Guidelines on ICT
- from International Social Security Association (ISSA)

World Bank's Europe Central Asia Forum
Implementation of MIS and Modernization of Social Programs
Istanbul, 21-24.5.2014

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Outline

- The ISSA at a glance
- ISSA Centre for Excellence
- ISSA Guidelines on ICT
- Implementation: challenges and solution approaches
  - The case on integrated social protection programmes.
- Conclusions
The International Social Security Association

- The leading international organization for social security institutions, departments and agencies
- Headquarters in Geneva (ILO)
- Founded in 1927, ISSA counts today 340 members in over 160 countries
- Provides information, research, expert advice and platforms for members to build and promote dynamic social security systems and policy worldwide
The ISSA at a glance

- Founded in 1927
- 340 member organizations
- 160 countries
- 1,500+ participants in ISSA events each year (average)
- 50 Staff in Secretariat
- 13 Technical Commissions
- 16 Liaison Offices and focal points
- HQ ILO Geneva

Promoting excellence in social security

www.issa.int
The ISSA Centre for Excellence

- New set of ISSA services to encourage, facilitate and support member institutions’ work towards administrative improvements.

- Offers a package of services to provide institutions with practical support to overcome the four typical challenges:
  - To obtain the necessary knowledge to set the right objectives;
  - To assess gaps and needs, and define a prioritized action plan;
  - To implement improvement initiatives;
  - To evaluate progress and receive recognition for achievements.

- The services of the Centre for Excellence are based on the ISSA Guidelines for Social Security Administration.

- Find out more: [www.issa.int/excellence](http://www.issa.int/excellence)
1. Select the set(s) of **Guidelines** important to your organization.

2. Complete the online **self-assessment**, and receive a prioritized action plan.

3. **Implement the Guidelines.**
   Connect with the ISSA **Support Centre** for advice and access to experts in your field
   
   Participate in the ISSA **Academy workshops** for practical support.

4. **Evaluate** your progress and gain **ISSA recognition**.
ISSA professional guidelines and standards

- The ISSA guidelines programme
  - Setting internationally-accepted professional standards
  - Guidelines are connected to self-assessment tool and good practices

- Guidelines for the following areas:
  - Good governance
  - Quality of social security services
  - **ICT in social security**
  - Actuarial standards and practices
  - Contribution collection and compliance
  - Investments
  - Prevention
  - Rehabilitation activities.
ISSA Guidelines on ICT - Context

ICT is an indispensable enabler in social security systems:
- Often spells the difference between processes that can or cannot be done.
- It’s a critical factor for political success, but also for failure.

Growing complexity and critical nature of ICT in social security.
- ICT-based social systems increasingly sophisticated and “mission critical”.
- High socio-economic impact of social programmes.

Permanent evolution in social policies and programmes:
- Articulation, Coordination and Integration of social programmes.
- Preventive approaches to deal with error, evasion and fraud.
- Empowering users and promoting self-service capabilities.

Continual austerity and budget control:
- Increasing scrutiny on effectiveness and efficiency of ICT-related expenses.
ISSA Guidelines on ICT – Main goals

- Provide a framework to support the corporate application of ICT in social security.
  - Addressing not only technical aspects but also Governance and investments issues.
  - Referring to good practices and case experiences.

- Reinforce institutional capacity on applying ICT.
  - Provide the ICT staff with a comprehensive guide.

- Increase awareness of Board and Management.
  - Provide CEO, Board and Management with a high-level guidance about the main elements for effective and efficient use of ICT.

- Long-term contribute to building common solutions
  - Standardized ICT-based approaches and solution for social security.
Guidelines on ICT: general structure

- ICT Governance and Management
  - Better quality of ICT services, in order to meet the needs of the business.
  - More effective and efficient use of ICT, by aligning ICT strategy with the business.
- Investments on ICT and value Management
  - More appropriately investing and contracting ICT products and services.
- ICT Services Delivery
  - More effective and efficient planning, control and exploitation of information resources along its life-cycle.
- Data and Information Management
  - More effective implementation of integrated and citizen-oriented social security systems.
- Key technologies:
  - Interoperability.
  - Data Security and Privacy
  - Mobile Technologies
Guideline 17. Developing a master data model and system

The institution develops a unique master data model, which standardizes the definition of the core objects and relationships (e.g., persons, employers) in its information system. The master data model fosters the consistency of statutory data in the context of core processes and programmes. The model can be viewed as the backbone of the system. On the other hand, objects as they exist in administrative processes are not included in the model (e.g., benefit payment).

