



Co-financed by the European Regional Development Fund

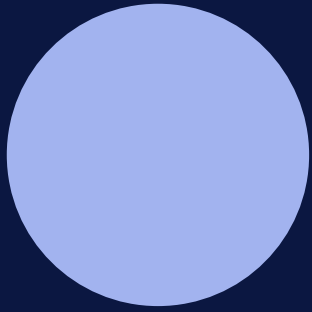
Inspire Policy Making with Territorial Evidence

# // **ESPO LORDIMAS** - Monitoring and measuring digital transformation at local and regional levels

Martin Gauk (martin.gauk@espon.eu)

*Specifisko teritoriju loma krizes*

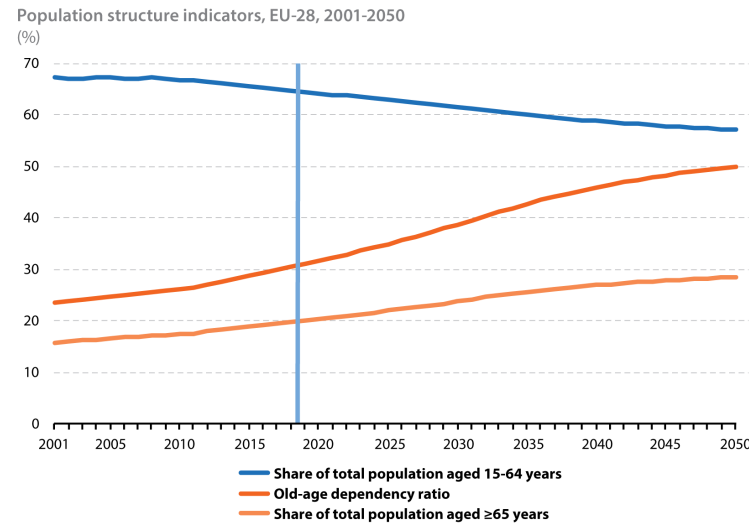
*27 November 2024*



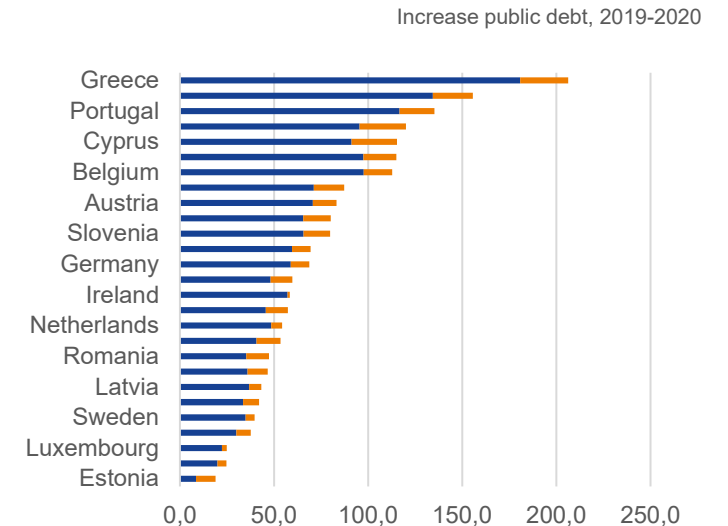
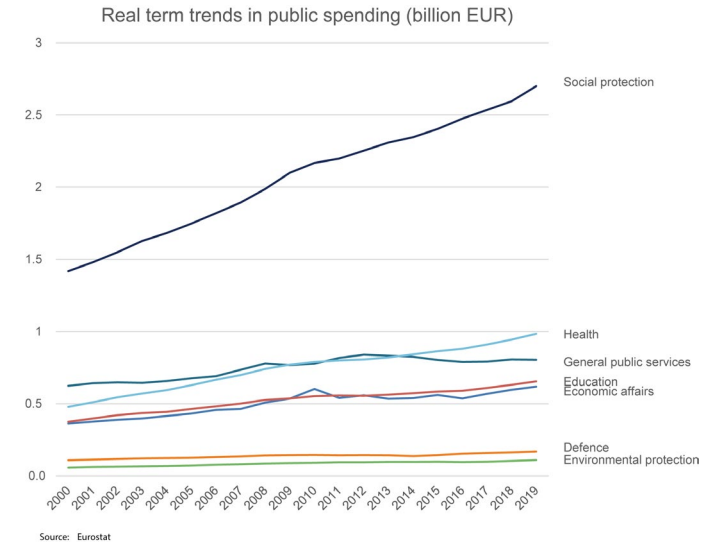
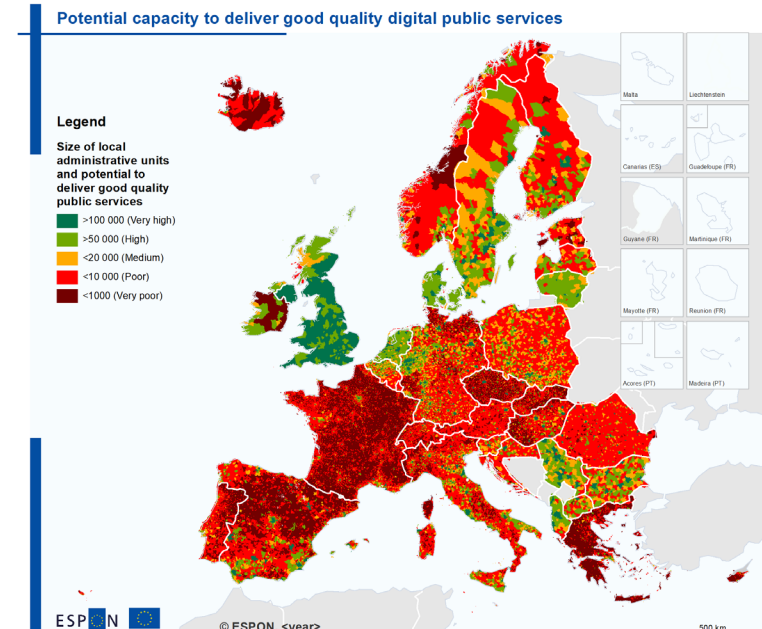
# Context and grand challenges

