Interoperability workshop

Relevant use cases for interoperability

March 26, 2026

01

Introduction

Introduction

Interoperability has become an essential pillar of digital transformation for governments around the world. It enables systems and public bodies to share data securely and efficiently, making high-impact use cases possible in areas such as transportation systems, public procurement, and civil registries.

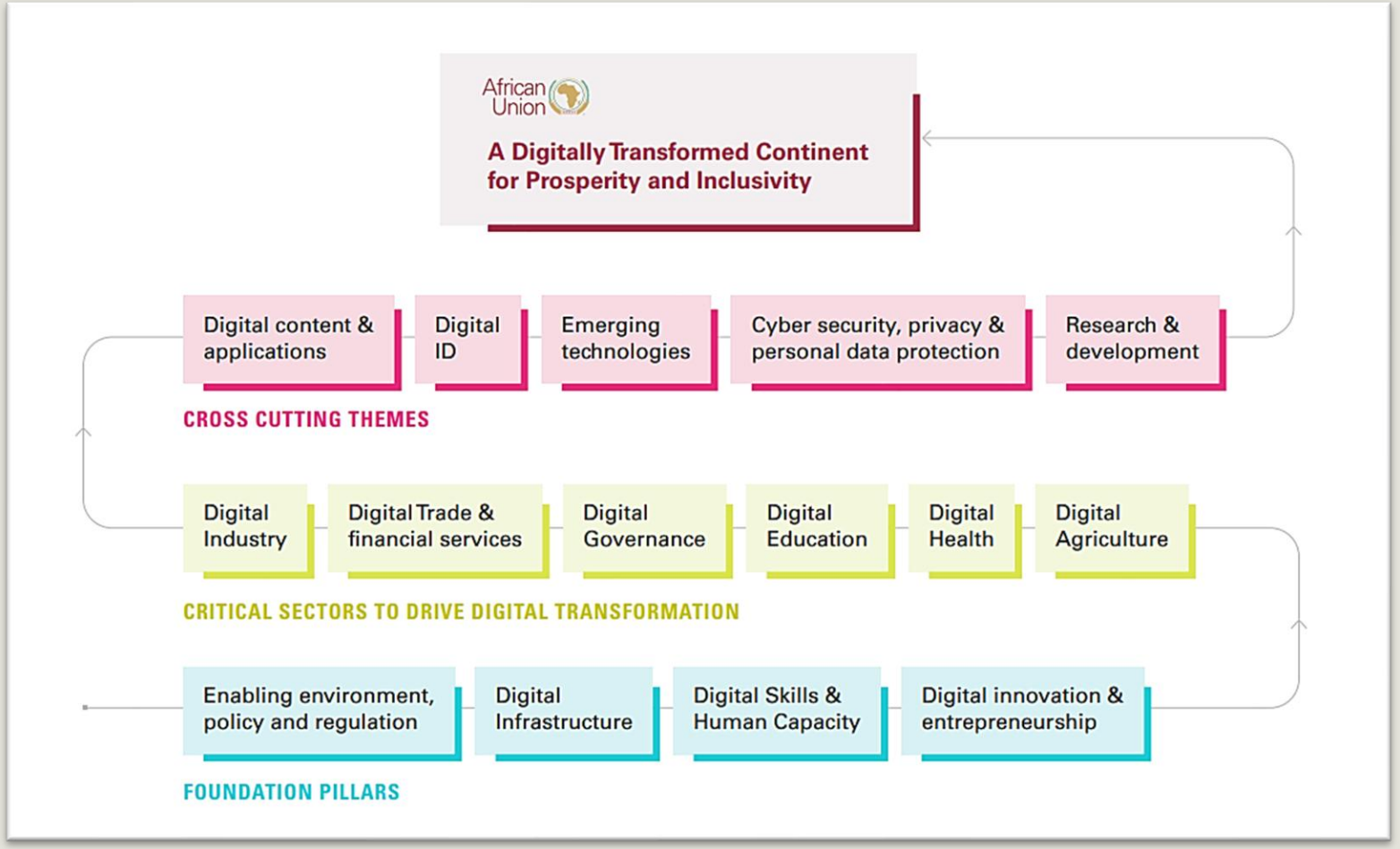
The examples presented below show that interoperability not only improves administrative efficiency, but also strengthens digital trust, drives innovation, and enhances the citizen experience in increasingly connected environments.

In this context, aligned with strategic initiatives such as Digital Transformation for Africa (2020–2030), Morocco has positioned interoperability as a priority lever within its digital agenda. The actions led by the ADD and the Maroc Digital plans provide a clear example of institutional coordination, governance, and trust-building for data exchange at a national scale.

The Digital Transformation for Africa (2020-2030)

Through the African Union (AU), a digital strategy has been defined for the 2020-2030 decade, aiming to serve as a common framework for digital coordination within Africa.

The use cases that we will present below will be related to some of the critical sectors driving this Digital Transformation.



