

## Talking Interoperability

A dialogue series for advancing interoperability in the social protection sector

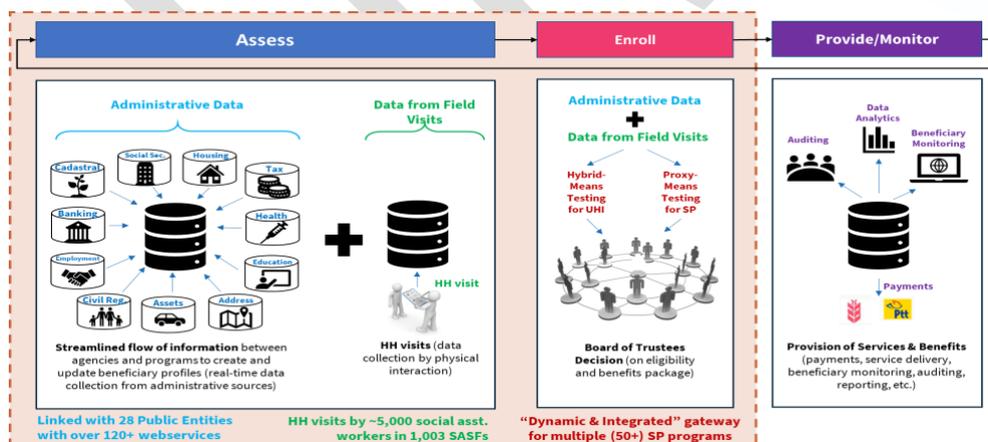
### The Integrated Social Assistance Information System in Turkey

This brief summarizes key learnings from the dialogue on Turkey's Integrated Social Assistance Information System held on 18 May 2022. The keynote was presented by **Ercan Dansuk**, Senior Social Protection Specialist, and **Ali Saip Demiröz**, Head of Social Assistance Applications, Ministry of Family and Social Services, Turkey. The discussants were **Rajiv Chawla**, Chief Knowledge Officer and Advisor, National Farmers' Welfare Implementation Society & Former Additional Chief Secretary, Government of Karnataka; and **Ubah Thomas Ubah**, Social Protection Specialist & Co-Lead for Core-MIS, World Bank. The session was moderated by **Madhumitha Hebbar**, Independent Social Protection Specialist. Please click [here](#) to access the recording, presentation slides and Q&A summary.

### Overview

The social protection system in Turkey<sup>1</sup> has two main components: contributory social insurance programmes and employment programmes led by the Ministry of Labor and Social Security (MoLSS)<sup>2</sup>; and non-contributory social assistance programmes and social services led by the Ministry of Family and Social Services (MoFSS). The majority of the social assistance programmes are managed by the General Directorate of Social Assistance (GDSA) within the MoFSS at the national level and are implemented by 1,003 locally based Social Assistance and Solidarity Foundations (SASFs). The Integrated Social Assistance Information System (ISAIS) electronically facilitates key processes in the implementation of GDSA's social assistance programmes, including registration, eligibility assessment, enrolment, payments, data analytics, and auditing (Figure 1). **This learning brief focuses on the functionalities of the ISAIS during the assessment and enrolment phases (within the dotted line in Figure 1).**

Figure 1. Key functionalities of the ISAIS



Source: Ahmet Fatih Ortakaya, Sr. Social Protection Specialist, World Bank, "The Future of Payment Systems, Turkey's Integrated Social Assistance System (ISAS), Webinar Four: Data Standards and Uses in Stacks", 20 October 2021

<sup>1</sup> In 2020, Turkey had a [population](#) of 84.3 million, of which an [estimated](#) 12.2 percent were poor. Turkey is classified as an upper-middle-income country.

<sup>2</sup> This is supplemented by social insurance programmes of various workers' unions.

