DATA JOURNEY

OPEN DATA

DATA SPACES

DIGITAL TWINS
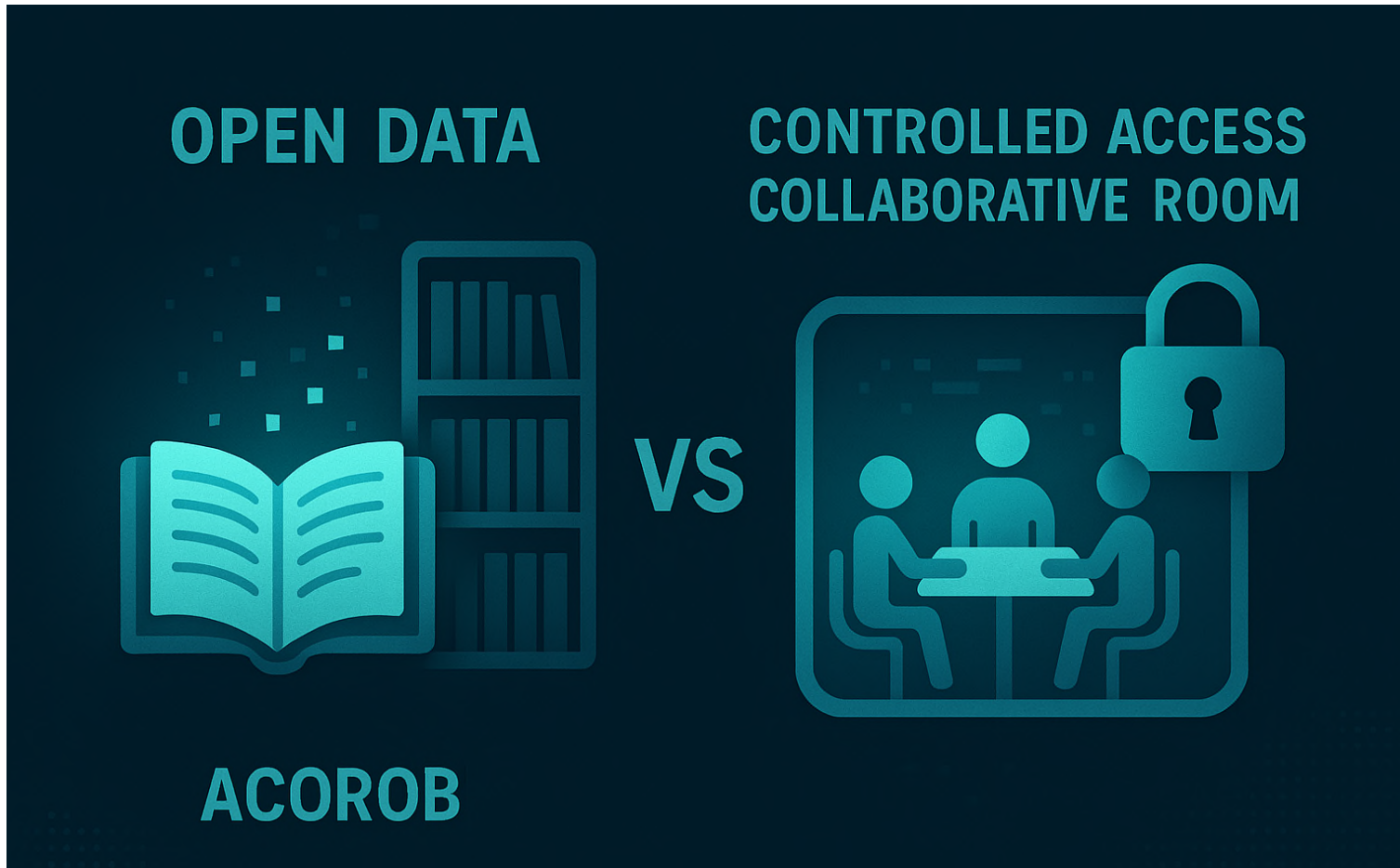
Step 2: Data Spaces

- Collaborative, governed environments
- Share sensitive/strategic data (mobility, health, energy, agriculture, crisis management and so on – links with priority Common European Data Spaces p and with European Data Space for Smart Communities
- Frameworks: Gaia-X, Data Spaces Support Centre
- Belgian Alliance: BDSA

Why Data Spaces?