Source: The Digital Transformation Strategy for Africa (2020-2030) - AU

Interoperability framework for digital ID

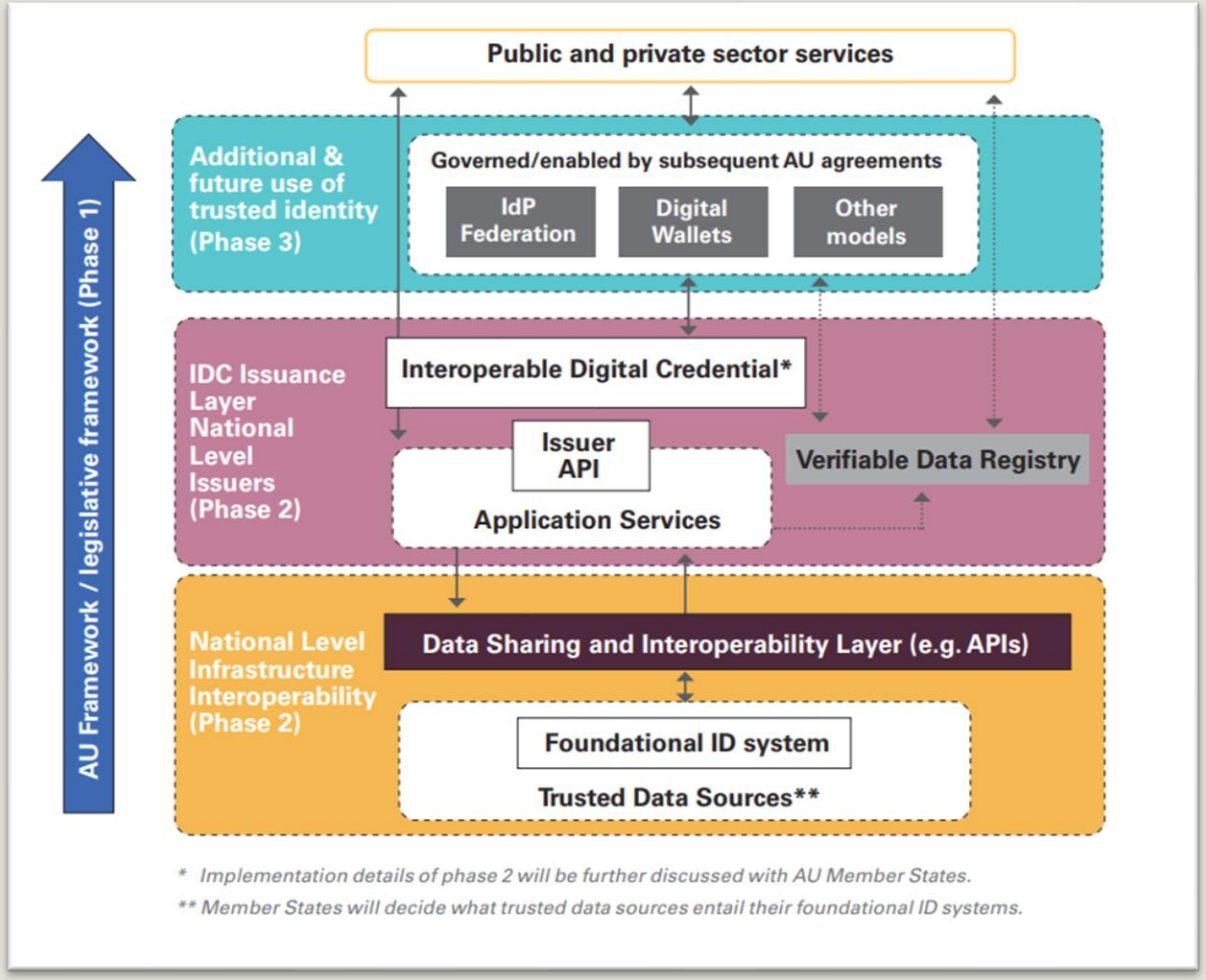
Digital identity is a cornerstone of the digital transformation strategy. Consequently, the AU has established an interoperability framework around it.

The framework defines the common requirements, minimum regulations, the governance mechanisms and further harmonizations between legal frameworks.

The framework does not require a unified continental digital identification system but rather establishing interoperability between the existing digital identifications systems in the UA member countries. Member states are free to choose how to issue this digital credential.

Final objective: Enable African citizens to verify their legal identity online and offline to access public and private sector services in the AU member states.

Application timeframe until 2030.



Phased implementation approach to the framework

02

Interoperability use cases

2.1

Introduction interoperability use cases

Interoperability use cases

The digital transformation of public services is advancing toward more proactive, efficient, and citizen-centered models.

Interoperability between administrative systems enables the automated and secure exchange of data, allowing services to be activated without requiring users to complete additional procedures.

In the next slides, we present a set of use cases, including:

- **Interoperability platforms**, in which each country has developed a model adapted to its political, administrative, and cultural context.
- **Digital solutions** that improve public management in key areas such as civil registration, mobility, public procurement, cross-border services, and digital identity.

Each of these examples illustrates how technology makes it possible to:

- Reduce administrative processing times and errors
- Improve the citizen experience
- Ensure traceability, security, and regulatory compliance
- Optimize public resources and facilitate access to services

From the registration of a child's birth to the validation of a company in another country, these cases demonstrate the potential of interoperability to build a more agile, inclusive, and connected public administration.

2.2

Interoperability platforms

Estonia

X-Road

The isolated silo approach generates redundancy and inefficiency. Interoperability avoids duplication and minimizes errors in data collection and storage and reuses redundant resources for use in other areas where they can generate greater value.

Project X-Road. Single data exchange platform

Main uses

Social welfare services

- Subsidy applications without documentation
- Automatic calculation of benefits for children, unemployment, and disability
- Proactive notifications about rights and benefits

Education and Enrollment

- Automatic school enrollment based on residence
- Transfer of student records between educational institutions
- Digital access to grades and certificates

Justice and Security

- Requests for legal documents (certificates, criminal records)
- Electronic communication with courts
- Property registration integrated with land registry and notaries

Silo removal

450 public and private sector organizations

52,000 organizations as indirect users of X-Road services

Over 3,000 electronic services available

Cost reduction

Savings of more than 1,345 years of work time per year by eliminating redundant paperwork, enabling access to up-to-date information, and focusing work on valuable tasks

Improved operational efficiency

96.1% of digital public services for citizens

97.5% for businesses

Estonia's X-Road: data exchange in the world's most digital society

Chile

Interoperability is an essential principle for digital governance and the protection of fundamental rights. It allows for the generation of aggregated information and the management of data cross-referencing, the validation of transactions, the application of rules and policies to data, and, from there, the generation of reports, the detection of anomalous situations or policy breaches, making it difficult to manipulate data or conceal illegal transactions. When public systems are integrated, citizens can more easily access public information, and this information can be verified, making it more reliable.

