AI FOR SOCIETAL GOOD
EMPOWERING THE SOCIAL ECONOMY

TUESDAY 25 NOVEMBER 2025

EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE

AI FOR SOCIETAL GOOD

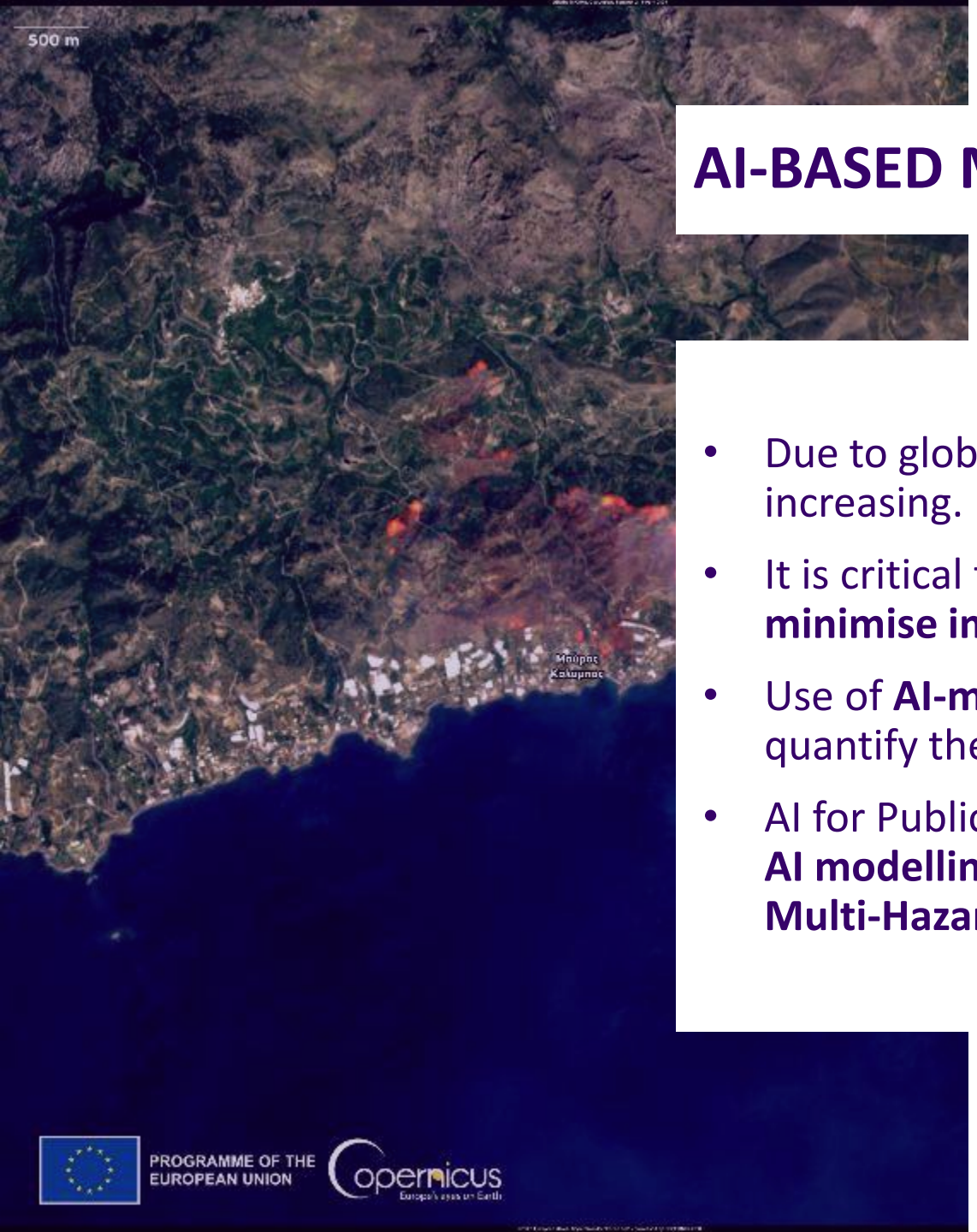
Tackling some of the world's biggest challenges by leveraging safe AI that focus on improving lives and that empower the Social Economy.

EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE

PROJECT PROCUREMENT

- **Disaster Risk Management:** A suite of AI models designed to enhance EU capacities for crisis management
  - **Emergency Response:** Deliver real-time intelligence on resource and planning for resource efficiency national, regional, and EU civil protection authorities during disasters, e.g. floods and fires.
  - **Digital Twin for Reconstruction:** Use simulations to drive smarter urban planning for the reconstruction of cities, increase transparency and optimize costing.
- **Health:** Train AI models for image detection of breast and prostate cancer.
- **Energy grid optimization:** Develop and test AI tools for smart grid optimization in urban areas, accommodating fluctuating demand and renewable sources.

EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE



AI-BASED MULTI-HAZARD PLATFORM

- Due to global warming, the occurrence of **natural disasters** is increasing.
- It is critical to accurately track the evolution of disasters to **minimise impact**, reduce damage and human casualties.
- Use of **AI-models** can help better predict disaster evolution and quantify the human and material resources needed to tackle it.
- AI for Public Good brings together EU and international experts on **AI modelling of disasters** and **crisis management** to enhance a **Multi-Hazard Platform**, starting with **wildfires**.

PROGRAMME OF THE EUROPEAN UNION

Copernicus

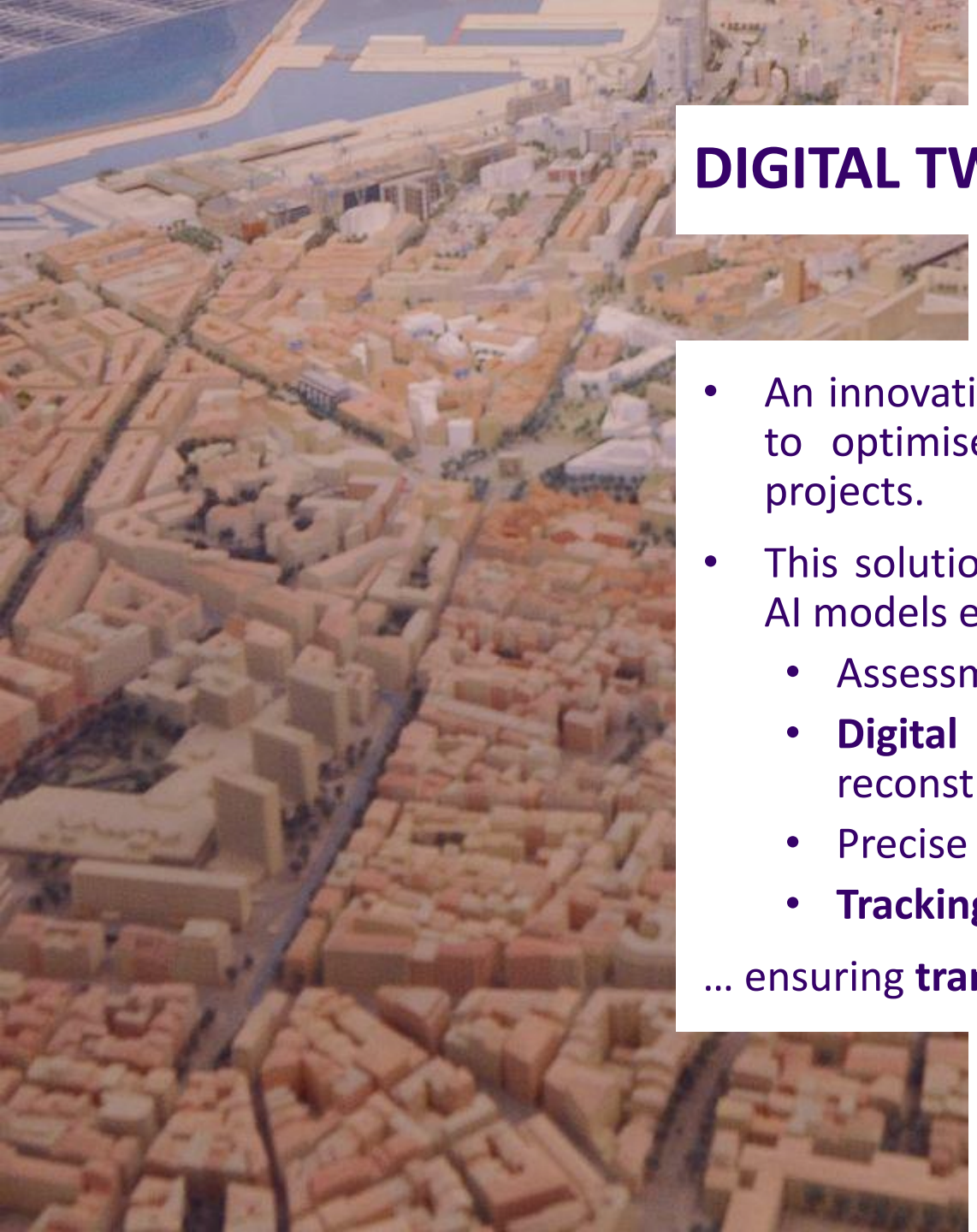
EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE

DISASTER RISK MANAGEMENT: RECONSTRUCTION

Digital Twin for Reconstruction (DT4R) pilot video

Discover more on our website
https://link.europa.eu/4TG49k

EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE



DIGITAL TWIN FOR RECONSTRUCTION

- An innovative solution, building on EU expertise in AI for urban planning, to optimise spend and execution for each phase of reconstruction projects.
- This solution equips decision-makers and urban planners with advanced AI models enabling:
  - Assessment of (extent of) **damage in buildings** and surrounding area
  - **Digital replication of cities** (“Digital Twins”) for simulation of reconstruction projects
  - Precise estimation of **reconstruction costs**
  - **Tracking of projects** throughout the entire reconstruction cycle

… ensuring **transparency and accountability** for donors and citizens alike.

EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE

AI TO REBUILD UKRAINE

Destruction and damaged buildings

- Donors' support
- Risk of fraud

Ukraine now…

Tracking and financial accountability

- AI for damage assessment
- AI for rebuilding scenarios (fully costed)

…applying AI technologies…

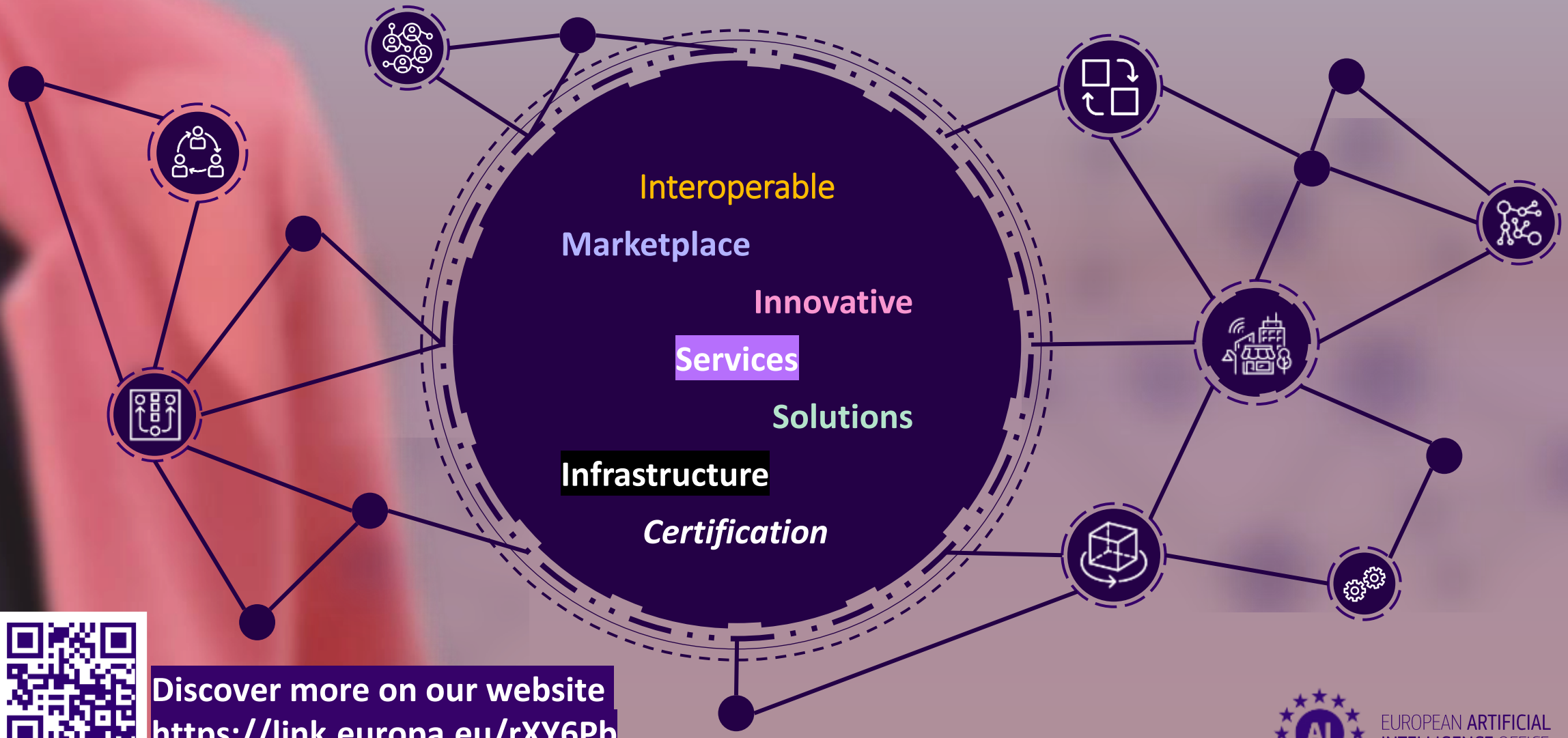
Value for money (citizens and donors)