## How does the system help reach the right beneficiaries?

**Through the ISAIS, Turkey standardized, digitalized and integrated its erstwhile paper-based siloed system for administering social assistance.** Historically, each social assistance programme had a separate cumbersome paper-based process. The ISAIS was initiated in 2010<sup>3</sup> to overcome the administrative burden faced by both applicants and administrators. Currently, the ISAIS holds data on 17.7 million households (or 57.5 million people), equivalent to 68 percent of the Turkish population.

**The ISAIS has vastly simplified the registration and assessment processes, reducing both documentation requirements (from 30 to 1) and processing time (from days to minutes).** Applicants apply using solely their national unique identity (ID) number at their local SASF offices or online, providing consent for their data to be accessed from various systems. Based on the ID, the ISAIS fetches data from 28 different public institutions<sup>4</sup> via 120 web services/application programming interfaces to create a socio-economic profile for the applicant. The household is visited by an SASF inspector once a year, who completes a standardized questionnaire that verifies information in the ISAIS (such as vehicle, livestock, property, agricultural land). S/he also collects additional household data needed, and assigns a subjective ranking of 1-5 (1 being very poor, 5 being well-off) to the household. Currently, there are approximately 8,700 inspectors across 1,003 SASFs making approximately annual home visits. The paper-based home visit questionnaire is later digitally recorded in the ISAIS. Eligibility for social assistance is determined by a local Board of Trustees and is based on the ISAIS' proxy means score and the inspectors' assessment.

**The ISAIS follows several procedures to ensure that decisions are based on accurate and up-to-date data.** The ISAIS' is automatically updated at least every 45 days via a batch update process. Data updates can also be triggered by central users at the GDSA and the local SASF inspectors at any time. The annual home visits provide an additional mechanism to ensure that eligibility decisions are based on up-to-date data. If there are conflicts across databases, the data will need to be reviewed before the application process can continue.

**The ISAIS has checks and balances to improve targeting, which in turn makes public spending more efficient.** After implementing the ISAIS, it was found that up to 10 percent of assistance benefits were duplicated.<sup>5</sup> Further, the ISAIS automatically detects suspicious cases and generates flags for ministry inspectors via a Risk Assessment Module comprising 260 risk indicators. If an update results in a beneficiary becoming ineligible, payments are automatically stopped. Beneficiaries can appeal such decisions through the local SASF offices.

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<sup>3</sup> Building upon the Social Assistance Information System (SAIS) initiated in 2009.

<sup>4</sup> These include: Ministry of Interior, Social Security Institution, Public Employment Services, Turkish Revenue Administration, Directorate General of Foundations, Ministry of Education, Ministry of Health, Ministry of Agriculture and Rural Affairs, Ministry of Environmental and Urban Planning, among others.

<sup>5</sup> [World Bank \(2018\)](#)

## Key enablers and challenges to data exchange

**Robust 'whole-of-government' digital infrastructure and a strong culture of e-government predate the ISAIS, providing a solid foundation for its roll-out. These include:**

- **Unique national ID with comprehensive coverage:** Turkish citizens have been issued a unique 11-digit identification (ID) number since 2000 by the MERNIS (Merkezi Nüfus İdaresi Sistemi, or the Central Population Administration System). Nearly 100% of the citizens have unique ID. The MERNIS' KPS (ID Information Sharing) service enables public agencies having appropriate security authorisations to access ID information and link data from different systems.
- **Civil registry:** Near-universal birth and death registration coverage<sup>6</sup> means that the digital Central Civil Registration System, in operation since 2000, can be effectively used to manage entries to, and exits from the ISAIS.
- **Address Based Population Registration System (ABPRS):** Under the ABPRS, the National Address Database (NAD) was created in 2007. The NAD standardized addresses and assigned unique codes for all localities, quarters, streets and buildings, as well as all independent units in each building. Household addresses are matched with MERNIS by using unique ID numbers, which is in turn linked to the ISAIS.<sup>7</sup>
- **e-Government gateway:** A key component of the e-government gateway<sup>8</sup> is an integration layer for government-to-government (G2G) communication enabled by web services, ID authentication, and secure networks. At the end of 2018, there were 129 G2G services.<sup>9</sup>

**Inter-institutional cooperation has been crucial to secure buy-in for data sharing.** During the development of ISAIS, senior management of the GDSA held a series of meetings with other government institutions to establish data-sharing agreements.<sup>10</sup> The GDSA has formal bilateral agreements with participating institutions that detail out what data are available in which form. These agreements were painstakingly negotiated – within the country's overarching e-government framework – over time.