Project PISEE Integrated Electronic Services Platform

Main uses

Household Social Registry
- Unique identification of beneficiaries for social programs
- Cross-validation of data across 17 public institutions
- Automatic updates of socioeconomic information
- Precise targeting of subsidies and state aid

Public Procurement System - ChileCompra
- Automatic verification of supplier background
- Data exchange with the Internal Revenue Service (SII), Civil Registry, and Treasury
- Digital certifications of tax and legal compliance

Justice and Security
- Unified access to 3,200 government procedures
- Single authentication via ClaveÚnica
- Shared transaction history across institutions

Description

The interoperability network consists of a set of direct and secure internet connections, based on interoperability nodes hosted within the IT infrastructure of State Administration bodies, to facilitate inter-institutional collaboration

Benefits

Promote collaboration and information sharing

Improve coordination in situations of emergency, national security, or public policy planning

Facilitate effective communication and coordination among State Administration bodies

Spain

Promotes data-based decision making, as it allows data to flow between organizations, which facilitates a more comprehensive vision and improves the quality of political and administrative decisions. This more integral vision of services allows obtaining data and information that go beyond the internal management of the Administrations and generates a more holistic view of the interactions.

Project PID Data Intermediation Platform

Description

The Data Intermediation Platform (PID) enables Spanish public administrations to automatically and securely consult more than 130 administrative certificates and data sets, provided by over 45 data-providing bodies, including civil registries, the land registry, social security, tax authorities, and other relevant public registers.

The PID acts as a common interoperability hub and is a key element in the practical application of the “once-only” principle, preventing citizens from having to submit documents or certificates that are already held by public administrations.

Improvements

When a citizen applies for social assistance, the administration can automatically verify:

- Their income level (through the Tax Agency)
- Their employment status (through the Public Employment Service)
- Their place of residence (through the municipal registry)
- Whether the applicant is already receiving other public benefits (through Social Security)

As a result, eligibility checks are faster and more reliable, case handling is streamlined, and decisions can be issued with greater consistency and legal certainty, improving both administrative efficiency and the citizen experience.

Indicators

- In 2025, more than 2,700 organizations used the Data Intermediation Platform.
- By 2025, more than 585 million data queries had been carried out, generating cumulative cost savings of over €2.7 billion since 2007.

PAe - Intermediación de datos

South Korea

KICS operates as a unified platform that integrates all criminal-justice information flows into a single digital ecosystem, enabling different agencies to securely share data, documents, and procedural statuses in real time.

Project KICS Platform (Korean Information System of Criminal Justice Services)

Description

The KICS platform (Korean Information System of Criminal Justice Services) is the main interoperability system of the criminal justice sector in South Korea. It digitally connects all key institutions within the criminal justice system:

- National Police
- Prosecutor's Office
- Ministry of Justice
- Coast Guard
- Courts (Soon)

Benefits

With this platform, it is possible:

- Electronic and real-time exchange of criminal information among all the agencies involved.
- Comprehensive case tracking, even when it is transferred from one investigative body to another.
- Remote video investigations, without the need for physical presence.
- Case management supported by AI, such as fact analysis, precedent suggestions, and automatic transcription.
- Citizen access for victims, who can check the status of their cases through personal authentication.

This interoperability capability reduces processing times, avoids duplication, and improves the efficiency and transparency of the criminal justice process.

2.3

Digital solutions

Civil registry and social services

Automated exchange of birth data for the activation of social services

Challenge

Facilitate the proactive activation of social services through the secure and automated exchange of data between the Civil Registry and Social Services.

Description

When the birth of a child is registered in the Civil Registry, the system automatically transmits the relevant data to Social Services through an interoperability platform. This allows Social Services to identify families potentially eligible for benefits or support programs, without the need for the citizen to submit an additional request.

Process Flow

1. The birth is registered in the Civil Registry.
2. The Civil Registry system generates a notification event with the child's and parents' data.
3. Through the interoperability platform, the information is transmitted to the Social Services of the corresponding municipality.
4. The Social Services system receives and processes the data.
5. A preliminary assessment is automatically initiated to determine whether the family may qualify for social assistance.
6. The social worker contacts the family to complete the assessment and activate the services if applicable.

Chile

The birth registered in the Civil Registry automatically triggers the creation of a record in the social protection system (Household Social Registry). This allows the system to immediately identify whether the family may access social benefits.

ECLAC-Naciones Unidas (2021), "Interoperability in the State of Chile: Lessons from the Social Protection System". Authors: Silva, E and Pérez, M.

World Bank (2022). "Digital Government for Development: Case studies from Latin America". Caso 3: "Chile's Civil Registry Interoperability"

Estonia

National interoperability platform (X-Road): When a child's birth is registered, the X-Road system enables Social Services to receive the information in real time. This allows for the automatic activation of child allowances, enrollment in family support programs, and the assessment of social needs without citizen intervention. Each citizen, through their digital identity, controls who accesses their data. Traceability, encryption, and explicit consent are guaranteed.