# Why measuring and monitoring are vital?

- Demand for public services is on the rise
- So is the need for expenditure
- But capacity to deliver is uneven across the board
- And the government's fiscal situation is under an increasing strain



Source: Eurostat



To sum up:

**Endless/increasing demand**

**but**

**infinite/less resources to deliver**

**Local context matters but needs addressing in a wider (EU) perspective**

- Cost of ageing:
  - Healthcare: 10 % GDP
  - Pensions: 13 % GDP
- Cost of climate change: 4% of GDP/annually
- Cost of recovery from the pandemic: 6% GDP

In addition, global instability hikes up costs for living, defense, subsidies for energy and other supply chain disruptons.

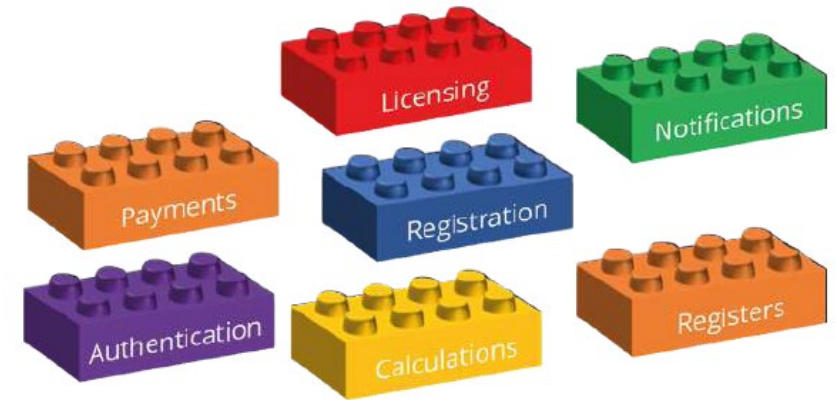


# How does digital fit in?

The real prize and productivity gains are not in:

- automatisation of existing processes.
- isolated success stories in advanced communities.

**The real prize is in adoption at scale!**



Creating, adopting and following digital commons: standards, building blocks, platforms and services, APIs together, in an open innovation ecosystem.

Only transforming at scale can result in large scale can lead to increased productivity, not only in the public sector, but consequently also across the broader tax base..

# What is being done about it?

THE EUROPEAN DATA STRATEGY



European Digital Innovation Hubs (EDIH)

AI Package and Coordinated Plan on AI

Green Deal Dataspace



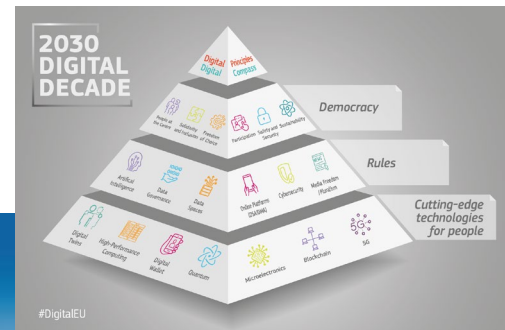
EIP-SCC  
European Innovation Partnership on Smart Cities and Communities



LORDIMAS

LIVING-IN.EU

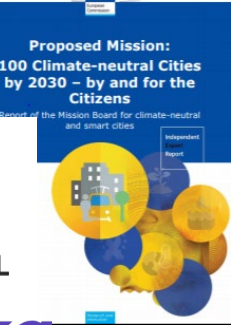
Data space for smart communities



DestinationEarth

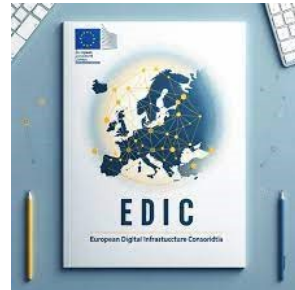


100 INTELLIGENT CITIES CHALLENGE



OPEN & AGILE SMART CITIES

Minimal Interoperability Mechanisms (MIMs)



AURORAL  
6Aika

LIVING-IN.EU  
The European way of digital transformation in cities and communities

# Digitalisation - a key priority in the EU policy frameworks

However, lack of data and evidence on the developments at regional and local levels

# How can ESPON help?

**2017-2018**

Policy Brief on digital transformation of **Public Services**

Targeted Analysis on **eHealth** (EE, FI, SI, BG)

