



IGN

Cerema

Inria

1spatial
YOUR WORLD SMARTER

brgm
camp tocamp
cap-digital
cnes
geofit/igo

Geometry Factory
Energies nouvelles
LuxCarta
SIRADEL
Université Gustave Eiffel

RÉPUBLIQUE
FRANÇAISE
Liberté
Égalité
Fraternité

FRANCE
2030

BANQUE des
TERRITOIRES
GROUPE CAISSE DES DÉPÔTS

European digital twins of the Earth
DestinE
June 30, 2026

3 FOUNDING PUBLIC ACTORS OF THE INITIATIVE

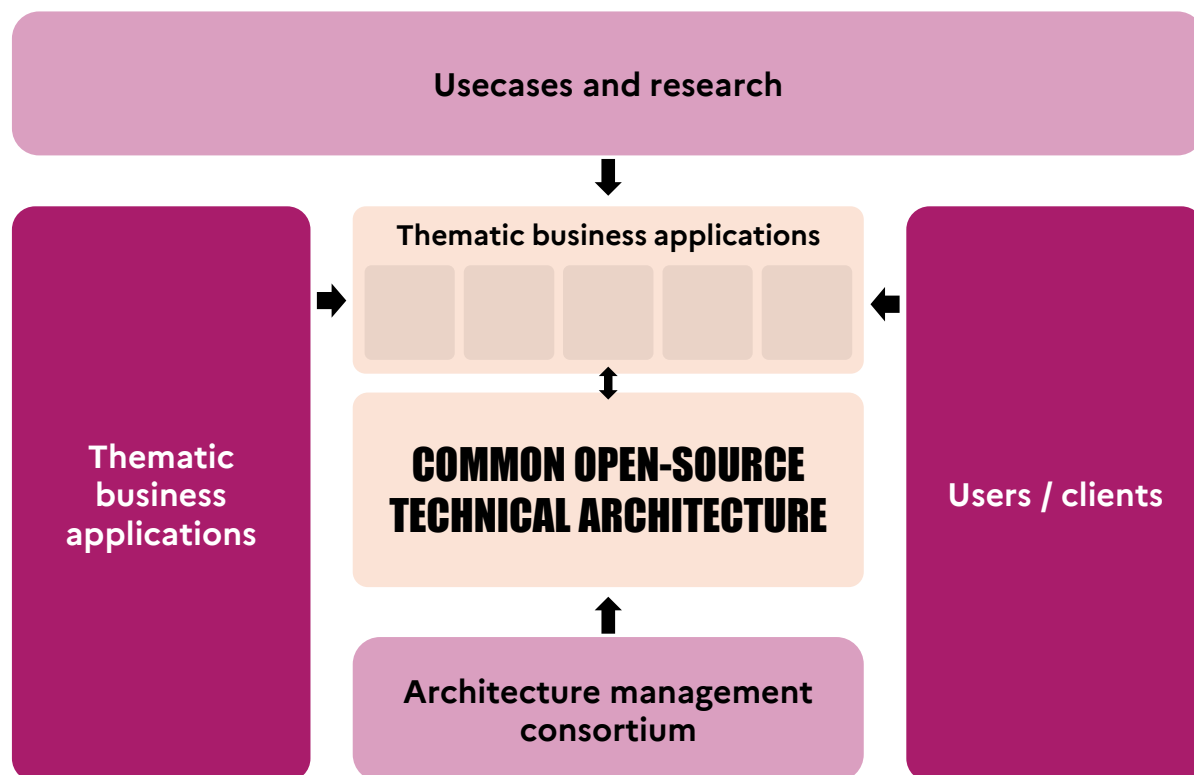


11 PLAYERS (INDUSTRIAL, PUBLIC AND RESEARCH) FROM THE GEODIGITAL AND DIGITAL SECTOR



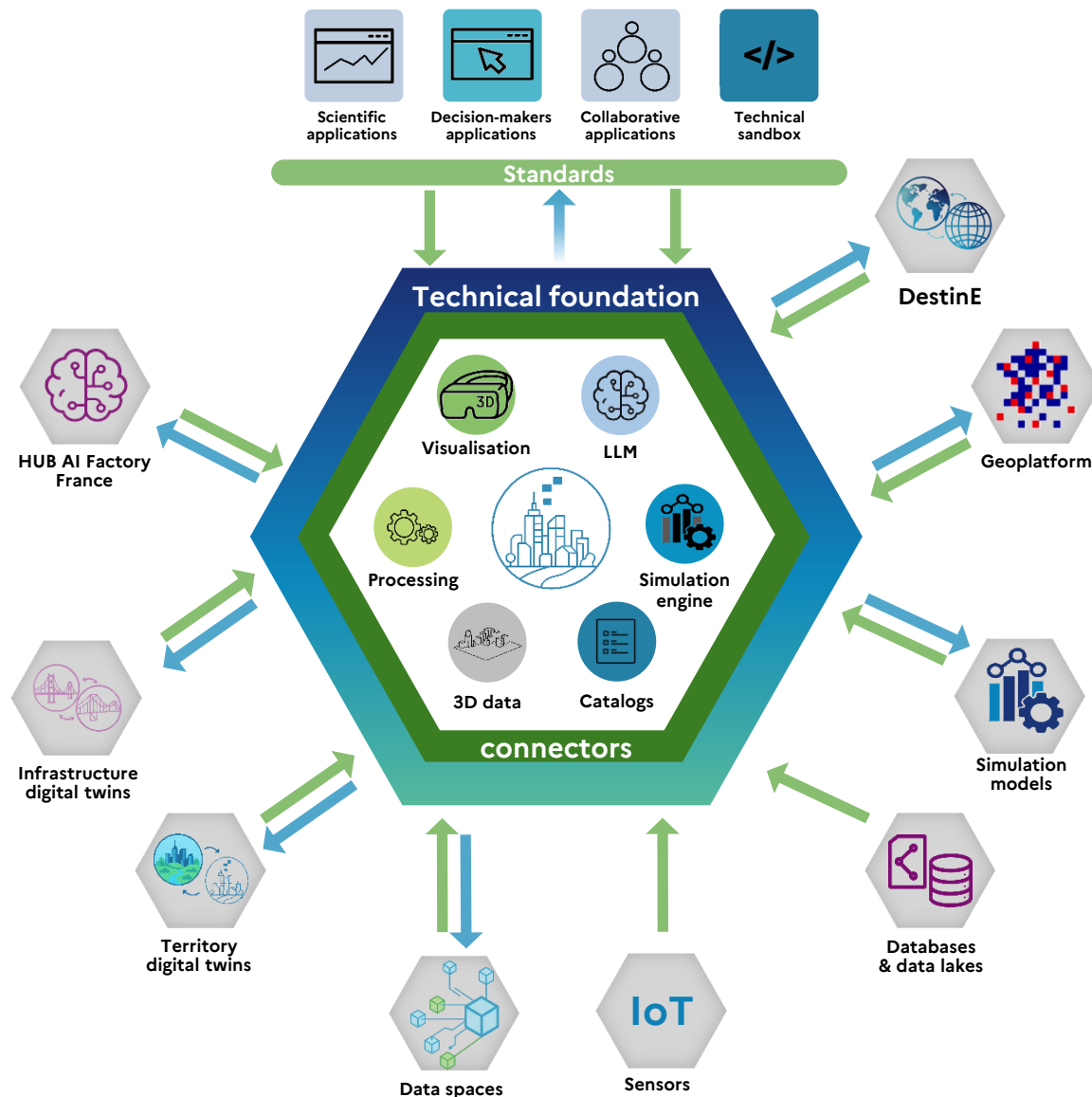
AN APPROACH TO SUPPORT THE DEVELOPMENT OF LOCAL DT IN FRANCE

via an open source technical platform supporting business use cases and assisted by a research program