EU Commission (2021), "Once-Only Principle: The Estonian Model"

OECD (2002). 2Digital Government in Estonia: Social Services Automation"

Impacts

< need for personnel

< human errors

savings for Estonia of 2% of its GDP

child subsidies without application start of monitoring vulnerable families'

citizens save 5 days per year in time activation

Driver’s license and vehicle registration

Real-time cross-validation for traffic control, penalties and digital services

Challenge

Allow transport and security authorities to automatically verify whether the driver is authorized to drive, the vehicle is registered, insured, and permitted to circulate, and whether there are any associated penalties, restrictions, or alerts.

Description

When a vehicle is detected by a police officer, toll system, traffic camera, or license plate reader, data can be captured and cross-checked in real time with vehicle registration and licensing systems to provide an immediate response on whether everything is in order or there are irregularities.

Process Flow

1. A policeman, toll system, traffic camera, or license plate reader detects a vehicle.
2. The transportation system queries in real time the vehicle owner, the status of the vehicle’s technical inspection, whether it has mandatory insurance, the type of vehicle, and the violation history.
3. If the vehicle does not meet the requirements, an alert is automatically generated; if it is electric, access to restricted areas is allowed; and if it has serious fines, the police are notified.
4. The event is recorded in the system, and the citizen is notified, if applicable, through multiple channels (email, SMS, app, postal mail).

UE DATEX II system

This European standard for the exchange of traffic and transport data between authorities, operators, and services enables traffic management, toll, and emissions control systems to communicate in real time with vehicle databases.

In Spain, the Traffic Authority (DGT) publishes data on accidents, roadworks, adverse weather conditions, and road network restrictions in DATEX II format.

IEEE Xplore Full-Text PDF:

If an accident occurs on the Spanish M30 highway, the system records it and publishes it in DATEX II so that other systems can automatically integrate the information.

In Madrid, the locations and statuses of traffic cameras and information panels are published in DATEX II format. This allows urban management systems and mobility platforms to access real-time information.

In Amsterdam, vehicles that do not comply with environmental regulations are automatically detected and restricted from entering low-emission zones.

Impacts

enforcement without the need to stop vehicles

emission reduction by controlling access to restricted zones

greater road safety by detecting vehicles in unfit conditions

better citizen experience as the process is transparent

e-Procurement in public procurement

Automated publication, bid submission, and validation of guarantees or certifications between public entities

Challenge

Optimize the entire public procurement cycle through interoperability between e-procurement platforms and the administrative systems of public entities.

Description

Complete cycle from publication to award and signing of a public procurement contract on an interoperable e-procurement platform.

Process Flow

1. in its internal system. It is automatically published on all available procurement platforms.
2. Suppliers access the tender and submit their electronic bids, which are automatically validated for format, deadlines, and requirements.
3. The system queries business registries, certification systems, and bank guarantees in real time.
4. The system automatically pre-evaluates technical and economic criteria.
5. Evaluators receive a consolidated report for the final decision.
6. The contract is signed electronically and integrated with budget tracking and execution systems.

Barcelona City Council

Tenders are automatically published on the Public Sector Procurement Platform and in the Official Journal of the EU. Suppliers submit their bids electronically, and the system automatically validates deadlines, formats, and required documentation. Guarantees and certifications are also verified. Technical and economic evaluations are carried out automatically, generating reports for the contracting authorities. The contract is signed electronically and integrated with the budget monitoring system and electronic invoicing (Facturae).

OCDE (2022). "Barcelona's e-Procurement model: Lessons for Smart Cities"

Italy

Tenders are published on the MEPA portal (Electronic Market of Public Administration) and automatically integrated with the European TED system (Tenders Electronic Daily) for tenders above the EU threshold. Suppliers submit their bids on the platform, and the system automatically validates documents, deadlines, and requirements. Guarantees and certifications are also verified. Technical and economic evaluations are carried out automatically, generating reports for the award committees. Finally, the contract is signed electronically and integrated with electronic invoicing and budget monitoring systems.

OCDE (2023). "Public Procurement in Italy: The CONSIP Experience and beyond".

Dominican Republic

A unique transactional platform that centralizes and digitizes the entire public procurement cycle, from the publication of tender documents to contract management

This portal has become an innovative, agile, and user-friendly tool that benefits all stakeholders in the process (Buyers, Suppliers, and Civil Society).

- +900 buyer users
- +200 institutions
- +43,000 registered suppliers

A 30% reduction in the time required to publish procurement processes has been achieved.

Centralization of all contract management.

Significant improvement in the transparency of public procurement processes

Impacts

< risk of human errors

reduction of time and administrative costs

traceability of the entire process

accessibility for all: SMEs, international suppliers and large companies

Cross-border interoperability for digital public services

Access public services in different countries to company registration, tax payments or certificate validation

Challenge

Allow citizens and companies to access public services in different countries.

Description

This approach ensures that individuals and organizations can interact with government systems in a consistent, secure, and user-friendly manner, reducing administrative barriers and fostering greater mobility, economic activity, and inclusion within an interconnected digital ecosystem.

Process Flow

1. A citizen from one country wants to access a public service in another country using their national digital identity (cross-border authentication).
2. A citizen requests the service in another country, and the system of that country queries in real time the business register of the citizen's country to verify the existence and financial standing of the applicant
3. It is automatically validated whether the applicant complies with the country's regulations.
4. The record is electronically signed using a qualified signature recognized by both countries, and the data is synchronized with regional platforms for fiscal and statistical control.

Registration of a Spanish company in France

A Spanish citizen wants to register a company in France. They access a public service in France using their Spanish electronic ID. The French system validates the identity through eIDAS. The Spanish citizen submits the registration request, and the French system queries the Spanish business register in real time to verify the data. It is automatically validated whether the applicant complies with European regulations through eCertis. The registration is electronically signed using a qualified signature recognized in both countries. The data is synchronized across the platforms of both countries.

