Case study 5: Turkey[109]

Name: Butunlesic (translated as Integrated Social Assistance System, ISAS)

Overall classification: social registry building on a virtual registry

Data collection strategy: combination of virtual data sharing from existing databases and on-demand registration (including home visits)

Breadth of integration: integrates data collection, eligibility determination and core services (e.g. payments, grievances, case management) across all social assistance programs (with data flows in both directions); integrates with other sectors (health and education primarily, including monitoring conditionalities); full integration with national ID database; some integration with social insurance (data acquired for eligibility determination)

Depth of integration: key objective is sharing data (two-way flow) to integrate service delivery across sectors and increase citizen focus

Number of individuals registered: 34 million (45 per cent of population, though access to selected data from any ID holder in Turkey is possible)

Turkey's Integrated Social Assistance System (ISAS) was launched in 2009 and finalised in December 2015. It is now in its 'implementation and maintenance phase'. ISAS enables all social assistance processes (application, decision-making, payments, monitoring, accounting, case management etc.) to be carried out in an electronic platform. It is integrated with 22 public institutions via web service — meaning it shares many of the connotations of a virtual social registry — and incorporates further information from 1000 local social assistance offices, thus serving as a 'poverty inventory' (social registry), with socioeconomic data of approximately 34 million citizens.

Since its creation, several benefits have already emerged.

» For citizens
  - Social assistance application process simplified: documents needed decreased from 30 to 1 (only identity card with Turkish ID number)
  - Period for accessing assistance was reduced: time for application decreased from days to minutes; processing reduced from months to days
  - Citizens can easily reach the latest information about their application (thanks to e-gov integration and SMS delivery service)
  - Full automation of payments: direct and integrated transfer to bank accounts across programs using Social Assistance Card

» For the state
  - Savings on time and resources in delivery of social assistance
  - 'Neediness situation inspection' (eligibility determination) decreased from 15–20 days to approximately 1 minute
  - Integrated processes/services: payments, case management etc. (economies of scale)
  - Disbursement time shortened (time from application to payment)
  - Other government institutions' workload decreased (web access)
  - Bureaucracy minimised and paperwork reduced: electronic record-keeping through ISAS saves the Turkish Government from processing approximately 5 million paper documents per month

109 This case study is based on discussions with Mehmet Çağlar Çinar and Mustafa Sencer Kiremitci from Turkey's Ministry of Family and Social Policy and on materials presented during socialprotection.org's webinar on Turkey's ISAS and accompanying materials.

- Efficient control and auditing mechanisms
- Misuses blocked and duplications avoided
- Reliable statistical information gathered

Background

ISAS was launched in 2009 and was finalised in December 2015. It was created with the objectives of transferring all social assistance processes to an electronic platform; establishing a 'social welfare' and 'poverty' inventory (social registry); and establishing efficient control and monitoring mechanisms to ensure fair distribution of resources.

The development of the ISAS modules was slow and iterative, involving extensive user testing. In 2010 work started on the Conditional Cash Transfer Module. Two further modules were developed in 2011, four in 2012, four in 2013, two in 2014 and a final four in 2015. Overall, the program-specific modules were developed first and the integrated functionalities (e.g. External User and Communication Module for link to the e-government portal; Central Risk Assessment and Inspection Module; Decision Support System Module) were developed subsequently. This is shown in Table 15.

Table 15 Timeline for development of key ISAS modules

ISAS modules	In service
Conditional Cash Transfer Module	2010
Social Assistance Module (Temporary Assistance Module)	2011
Accounting and Resource Management Module	2011
Human Resources Module	2012
General Health Insurance Module	2012
Cash Assistance for Widowed Women	2012
Disabled and Elderly Salaries Module	2012
Home Care Module	2013
Cash Assistance for Needy Military Families	2013
Project Assistance Module (Income Generating and Social Service Projects)	2013
Fund Committee and Directorate Module	2013
Employment Aid Module	2014
Inventory Stock Management and In-Kind Aid (for Disasters) Module	2014
External User and Communication Module (e-government portal integration)	2015
Central Risk Assessment and Inspection Module	2015
Decision Support System Module	2015
Case Management Module	2015

Programs supported

Turkey's social expenditure as a percentage of GDP was 1.46 per cent in 2016. The main social assistance programs supported and managed through ISAS are:

» Conditional Cash Transfer Services: Aims to reduce poverty by making welfare programs conditional upon the receivers' actions. The system only transfers the money to persons who meet certain criteria

» Social Assistance and Solidarity Foundation Services: Aims to help needy citizens with in-cash and in-kind assistance for food, clothing, shelter etc.