**Structure**
- The management should commission the development of the model, covering the core objects for social security benefit administration, with their specific characteristics of the social security benefit administration system.
  - Persons' data, including family data. 
  - Employers' data:
    - Social programmes:
      - Relationships between persons and employers, working periods, etc.;
      - Relationships between persons and social programmes (affiliation relationship), registration periods, and other characteristics of the affiliation relationship.
- A specialized organizational structure is needed to establish and maintain the model. To establish the model, there must be a well-defined and clearly defined plan.
- The master data model and the institutional data governance should be aligned and considered as an integral part of the institutional technical standards.

**External references**
- DAMA Data Management Body of Knowledge (DAMA DMBOK)
- DAMA Data Management Book
- OWL. Web Ontology Language, W3C OWL Working Group

**Good practices**
- Social Security Institution Data Bank
  - Social Security Institution Data Bank
  - Modernization and establishment of the SII information system for better performance and fight against corruption

**Mechanism**
- The ICT unit should define a control plan for the management of change of the master data system. The project should be controlled and monitored. The project should be controlled and monitored.
- The project should identify and apply the metadata to the project. The metadata should be defined and applied to the project.
- To ensure the accuracy of the data, metadata, and the context of the data, the development of the data model should be based on the requirements of the stakeholders.
- The implementation of a master data model should be part of the ongoing development and maintenance of the data management systems.
- For the development of the master databases, specialized technologies have been developed for them.
- ICT staff (in the main) should administer the master data system, and business staff should carry out data stewardship and data specification tasks.
Implementation: challenges and solutions

Specific challenges in social protection / social security:
- Integrated social programmes ➔ Large-scale nation-wide projects:
  - Multiple instruments and actors.
  - For example: “Bolsa Familia” in Brazil, Argentina, Chile (SP+Health), Mexico, Uruguay (SP+Health), Thailand (Health).
- May take several years and/or involve several industry providers.
  ➔ Modularized design and standards-based ICT strategy.

Input to the project’s Conceptual Design:
- Medium & long-term perspective of social policy needs.
- Institution’s ICT roadmap aligned to social strategies.
- Increase involvement of Gov. CEOs ➔ “IT literacy”!

Improving effectiveness Industry/Gov. interaction:
- Joint discussions on strategic aspects of ICT application.

Procurement:
- Define the *value* of the project in terms of social and political outcomes.
Implementation of integrated SP programmes

**Integrating social programmes ➔ improve social policy application:**
- Increase focus on beneficiaries combining required instruments.
- Improve coordination between different social protection components and involved actors. Reduce fragmentation.
- Improve monitoring and control (especially in CCT).

**Implications and challenges:**
- Connect processes/systems of different programmes/institutions.
- Relate heterogeneous data formats and concepts (e.g. household, head of family, unemployment status, etc.)
- Ensure Data Quality amidst diverse criteria and rules and data quality .
- Enforce security rules and privacy regulations.

**Solutions (➔ Guidelines):**

- **Interoperability.**
  - Technical (systems)
  - Semantic (business concepts)
  - Shared data resources.

- **Data Management:**
  - Data Quality.
  - Data Governance.

- **Data Security:**
  - Data access control.
Example: Chilean integrated social programme

Traditional Social Assistance

- CCT family/children
- Old-age pensions
- Disability pensions

Individuals: CCT

- Education
- Employment
- Health

Households: CCT

- Education
- Employment
- Health

Ministries:

- Health Min.
- Education
- Planning Ministry
- Social Security
- Labour Min.
- Employment services

Municipalities
Example: Chilean integrated social programme

SIIS: Social Integrated Information System

- Health Min.
- Education
- Employment
- Social Security

SIIS: CCT-households

Traditional Social Assistance:
- CCT family/children
- Old-age pensions
- Disability pensions

Municipalities

Employment services

SIIS: Employment

Planning Ministry

Education

Health

Labour Min.

Disability
Example: Chilean integrated social programme

- **Interoperability:**
  - Web Services (WS) + batch exch.
  - Common concepts in SIIS.

- **Data Management:**
  - Distributed data + Catalog in SIIS.
  - Data Quality criteria defined by SIIS and enforced by all actors.

- **Security:**
  - Access control to SIIS and to client-systems.

**Traditional Social Assistance**

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Conclusions

**Complexity and impact of social programme implementation:**
- Require effective and efficient responses ➔ Understand *the essentials*
- Manage evolution, twofold: social functions and technologies.
- Success factors:
  - Strategic plans: ICT strategy aligned with institution’s social policy goals.
  - Industry/Government collaboration.

**“Structural” issues and challenges in social arena:**
- High costs, due to risks of large projects and low reuse of solutions.
- Few sectorial solutions and lack of standards supporting modularization.

**Towards common solutions and sectorial standards (SP/SS):**
- Including relevant technical, methodological and experience knowledge.
- Provide a common framework and support to the SP/SS community.
  ➔ Goals of ISSA Centre for Excellence and Guidelines on ICT:
    - *Current developments*: Master Data models and international agreements.
Thank you very much

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