**2019-2020**

Methodology and indicator list  
**Local&Regional Digital Transformation LORDI**

Policy Brief on **Digital Innovation** in public sector

**2021-2022**

European Research on Digital Governance  
**DIGISER**

Targeted Analysis and Working Paper on **Digitalising Spatial Planning**

Thematic Paper on **eHealth**

**2023**

Methodology and self-assessment tool **LORDIMAS**

**2024**

Work with **LORDIMAS** continues

Launch of a new European research on digital divides **DIGIREG**

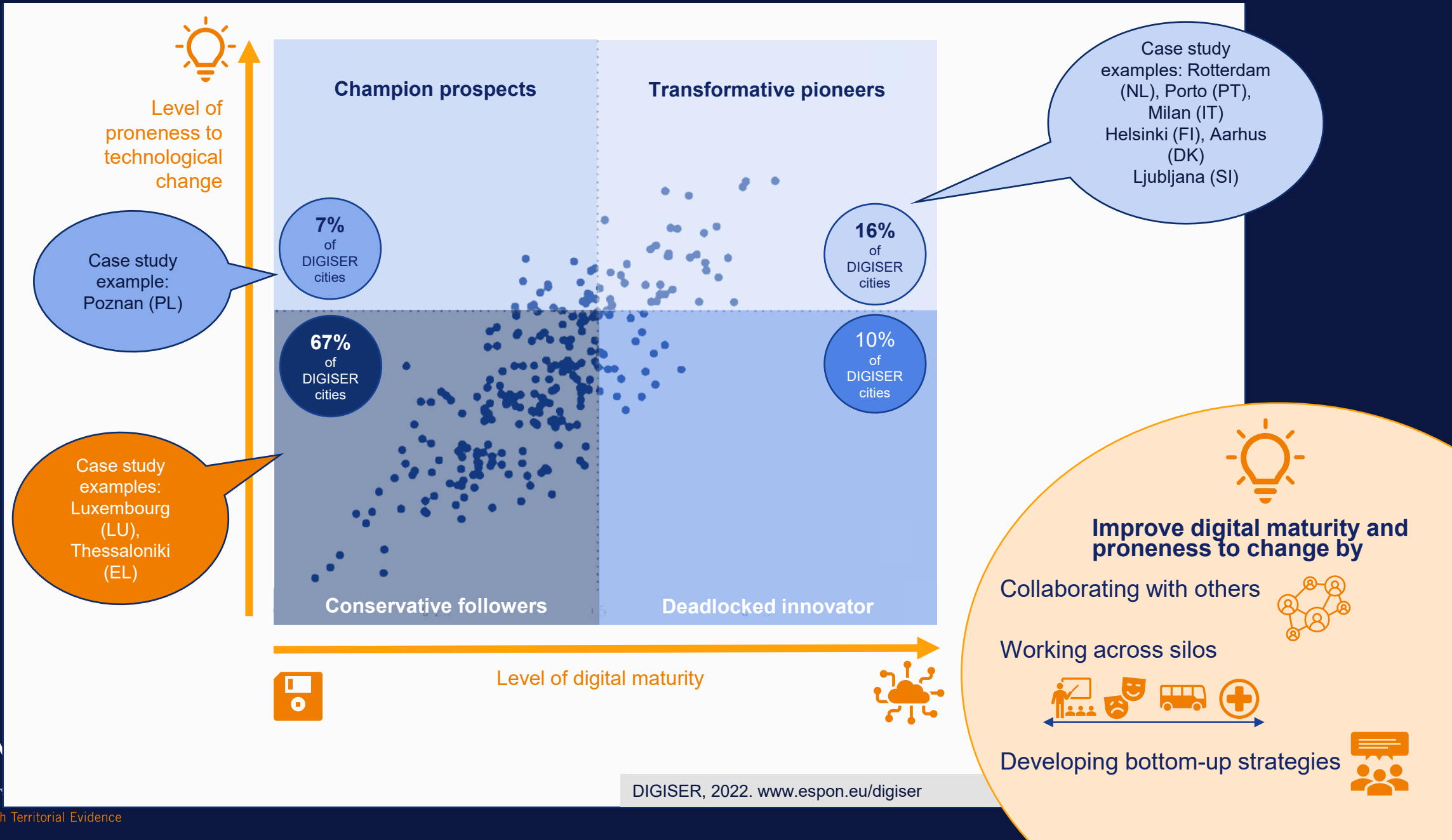
Launch of a new Targeted Analysis on digital helpers **DHAK**



# 2

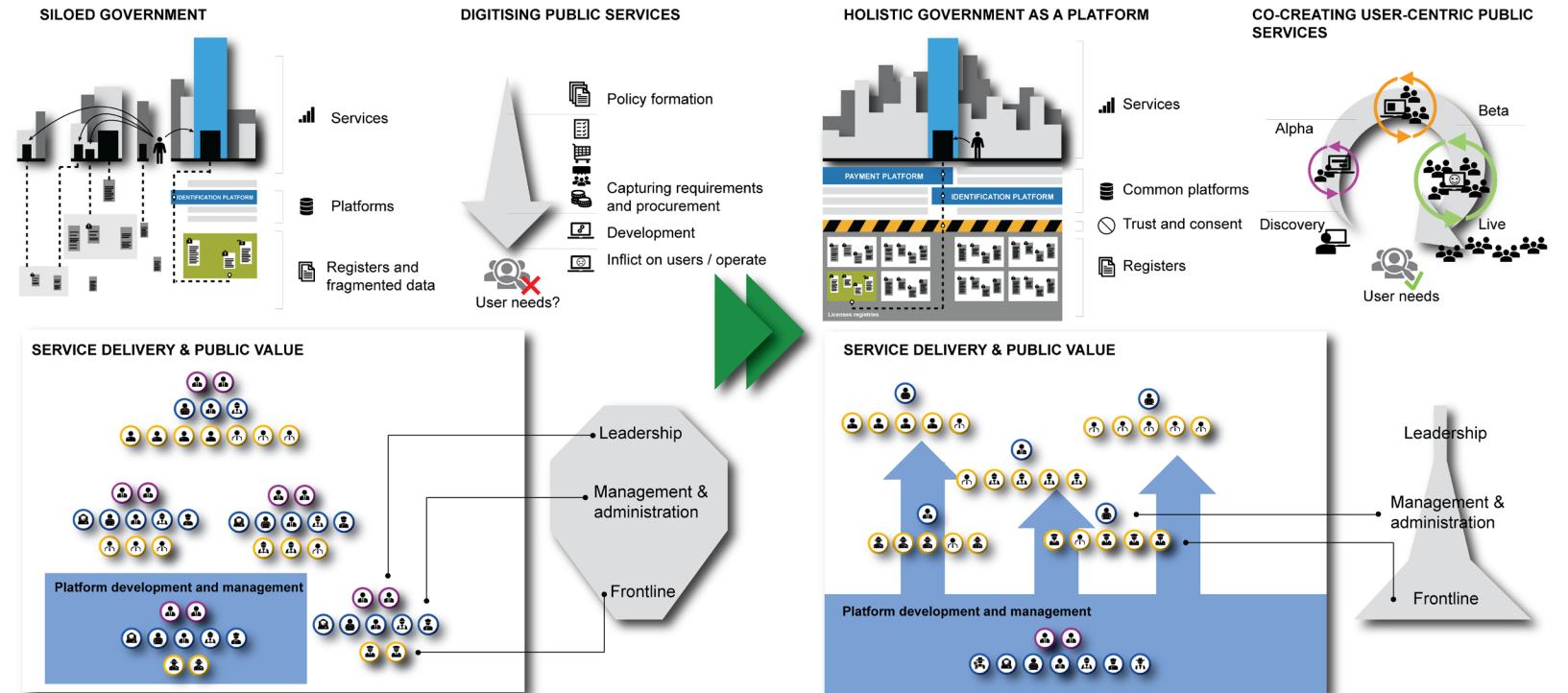
## State of play of digitalization of public sector and its services: insights from ESPON DIGISER