GOALS

- **Reduce the costs of local initiatives** and facilitate their replication in other areas
- **Combine expertise and perspectives** related to different public policies by establishing a framework for interoperability and interface
- **Set up a science hub** to facilitate the development of technological advances resulting from R&D
- **Build an ecosystem of services and business applications** and facilitate access to them for local stakeholders
- **Develop an economy** around local digital twins



MAIN COMPONENTS OF THE PLATFORM

- **Open 3D data repository**
- **Hub for external sources and services:** digital twin, database, data lake, IoT, dataspace, etc.
- **Cross-functional, open-source libraries, services and APIs:** conversion and loading processes, analyses, simulations, cataloguing, 3D visualization, natural language interface



SUSTAINABLE URBAN AND TERRITORIES PLANNING

ASSISTANCE IN CHOOSING RENEWABLE ENERGY SPOTS

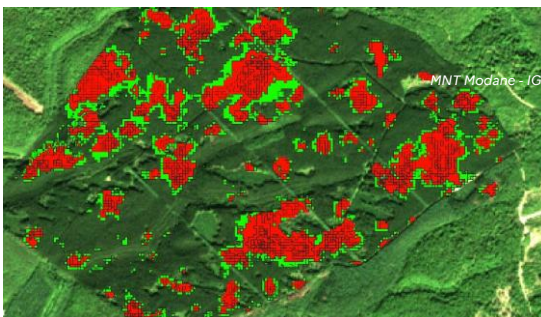
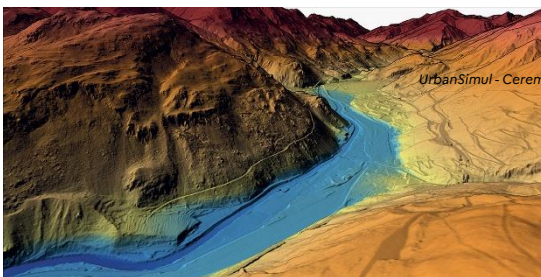
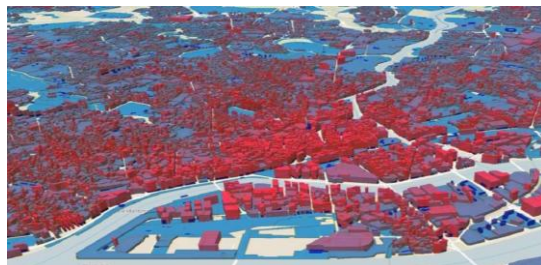
MAKING THE REGIONS RESILIENT TO NATURAL RISKS / CRISES

WATER RESOURCE USE OPTIMISATION

ADAPTING FORESTS TO GLOBAL WARMING

FIGHTING AGAINST EPIDEMICS

OPTIMISING MOBILITY IN THE REGION



Some examples

Sustainable urban planning

- Simulation of potential for building height increases
- Simulation of changes to urban regulations
- Calculation of heat/cool islands
- Noise or pollutant dispersion model

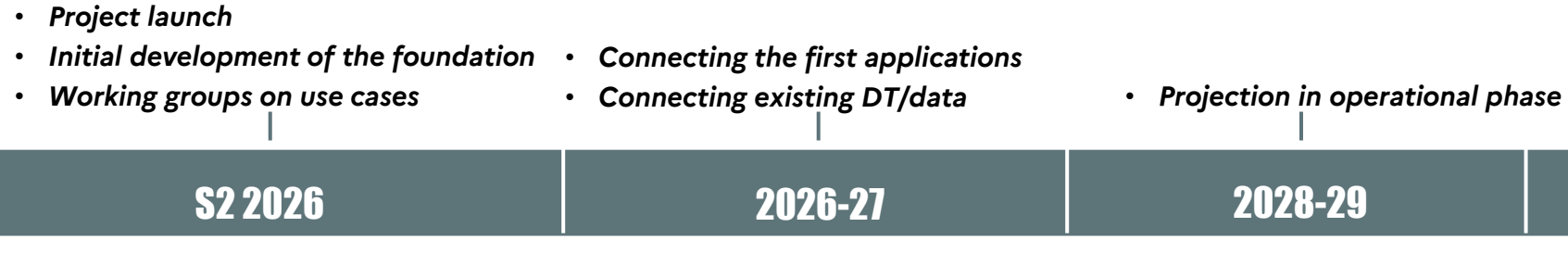
Making the region resilient to natural hazards

