise. Measures to protect against personation and the use of stolen identity cards or passwords may be required. In addition, it may be important to be able to prove afterwards that the person concerned made certain statements or provided certain information or was given a service.

Secure and provable communications between organisations are also vitally important. How can an organisation be confident that payroll data provided electronically came from a trusted person in a trusted organisation and how can it afterwards be proven that the information received was transmitted by the relevant firm. Where there are multiple channels for communication, post, eMail, Internet, phone, personal contacts etc, integrating the different inputs may be essential to the proper management of claims and services.

National ID systems are used in some countries as part of the identification mechanisms for social security. Other countries formally prohibit this type of aggregation of identity management. In any event, the level of proof of identity varies considerably depending on the circumstances and the potential consequences of the interaction. In addition, the individual's ability to interact with the requirements is also a variable. Arrangements to cope with lost identity cards may not need to be urgent for one service but may need to be extremely urgent and always available in other situations.

7.2. PKI and identification - selected findings

7.2.1. Identification is a major business challenge

Many respondents indicated that identification is a major future challenge. The question of identity of social security customers arose under a variety of headings during the analysis of the responses. It appears from the responses that PKI methods will soon be widely used.

- Only 13 per cent of the replies say that PKI is not used or planned
- A quarter of the replies say that they already use PKI intensively

¹⁵ The level of proof has to be proportionate to the issue at stake. For example, questions about when a cheque was posted might only justify a low level of proof, but disclosure of sensitive information such as bank account reference details or health status would require more substantial evidence.

7.2.2. PKI approaches are likely to predominate

The responses suggest that there is considerable pressure for greater and faster progress. Expectations cited show that measures to solve the identification and authentication issues will be essential. However only 5 per cent feel that access to or use general citizen data (births, deaths etc) will feature in their systems in the next few years. Similarly only 3 per cent anticipate using Cards and Chip Cards in significant ways. The implication therefore is that PKI type approaches will predominate

eTransactions would acceptable in evidence in many countries	65%
E Government targets regularly monitored	74%
Many organisations expect that early progress in eGovernment and eServices	38%
A significant minority anticipate Integrated ICT with other sectors	20%
eDocuments and eSignatures are anticipated	9%
Interchange of data internationally is anticipated by a minority of organisations	6%

Many case studies deal with PKI and Identity related issues

About 40 case studies deal directly or in a closely associated with solutions that suggest there will have to be considerable emphasis on identification and authentication.

7.3. PKI and identification - conclusions

7.3.1. PKI is a precondition for integrated services

Until concrete solutions to identification of customers interacting with social security organisations are in place it is clear that meaningful, secure and affordable service delivery improvements cannot be delivered. PKI is a precondition for extensive Internet and Integrated Services.

7.3.2. Identity management - collaboration

If organisations can offer programmes for identity management that are consistent with developments in other countries, this would do much to reduce the levels of uncertainty and the sharing of experiences would reduce the risks of costly failure and delay.

There would be further advantages from greater collaboration. The simplest would be reduced costs of the software and technology if less variation occurs in the solutions adopted. Another advantage could be easier sharing of services transnationally, even if data and processes were not shared - at least the infrastructures might be shareable to assist migrants and tourists access their benefits while overseas.

7.3.3. Identity management - do not aim at the stars immediately

Efforts to provide a uniform and consistent identification process could prevent or delay important progress where less robust identification needs would be adequate.

7.3.4. Identity management - sometimes the old methods are the best

Delaying the introduction of eServices because the new system will not be 100 per cent "bullet-proof" does not make sense if the system due to be replaced has significantly higher risks. For example, even where elaborate safeguards are in place to protect credit card details (and similar sensitive data) situations do occur where the data gets revealed either by error or as a result of criminal (hacking etc.) activity. When tackling analogous challenges, Social Security organisations may need to be more pragmatic.

7.3.5. Identification - the future - biometrics perhaps

In all probability, the future solutions will include elements of biometric recognition (voice, eye, fingerprint etc) supplemented with smart card technologies and password-protected channels all managed within PKI concept environments.

8. Consultancy

This section offers findings and comments on the use of consultants

8.1. Consultants - commentary

Social Security organisations have to rely on leading-edge technology to support complex, distributed and collaborative service delivery models and their ICT systems.

Accordingly, they sometimes require project management and technical skills beyond the levels normally available in the public sector. This factor was frequently cited (35 per cent) as a reason for engaging consultants (to gain access to expertise and experience in new technology). A few respondents (6 per cent) felt that consultants were engaged because the IT personnel were considered too old to acquire the latest skills. Adding to the risks are other public sector constraints, such as rigid budget frameworks and aggressive legislative deadlines.

Social Security organisations require project management and technical skills beyond the levels normally available in the public sector. Despite the current and anticipated reliance on consultants, many responses expressed dissatisfaction with the levels of expertise available and the knowledge transfer achieved. However, social security organisations generally are very aware of the technical and policy issues that underpin more effective use of ICT.

ICT was often traditionally viewed as the enemy within.

Are consultants now seen as the barbarians at the gate?



Enterprises that regard their IT Departments as only cost-centres tend to take a similar view of external IT suppliers. They select suppliers on an ad-hoc basis and often insist on contracts that are financially adversarial.

Successful organisations build collaborative partnerships with suppliers with shared incentives. They select suppliers using more holistic approaches that include attention to technical, philosophical and financial compatibility.

Survey of 300 CIOs by Accenture

8.2. Consultants - selected findings

Business objectives for using consultants included

- Service improvements (66 per cent),
- Improving client confidence in the administration (50 per cent - probably related to the need to improve services) and
- More balanced service (40 per cent again probably derived from the need to improve services generally).