# Digital maturity and proneness to technological change differ among European cities



# Grand challenges:

- Scaling
- Structure
- Processes
- Capacity



# Grand Challenges addressed in DIGISER

- **Scaling**
- **Structure**
- **Processes**
- **Capacity**

**There are 32 national, 304 regional, 1034 intermediary and `95000 local governments in the ESPON countries (EU, EFTA, UK)**

Each surrounded by administrative, health, social care, education, transport, emergency and third sectors.

Each with its own, largely duplicated digital infrastructure, roles and institutional processes.

Each piloting solutions that already exist elsewhere.

# Scaling governments and markets to take full advantage of the digital revolution

## Large cities benefit from sufficient capacities



Large cities have capacities to develop and implement:



Holistic data strategies

Interoperable systems



Bottom-up approaches



In medium sized cities much data is collected and processed separately per sector



Smaller cities focus on data collection



## Possibilities to scale government activities and markets for every city

**35%**

of DIGISER cities report the use or production of big data

### Develop data management strategies

Based on participatory approaches  
Use (big) data, re-use data



Less than **20%**

of DIGISER cities adopt interoperable digital systems

### Develop interoperable systems

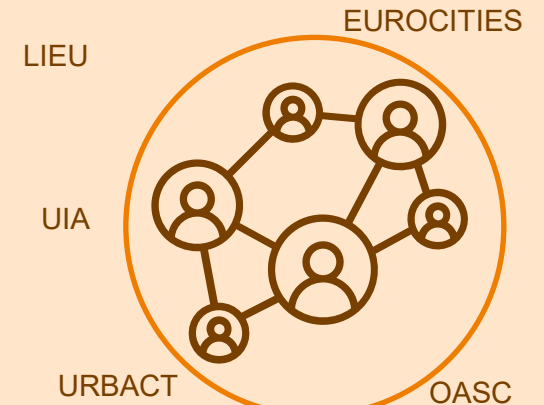
### Collaborate

Across policy sectors  
With other cities



**35%**

of DIGISER cities operate or work with urban data platforms. This rate rises to **58%** for capital cities but drops to **31%** for non-capital cities



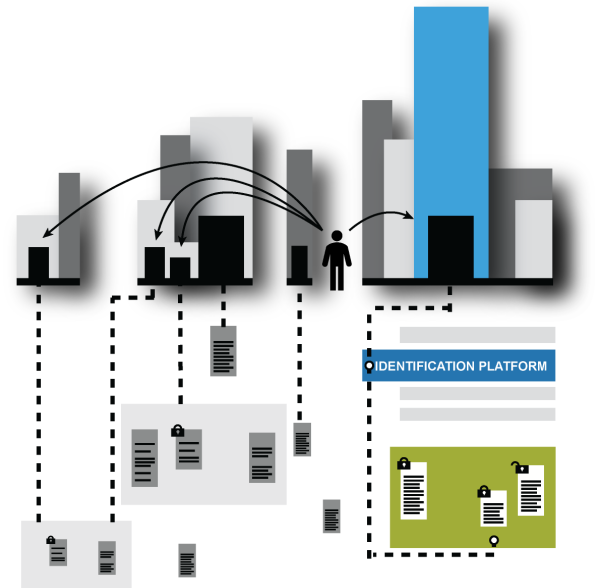
nearly **30%**

of DIGISER cities apply solutions developed by other public authorities

# Grand challenges:

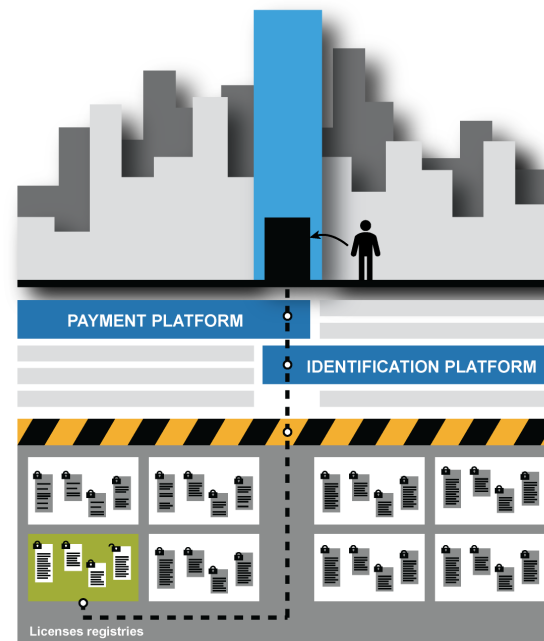
- Scaling
- Structure
- Processes
- Capacity