Journal of cross-border business interoperability (2023). "Spanish-French company registration: An interoperability success story".

PEPPOL (Pan-European Public Procurement Online)

Enables the secure and standardized exchange of electronic documents related to public procurement and invoicing across different countries and systems, in compliance with the European Electronic Invoicing Directive.

McKinsey&Company (2023). "The Econocmic impact of Peppol implementations: Multi-country analysis".

Impacts

reduction of paperwork

reduction of administrative time

regulatory compliance

traceability enables participation for all

Digital identity and singles sign-on platform

Access public services using a single, unified digital identity

Challenge

Allow citizens and companies to access multiple public services with a single authentication.

Description

A platform that enables a single digital identification to access any public service

Process Flow

1. The citizen registers on the public digital identity platform, and a unique profile with verified attributes is generated.
2. The citizen accesses a public administration portal, which validates the identity through a platform
3. When accessing the portal, the citizen can carry out different procedures without having to authenticate for each one.
4. The citizen can control which data is shared for each transaction

Singapore

SingPass (Singapore Personal Access): Through this national digital identity and SSO platform, users can access digital services from both public and private organizations. It offers secure authentication via biometrics or two-factor authentication, enables digital signing of documents, and pre-fills forms during digital transactions.

Lee, H.L. (2022). "Digital Government in Singapore: The SingPass Evolution".

UK

UK-NHS Login: It is a single authentication system to access National Health Service services. With a single login, users can access medical appointments, electronic prescriptions, or medical history.

OCDE (2022). "Health Data Governance and Interoperability: The UK NHS Digital Approach"

Impacts

unified experience

streamline procedures

reduce processing times

regulatory compliance

Access to health documentation

Challenge

Sharing useful information across different levels of healthcare, organizations, and geographies to optimize health outcomes.

Description

An information system that facilitates access to health data. It is available to all individuals receiving care within the healthcare system, as well as to healthcare professionals working in clinics, hospitals, care centers, outpatient facilities, and pharmacies.

Process Flow

1. The citizen has a regular medical prescription registered in the system.
2. The citizen travels to another city for vacation without the need to carry paper reports or prescriptions.
3. The citizen visits a pharmacy registered in the system to request a medication refill.
4. Using the citizen's identification document, the pharmacy verifies eligibility for the prescribed medication.
5. The pharmacy dispenses the correct medication.
6. The citizen continues their treatment with a simple and accessible experience.

Manage health information from a single, secure location

Austria

ELGA is already used across all public hospitals and healthcare centers, as well as in private medical practices and pharmacies throughout Austria.

ELGA health data includes electronic medication (information on medications prescribed by physicians and dispensed by pharmacies) and electronic clinical records (laboratory tests, diagnostic imaging reports, hospital and nursing discharge summaries, etc.).

Estonia

The **e-Prescription system** enables medical staff and pharmacies to monitor and manage the issuance of prescriptions.

All hospitals and pharmacies in the country are connected to the system.

Just 15 months after its launch, 84% of prescriptions were issued digitally, and more than 95% of pharmacies were ready to process electronic prescriptions. According to a survey on citizen satisfaction with healthcare services in Estonia, 97% of digital prescription users are satisfied with the service.

Australia

My **Health Record** is Australia's national health information repository. It contains key clinical information such as medications, allergies, immunizations, diagnostic reports, and hospital discharge summaries.

1800 MEDICARE is an official mobile application of the Australian Government. Its primary purpose is to allow citizens to view and manage the information stored in My Health Record directly from their mobile devices.

Impacts

- reduced use of paper
- improved continuity of care
- lower operational costs
- traceability
- < human errors

Services for nationals residing abroad

Assistance to nationals abroad is provided by consulates and embassies to protect and support citizens outside their country

Challenge

Modernize and simplify consular services to facilitate access for nationals living abroad, improving the service delivery experience and reducing geographic and administrative barriers.

Description

A platform that centralizes and streamlines the request and management of consular services for nationals residing abroad, enabling, among others, procedures such as consular registration, civil registry registration, certificate requests, document legalization, assistance to detained nationals, grant applications, and access to a digital identity.

Process Flow

1. A citizen moving abroad with her family wishes to register in the Consular Register of her corresponding consular district.
2. She initiates the process online through the Ministry of Foreign Affairs' portal, using her digital identifier.
3. She completes the electronic form with her personal information and those of her family and uploads the required documentation.
4. She digitally signs the application and submits it electronically.
5. The application is registered electronically, with no need for an in-person visit.

Spain

The **Ministry of Foreign Affairs, the European Union and Cooperation** is driving an ambitious consular digitalization plan through a single, centralized, multi-administration platform that integrates the public services required by Spaniards living abroad and ensures more accessible, consistent, and efficient service delivery. The system has been operational since June 2025 across Spain's 177 consular offices, providing services to nearly 3.2 million Spanish citizens residing abroad.

1. Ministry of Foreign Affairs
   - Provides a platform to register all citizens residing overseas.
   - Delivers services both online and in-person via Consulates and Embassies.
   - The system allows setting evaluation criteria, deadlines, and technical specifications.
2. Ministry of interior
   - Ensures interoperability with police administration for recording all documentation and passports.
3. Civil Registry (Ministry of Justice)
   - Enables interoperability for accessing citizen information and registering individuals upon birth or when acquiring Spanish nationality.
4. Spanish Royal Mint (Fábrica Nacional de Moneda y Timbre)
   - Issues electronic certificates for citizens abroad, as well as passports.