Despite the current and anticipated reliance on consultants, many responses expressed dissatisfaction with the levels of expertise available and the knowledge transfer achieved. The responses frequently refer to problems in ensuring effective knowledge transfer from consultants. However, the responses also indicate that social security organisations generally are very aware of the technical and policy issues that underpin more effective use of ICT. A number of other findings from the survey relating to consultants are set out in Annex VI. Additional information is available in the individual responses and case studies and in the PowerPoint presentation already mentioned.

8.3. Consultants - conclusions

8.3.1. Decide clearly what the consultancy relationship should be

Organisations need to decide explicitly whether consultants should be viewed, and treated, as: advisors, mentors or temporary staff? Lack of clarity about the role leads to problems when consultants are used.

8.3.2. Be more assertive with consultants, but also build partnerships

Organisations need to be more assertive and should be telling their consultants more forcibly to deliver the visions they already have rather than allowing consultants set their agendas. In other words, there is a need to carefully define the expected role of consultants at the outset and to agree, in explicit terms, that role with them.

However, they also need to question their underlying philosophical approach to the use of consultants. There are some grounds for thinking that the current shortfall in internal ICT skills and capacity partially stem from the typical antagonisms between ICT and general management that was evident in the early years of ICT deployment. Similar negative relationships carried into reliance on consultants, may mean that the final outcomes will be no better, even if the costs are higher.

8.3.3. Project management methodology is essential

Organisations that do not use well-defined methodologies, that are enforced, will continue to experience problems when using consultants. Furthermore the typical justifications for using consultants - risk reduction, cost containment and access to skills transfer - will not be achieved without strong project management within a well-structured methodology.

9. Case studies and future research

9.1. Case study material restricted to ISSA members

The case studies will be available on the ISSA Extranet. A few selected items are summarised in Annex VII. The cases listed were selected to illustrate the variety and geographical spread of case studies provided.

9.2. Future research topics

Respondents were asked to indicate possible areas of future ISSA research. They were also asked to suggest technology issues that might become relevant in the medium term but which they have not yet embraced. Many answers did not provide clear differentiation between items that ISSA might consider in the near-to-medium term for research to assist members and issues that might become more relevant in the future. Accordingly, most suggestions were interpreted as all being potentially relevant for early research by ISSA. The main topics suggested by respondents are:

- eServices (including ePayments, eClaims etc.)
- Identity Management (including eSignatures and Biometric issues)
- Web Services

- Document Management (including Scanning, OCR, eMails etc)
- Smart or Chip Cards
- PKI
- Database (including data integrity and clean-up operations)
- Wireless and RFID technologies

The topic of database migration arose infrequently compared to the levels of interest in this topic in earlier years. This may be due to some of the more recent thinking and technologies that support access to data across disparate environments more efficiently than heretofore.

Organizations having taken part in the study

Country	Organization
Albania	Social Insurance Institute
Algeria	National Retirement Fund
Azerbaijan	State Social Protection Fund
Belgium	Overseas Social Security Office
Belgium	National Union of Socialist Mutual Benefit Societies
Belgium	National Employment Office
Belgium	National Social Security Office
Benin	National Social Security Fund
Brazil	The Jorge Duprat Figueiredo Foundation for Occupational Safety and Health
Brazil	National Institute of Social Security
British Virgin Islands	Social Security Board
Bulgaria	National Social Security Institute
Cameroon	National Social Insurance Fund
Canada	The Quebec Pensions Board
Czech Republic	Ministry of Labour and Social Affairs
Czech Republic	Czech Social Security Administration
Denmark	Labour Market Supplementary Pensions Institution
Denmark	Social Appeals Board
Denmark	National Board of Industrial Injuries
Dominica	Dominica Social Security Scheme
Estonia	Estonian National Social Insurance Board
Ethiopia	Social Security Agency
Finland	Social Insurance Institution
Finland	Finnish Centre for Pensions
France	National Occupational Union for Employment in Industry and Commerce
France	National Old-Age Insurance Fund for Employees
France	Central Fund of Social Agricultural Mutual Benefit Societies
France	National Family Allowances Fund
Germany	German Pension Insurance Federal Institution
Greece	Agricultural Insurance Institute
Guyana	National Insurance Scheme
Hungary	Central Administration of the National Pension Insurance
India	Assam Tea Plantations Provident Fund and Pension Fund Scheme

Indonesia	Health Insurance for Government Employees, PT ASKES
Iran	Social Security Organization
Italy	National Social Insurance Institute
Italy	National Insurance and Assistance Institute for Performance and Sports
Japan	Social Insurance Agency, Shakai Hoken Cho
Kyrgyzstan	Social Fund of the Republic of Kyrgyzstan
Latvia	State Social Insurance Agency
Lithuania	State Social Insurance Fund Board of the Republic of Lithuania under the Ministry of Social Security and Labour
Malaysia	Social Security Organisation
Malaysia	Employees Provident Fund
Mali	National Social Insurance Institute
Mexico	Mexican Social Security Institute
Mexico	State Employees' Social Security and Social Services Institute
Netherlands	Central Organization for Work and Income
Nigeria	Nigeria Social Insurance Trust Fund
Nigeria	National Pension Commission
Norway	National Insurance Court
Peru	The Social Health Insurance Institute
Philippines	Social Security System
Poland	Agricultural Social Security Fund
Poland	Social Insurance Institution
Portugal	General Directorate for Solidarity and Social Security
United Kingdom	Department for Work and Pensions
Rwanda	The Rwandese Health Care Insurance
Rwanda	Social Security Fund of Rwanda
Senegal	Social Insurance Institute for Old-Age Pensions in Senegal
Seychelles	Seychelles Pension Scheme
Seychelles	Social Security Fund
Sierra Leone	National Social Security and Insurance Trust
Slovakia	Social Insurance Agency
Slovenia	Institute for Pension and Disability Insurance of Slovenia
Spain	National Institute of Social Security
Sudan	National Social Insurance Fund
Tanzania	Public Service Pension Fund
Tanzania	Parastatal Pensions Fund
Trinidad and Tobago	National Insurance Board

Turkey	Social Insurance Institution
United States	Social Security Administration
Zambia	Pensions and Insurance Authority
Zambia	National Pension Scheme Authority
Zambia	Zambia Workers' Compensation Fund Control Board
Zimbabwe	National Social Security Authority

Annex 1. Terms of Reference of the Working Group

Relation with the ISSA ICT Technical Commission

The Working group will act under the responsibility of the ISSA ICT Technical Commission and its Advisory Board. All products as delivered by the working group will have to be assessed and approved by the ICT Technical Commission.

