



Ukraine's rapid development of digital government

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Ukraine's rapid development
of digital government



Digital Ukraine

- ▶ DIIA eco-system (portal, mobile application, service centers, digital education platform, legal and tax framework, open data competence center, etc.)
- ▶ Trembita data exchange platform
- ▶ eID and digital identity eco-system (legislation harmonized with eIDAS, trusted list validated on the EC portal, eIDAS NODE deployed and tested with EC and some EU countries)
- ▶ Open data eco-system
- ▶ More than 300 state registers and state electronic information systems
- ▶ More than 500 e-services





Structure of the presentation

- ▶ Interoperability of registers
- ▶ Trembita system (data exchange platform)
- ▶ Assessment of data quality in public registers and effect on interoperability

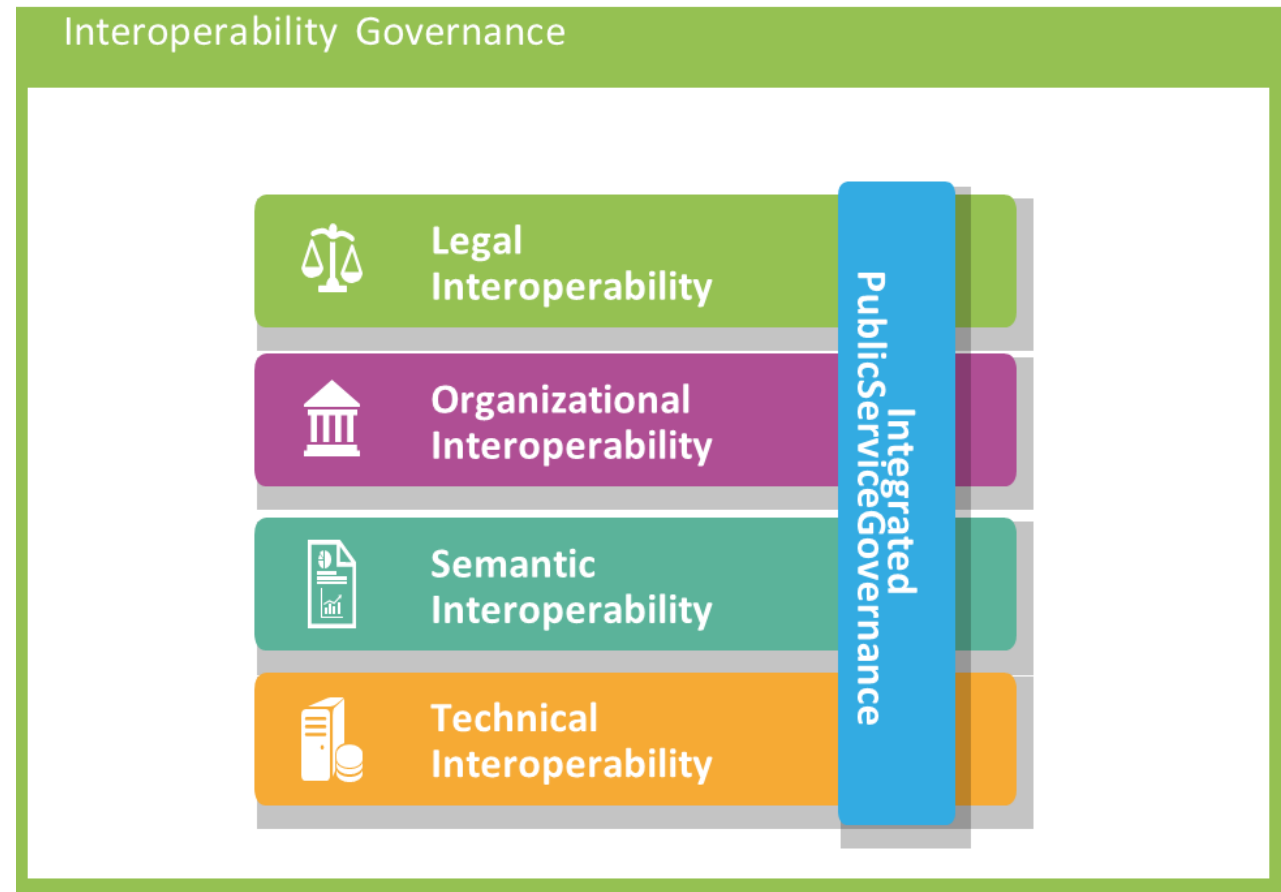




Interoperability layers (EIF)



<https://joinup.ec.europa.eu/collection/nifo-national-interoperability-framework-observatory/3-interoperability-layers>





Legal interoperability of registers

Law on public electronic registers (2021, upd. 2022).