**Given the varying level of data systems maturity across participating institutions, the GDSA had to put in additional efforts to make the data usable.** Common challenges at the design stage included: non-standard data formats, lack of electronic data, limited technical know-how to share data, etc.<sup>11</sup> The ISAIS development staff worked closely with each institution to prepare data for exchange. Therefore, the ISAIS had substantial positive spill-overs across broader government information systems.

**Although the ISAIS is now in a stable operations and maintenance phase, without a common information model and accompanying data standards, meaningful data interpretation remains a challenge.** The data sharing agreements are bilaterally made

<sup>6</sup> [TurkStat \(2020\)](#)

<sup>7</sup> Residents are required to make address change notification within 20 days, following which fines are applied. This helps keep the NAD up-to-date.

<sup>8</sup> The other component being a single online interface for citizens and businesses to access various government services.

<sup>9</sup> [European Commission \(2019\)](#)

<sup>10</sup> [World Bank \(2018\)](#)

<sup>11</sup> [World Bank \(2018\)](#)

between the IS AIS and various participating institutions, and as such, have not emerged from a common information model (see the case of Belgium [here](#)). For example, a critical piece of information required by the IS AIS is the social security status provided by the Social Security Institution (SSI, within the MoLSS). The social security status affects both eligibility determination and computation of social assistance benefits to be provided. The constantly changing social security business rules and lack of clear protocols to notify changes to data definition and structure make the interpretation of this data a challenge for the IS AIS. Currently, accurate interpretation is dependent on finding the right SSI counterpart for manual interpretation, and therefore cannot be automatically assumed once data is relayed via web services. The Turkish government is working to set up a [National Data Dictionary](#) (NDD) to resolve challenges related to interpretation and ownership of data across ministries; the extent to which the NDD is impactful remains to be seen.

**The data in the IS AIS is protected by strong information security and privacy protection measures.** The IS AIS takes many measures to ensure information security, including by employing a two-factor authentication process and by restricting access to a core set of staff.

**The case of the IS AIS reinforces the importance of complementary human resources for effective interoperability-enabled data exchange.** The annual verification visits play an important role in ensuring that up-to-date accurate data is used in making eligibility decisions. Further, they also create opportunities for referrals to other social services.

**The dialogue series identified opportunities to make IS AIS more inclusive and effective.** These include:

- Middle- and [high-income countries](#) are increasingly moving towards proactively granting benefits using automatic eligibility assessments applied on data from integrated information systems, completely taking away the burden of applying for assistance from people. While the IS AIS currently does not implement proactive benefits, it is well-placed to implement such an approach, as evidenced by Turkey's recent COVID-19 response. During the COVID-19 crisis, Turkey implemented an emergency cash transfer where targeting and beneficiary enrolment was done purely based on validation of the IS AIS data.
- The IS AIS currently does not allow people to view their data or its use, request corrections, and appeal against non-consented use. Such transparency and accountability measures would enhance people's trust in the IS AIS.
- The data flows are unidirectional by design, i.e., the IS AIS consumes data from other systems, but does not send them data updates. While it is not within IS AIS' mandate to validate the business rules of other agencies, it could consider leveraging home visits to push alerts regarding outdated data or contradictory data.
- The IS AIS is currently used only by the GDSA for administering social assistance, but it could be an important resource for both other directorates within the MoFSS (e.g. social services – efforts are underway to integrate the IS AIS with social services' information systems) and other ministries administering social assistance and related services.