Purpose of the working group

For the participants of the working group the implementation of relatively newer ICT-related technologies is already widespread and is expanding rapidly in all regions. Amongst the technologies under implementation are PKI, smart cards, call centers, CRM/standard software suites, scanning and document management, etc.

A particular objective of the working group's activities relates to difficulties that can arise for institutions assessing technologies that are not widely used in their own countries. The working group will identify examples of successful use of newer technologies that are not yet widely used in all regions and will draw up case study reviews. It is hoped that these reviews will facilitate institutions assess the benefits and risks associated with the use of these technologies in social security administration generally and in developing country situations.

These newer technologies are fundamental to organizations seeking to:

- Control their operating costs more efficiently and more transparently;
- Improve the quality of service delivery in all dimensions (customer experience, accuracy and relevance to evolving needs).

However, implementing the more advanced or newer technologies requires ever-greater management expertise. In particular, implementation requires careful attention to aspects such as:

- The type of business problems and objectives for which the specific technology is the most appropriate for example:
 - Improved service - accessibility, response, accuracy etc;
 - Reductions on operating cost and losses due to error and fraud;
 - Collaboration with other agencies - peer to peer and hierarchical, NGOs,
 - etc;
 - Migration of large systems, including legacy data of indeterminate quality;
 - Greater ability to evaluate social outcomes;
- Typical pitfalls likely to arise when implementing the newer technological solutions;
- Interdependencies with other technologies and administrative management philosophies;

- Business cases (building accurate and reliable cost-benefit models and anticipating the true cost of implementation and ownership).

The working group decided to recommend investigations and research into the successful (best of breed) implementation of specific ICT-related technologies. The results of these activities should not only be relevant for developed countries but for countries under development as well. A core output is expected to be reference models that project planners could consult at an early stage in their assessment of the newer technologies and paradigms to help them identify the most appropriate strategies for their situation.

Activities

The working group will deploy the following activities:

- Develop a list of relevant technologies, in particular newer technologies and more established technologies that appear to carry special risks (eg in estimating effort - skills needed, time frame and financial budget - performance issues, interoperability, maintainability, undue reliance on suppliers, etc); Gather examples of successful implementation for each of those technologies;
- Create case studies regarding a (selected) number of the selected examples;
- Describe (on the basis of these case studies) general aspects relevant for each type of technology;
- Draw general conclusions regarding the implementation of these technologies within the social security domain.
- The elaboration of these issues must lead to a report that can be presented at the ISSA World Social Security Forum (General Assembly) in 2007.

Some possible examples of technologies that might be reviewed are in the Annex VII. This list is intended only to illustrate the types of issues that might be relevant for future consideration and study by the Working group.

Members of the Working Group

Mr. Batt, Peter	Germany	German Pension Insurance Federal Institution
Mr. Delgado, Francisco	Spain	National Social Security Institute
Mr. Dunato, Anton	Slovenia	Institute for Pension and Disability Insurance of Slovenia
Mr. Franke, Cor	Netherlands	Central Organization for Work and Income
Mr. Hytonen, Veikko	Finland	Social Insurance Institution
Mr. Ibrahimov, Oktay	Azerbaijan	State Social Protection Fund
Mr. Kounouwski, Gilles	France	National Family Allowances Fund
Mr. Kientzler, François	ISSA	ISSA
Mr. Mario, Cilla	Italy	National Social Insurance Institute

Rory O'Shea

Mr. O'Shea, Rory	Ireland	IBM
Mr. Raba, Ferenc	Hungary	Central Administration of the National Pension Fund
Mr. Raynaud, Pierre	France	National Old-Age Insurance Fund for Employees
Mr. Steeger, Walter	Germany	German Pension Insurance Federal Institution

Working Group meetings

Madrid, April and October 2005, hosted by the National Social Security Institute, Spain

Amsterdam, March 2006, hosted by the Central Organization for Work and Income, Netherlands

Berlin, January 2007, hosted by the German Pension Insurance Federal Institution, Germany

Geneva, March 2007, in the ISSA General Secretariat

International ICT Conference

Moscow, June/July 2005, hosted by the Pension Fund of the Russian Federation

ICT regional meeting for African ISSA member organizations

Marrakech, May, 2006, hosted by the National Social Security Fund, Morocco

Annex 2. Study on ICT for new challenges in social security¹

ISSA Technical Commission on Information and Communication Technology
 ISSA Advisory Board on Information and Communication Technology
Working group project on technology issues in social security

Objective of the study

The last ISSA International Conference on Information and Communication Technology (Moscow, 2005) focused on ICT as enabler and instrument of social security transformation. Different aspects of this general topic were illustrated by case studies and discussion: (1) partnership and cooperation; integration of service delivery; (2) holistic view of clients: clients looking for information and sharing of information among agencies; and, (3) common services: cost effective solutions – what is possible in service delivery. ((A compilation of the case studies was published and is available on the ISSA Website (<http://www.issa.int>): see *field of activities – ICT- meetings and reports and meetings*)). The ISSA ICT Advisory Board which met at the occasion of the Conference in Moscow expressed the need for ISSA member organizations to continue to share information and experiences in the field of ICT.