- Flood/submersion simulation
- Runoff calculation based on soil type
- Socio-economic impact analysis of natural disasters
- Modelling the impacts of global warming

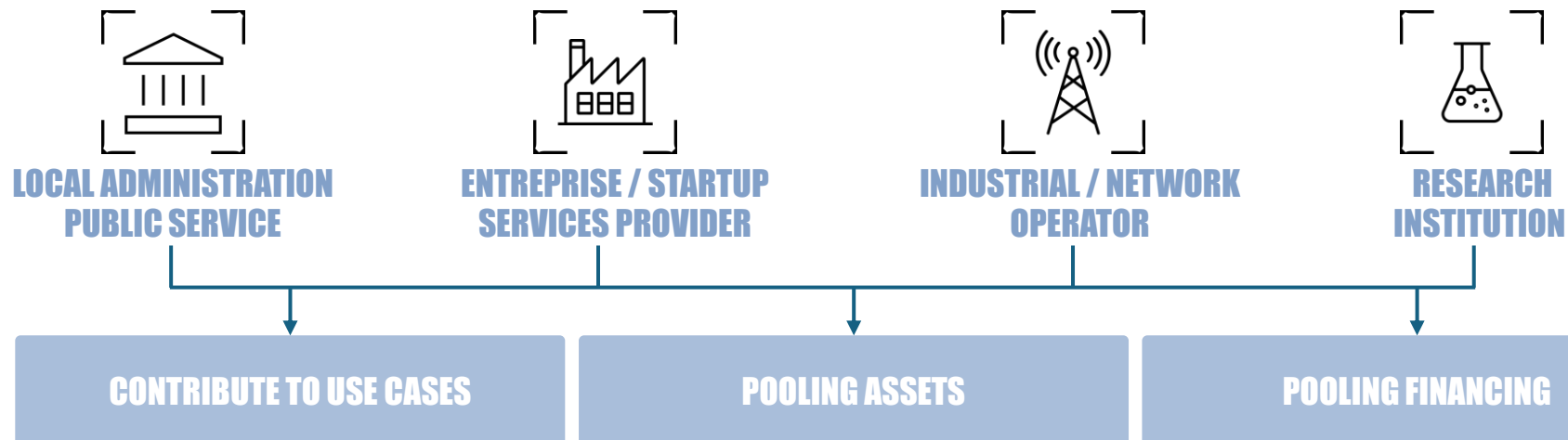
Adapting forests to global warming