The Law establishes the principles of creation and operation of public electronic registers.

<https://zakon.rada.gov.ua/laws/show/1907-20#Text>

Decree of the Cabinet of Ministers of Ukraine from 08.09.2016 N° 606 On some issues of electronic interaction of electronic information resources (upd. 2023).

The decree defines the basics of the Trembita system functioning, the procedure for connecting to the Trembita system, procedure of building electronic interactions (data exchanges).

<https://zakon.rada.gov.ua/laws/show/606-2016-%D0%BF#Text>

Regulation of Trembita system operation (ver. 3.0, 2023).

The regulation defines the mode of the system operation, requirements for names of objects, order of interaction of system subjects.

<https://trembita.gov.ua/storage/app/media/uploaded-files/52.pdf>



Organizational interoperability of registers



Initiation tasks

- ▶ Determination of the need for receiving data
- ▶ Political will



Analysis tasks

- ▶ Search for existing services (reusability)
- ▶ Business analysis (AS IS – TO BE)
- ▶ Semantic interoperability



Legal tasks

- ▶ Elimination of legal restrictions
- ▶ Conclusion of agreement on electronic interaction



Technical tasks

- ▶ Development
- ▶ Deployment
- ▶ Setting up
- ▶ Administration



Semantic interoperability of registers

Based on INSPIRE Implementing Rules on interoperability of spatial data sets and services (IRs) and Technical Guidelines (Data Specifications) the following documents and product have been developed and implemented:

- ▶ the Unified Address Register;
- ▶ the external interaction module for the Unified Address Register.

The following Core Vocabularies for standardized digital representation of common real-world entities in automated systems have been approved as the standards:

- ▶ Core Person; Core Business; Core Location; Core Criterion and Core Evidence; Core Public Organisation.





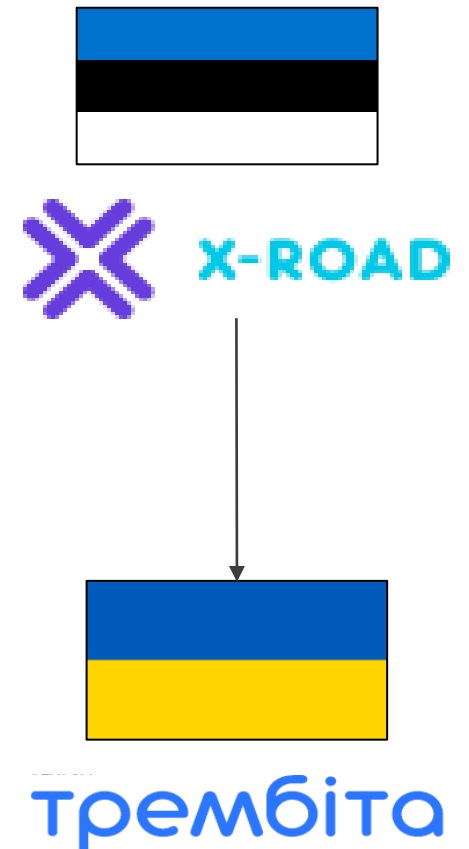
Technical interoperability of registers

Trembita system and Trembita services (web-services and web-clients).

Data exchange platform is used in Ukraine for data exchange between state registers and information systems. Trembita system is based on X-ROAD.

Registers Platform.

Platform is information and communication system designed for a unified, automated and standardized process of creating, administering and maintaining public electronic registers.





Трембіта

Trembita system and its functions

- ▶ provision of information on connected registers and systems;
- ▶ provision of access to data in connected registers;
- ▶ ensuring legally significant data exchange, including:
- ▶ provision of electronic identification and authentication of data exchange participants (parties);
- ▶ fixing the time of sending and receiving electronic messages;
- ▶ ensuring the integrity and authenticity of electronic messages by digital signatures;
- ▶ recording of data exchange facts.