- Accountability
- Transparency during whole lifecycle

…for optimised urban planning

EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE

LOCAL DIGITAL TWIN (LDT) – CITIVERSE
EUROPEAN DIGITAL INFRASTRUCTURE CONSORTIUM (EDIC)



Discover more on our website
https://link.europa.eu/rXY6Pb

EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE

Discover more on our website
https://link.europa.eu/rWFw8T

PROJECTS SUPPORTING THE LDT CITIVERSE EDIC

European Data Space for Smart Communities plus Middleware

Local Digital Twin Toolbox

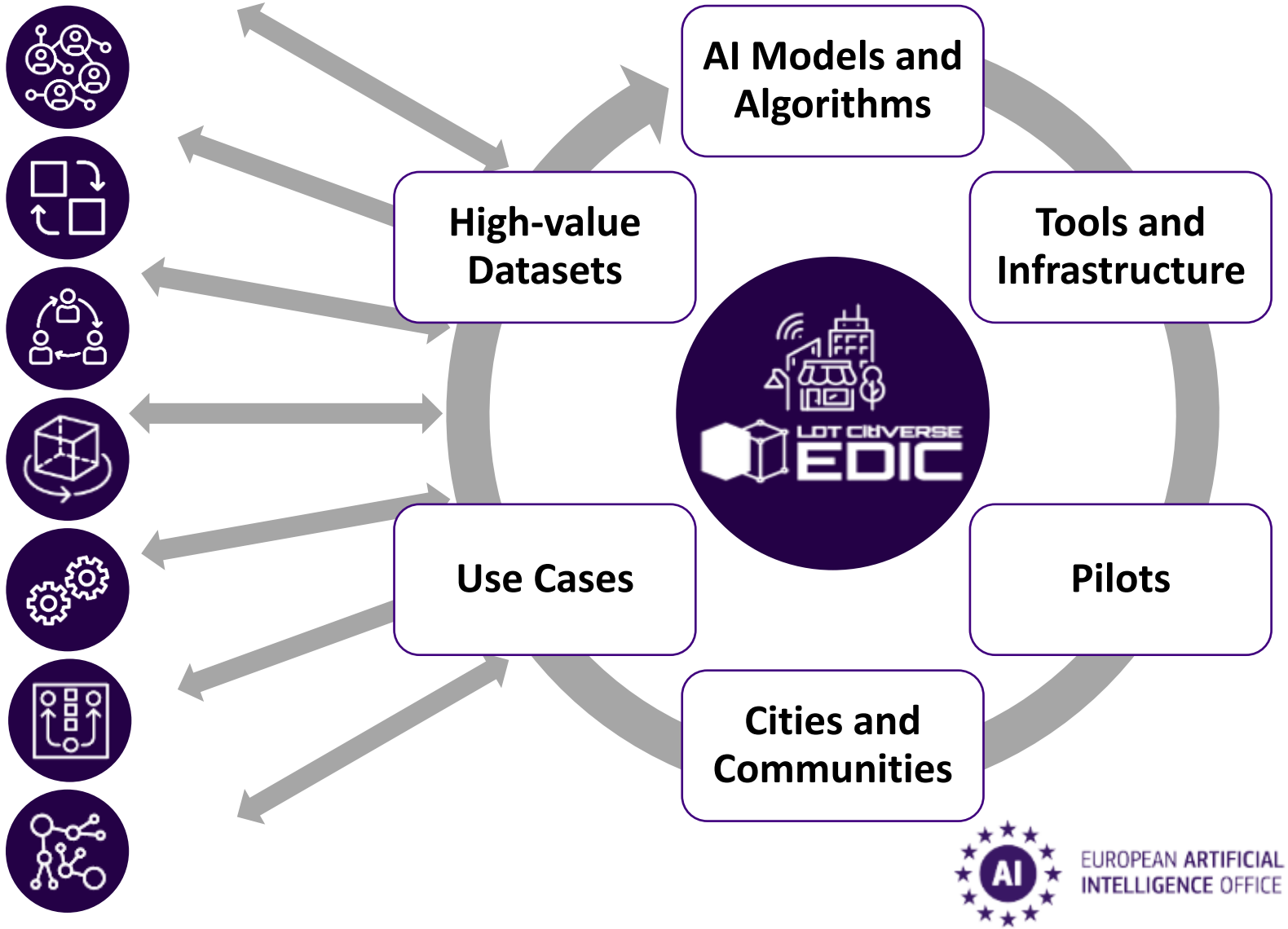
Networked Local Digital Twins

CitiVerse projects Immersive technology

Test and Experimentation Facilities for AI in smart cities

Minimum Interoperability Mechanism for Standardisation

Living in the EU



EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE

TOOLBOX USE CASES

ENERGY OPTIMISATION

Design low-emission zones and reduce energy waste to improve air quality and sustainability.

ENVIRONMENTAL HEALTH (POLLUTION PROPAGATION)

Monitoring pollution and assess impacts to create healthier urban environments.

URBAN MOBILITY

Simulating mobility scenarios to optimize traffic flow, public transport, and accessibility.

URBAN PLANNING

Testing land-use and infrastructure options to grow a more sustainable city.

BUILDING ENVIRONMENTAL FOOTPRINT

Modelling the environmental footprint of construction to enhance quality of life.