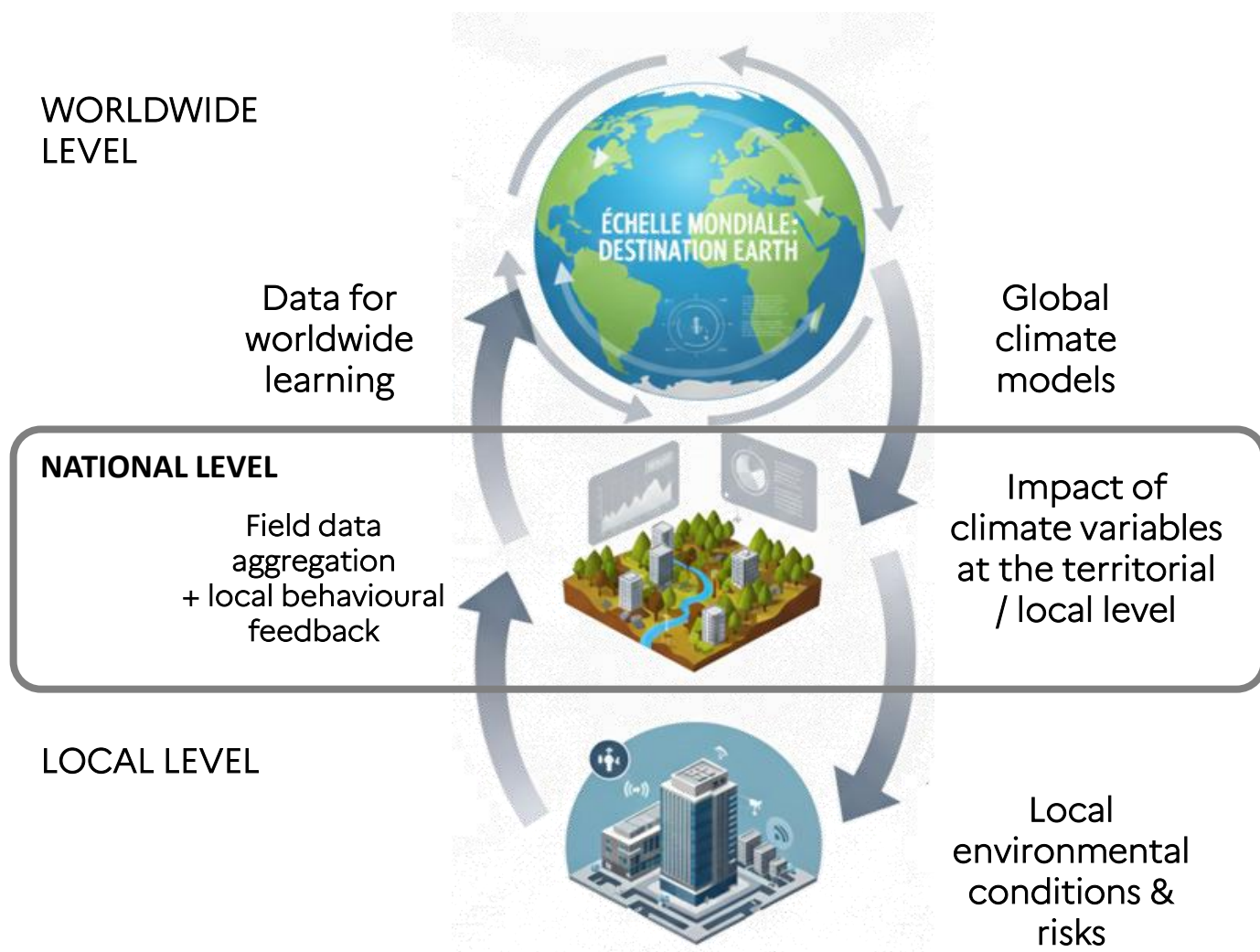
- Tools for detecting vegetation anomalies
- Simulation of growth by species according to climatic conditions
- Simulation of 3D landscape views using AI
- Calculators for thematic indicators (health, carbon sinks, exploitation, etc.)