The participants of a Working Group, set up by the ICT Advisory Board, concluded that implementation of relatively newer ICT-related technologies is already widespread and is expanding rapidly in all regions. Amongst the technologies under implementation are electronic services, e-government and e-administration, multi-channel processes and delivery, Public Key Infrastructure (PKI), smart cards, call centers, CRM/standard software suites, scanning and document management, etc.

A particular objective of the working group's activities should relate to difficulties that can arise for institutions assessing technologies that are not widely used in their own countries. The Working Group will identify examples of successful use of newer technologies that are not yet widely used in all regions and will draw up case study reviews. It is hoped that these reviews will facilitate institutions to assess the benefits and risks associated with the use of these technologies in social security administration generally and in developing country situations.

It is proposed to continue the approaches in the fields which were under investigation during the last years and particularly the previous International ICT Conferences. The ICT Montreal ICT International Conference (1999) focused on *electronic services delivery* and was followed by a Working Group activity which produced the Manual on *Implementation of electronic services in social security*. The International Conference in Valencia (2002) had as main theme

¹ ISSA Reference was ISSA/INFO/CC/WG/2005

e-government/e-administration and was followed by a Working Group study which produced, in cooperation with global Social Security Segment of IBM, the manual on *Project management in social security*.

Results-oriented approach

The investigation should result in a preliminary guidance manual to be presented at the General Assembly of the ISSA in 2007.

The results of the working group project should be the following:

Globally:

Develop a list of relevant technologies, in particular newer technologies and more established technologies that appear to carry special risks, e.g. in estimating effort - skills needed, time frame and financial budget, performance issues, interoperability, maintainability, undue reliance on suppliers, etc.

More specifically

- Evaluate the impact of e-government/e-administration technology on the efficiency of the services delivery and their effectiveness;
- Estimate the impact of consultancy and outsourcing activities in particular when managing ICT projects in developing countries;
- Examine the transformation of the processes of services delivery in a multi-channel environment.

Methodology

- Gather examples of successful implementation for each of those technologies or approaches;
- Create case studies regarding a (selected) number of the selected examples;
- Describe (on the basis of these case studies) general aspects relevant for each type of technology and approaches;
- Draw general conclusions regarding the implementation of information and communication technologies within the social security domain.

Two methods will be used: the dispatch of a questionnaire and the set up of a Forum on the ISSA web site. If the information is transmitted by electronic means, it will be transferred on a specific page open onto the ISSA website.

The elaboration of the results must lead to a preliminary guidance manual that can be presented at the ISSA General Assembly in 2007.

Your contribution

The present study will involve the participants of the previous ICT International Conferences, the members of the ICT Correspondents network and the members of the ICT Advisory Board by exchanging information and experiences in the implementation of projects, best practices and lessons learnt.

The questionnaire mentioned below is structured in three parts: each one covers a specific field: ***e-government/administration; Project management; and, Services delivery transformation.***

We would be very grateful if you complete **one, two** or the **three** parts of this questionnaire and also provide complementary documentation which will be available in our organization and which could be helpful for others.

If your organization is an umbrella organization, please transmit the questionnaire to institutions which administer the delivery of social security benefits.

An electronic copy of the questionnaire is available on the ISSA Website under <http://www.issa.int>. You may wish to complete an electronic copy and e-mail it to the ISSA General Secretariat (kientzler@ilo.org) or mail or fax it to 4, route des Morillons, Case postale 1, CH-1211 Geneva 22; fax: +41 22 799 85 09.

The study is conducted in cooperation with the Global Social Security Segment of IBM. This organization was an ISSA partner in the publication of the Manual on *ICT project management in social security* (ISSA, Geneva, 2004, and ISSA Website under GA 2004).

Annex 3. Public Key Infrastructure (PKI)²

Early software systems partially mitigated the problem posed by secret key distribution and management by adopting a central repository of keys, managed by a single server. Each of the communicating entities divulged its secret key to a secure central server only, which distributed the keys using a temporary secret key, generated by the server. However, The problem with secret key distribution is not so much the number of distributions needed to propagate the keys; rather it is the need to find a secure channel for their distribution.

Public key cryptography has emerged as a core technology and has been adopted in many modern computing security systems. The concept of related private and public key pairs is probably its most appealing aspect. The notion that one cryptographic operation-encryption-can be performed using one key from the pair, while the reverse transformation can only be computed using the other key in the pair, is indeed a giant step toward solving the secret key distribution problem. The proliferation of public cryptographic keys, on the other hand, needs to be achieved in a controlled fashion to ensure that public keys are securely bound to legitimate entities. The Internet public key infrastructure defines secure digital certification for public keys.

Public key cryptography is based on the notion that encryption keys come in related pairs, private and public. The private key remains concealed by the key owner, while the public key is freely disseminated. It is computationally infeasible to compute the private key by knowing the public key-data encrypted using the public key can only be decrypted using the associated private key. Encryption is the easy direction; decryption is hard. With knowledge of the trapdoor, or private key, decryption can be as easy as encryption.

Public key cryptography can be combined with other functions to produce documents with digital signatures that can withstand repudiation. The premise is that the signature can only be verified using the public key corresponding to the private key used during signing. Thus, with the assumption that the private key remains confined to the secrecy of the owner, and furthermore by preventing users from obtaining direct access to their own private keys, a digital signature prevents a user from denying the signing of a document. This property is referred to as non-repudiation of the signing action. Preventing direct access to the private key precludes someone from intentionally disclosing his or her own private key and later denying the signing process. By definition, verifying a digital signature automatically proves the authenticity of the signer.