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Trembita system (statistics)

implemented
and operational since
02 January 2020

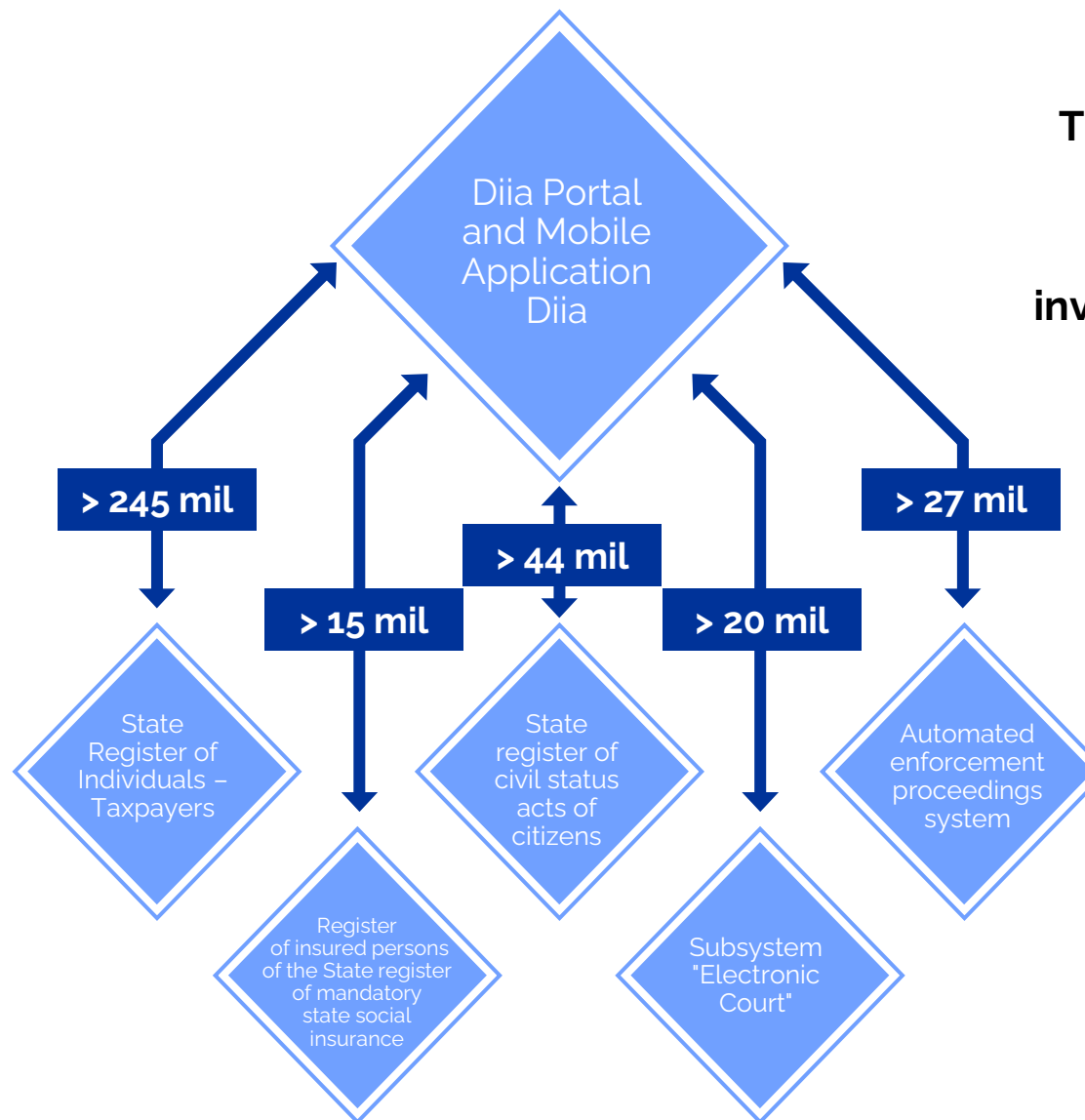
2,3+
billion
transactions

80
registers
connected

192
members

500+
services

The most active
electronic
information
interactions
involving the Diia
Portal and the
Mobile
Application
Diia





Next steps to improve Trembita

- ▶ Personal data access monitoring module for Trembita system
- ▶ New catalog of Trembita system
- ▶ Trembita 2.0





Data quality in public registers

- ▶ Methodology of registers data quality assessment was developed
- ▶ Data quality of 5 key state registers was evaluated (Taxpayers Register, Demographic Register, Civil Status Acts Register, Real Estate Ownership Register, Legal Entities Register).
- ▶ Registers Development Roadmap
- ▶ Decree of the Cabinet of Ministers of Ukraine on data quality audit of electronic public registers
- ▶ Cross-border interoperability



Interoperability governance

- ▶ Expertise of digital transformation projects by the Ministry of Digital Transformation
- ▶ Monitoring of Trembita system regulations compliance of Trembita system participants
- ▶ Popular certificates that are used in e-services were identified
- ▶ e-Service competence center with e-Services testbed and toolkit
- ▶ Mutual recognition of digital signatures (Validation of UA signatures is possible in the EU with the new Trusted list that is included in EU ecosystem)





Let's make digital transformation happen! Everywhere.



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