## SILOED GOVERNMENT

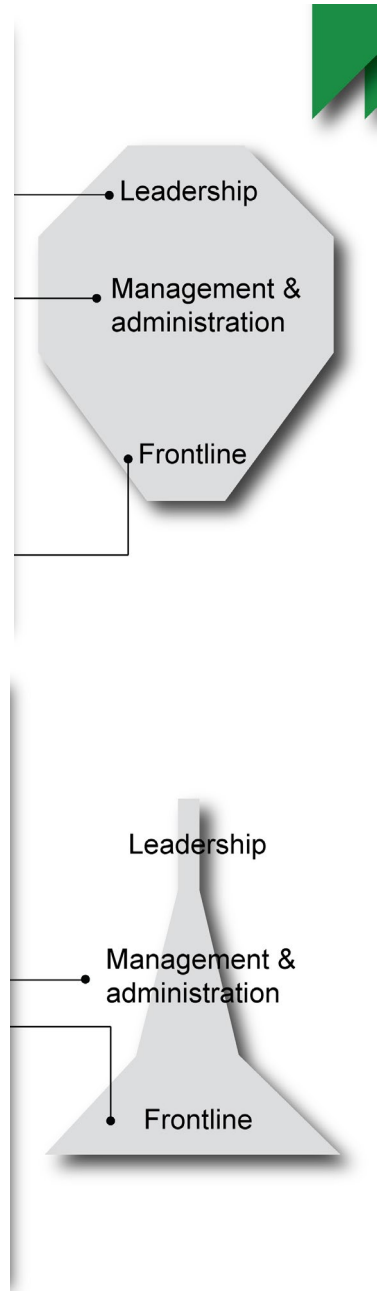


- Services
- Platforms
- Registers and fragmented data

## HOLISTIC GOVERNMENT AS A PLATFORM



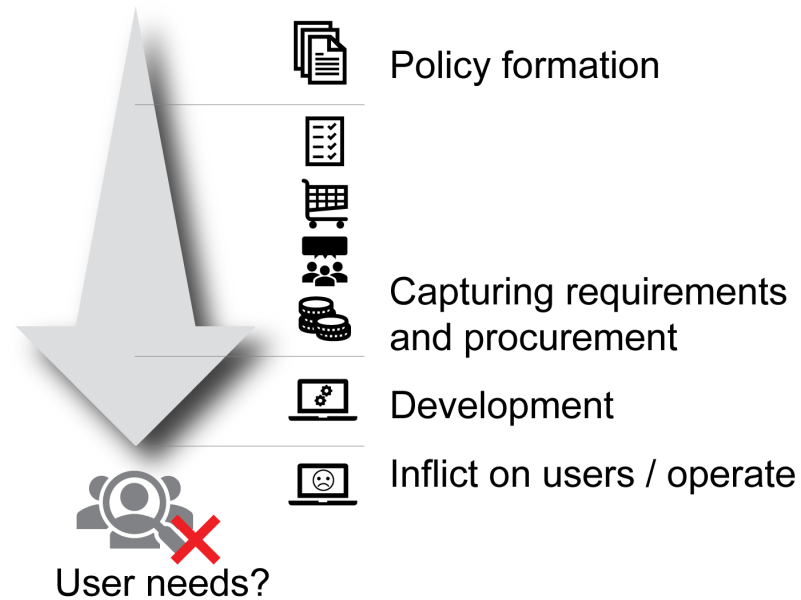
- Services
- Common platforms
- Trust and consent
- Registers



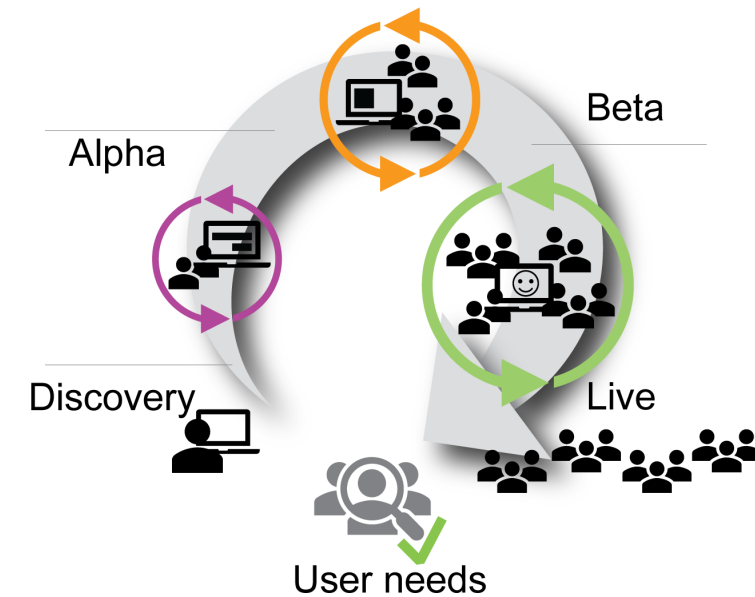
# Grand challenges:

- Scaling
- Structure
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- Capacity