Parties reliant on public keys place their trust in a single entity, known as the certificate authority (CA). Before a user's public key is disseminated to a public repository, the

² The following paragraphs are based on an article published by M. Benantar:
<http://researchweb.watson.ibm.com/journal/sj/403/benantar.html> (accessed 21 April 2007).

underlying high-assurance CA uses its own private key to digitally sign it. A reliant party securely installs the public key of the trusted CA and uses it to verify the signature of each user's public key. Only upon a successful verification of the signature does a reliant party initiate a communications channel. This simple method of certification thwarts an attacker who does not have a public key signed by the same CA as that of the two communicating parties, but fails to do so when the attacker is also in possession of a key signed by the same CA.

Summary of features achieved using PKI ³

- Data is obscured and protected from view or access by unauthorized individuals.
- Easily determine whether or not digitally signed data has been altered since it was signed
- Users can securely identify themselves to other users and servers on a network without sending secret information (such as passwords) over the network.
- Users who digitally sign data cannot later successfully deny having signed that data.
- Data can only be accessed in a comprehensible form by those specifically identified when data was encrypted.
- Appropriate policies and rigorous procedures provide assurance, for example the registration process that identifies and authenticates a client is before a digital certificate is issued.

•

Practical examples of PKI

Banks, online shops and many different public services already use PKI concepts extensively. The tools and techniques can now be considered quasi-generic, that is user organisations have a wide choice of technology providers and concepts to choose from and, therefore, are unlikely to become overly dependent on a few key suppliers of the relevant technologies.

The case studies submitted by some of the respondents illustrate the potential for PKI; however for many social security organisations the potential is still largely untapped. There are considerable administrative challenges to be considered, including educating large numbers of elderly persons, providing keys to transient populations (e.g. students working for a few summer months, tourists, migrants etc). Attempts to use channels dependent on PKI approaches as the sole or core channel for communications with citizens appear to have many problems that cannot be solved quickly, if at all. However, where organisations use PKI approaches to broaden the choice of channels, the problems appear to be more manageable. If citizens are permitted to select the type of channel most suited to their needs and capabilities,

³ Based on Canadian Revenue Service Internet publication
<http://www.cra-arc.gc.ca/eservices/pki/about-e.html> (accessed 22 April 2007).

PKI may prove to be a useful component in opening up new opportunities for administrative efficiency.

Organisations considering new services or channels dependent on PKI or equivalents have a wide variety of case study material available to guide their strategies. Some case studies will be found in the questionnaires submitted. Other important public sector case studies and strategy documents are available on the Internet. A few examples currently available on the Internet are:

- The Canada Revenue Agency (CRA) has adopted a Public Key Infrastructure (PKI) to preserve the security and integrity of electronic transactions over the Internet. PKI is being implemented for several projects throughout the organization. Online registration will enable participants to register for PKI certificates over the Internet. <http://www.cra-arc.gc.ca/eservices/pki/menu-e.html>
- In December 2006, the UK Home Office published a Strategic Action Plan for a National Identity Scheme.
- http://www.identitycards.gov.uk/downloads/Strategic_Action_Plan.pdf
- Information about the legislation on Digital Signatures in Argentina, projects implemented and services offered by public organisations and other general information on related developments in the MERCOSUR region. <http://www.pki.gov.ar/>
- In 2006, the Australian Government Information Management Office released a Gatekeeper PKI Framework designed to make PKI applications less complex and more affordable. <http://www.agimo.gov.au/infrastructure/gatekeeper>
-

Annex 4. Social security for migrants in European Union⁴

A European Union Regulation (Number 1408/71) sets out a general principle which each 'competent State' must take into account in deciding whether a migrant worker or self-employed person is entitled to social security benefits.⁵ There are four main principles:

- **Equal treatment:** workers and self-employed persons from other Member States have the same rights as the competent State's own nationals. A Member State may not confine social security benefits to its own nationals. The right to equal treatment applies unconditionally to any worker or self-employed person from another Member State having resided for a certain period of time.
- **Aggregation:** situations in which national legislation requires a worker to have been insured or employed for a certain period of time, for example, before he is entitled to certain benefits. The aggregation principle means that the competent Member State must take account of periods of insurance and employment completed under another Member State's legislation in deciding whether a worker satisfies the requirement regarding the duration of the period of insurance or employment. As regards the right to membership of unemployment or sickness funds, for example, application of this principle means that the person can be transferred directly from a fund in one Member State to a fund in another Member State.
- **Prevention of overlapping of benefits:** prevention of special advantages as a result of exercising the right to freedom of movement. Contributing to social security systems in two or more Member States during the same periods of insurance does not confer the right to several benefits of the same kind.
- **Exportability:** social security benefits can be paid throughout the Union and prohibits Member States from reserving the payment of benefits to people resident in the country, but it does not apply to all social security benefits. There are special rules for the unemployed. Note also that different rights apply to exporting cash benefits (e.g. sickness benefit or pensions) and benefits in kind (e.g. medical assistance).

Scope

- Originally, Regulation 1408/71 only covered workers, members of workers' families and their dependents, as well as stateless persons and refugees. The scope was extended to cover
- Self-employed (including families and dependents) - Reg 1390/81
- Civil servants (analogous to general statutory pension rights in Member State) - Reg1606/98

⁴ This summary is based on European Parliament European Fact Sheet 4.8.4. (Social security for migrant workers) http://www.europarl.europa.eu/factsheets/4_8_4_en.htm

⁵ Competent State means the EU Member State in which a person is employed or self-employed.