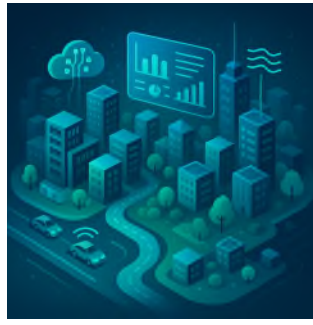- Innovation through shared data
- Operational efficiency
- Cross-sector intelligence
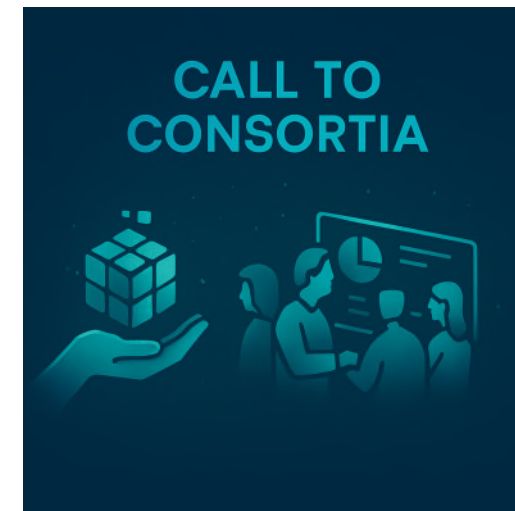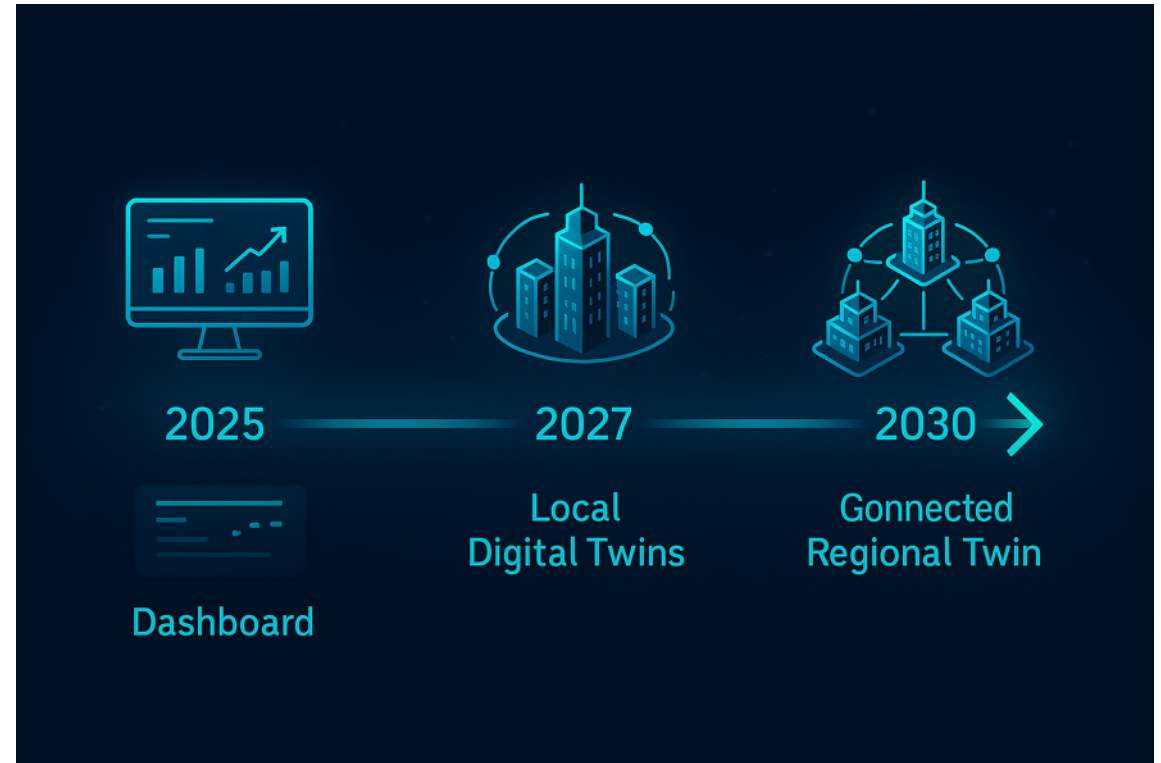- Trust & sovereignty