DIGITAL TWINS CAN MAKE CITIES MORE LIVEABLE

CLEANER AIR

AI-based multi-objective optimisation

Using algorithms to solve conflicting objectives

BETTER TRANSPORT

EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE

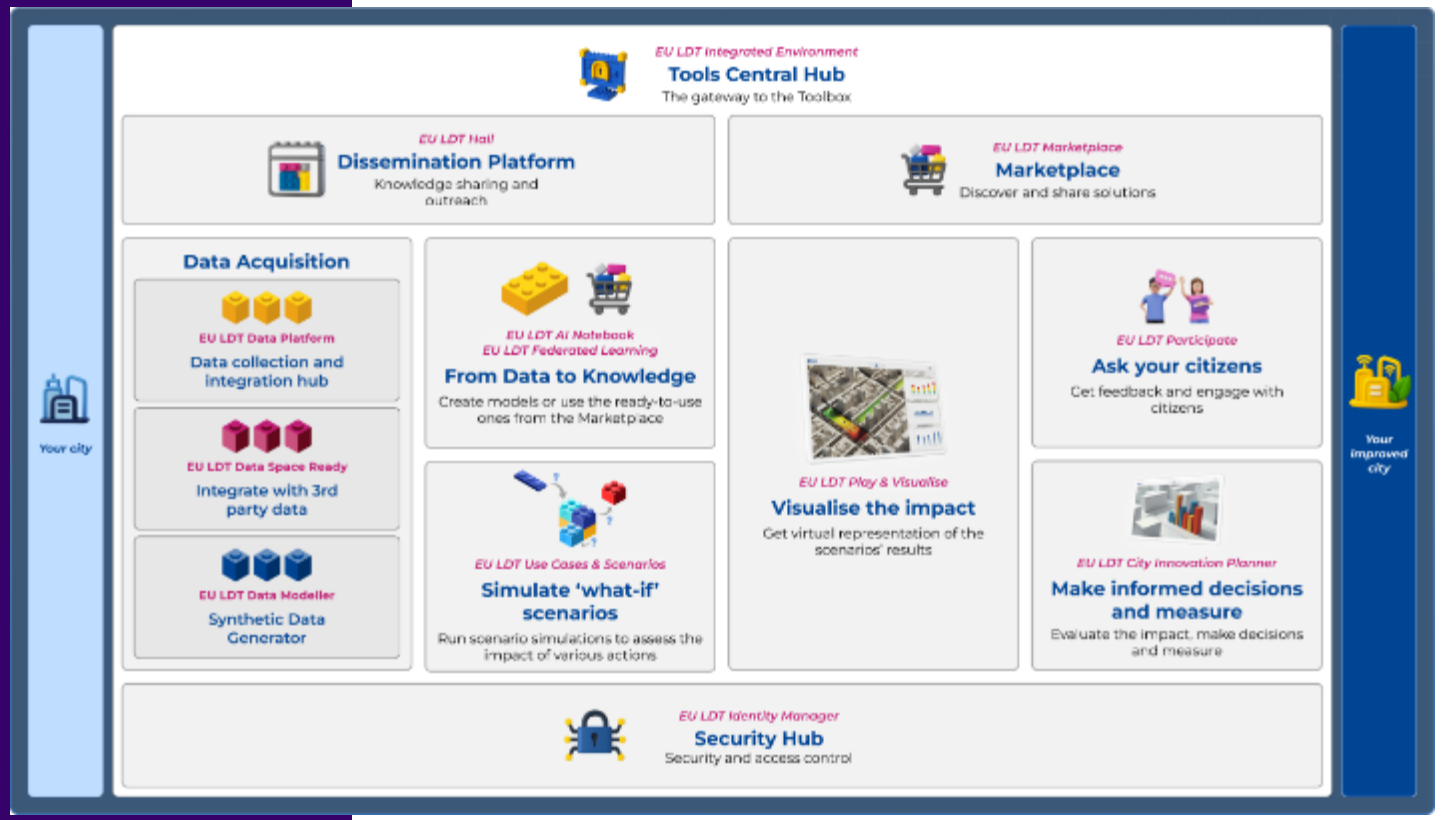
EU LDT TOOLBOX

ALL THE EU LDT TOOLS

11

Interoperable and **open-source tools** that cities can deploy **individually** or as an integrated **suite** to:

- **Connect data** from multiple city systems.
- **Simulate, visualise and analyse** urban scenarios.
- **Engage citizens** and **monitor** sustainability impact.



Discover more on our website
https://link.europa.eu/qvpw8b

EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE

CITIVERSE PROJECTS: IMMERSIVE TECHNOLOGY AND AI

3DxVERSE

Create an open, secure, and inclusive digital twin services mostly in mobility solutions.

3 Use cases: Sustainable Living (Energy), Sustainable Travel (Airport), Sustainable Mobility (smart city)

x-CITE

Develops new ways and tools for digitally enhanced citizen-participation in urban development and urban life.

3 use cases in Tampere, Rotterdam and Flanders in urban development and tourism.

Strengthening Cities and Enhancing Neighbourhood Sense of Belonging

Creation of a CitiVerse service orchestrator based on open standards and deployment of 6 use cases in cities in DE, ES, IT, PT

European Citiverses Uniting for Inclusiveness (CU)

Piloting modular, interoperable digital twin architecture in Gothenburg, based on open standards and AI-driven services.

Europe is well positioned to become an AI continent. With the Apply AI Strategy, we will help our companies and key sectors, from manufacturing to healthcare and the public sector, use AI to deliver real benefits for EU citizens, reinforce our competitiveness, and strengthen our technological sovereignty.

THANK YOU

AI for Societal Good: Empowering the Social Economy

© European Union 2025

Unless otherwise noted the reuse of this presentation is authorised under the CC BY 4.0 license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

EUROPEAN ARTIFICIAL INTELLIGENCE OFFICE