- All insured persons, students and others not in gainful employment - Reg 307/1999.
- Nationals of third countries working in the Union cannot invoke the Regulations. In 1997, in response to pressure from the European Parliament, the EU Commission presented a proposal for extension of scope to nationals of third countries. The Council has not yet adopted this proposal. NOTE: Lack of protection for non-EU migrants may expose female migrants to more risks than men.⁶

The benefits covered include sickness and maternity benefits, invalidity benefits; old-age benefits; survivors' benefits; benefits in respect of accidents at work and occupational diseases; unemployment benefits; and family benefits.⁷ There are various standardised forms used to co-ordinate the administration of benefits, for example: E101 -Certificate concerning legislation applicable, E204 -Invalidity Pension - E204 and E207.⁸

⁶ For example, see the EU Parliament Draft Report on a Roadmap for Equality between Women and Men (Committee on Women's Rights and Gender Equality - September 2006) at URL:

http://www.europarl.europa.eu/meetdocs/2004_2009/documents/pr/629/629296/629296en.pdf

⁷ Invalidity Benefits include benefits intended for the maintenance or improvement of earning capacity.

⁸ See http://ec.europa.eu/employment_social/soc-prot/schemes/eform_en.htm for full list of forms.

Annex 5. Multilanguage forms to assist migrants

New York State – Food Stamp Form - Chinese

NYC Easy Screening
NYC Easy Screening ID: N/A

紐約市臨時救濟和特設補助辦公室
糧食券福利申請 / 資格重新認證表

Application Date Interview Date Center/Office Unit Worker Case Type Case Number Registry Number Version Abuse Apply Recently Lang

姓名: al resource test 電話號碼: 適用於找到您的其他電話號碼:
住址: 市鎮 NY 郵政區號
郵寄地址 (如與住址不同) 市鎮 NY 郵政區號
其他姓名: 您是否申請過是 福利部資格 您希望收到何種語言的通知 西班牙文及 或 僅有 英文

列出所有與您同住的人。無論其是否同時申請。先列出您本人。

序	名	中文姓名	姓	申請人的 社會安全號碼 (SSN) 如有者, 寫明 "N/A"	出生日期	性別 男 或 女	此人是否申請	種類的 福利	是否與第一 類別 相符?	是否 西班牙裔 或拉美裔?	是否限制飲食/糖尿病 Y (是) 或 N (否)*	I	A	B	P	W
1	al	F	test		6-1-1968	M		Self								
2																
3																
4																
5																
6																
7																
8																

*種族/族裔代碼 I - 美國原住民或阿拉斯加原住民, A - 亞洲, B - 黑人或非裔美國人, P - 夏威夷原住民或太平洋島民, W - 白人 U - 未知 (僅適用於醫療補助)
 您和每個與您同住的人是否都是美國公民? 是 否 如果回答 "否", 這與此人是誰
 您或任何與您同住的人是否因被控或被判有罪而受到法律機構對其犯罪行為的起訴、或違反法律的種別或個體的處分? 是 否
 您或任何與您同住的人是否因被控或被判有罪而受到政府福利或糧食券的處分? 是 否
 您或任何與您同住的人是否正在領取申請或領取補助? 是 否
 您或任何與您同住的人是否已失領、停領或凍結? 是 否, 註明此人是谁
 您或任何與您同住的人是否退伍軍人? 是 否 如果回答 "是", 註明此人是谁
 您或任何家人是否住在戒毒或戒酒治療中心、精神健康諮詢的群體居住設施或聯邦政府建設的宿舍/支持公寓? 是 否
 如果您申請糧食券資格審查, 請在最後一頁上列出自您上次申請或資格審查以來發生的變化 (例如搬家、增添新成員、有人離家或搬出)。

家庭成員開銷 - Microsoft Internet Explorer provided by Human Resources Administration

NYC gov always open

NYC.gov | 重新導航 | 幫助

成員 關係 收入 資源 總結

家庭成員開銷

請為家庭成員輸入開銷資訊。
請回答任何一個有星號(*)的項目

添加家庭成員開銷:

選擇一名家庭成員: Fred Bloggs 1/1/1980

選擇開銷頻率: 月度

選擇開銷類型: 電話費

輸入開銷金額: 50

返回 把新開銷加入列表 下一步

家庭成員開銷列表

成員	出生日期	頻率	類型	數額	月度數額	動作
Mary Bloggs	1/1/1980	每週	租金/房屋抵押貸款	\$ 250.00	\$ 1,083.25	編輯 刪除
Fred Bloggs	1/1/1980	月度	兒童撫養費(已支付)	\$ 25.00	\$ 25.00	編輯 刪除

Done Local Intranet

Annex 6. Issues/risks that relate to consultancy

Social security organizations were asked to list up to 5 major risks they perceived with the use of consultants. More than forty specific risk issues were listed with most social security organizations listing several issues.

To facilitate analysis, different issues were grouped under a number of headings

- 25% of all the issues mentioned relate to matters that social security organizations could control better with tighter contracts, purchasing processes and project control.
- 68% relate to consultancy suppliers clearly not living up to their promises
- 22% relate to failure to understand customers' needs, communications failures and inability to cope with cultural and language barriers.
- 18% relate to knowledge transfer and ongoing ability by customers to maintain the systems after the consultancy assignment is finished
- 8% relate to poor skills, substitution of less qualified staff, excessive technology focus etc.
- 7% relate to fears about consultants getting access to sensitive information.
- Developed countries do not see this as an issue, perhaps because they have easier access to major international companies that emphasise their ability to preserve confidentiality and who place a premium on their international reputations

The most frequently mentioned issues

- Issues that social security organizations could control better with tighter contracts.
- Higher Costs and Over-runs
- Loose contracts
- Inflexible expenditure commitments
- Consultants get priority over users
- Failure to understand customers needs, communications failures and inability to cope with cultural and language barriers.
- Language and National Cultural issues were mentioned by only one agency in six, strongly implying that consultancy companies need to adapt their own internal business cultures to the specific needs of the Public Sector and to Social Security.
- 18% relate to knowledge transfer to, and the ongoing ability of, customers to maintain the systems after the consultancy assignment is finished
- A few social security organizations suggested that consultants were actively try to build in ongoing dependence. The implication is that consultants do not make adequate provision for the effort involved in knowledge transfer, which in turn may reflect weak contracts or purchasing arrangements.