Step 3: Local Digital Twins

- Dynamic digital replica of a territory

- Real-time data: sensors, mobility, energy

- Simulation: flooding, planning, energy optimization

- Supports policymaking and engagement

GEODATA

DATA

5G

DIGITAL TWINS

DATA SPACES

SMART APPS

SENSORS

ENCODERS

IA

GOVERNANCE

SIMULATION

Digital Twins in Wallonia

- Digital Wallonia 2025-2029
- First pilots: water/energy/waste , mobility, crisis (floods), urban planification management
- Tech: 5G, LUCIA HPC, IoT
- Projects: IDELUX, IDETA, Namur, InBW/Province BW, Liège, Meuse-Condroz-Hesbaye + EU initiatives

2025 — Dashboard — 2027 — Local Digital Twins — 2030 — Gonnected Regional Twin

CALL TO CONSORTIA

Conditions for Success

- Standardization (OSLO, CityGML, INSPIRE)
- Interoperabilitycyber, local cloud, HPC, quantum?)
- AI skills and algorithm ownership
- Strong governance (public-private-academic
- Sovereign infrastructure (5-6G,)

- Citizen inclusion & open innovation
- Support from Digital Wallonia, SPW, EU

EU Funding (Horizon Europe, Digital Europe, Interreg, Smart Communities Data Space, CitiVerse and ?)

 & PPP Opportunities (consortia)