Project schedule



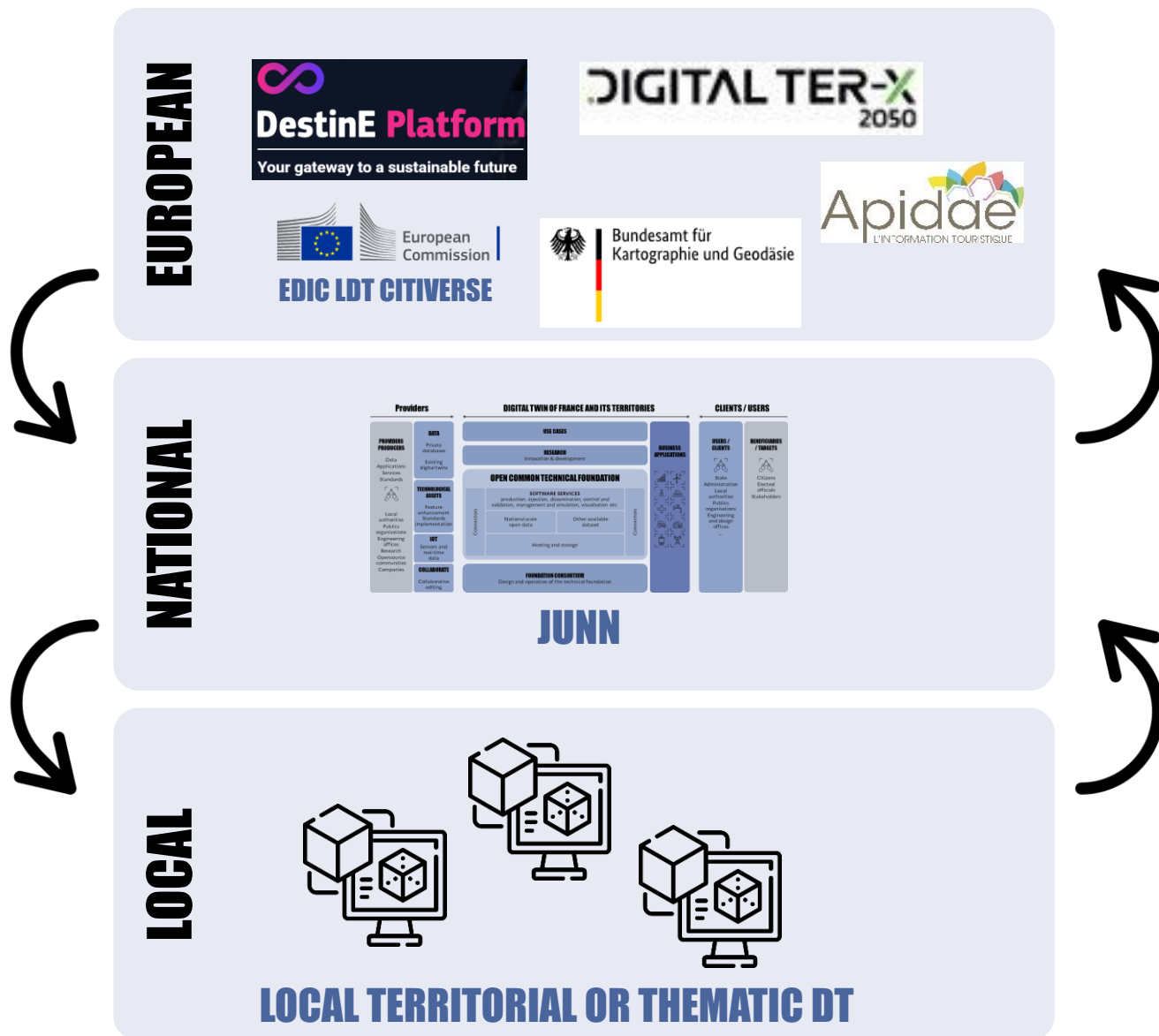
Ecosystem association





LOCAL NATIONAL AND INTERNATIONAL INITIATIVES

FILLING THE GAP BETWEEN SMART-CITY AND EARTH OBSERVATION SERVICES



- LEVERING ON EXISTING INITIATIVES OR RUNNING PLATFORMS
- DOWNSCALING & UPSCALING TO ADDRESS THE DESIRED SCALE
- CROSS FERTILISING OF DIFFERENT SCALE SIMULATION MODELS
- DATA, TECHNICAL AND BUSINESS SERVICES SHARING
- HELPING IN HARMONISING DATA ACROSS SYSTEMS AND TERRITORIES
- ENCOURAGING TRANSBORDER USECASES

**SHARING OF OPEN DATA
AND SPECIALISED
MODELS BETWEEN THE
TWO INFRASTRUCTURES**



**JUNN'S CONTRIBUTION TO
THE DESTINE USER GROUPS
ABOUT USE CASES AND
BUSINESS MODEL**





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