Issues that consultants need to consider include

- Poor skills of staff they deploy (including CV promises etc not delivered)
- Supplier rigidity
- Focus on Technology rather than business needs
- Conflicts of Interest (including key staff drawn away to other projects)
- Contract terms not adhered to
- Financial stability of consultants
- Underestimation of effort and other requirements
- Proposing wrong technology & inadequate localization

Many organizations suggested measures to reduce risks in ICT projects

The most frequent suggestions were:

- Have a complete (and detailed) Plan
- Identify & prioritise risks & mitigation strategies
- Monitor & Manage progress
- Ensure effective user & stakeholder involvement
- Pay real attention to internal ICT Capacity Building
- Use Proof of Concept approach
- Maintain Internal control of project
- Senior Management buy-in/support

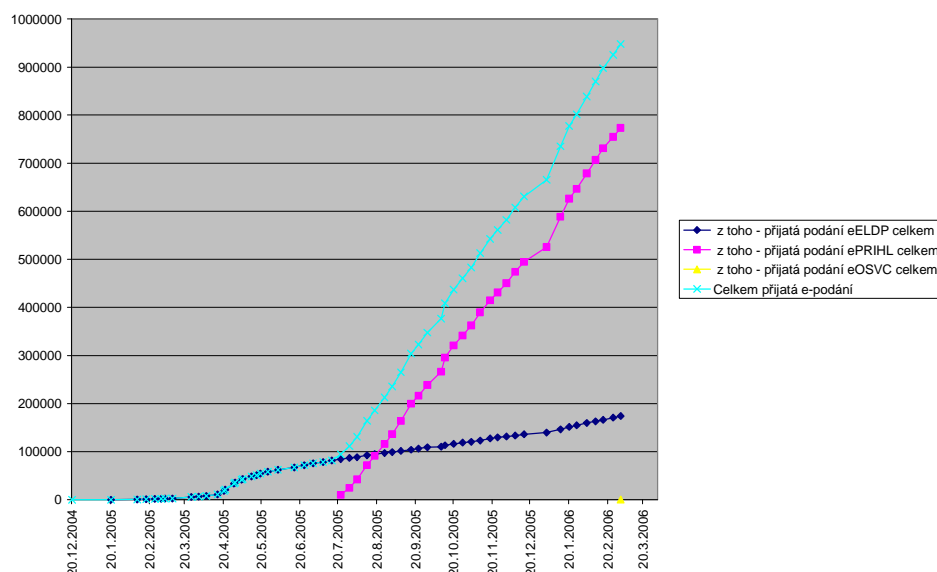
Issues listed as the single most important issue to reduce risk of failure included:

- Have a firm policy of developing reusable modules
- Detailed analysis of systems interfaces
- Recruit own Project Management
- Consider aligning internal ICT staff pay rates closer to market rates
- Ensure good documentation is generated and provided
- Use a good Project Management Methodology

Annex 7. Case Studies

Country	Internet-related
Belgium ONEM Form 24	<p>Multifunction declarations by Employers (DMFA) providing data to different social security branches from a single input and declarations of social risk (DRS) covering illness and unemployment claims allowing employers to provide supplementary information over the Internet. The business benefits include faster service. Lessons learned included the need to plan for extensive complete back office BPR to anticipate that the private sector might be slow to adapt and invest adequately in a robust network.</p>
Bulgaria NSSI Form 1	<p>Five services allow Employers and Insured persons manage their Social Security status. Business benefits include improved collection of contributions. The system uses a PIC Code to authenticate access by users.</p>
Finland KELA Form 12	<p>Multi-channel service environment (web services) for different groups of clients</p> <p>eKela is a general concept defining a holistic, multi-channel service environment, which includes a variety of web services for different groups of clients, both citizens and external partners, improving and creating new data systems for use by Kela's own personnel in internal processes, and introducing greater automation into the data transfer methods used in the benefit processes between Kela and its external partners.</p> <p>Lessons learnt include:</p> <ul style="list-style-type: none"> • the importance of centralised databases for high availability of up-to-date data covering housing, tax and family data and a universal and reliable method for personal and organizational. • electronic identification and authentication. • Maintaining a common and uniform interface for all benefit applications. • Adoption of an electronic document management system throughout the organization. • Cooperation with other public organizations.
Poland ZUS Form 66	<p>Functionality of ZUS electronic information channel was extended to support two-way data exchange to improve information exchange between contribution payers and ZUS to improve quality of data in the central registry of payers and insured persons. Business benefits include more efficient document and data submission, greater accessibility and better security and a platform for implementing new electronic services.</p>
Quebec RRQ Form 34	<p>A project that began in October 2002 and became operational in November 2003, enriched and extended the information content of the Internet site to cover life events, allowing customers to consult their personal file data and submit on-line claims or by eMail. A password or code, combined with other information is used to identify customers. The features include simulations or estimates of future retirement benefit (SimulRetraite) and the ability to change of address and bank account details (for the direct deposit). A new way to access online services (ClicSÉCUR)" facilitates collaboration between the Ministry responsible the governmental services (Service Quebec) and Income Quebec.</p> <p>Lessons learned relate to the difficulties that arose in making partnership with other organisations, and quantifying the business benefits.</p>
Rwanda RAMA Form 42	<p>Project on the conceptual design for electronic national cards for all Rwandan. This card must contain all necessary information concerning the identification of every Rwandan. eCard data will cover in addition to the person's identity, health insurance, social file information, driver's license and tax details. Lessons learned include the</p>