» General Health Insurance Income Test Service: Aims to determine the income level of households to provide health insurance to those who need it

» Widow Assistance Service: Aims to help widowed citizens with cash support

» Disabled and Elderly Assistance Services: Aims to help disabled and elderly citizens with cash support

» Soldier Families Assistance Service: Aims to help soldiers' families with cash support

» Solidarity Foundation Project Services: Aims to support citizens to start businesses so that their need for social assistance is prevented.

Institutional arrangements

Unlike many other experiences internationally, where the development of a solution for integration is outsourced to a provider company, in Turkey the full development of ISAS was undertaken by a project team within the Ministry of Family and Social Policy and by expert staff from the Research and Development Department of the General Directorate of Social Assistance and from the Scientific and Technological Research Council of Turkey.

During the project phase, 28 software engineers were contracted on a full-time basis, while 12 administrative staff supported implementation at central level. For the ongoing maintenance period six software engineers are still contracted by the ministry, with an additional four in house, supported by five administrative staff.

Institutional arrangements with a wide variety of other institutional actors across government (see below) were slowly negotiated over time, facilitated by the country's overarching e-government framework. This was achieved through extensive face-to-face meetings where project staff explained win–win aspects of data-sharing. Moreover, the project's IT department gave support to other institutions' IT departments. Following this process, official protocols and memoranda of understanding were signed.

How ISAS is structured in practice

Data sources and linkages

The primary data source for Turkey's ISAS is the data obtained from 22 different public institutions through 111 different web services. Further data collection is then carried out by local offices responsible for social assistance administration. ISAS is therefore a virtual social registry (with information potentially available on all citizens) that performs additional data collection activities within social assistance applicant households in order to determine eligibility (becoming therefore a social registry). External stakeholders that share data with ISAS include:

» Ministry of Interior, Directorate of Civil Registration and Nationality (civil registry): addresses, copies of civil family registration

» Ministry of Labor and Social Security, Social Security Institution: employment status, short-term working allowance and job-loss compensation

» Ministry of Labor and Social Security, Public Employment Services: unemployment insurance

» Ministry of Finance, Turkish Revenue Administration: registration to tax system and running a business; owning a motor vehicle

» Ministry of Family and Social Policies, Social Services and Child Protection Agency; Directorate-General of Foundations: receipt of other social services

» Ministry of Education, E-schools: student enrolment and attendance information

» Institution of Scholarship and Dormitories: scholarships
» Ministry of Health, Family Medicine Information System: examination tracking; benefit from health services
» Ministry of Defence and Ministry of Interior: information on soldiers and village guards
» Ministry of Environmental and Urban Planning: land registry and cadastre information (owning property)
» Ministry of Agriculture and Rural Affairs: plantation ownership information
» PTT Bank, Ziraat Bank: payment information and payment synchronisation for delivery of payments.

It should be noted that this level of virtual integration could be achieved in Turkey because of two important preconditions: first, the existence of a strong government focus on e-government; and second, the fact that each Turkish citizen has a national ID number assigned at birth — meaning this number can be used as a unique identifier to share information across databases. Importantly, this ID number is assigned to both nationals and foreigners and is essential for accessing any government service or exercising citizenship rights. For example, without an ID number it is not possible to go to school, access health services, work, own a house or car, vote or receive water or electricity.

How data is collected and updated

As discussed above, the primary approach for data collection and updating is through virtual integration (interoperability) of existing administrative databases. However, this information is not sufficient for the purposes of determining means-tested eligibility for social assistance programs. For this reason, additional data is collected as a side-product of the social assistance application and registration process (through home visits and on-demand visits to local offices).

There are approximately 4000 social assistance inspection officers dedicated to household visits across Turkey. These officers work within the Ministry's 1000 local branches, making approximately 3 million household visits per year. During these visits a paper-based household visit form is completed, and this is subsequently entered into the ISAS system by local office staff.