Engaging with citizens and businesses through data in Ghent

How it started

First steps towards open data in Ghent

2. The need for data ecosystems
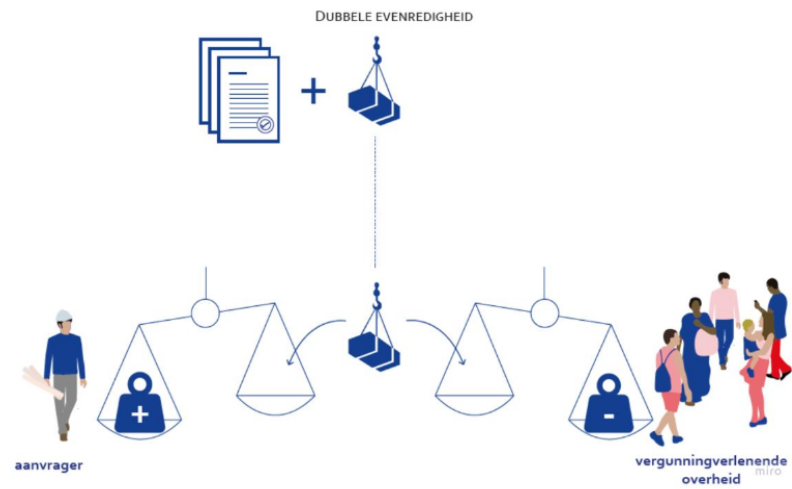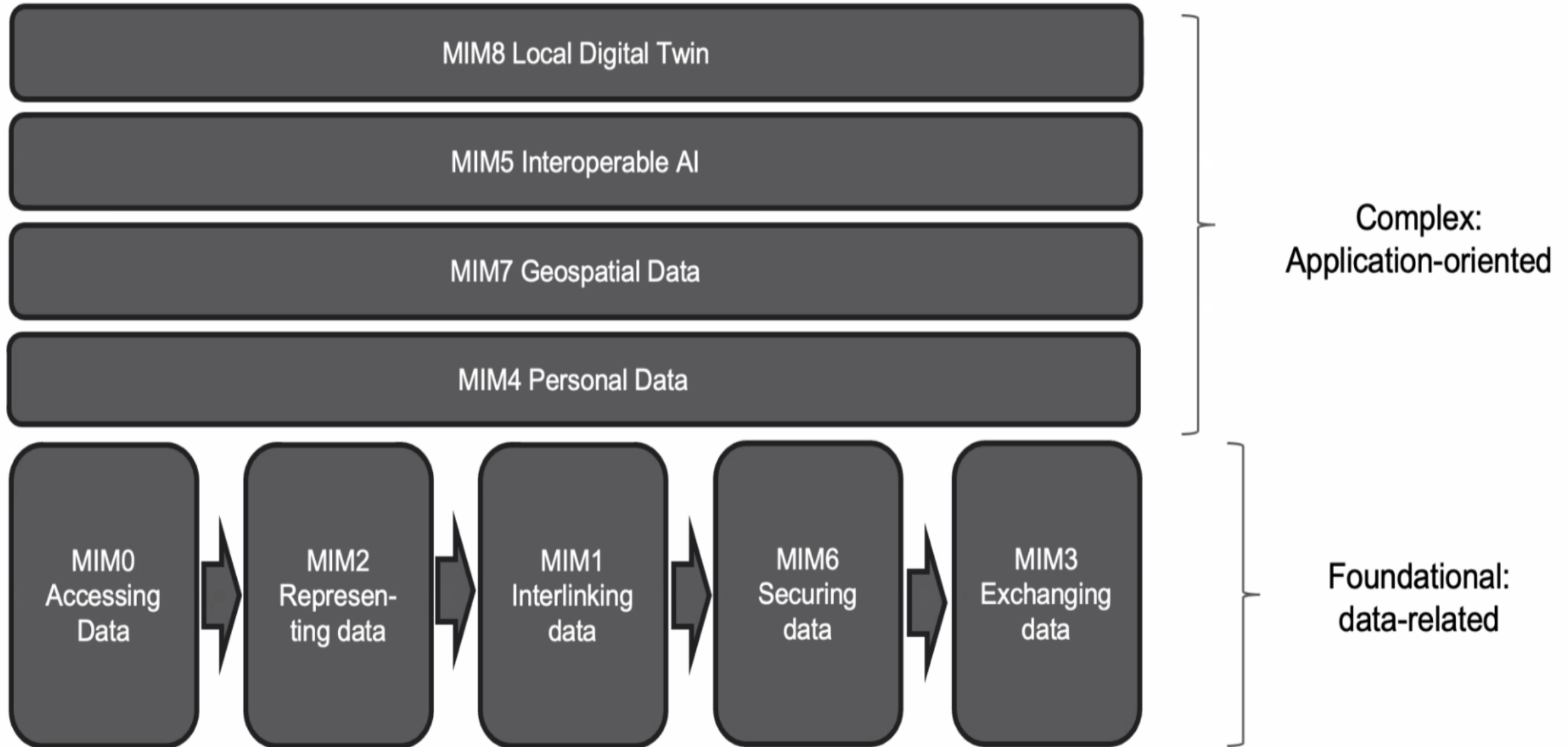
From open data to data spaces

Expectations

Reality

Good urban development decisions require data, simulation, and participation

DUBBELE EVENREDIGHEID

aanvrager

vergunningverlenende overheid

MIMs (Plus) Framework 2025

What is LORDIMAS?

*A **functional** approach*

EVALUATE
A digital maturity tool
Governance, Service design, Data management, Interoperability, Technology, Service delivery and Networking

COMPARE
An interactive dashboard
Presenting your data in real-time and allowing you to compare with other cities in Europe

SHARE
Repository of good practices
Sharing your success and challenges to promote the European way for digital transformation

LEARN
Policy recommendations
Bringing awareness about emerging topics at the EU level and to giving policy advice

lordimas.espon.eu

If you want to contribute to shape the future development of the tool you can join the **Monitoring & Measuring Working Group** of Living-in.EU

living-in.eu

Call to Action – How to Get Started

Go to the platform, click on participate and download the offline form.