	need to manage rapidly evolving technology and the vital need to plan data collection systematically.
Slovenia ZPIZ Form 41	Pension and invalidity insurance entitlements are provided by ZPIZ. Availability, reliability and security of operation is secured by modern information technologies that collect insurance registry data and that calculate & pay all types of pensions and benefits and which monitor workflow. Partner institute activities are supported by a small-scale internal information system.
Turkey SSK Form 40	eDeclaration of the insured person's premiums and insured periods etc. Three different documents were previously completed and submitted monthly and quarterly. The three statements were replaced by one integrated submission of data electronically using the Internet.
USA SSA Form 35	<p>SSA developed an Access Control Utility (ACU) to demonstrate the operational and technical model of an identity service between a third-party credential service provider and the SSA. Targeted end-users will access a secure SSA web application (Direct Deposit) through an application website. The ACU will provide users with an option to authenticate themselves with the use of their third-party issued credential. A third-party credential service provider authenticates users and the identity assertion is passed to SSA after validation. Lessons learned were the:</p> <ul style="list-style-type: none"> • Importance of Executive Level Investment, Leadership, Support and Sponsorship • Complexity in Working with Disparate Organizations Crossing Government and Private Sector Lines • Importance of Clear and Timely Business Requirements, Operating Rules and Project Deliverables • Establishing Clear Communications and Roles
Czech Rep CSSA Form 38	<p>Initially, CSSA stored large numbers (in excess of 100 million images) of document images relating to contributions for pensions insurance. The system now supports electronic submission of forms. The project also involved using a Public Administration Portal for mass transfer of data between organizations and the state administration and extensive utilization of electronic signature keys. The system scope has been extended in a progressive fashion.</p> <p>CSSA relied on consultants to advise on data and access security and for implementation. The project includes a PKI system and chip cards. CSSA identified problems with misconceptions by consultants and outlined who these problems can be managed.</p> <p>The following graph represents the numbers of electronic submissions from December 2004 to early 2006.</p>



**Italy
INPS
Form 30**

Multi Channel Virtual Front Office supporting INPS and INAIL (work injuries) based on a multi-level model integrating front & back office functions. Includes use of CRM to offer shared Contact Centres. Business benefits achieved include reduction in fraud, real-time integration of functions, leverage and enhance business knowledge capital. Consultants played important roles in designing, planning & controlling important implementation streams.

INPS also provide details on other case study perspectives (Integrated Active Workers Information System) and on an Integrated Service for Employers

**Trinidad & Tobago
NIBTT
Form 56**

Development of an IT Security Framework for the National Insurance Board. IT Security evolved over the years as a specialist field with NIBTT retaining consulting services to develop security policies, procedures and system security plans and to recommend a technical security architecture to meet current and future needs.

NIBTT identified the following risks when using consultants:

- Unfamiliarity with Social Security
- Under-estimation of requirements
- Ensuring skills and knowledge transfer
- Ensuring the provision of quality service and products
- Consultants learn about system security vulnerabilities.

**United Kingdom
Form 59**

Issues that arose in using consultants in a project to modernise services by reengineering processes and using Electronic Records and Document Management. A clearer set of objectives and a clear timetable before the project commenced would have prevented certain difficulties. Consultants underestimated the complexity and failed to report true project status. The lessons learned include the need for greater monitoring and better processes for verifying the qualifications of consultants proposed.

**Azerbaijan
SSPF
Form 13**

SSPF shares data with the Ministry of Taxes and Ministry of Labor and Social Protection of Population. Similar agreements planned with the Ministry of Internal Affairs, Ministry of Communication and Information Technologies, Land and Cartography Committee, some other organizations. Major challenges arose due to different levels of ICT among the partner organisations and from absence of data standards, and the diversity in software platforms. Features include:

- Electronic submission of application and declaration forms, increasing accuracy of data and faster submission.

	<ul style="list-style-type: none"> • Data sharing allows SSPF to clean its database. • Delivery of pensions and allowances through ATMs • VISA plastic cards for paying pensions.
Belgium ONSS Form 47	<p>Declarations by employers when they let a worker go</p> <ul style="list-style-type: none"> • channels include phone, Internet, file transfer. • New channel via GSM/SMS developed.
Brazil Form 50	Improved services for medical certification involving integration of processes, better measurement of customer satisfaction, more transparent awarding arrangements and efficiency improvements.
Netherlands CWI Form 10	<p>CWI developed a new information system that supports client interaction in the front office. The system was not tailor-made but developed using a CRM suite (Siebel). The system does not only support CWI staff but also client interactions via the Internet (such as applications for unemployment benefit and social assistance and registration as a job seeker). The project also illustrates issues with consultants and collaboration.</p> <p>Additional insights into the use of consultants by CWI may be found in a publication by Het Expertise Centrum. The Centrum published a booklet in November 2005 entitled <i>Managing Complex Public Service Projects – Sonar – Lessons to be learned from CWI</i> (Paper Note No.18). The booklet is also available on the Internet.</p>
Philippines SSS Form 9	SMS - information on contributions and loans – implemented 2001 – access by clients to contribution and loan information. Important lessons learned included ‘income can be derived via implementation of new service delivery systems’, importance of marketing to users, need to consider technology obsolescence (eg shift from 2G to 3G mobile telephony infrastructure).
Tanzania PPF Form 19	e-Government – WEB enabled pensions system (see http://www.ppftz.org). Clients can register and view their contribution records and also receive estimates of future pension entitlements. The system also supports various Local Office functions. Lessons learned include difficulty in striking a comfortable (for users) but adequate level of security, difficulty in obtaining reliable service providers outside main urban areas, managing expectations for 24/7 Internet service, Password recall by clients.