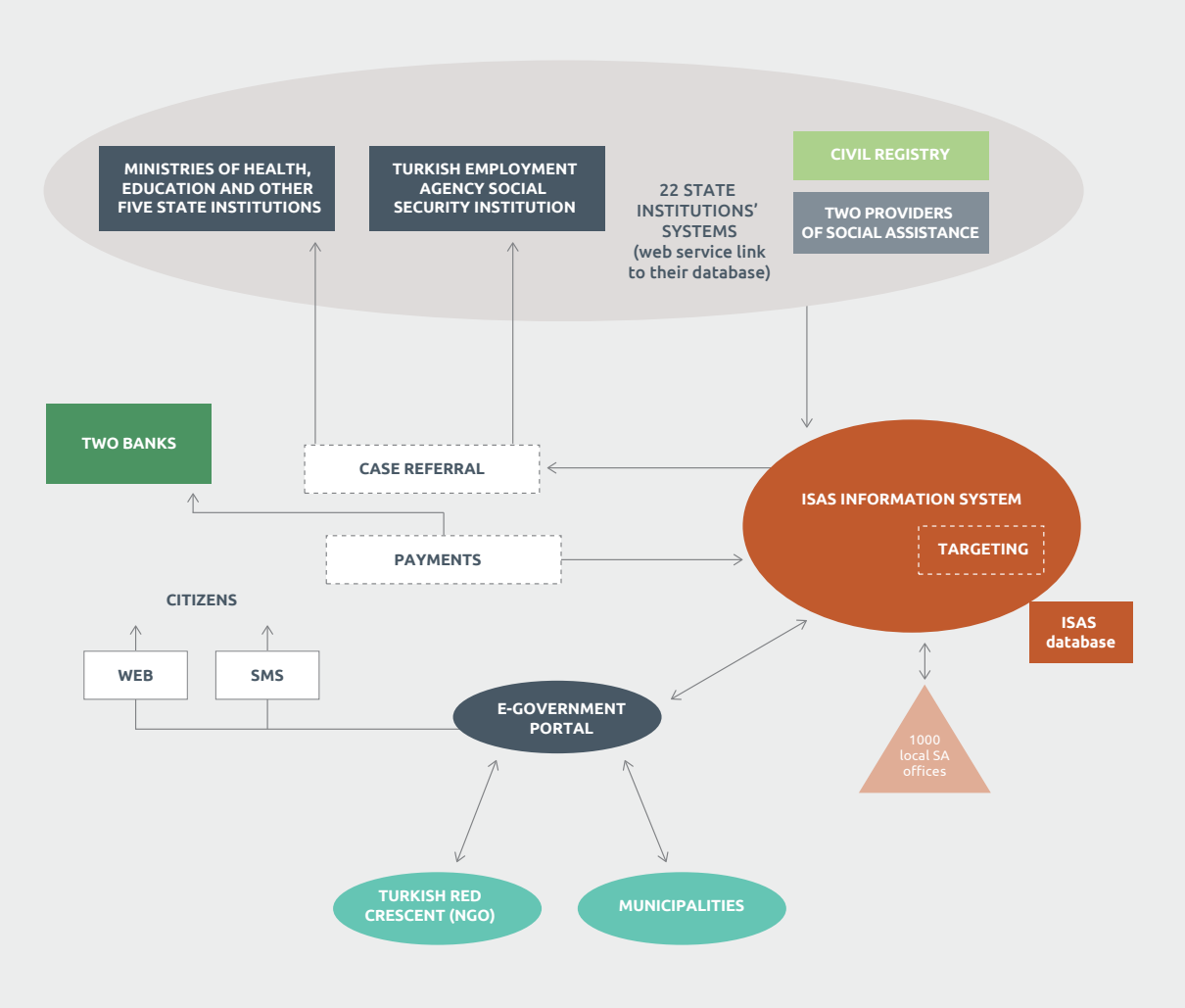
How data is transferred

Data is transferred exclusively using web services. For example, data transferals between local branches and the ministry are made via a 'secure tunnel' and virtual private network.

How data is processed and used for targeting

Each local branch has a decision body called a board of trustees. This board decides whether a household is eligible or not, based on the ministry-set eligibility criteria and the data collected. Grievances can also be made to this board or to a free-call centre. To control this process, local branches are audited by three different institutions acting as inspectors. The ISAS system also automatically detects suspicious cases (e.g. households that have been deemed as eligible but do not fulfil the required criteria) and generates flags for ministry inspectors via a specially designed Risk Assessment Module.