Identify your list of key city stakeholders you would like to invite for the assessment. Share the questionnaire with the stakeholders.

Organise a workshop to discuss the questionnaire and collect information on all dimensions.
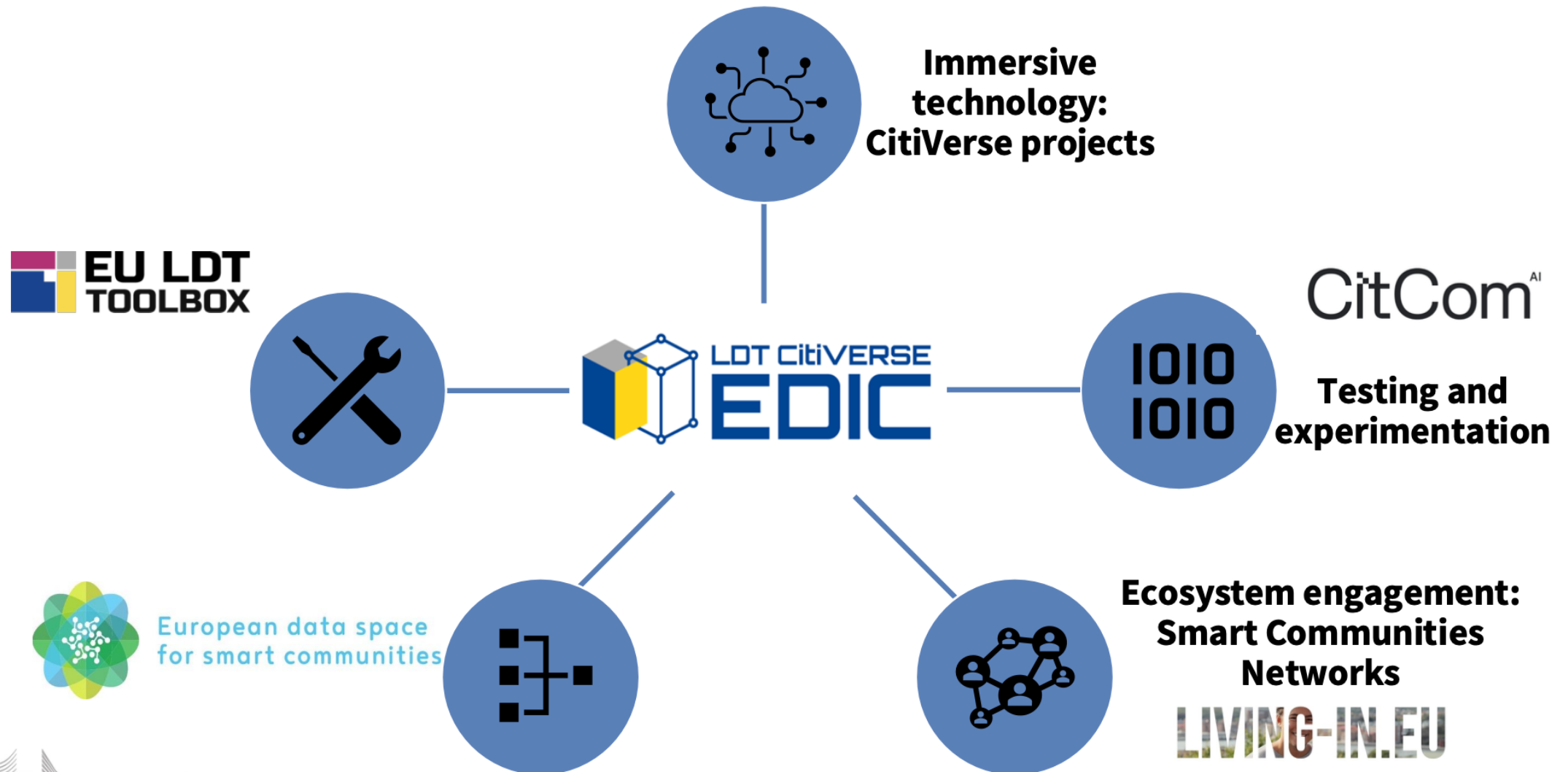
Complete the assessment online, compare yourself to other cities, consult good practices and recommendations