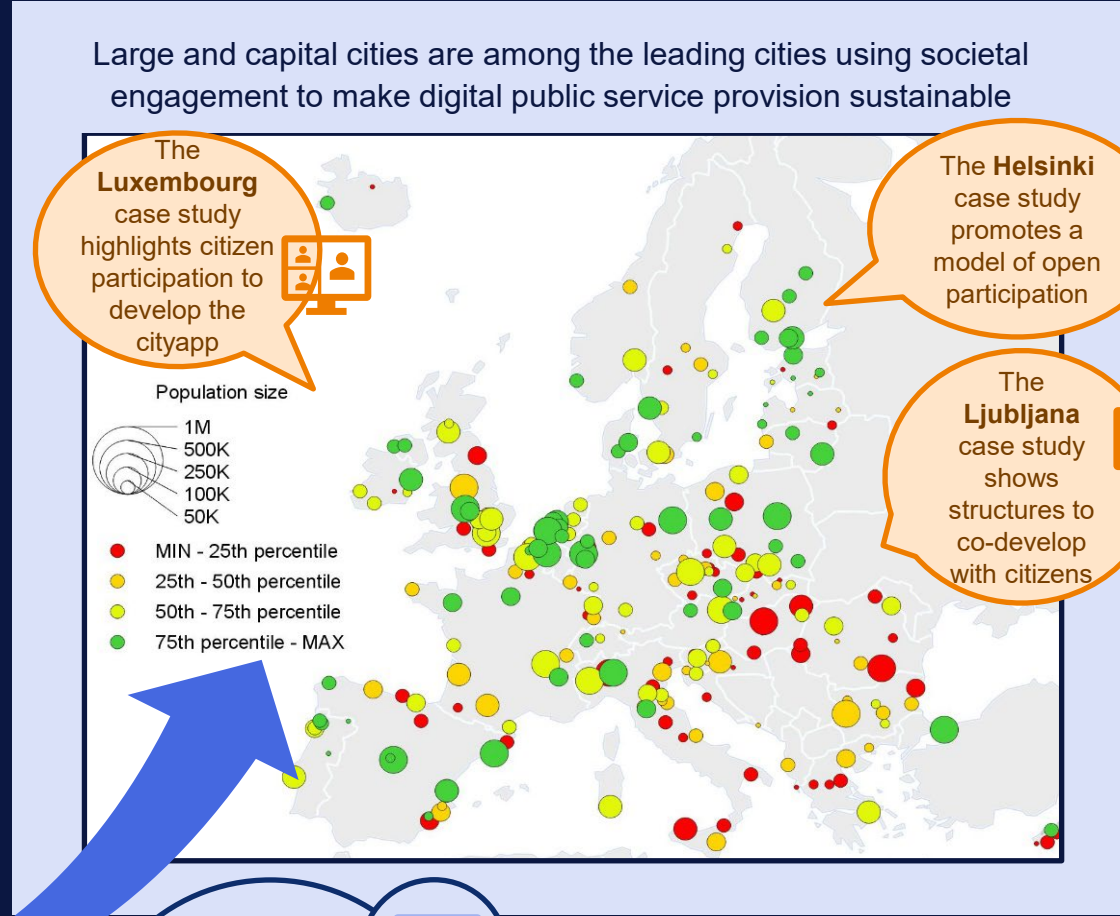
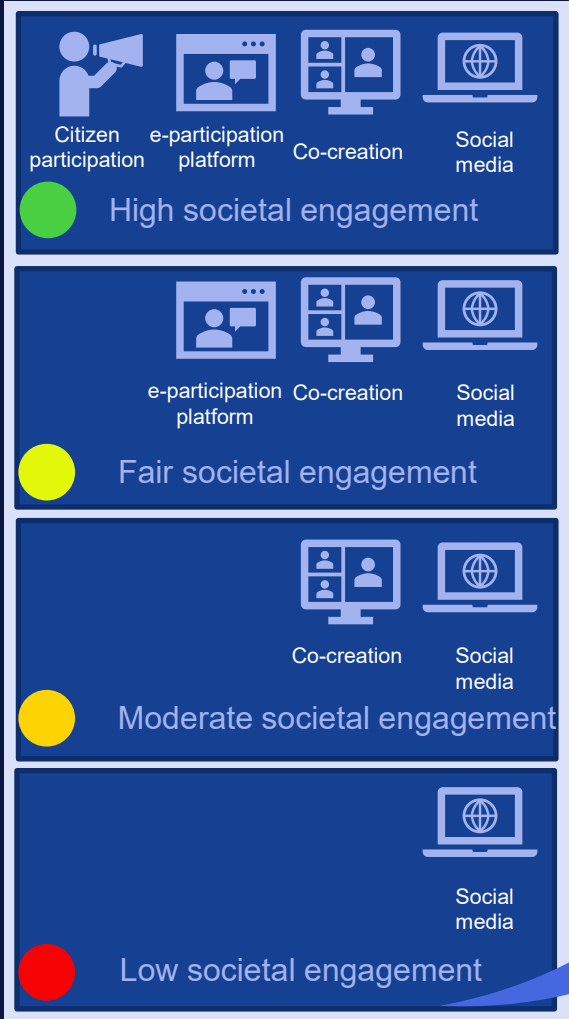
## DIGITISING PUBLIC SERVICES



## CO-CREATING USER-CENTRIC PUBLIC SERVICES



# Improving societal engagement for digital public services



Most DIGISER cities are present on social media

DIGISER cities score moderately on co-creation for digital services

DIGISER cities score lowest on e-participation for digital services

Co-creation and e-participation provide best user experience



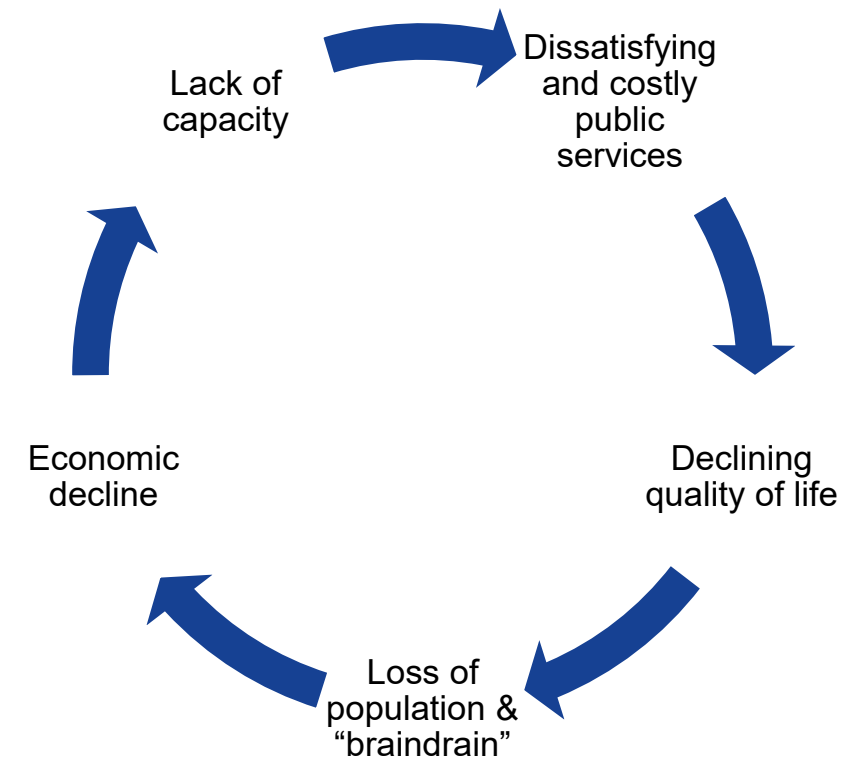
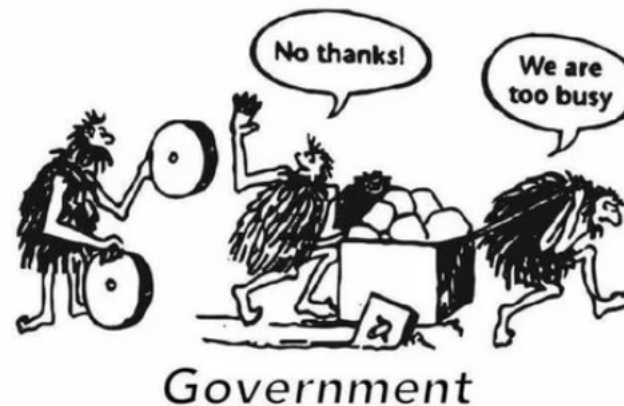
## Grand challenges:

- Scaling
- Structure
- Processes
- Capacity

Especially problematic for lagging regions/localities.

We do not have the necessary data/evidence to direct investments (DESI, Digital Decade).

Some governments resilient to change, most do not know how.



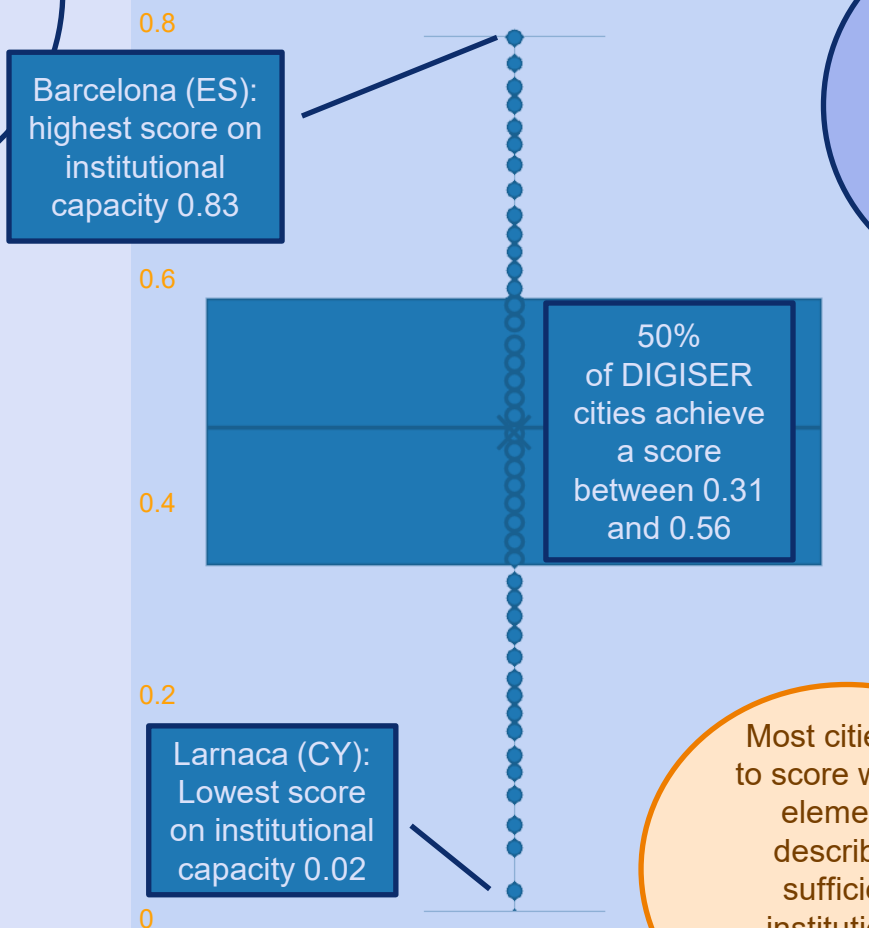
**Vicious spiral of the digital divide for lagging regions/cities and rural areas**

# Improving institutional capacities for digital public services

41%

of DIGISER survey respondents indicated limited institutional capacities. As such, it is the most frequently indicated obstacle to digital public services

Score of institutional capacity among DIGISER cities



40%

of public authorities do not provide employees with advanced ICT training



Institutional capacity



30%

of public authorities experimented with AI and IoT systems



+65%

of cities with >500k residents approved & published their digital innovation strategies. This is the case for 50% of smaller cities (50k - 100k residents)

Most cities fail to score well on elements describing sufficient institutional capacities (more than 0.5)

## Improving institutional capacities

Workshops



To proactively demonstrate digital innovation benefits

Reward and encourage employees



Use incentives to reward experimenting with digital solutions and promote relevant organisational culture

3

# Need for better data and monitoring

## ESPON LORDIMAS

What to monitor?

Processes or outcomes?

# LORDIMAS



LIVING-IN.EU

Your digital  
maturity assessment



## LORDIMAS in one sentence

*'An interactive tool helping local and regional governments to understand where they are in their digital transformation journey'*

## What is LORDIMAS?



### Evaluate

#### A digital maturity tool

Governance, Service  
Data management,  
Interoperability, Technology,  
Service delivery and  
Networking



### Compare

#### An interactive dashboard

Presenting your data in  
real-time and allowing  
you to compare it with  
other regions and cities  
in Europe



### Share

#### Repository of good practices

Sharing your successes  
and challenges to  
promote the European  
way  
for digital transformation



### Learn

#### Policy recommendations

Bringing awareness  
about emerging topics  
at the EU level and to  
give policy advice

## Analyse and visualise

## Data management

## About this dashboard

This module assesses how data is digitally stored, collected, and organised within the public administration, made accessible across service sectors and connected devices, and exploited for decision making and business purposes or service delivery. In addition, it evaluates how public administrations are informing their citizens and businesses about the collection, use and sharing of their personal data.