Impacts

continuous communication channel

instant access to updated information

lower operational costs

improving interoperability

help line

reduce times and displacements

Smart City platform for municipal services

Single platform for managing municipal records in full legal compliance

Challenge

Modernize municipal management and public service delivery by integrating digital technologies to improve efficiency, sustainability, transparency, and citizen engagement across the city.

Description

A platform that centralizes urban services to enable integrated city management, with a strong focus on data interoperability, as it allows multisector information to be collected, integrated, and analyzed, serving as the foundation for informed, data-driven municipal decision-making.

Process Flow

Model for medium-sized cities.

The Smart City approach is based on pragmatic and scalable solutions, focused on service digitalization, data integration, and improved municipal efficiency, tailored to a manageable urban scale and delivering a direct impact on quality of life.

1. A transversal Smart City platform as the central backbone.
2. Progressive integration of vertical services.
3. Use of open data and dashboards for municipal management.
4. Incremental evolution, avoiding oversized or overly complex solutions.

Spain is one of the European countries with the highest number of Smart City initiatives and cities, promoted both in large urban areas and in medium-sized cities. Several Smart City cases in medium-sized cities stand out, including:

- The Lugo Smart Project, promoted by Lugo City Council, with one of its main pillars being the implementation of an e-government platform enabling fully electronic processing of administrative procedures, including electronic registration, notifications, and digital signature, as well as digital interaction between citizens and the City Council through the electronic portal
- The Smart City platform of Tres Cantos City Council (Madrid), aimed at optimizing urban cleaning and solid waste collection (SWC) through the use of sensors and real-time data, improving service efficiency and operational planning.
- The Smart City project of Santiago de Compostela, focused on the development of an intelligent ornamental lighting system capable of preventing the appearance and growth of biofilm responsible for the deterioration of historic elements, combining heritage conservation and technology.
- The Smart City initiative of Santander based on an extensive network of urban sensors for the intelligent management of services such as mobility, environment, and public space, and on the use of data to support municipal decision-making.

Impacts

continuous communication channel

instant access to updated information

lower operational costs

Improved participation

streamlined, compliant, and efficient administrative processes

compliance with legal requirements

flexibility to adapt services to new needs

03

ADD: an interoperability success story

An interoperability success story

The ADD's mission is to accelerate digital transformation in Morocco, with interoperability being a fundamental pillar of this mission.

#ADD
Agence de Développement du Digital

In this context, the ADD has promoted an interoperability platform, demonstrating a clear vision and excellent execution capacity.

The success of the ADD lies in having addressed interoperability from a comprehensive perspective, coordinating diverse actors within the Public Administration.

To achieve this, a General Interoperability Framework (CGI) was created, which identifies the essential standards for implementing technical interoperability, supported by the national interoperability platform. It is based on international standards and recommendations that indicate that each administration must align with the framework to design, implement, and maintain interoperable information systems.

With interoperability, citizens can submit a single request for a procedure to the responsible administration, which then collects the required data and supporting documents directly from the relevant administrations.

An interoperability success story

Description

The national interoperability platform called GISRE, implemented by the ADD, enables the secure exchange of data between administrations.

It is based on an API management solution that offers the following functionalities:

- **Secure access:** Requests information from the platform user and validates it against an identity repository
- **Encryption:** Encrypts the data exchanged between authorized entities.
- **Timestamping:** Records the date and time of each data exchange transaction
- **Performance monitoring and reporting:** Monitors and reports all anomalies related to API performance
- **Administration services:** Management of roles, access, and configuration.
- **Rules engine:** Manages consent and business rules for each use case, according to the standards established by service providers
- **Audit and logging:** Tracks and records the various events and changes reported on the platform