Summarise and discuss digital maturity assessment results jointly with the stakeholders, share learnings on strengths and weaknesses

European Commission

JOIN, BOOST, SUSTAIN

Building an ecosystem of AI-based solutions

Funding opportunities – cascading open calls

Towards networked Local Digital Twins in the EU - DIGITAL-2024-CLOUD-DATA-AI-07-DIGITALTWIN
Digital Europe Programme (DIGITAL)

Tentative date

November 2025

Ecosystem of interoperable LDTs sharing a common blueprint

Increase in number of national infrastructures for urban data platforms and LDTs

New technical solutions for the EU LDT toolbox – policy scenarios in key urban management areas

New AI-based solutions contributing to the EU LDT toolbox

Mature AI services in public domain for predictive modelling and immersive services

European Commission

EU Digital Funding opportunities

The European Union (EU) supports the digital transformation of public administrations through various funding programmes.

Digital Europe Programme (DEP) supports the development of digital infrastructure/skills, focusing on public admin efficiency + accessibility.

Horizon Europe funds research and innovation projects to advance digital technologies and public services.

Interreg promotes regional cooperation to enhance digital connectivity and innovation in public services.
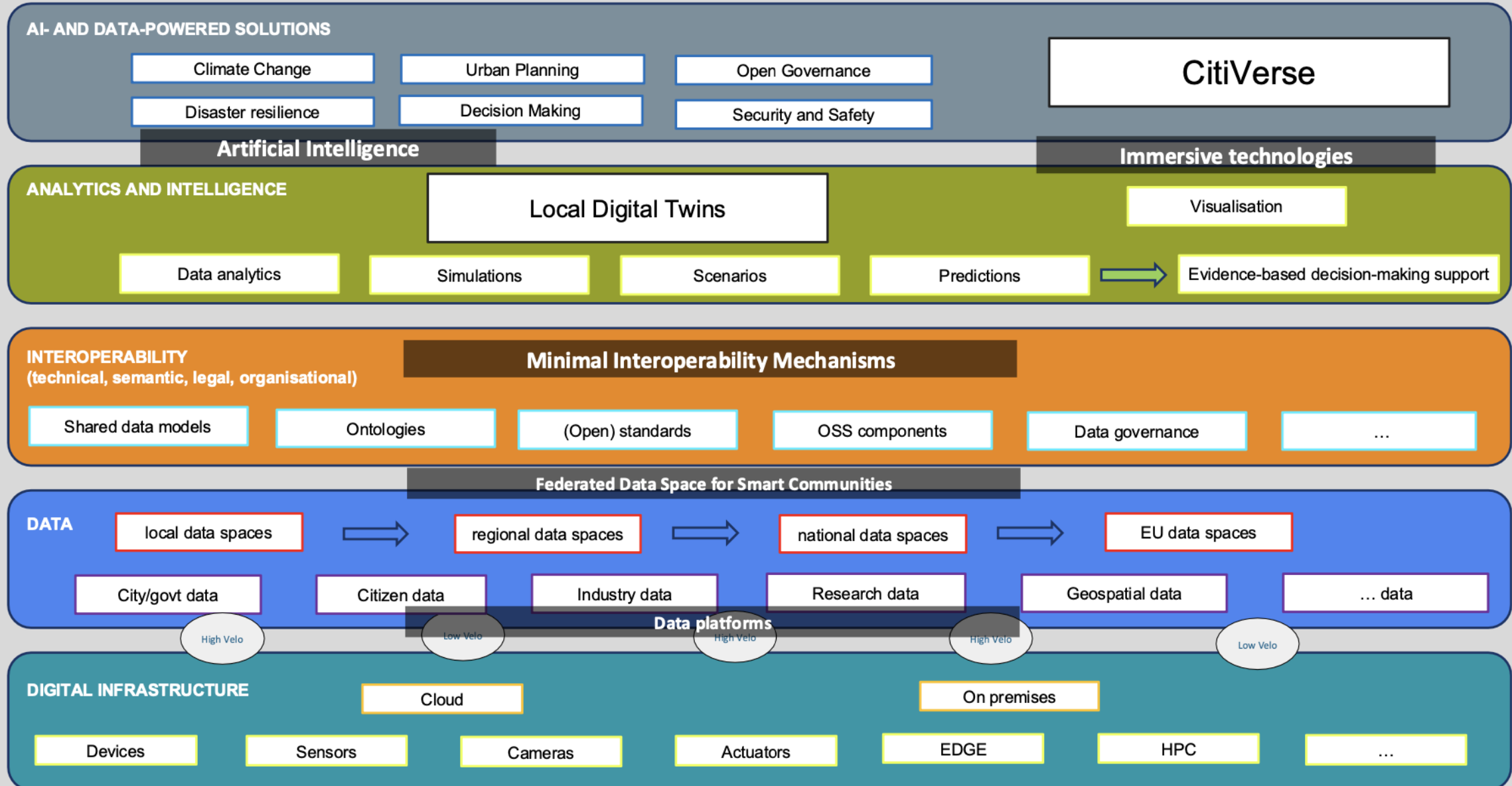
Technical Support Instrument (TSI) offers tailored technical support for designing/ implementing digital reforms in public admin.