## Search and filter

## Filter by year

No category selected

## Filter by country

No category selected

## Filter by type

No category selected

## Filter by population size

No category selected

## Filter by maturity

No category selected

## Search by name

The Digital Maturity Assessment is calculated for the selection you see on the Map. You can select one or multiple public authorities using the Map or Search and Filter section.

## Maturity Assessment

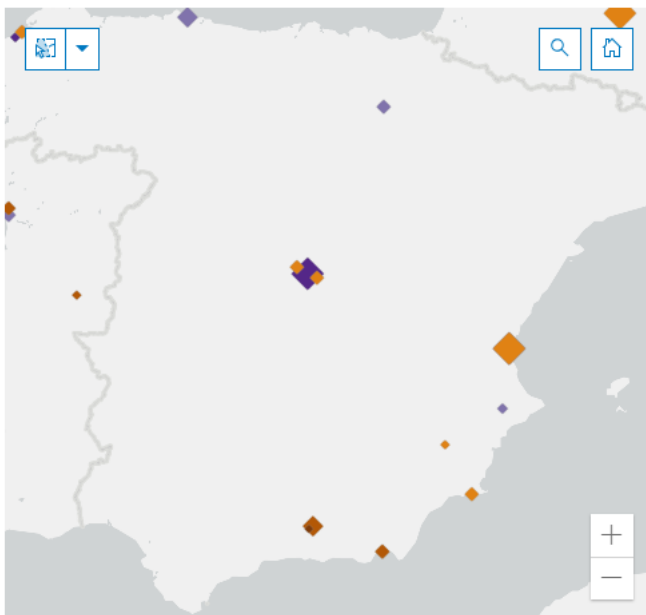
- ◆ **Digitally native**  
Very high levels of digital transition
- ◆ **Digitally optimised**  
High levels of digital transition
- ◆ **Digitally purposeful**  
Moderate levels of digital transition
- ◆ **Digitally emerging**  
Low levels of digital transition
- ◆ **Digitally reactive**  
Very low levels of digital transition
- ◆ **Digitally nascent**  
Lacking digital transition

## Population size

- ◆ > 5 000 000
- ◆ < 5 000

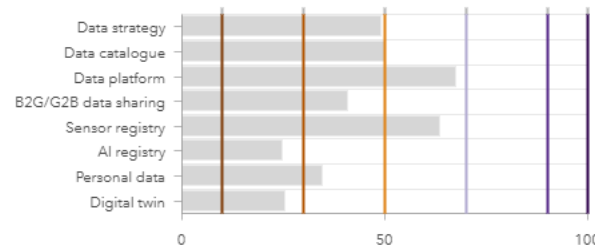
Maturity level: Digitally emerging

Maturity score: 44.3/100



Instituto Geográfico Nacional, Esri, TomTom, Garmin, FAO, NOAA, ... Powered by Esri

## Indicator scoring



## Analyse and visualise

## Maturity Assessment

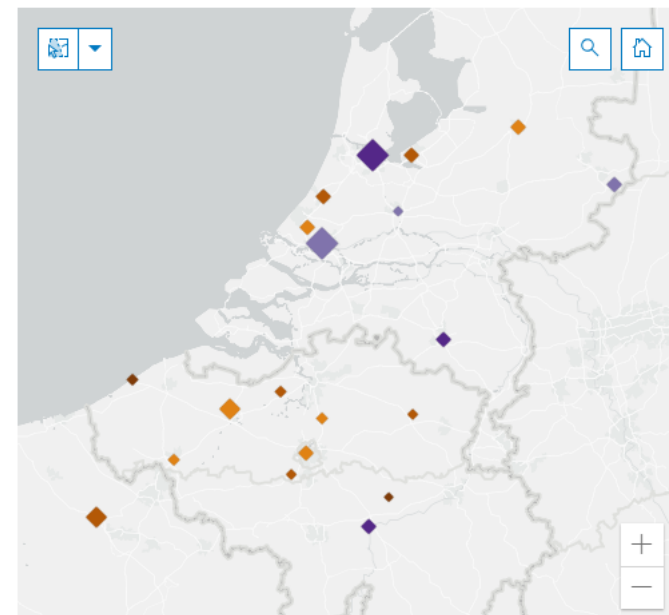
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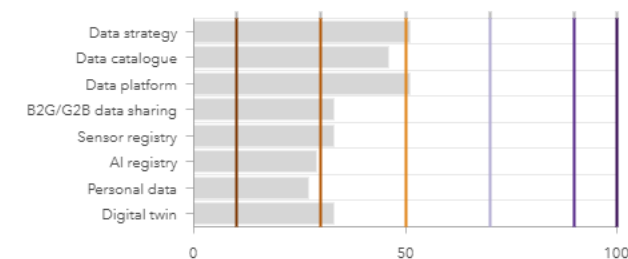
Maturity level: Digitally emerging

Maturity score: 37.7/100



Kadaster, Esri, TomTom, Garmin, FAO, NOAA, USGS Powered by Esri

## Indicator scoring



# Is your region, city, community already part of LORDIMAS?

## 3.1. Does your public administration:

	not at all	under consideration	under development or adoption	in operation in one or few service sectors	in operation in several or most service sectors
[3.1.1.] have a data strategy that coordinates the management, sharing, interoperability, and (re)use of data?*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
[3.1.2.] have data catalogue, that catalogues the key data in the public administration.* ▶ Details	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
[3.1.3.] have an open data platform that enables data sharing and development of data related services?*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



<https://lordimas.espon.eu>