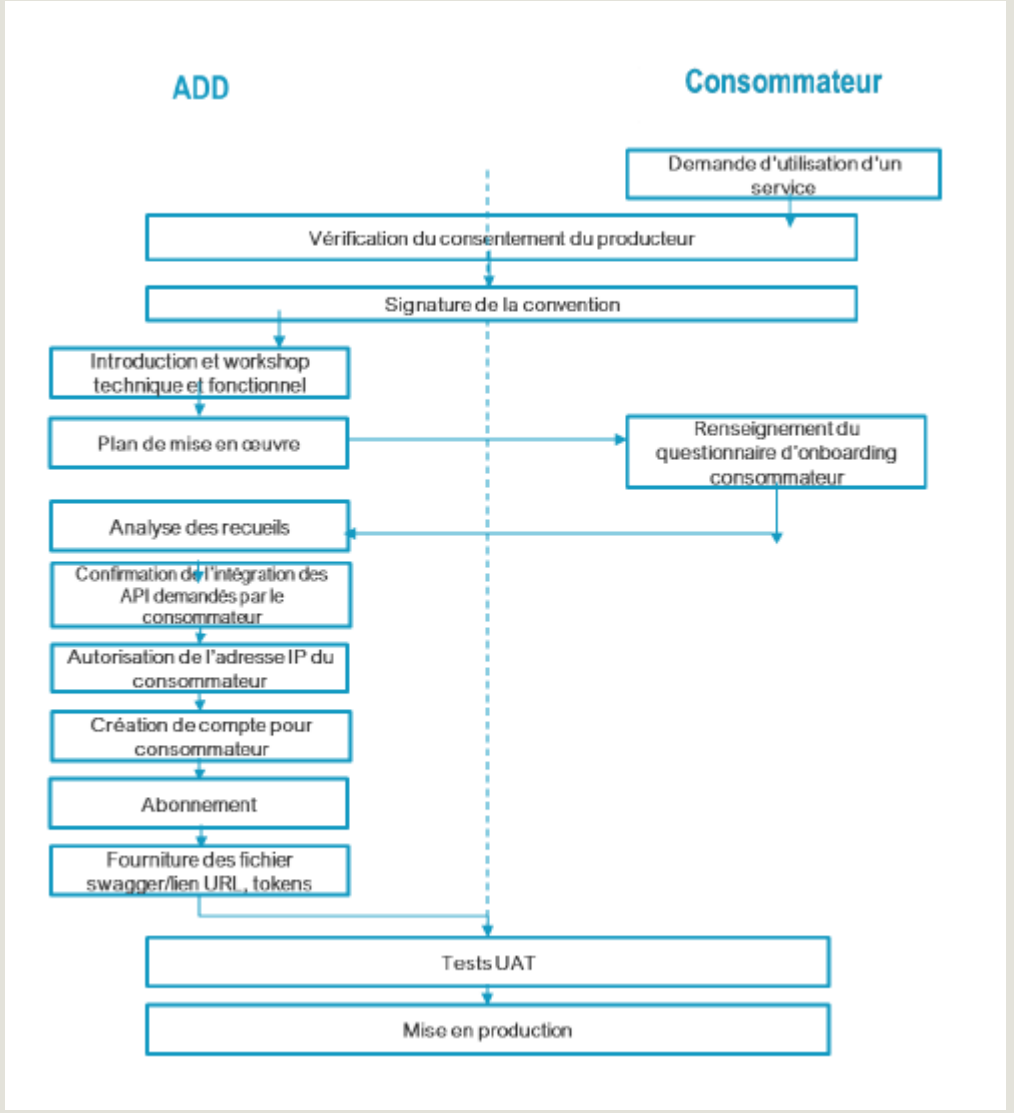
An interoperability success story

Description

The data exchange is carried out between a data-producing system and a data-consuming system using API technology. To enable this exchange, each data-producing user must have a web service to expose their data.

The integration process for a new user includes the following stages:

- Signing of an agreement between the Digital Development Agency (ADD) and the user (data provider and consumer). This agreement aims to define the conditions and modalities for accessing and using the data exchange solutions offered by the national interoperability platform, as well as the commitments of each party involved
- Collection of the technical requirements for integrating the data producer and the data consumer (considering that any use of the data is subject to the producer's consent
- Design of data exchange flows between platform users
- Establishing a secure network channel required for communication between the interoperability platform and the data producer/consumer
- Development, testing, and integration of mediation APIs by the ADD
- Integration of consumers into the GISRE interoperability platform.
- User validation testing to verify data exposure and successful consumption
- Deployment of data exchange operations



An interoperability success story

Data exchanges

Among the most relevant data exchanges used by the Moroccan Public Administration are:

- RSU (Registre Social Unifié): Provide social benefits to Moroccan households
- MASSAR (Massiar Scolaire Assisté, Restructuré et Renové): Registration of all aspects of the school life of students in Morocco
- SANTÉ (Système Automatisé National Télémédecine e é-santé): Automated Exchange of information with RSU, hospital systems, and healthcare providers for data validation, medical benefits, and healthcare billing
- NARSA (Nationale Agence Routière Sécurité): Data exchange on road safety to inform, prevent and enforce regulations
- FMSAR (Fédération Marocaine Sociétés Assurances Réassurances): Secure, standardized and real time exchange of data between insurance companies, repair shops and authorities regarding vehicle insurance claims

An interoperability success story

RSU (Registre Social Unifié)

Automated data exchange for the verification and validation of information provided by families

REGISTRE SOCIAL UNIFIÉ
السجل الاجتماعي الموحد
ROYAUME DU MAROC
RSU.MA

Challenge

Provide the validation and verification of data provided by households applying for social benefits

Description

The RSU uses the interoperability system to exchange data with other agencies such as the Civil Registry, municipal social services, the SRM (Systèmes de Référence Métier) for electricity and water consumption data, and water and electricity service companies, in order to validate and verify the data provided by households wishing to benefit from social protection programs.

Impacts

< need for personnel

< human errors

monitoring vulnerable families

An interoperability success story

MASSAR (Information system for school monitoring and support)

Automated exchange of information with different agencies/ organizations to verify the status and data of students

Challenge

Verify

- Personal data (name, date of birth, CIN, nationality, address, etc.)
- Academic data (enrollment, assessment grades, attendance, behavior observations, promotion or repetition decisions)
- Ensure accurate allocation of aid, scholarships, and educational services

Description

MASSAR uses this interoperability system to exchange data with other entities such as:

- The Civil Registry (ANRC): it automatically validates students' identity data and verifies the authenticity of documents
- The National Social Security Fund (CNSS): manages social assistance programs. MASSAR verifies the socioeconomic status of families using CNSS data to determine eligibility for these benefits.
- Ministry of the Interior: For demographic and territorial planning data. Manages payments.
- Ministry of Health: For school health programs. MASSAR is actively supplied with data by educational centers, the AREFs (Regional Academies of Education and Training), and the Ministry of Education

Impacts

less need for personnel

less human errors

reduction of time and administrative costs

An interoperability success story

SANTÉ (National Health Information System)

Automated information exchange with the RSU, hospital systems and healthcare providers for data validation, medical services and healthcare billing

Challenge

Facilitate the secure and standardized exchange of health data, validate medical rights and benefits and manage administrative and billing processes related to healthcare services

Description

The CNSS (Caisse Nationale de Sécurité Sociale) interacts with the RSU to correlate beneficiary data and validate healthcare rights, with hospital systems and healthcare providers for billing purposes, and with other public and private entities to consult healthcare data.