Connecting Europe Facility (CEF) improves digital networks and infrastructure, enhancing public administration services and connectivity.

Five layers 4 EU Smart Communities

AI- AND DATA-POWERED SOLUTIONS

| Climate Change | Urban Planning | Open Governance | CitiVerse |
| Disaster resilience | Decision Making | Security and Safety | |

Artificial Intelligence **Immersive technologies**

ANALYTICS AND INTELLIGENCE

Local Digital Twins

Visualisation

| Data analytics | Simulations | Scenarios | Predictions | → | Evidence-based decision-making support |

INTEROPERABILITY
(technical, semantic, legal, organisational)

Minimal Interoperability Mechanisms

| Shared data models | Ontologies | (Open) standards | OSS components | Data governance | … |

Federated Data Space for Smart Communities

DATA

| local data spaces | → | regional data spaces | → | national data spaces | → | EU data spaces |

| City/govt data | Citizen data | Industry data | Research data | Geospatial data | … data |

Data platforms

High Velo   Low Velo   High Velo   High Velo   Low Velo

DIGITAL INFRASTRUCTURE

Cloud   On premises

| Devices | Sensors | Cameras | Actuators | EDGE | HPC | … |

EU Smart Communities Pipeline

OASC MIMs
Go Li.eu
Living-in.EU MIMs Plus

#1 LDT Toolbox
Tech Specs

#2 LDT Advancing Initial Stages
Support services: SCN, procurement helpdesk and templates, MIMs Plus compliance testing and certification

#3 EU LDT Toolbox
Development of the Toolbox

DS4SSCC – Data Space for Smart Communities blueprint

DS4SSCC DEP – Data Space for Smart Communities Deployment, validation

DIGITALTWIN call
EU LDT Ecosystem
Common Interoperability Blueprint

EDIC
Networked LDT towards the CitiVERSE

Developing CitiVERSE projects: x-CITE, SENSE 3DxVERSE, CU-project

AI
EU Artificial Intelligence

CitCom.ai
AI Testing & Experimentation Facility for SCC

EU Interoperability Framework
EIF4SSC

Simpl
Streamlining cloud-to-edge federations for major EU data spaces

1st EuroHPC AI Factories