Figure 18 Overall structure of ISAS



Source: Developed by author based on discussions with the Ministry.

Note: Boxes indicate databases; circles indicate MISs; bold lines indicate direct link (e.g. web service access); dotted lines indicate indirect link (batch process, CDs etc.); arrows indicate where information flows in one direction or two directions.

How information is used

Data from ISAS is not only used for registration into and determination of eligibility for social assistance programs. A wide variety of other functions can also be carried out through ISAS, a characteristic that is rare in other social registries. These include:

a) Programme payments: ISAS has online integration with four different banks that carry out all the social assistance payments. For example, the standard payment process is as follows:
   i. Eligibility is decided by the local branch
   ii. Eligible households are automatically added to payment lists

iii. Before payment, regular administrative queries are automatically processed by an ISAS batch process to control the updated status of each beneficiary

iv. A payment list is verified and closed by the system

v. Each payment is calculated by ISAS and automatically transferred to the beneficiaries' bank accounts

vi. ISAS regularly monitors delivery and payment status from each financial partner's system, with status changes recorded to the ISAS database automatically

b) Case management: ISAS enables social assistants at local level to flag any issue that requires ad hoc case management — for example if there is violence against a woman in the household. The system automatically creates a 'case' and reports to the local foundation manager. The manager redirects the cases to the relevant institutions, and each institution can see its redirected cases through an e-government portal and make its own operations. When an institution makes an operation, this operation is synchronised to ISAS and foundation officers can see any changes on the case

c) Monitoring of conditionalities: ongoing monitoring of conditionalities is achieved by integrating ISAS with the health and education ministry MISs. This process is entirely electronic. For example, school teachers record their information on a daily basis. Each month's total absences are then collected by ISAS before payment. If there is an absence above the predefined limit then that month's payment is automatically cut off by the system.

Information collected by ISAS is also used for research and policy design purposes (using ad hoc pre-designed reports, a GIS visualisation system and simple business intelligence) and is further shared with citizens and other relevant institutions through an ad hoc e-government portal. ISAS has supported up to 4500 concurrent users and enables access to 10,600 users in total, including staff within 1000 local branches.

Data security and privacy

A wide variety of strategies are used to ensure data privacy and security for ISAS. This is fundamental given the vast amount of information available through the system. User privacy is guaranteed through two-factor authentication via one-time password devices.[110] Communication security (discussed above) is ensured via the setting of a virtual private network among system users. System room security is guaranteed in several ways, including restricted access, retina scans and storing of devices in locked cabinets that open using fingerprints. To add to this, each operation within the system is logged on a system database and on a second database.

Main challenges and lessons learned

Turkey's ISAS is a great example of how building a social protection information system does not imply one 'super system' but creating an integrated framework: the key issue is to build databases that effectively 'talk' to each other (are interoperable). Of course, this achievement has been possible in a context that was 'ripe' and ready to accommodate such a virtual system:

» ISAS integration to 22 public institution databases via web service is a testament to the functionality of other government databases

» Turkey has an existing e-government platform, an important enabler of effective integration (though it has risks). For example, integration of ISAS with the e-government portal allows for exchange of data directly with citizens (by web and SMS), municipalities (pilot) and the Turkish Red Crescent (testing)

» Turkey's comprehensive national ID system has provided a strong unique ID for integration.

110 USB-based tokens that generate new passwords each time they are clicked (based on a crypto algorithm and device and user-specific information).

ISAS is also testament to the important role played by political will in shaping the design of solutions for integration. From the very start, ISAS was intended as a tool to improve the active management, monitoring and control of 11 different social assistance services throughout their delivery cycle — empowering local actors while also maintaining a strong role at central level.

Importantly, this shared vision and strong leadership meant that the project for the creation of the ISAS system was also managed in an effective way:

» It had had a long-term perspective (five years) and a clear objective

» It chose to invest in in-house resources (capacity building and fewer risks, costs and time loss associated with tendering)

» It adopted an incremental, iterative and modular approach to development (meaning that any glitches could be addressed on an ongoing and user-tested basis)

» It built a community of practice that had a stake in the project through ongoing negotiations and face-to-face time spent with other contributing institutions.