The data exchanged includes:

- Identification: name, date of birth, CIN, affiliation number
- Healthcare: list of ALD - Long-term conditions (Affections de Longue Durée), medical procedures, and medications
- Administrative: invoices, rejection codes, and details of supplements
- Reference: medical procedures, medications, and rates

Impacts

fraud prevention

optimize administrative processes

integrate with social programs

An interoperability success story

NARSA (Agence Nationale de la Sécurité Routière)

Data exchange on road safety to inform, prevent, and enforce penalties

Challenge

Inform, prevent and enforce penalties.

Description

The NARSA system centralizes, analyzes, and cross-references data from multiple agencies to inform, prevent, and enforce penalties.

The agencies it interacts with are:

- Ministry of Interior (National Police): Real-time traffic violation data, accident reports, and license suspension due to points.
- Royal Gendarmerie: Data on accidents and violations in rural areas and national roads.
- Ministry of Equipment and Water: Data on road conditions, layouts, and black spots.
- Ministry of Transport and Logistics: Data on the vehicle fleet, vehicle registration, and transport company information.
- Insurance companies: Data on claims covered by insurance.Ministry of Health: Data on the severity of accident victims (injured, deceased).

Impacts

save lives

improve infrastructure

law enforcement

An interoperability success story

FMSAR (Fédération Marocaine des Sociétés d'Assurances et de Rèassurances)

Collaborative and efficient digital workflow in automobile insurance

Challenge

Provide secure, standardized, real-time data exchange between insurers, repair shops, and authorities.

Description

When a traffic accident occurs, the drivers involved open a mobile app provided by their insurers or by FMSAR. The app automatically pre-populates vehicle data (license plate, model) and drivers (name, policy number) by scanning the documentation or accessing databases through the FMSAR platform. Drivers then complete the digital report, which is signed electronically. Photos and videos of the scene, damage, and documents are uploaded.

The FMSAR platform instantly notifies both insurers and creates a single case for the accident. It is automatically verified, and liability is assigned. Upon receiving the report, the insurers' systems automatically check, through FMSAR, the validity of the policies, the vehicle's history, and the driver's license.

With standardized digital information (photos, description), an artificial intelligence system can perform a pre-assessment of liability and an initial damage estimate. For complex accidents, an electronic report can be requested from the authorities, which is also uploaded to the platform.

The insurer then directs the insured to a network of interoperable partner repair shops. The repair shop accesses the FMSAR platform (with authorization) to view photos and the pre-assessment. A complementary inspection is performed, and a standardized electronic estimate is generated. The insurer approves the estimate almost immediately, as the entire claim history is available and verified. The repair shop performs the repair and notifies the shop of its completion through the platform, triggering electronic payment from the insurer to the repair shop.

The case is closed digitally.

Impacts

- improved assessment of accident causes
- strengthened road safety
- fraud reduction

An interoperability success story

CONLUSIONS

Benefits

- Unify and standardize data management and information exchange among the various stakeholders involved
- Develop capabilities that support the adoption of new management models in both the public and private sectors, serving as a catalyst for the country's economic development
- Enable the creation of integrated services delivered by public and private organizations, aligned with emerging business models that foster economic growth and help revitalize sectors affected during times of crisis
- Promote the use of technology and the digitization of businesses
- Ensure service continuity and information security

Impacts

Promoting the digital transformation of the public sector by simplifying processes and improving service delivery

Providing a 360° view of citizens and businesses to better tailor services to their needs and stimulate economic growth

Reducing processing times and documentation requirements, while also minimizing human errors and lowering costs

04

Last thoughts

Last thoughts

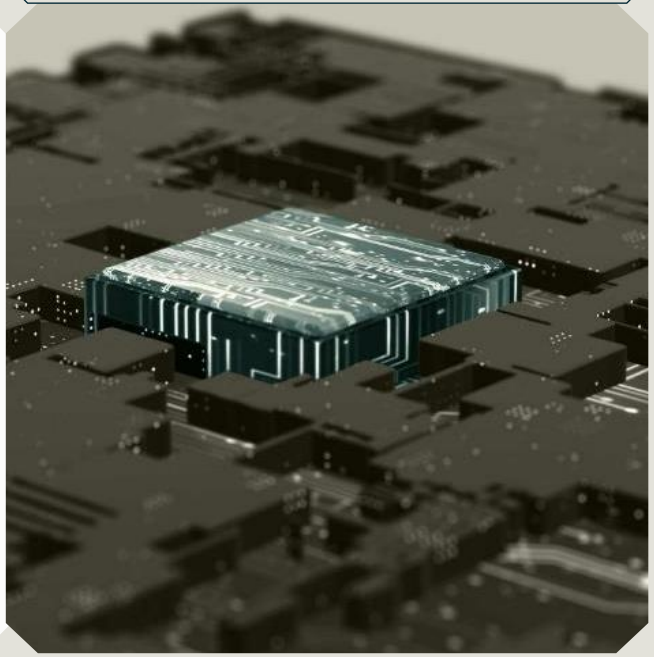
Interoperability is the **cornerstone** for scalable and sustainable digital strategies

Interoperability **guarantees** secure, timely, and accurate data exchange within legal and ethical frameworks

Interoperability must be a **strategic priority** for inclusive, efficient, and resilient public governance

The **CAITA Interoperability Workshop** has showcased the strategic importance of interoperability for delivering seamless, secure, and citizen-centric digital services. International experiences consistently highlight the same message: strong governance, shared standards, and common platforms are the foundations of successful national interoperability.

These lessons point toward a clear conclusion: **interoperability is a strategic enabler for coordinated, efficient, and future-ready digital government.**



Thank you