

Monitoring and measuring digital transformation at local/regional level across the EU

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CITYxCITY Festival '22

*Developing an indicator framework at local level – “**Local and Regional Digital Indicators**” (LORDI)*

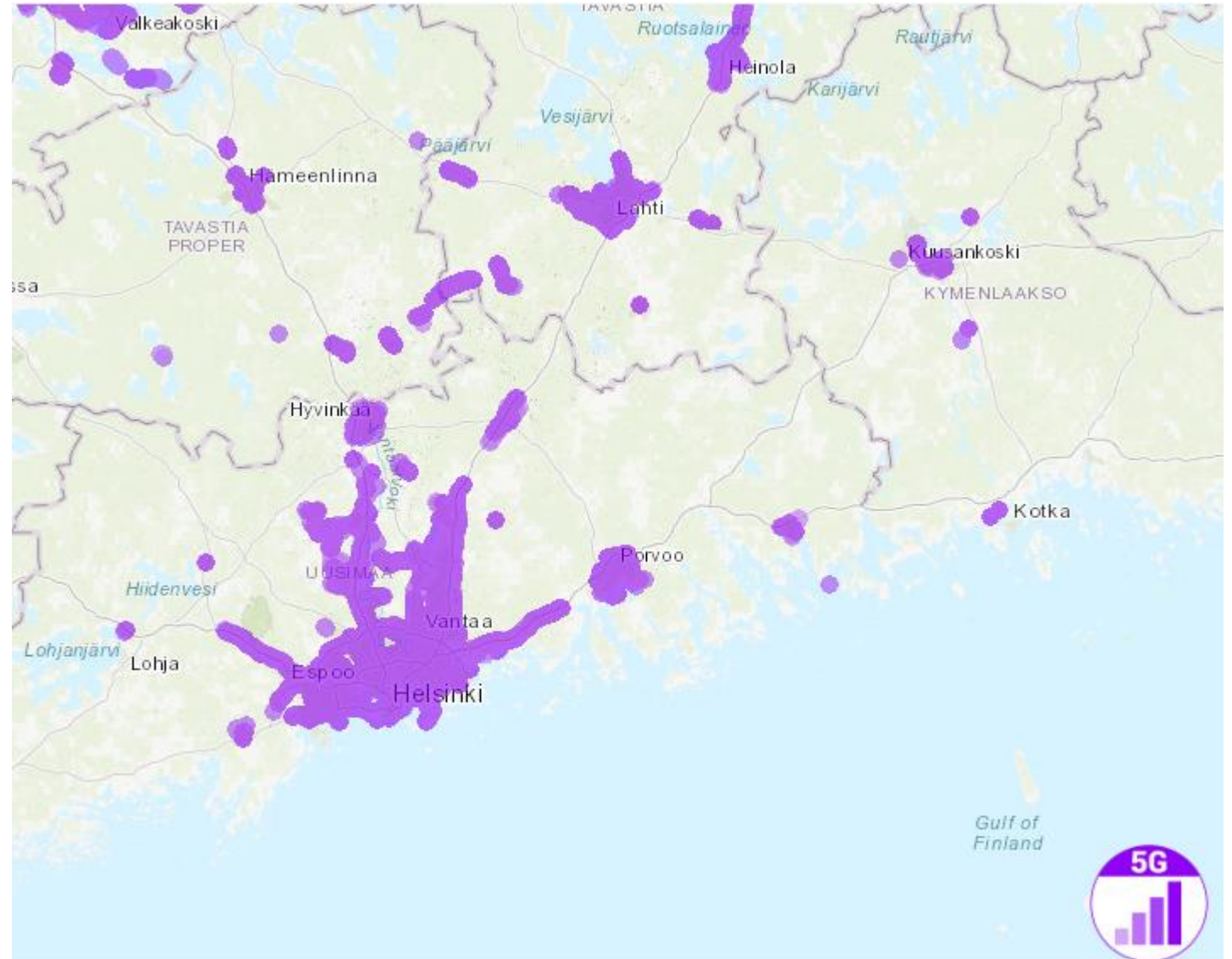
Challenges in creating a multi-national measurement and monitoring framework for local level

- Almost no relevant, official, structured, harmonized data at the right scale covering all municipalities in all Member States.
- More granularity = need more complexity, focus on detail and more precise data.
- Analysis units differ and change, hence it is difficult to compare and monitor.
- Quickly changing circumstances, mismatches between data and policy, hard to get cities involved... etc, etc, etc.
- Data collection, harmonisation is very labour extensive and expensive.

Impossible to cover all 80 000+ local administrations in the EU.

How to capture? How to keep it simple, yet relevant and meaningful?

Challenges in creating a multi-national measurement and monitoring framework for local level



Challenges in creating a multi-national measurement and monitoring framework for local level

Developing LORDI indicator framework

Overall framework development

- Methodology paper
- 170+ potential indicators identified
 1. Local digital infrastructure
 2. Local digital skills and capacity
 3. Local digital governance & public service provision
 4. Local digital economy
 5. Context indicators (for meaningful comparisons)

Challenges in creating a multi-national measurement and monitoring framework for local level

Developing LORDI indicator framework

Piloting:

Local digital infrastructure

1. % households covered by ultrafast broadband
2. Broadband costs as a % of monthly average income
3. % of population covered by 5G network

Local digital skills and capacity building

4. % of employees in ICT sector
5. % of employees with data skills
6. % of employees with programming skills
7. Evolutionary stage of DIH in the region
8. Range of services offered by DIH in the region
9. % sectors where there is competence in DIH in the region

Local digital economy

10. GVA per capita in ICT
11. Share of high-growth enterprises 4.0 industry sectors
12. Number of start-ups in 4.0 industry sectors

Local digital governance

13. Presence up-to-date digitalization strategy
14. Presence of cross-department digitalisation coordination units
15. Signed "living-in.eu" declaration
16. % of relevant network participation
17. % of service areas where local government is developing services in cooperation with other governments.
18. Local gov. is using data to improve service provision
19. Local gov. has business model in place to share data with businesses
20. Local gov. has data platform in place
21. % of service areas incorporated within local data platform
22. Local gov. has local digital twin developed
23. % of service areas incorporated in the local digital twin
24. Local gov. uses data for service analytics
25. Local gov. uses data for service provision
26. % of adoption of the CEF Building Blocks
27. % of adoption of InteroperableEurope services
28. % of adoption of OASC/EC Minimum Interoperability Mechanisms
29. Local gov. is testing and co-creating services and solutions with citizens, businesses, and academia

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Developing LORDI indicator framework

Process and current progress:

- Data collected from platforms, providers,
- Large scale survey conducted (250+ cities captured) to collect additional data
- Co-creative process (living-in.eu coordinators, partners and cities involved)

Challenges in
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monitoring
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**Developing LORDI
indicator framework**



The European way of digital transformation in cities and communities

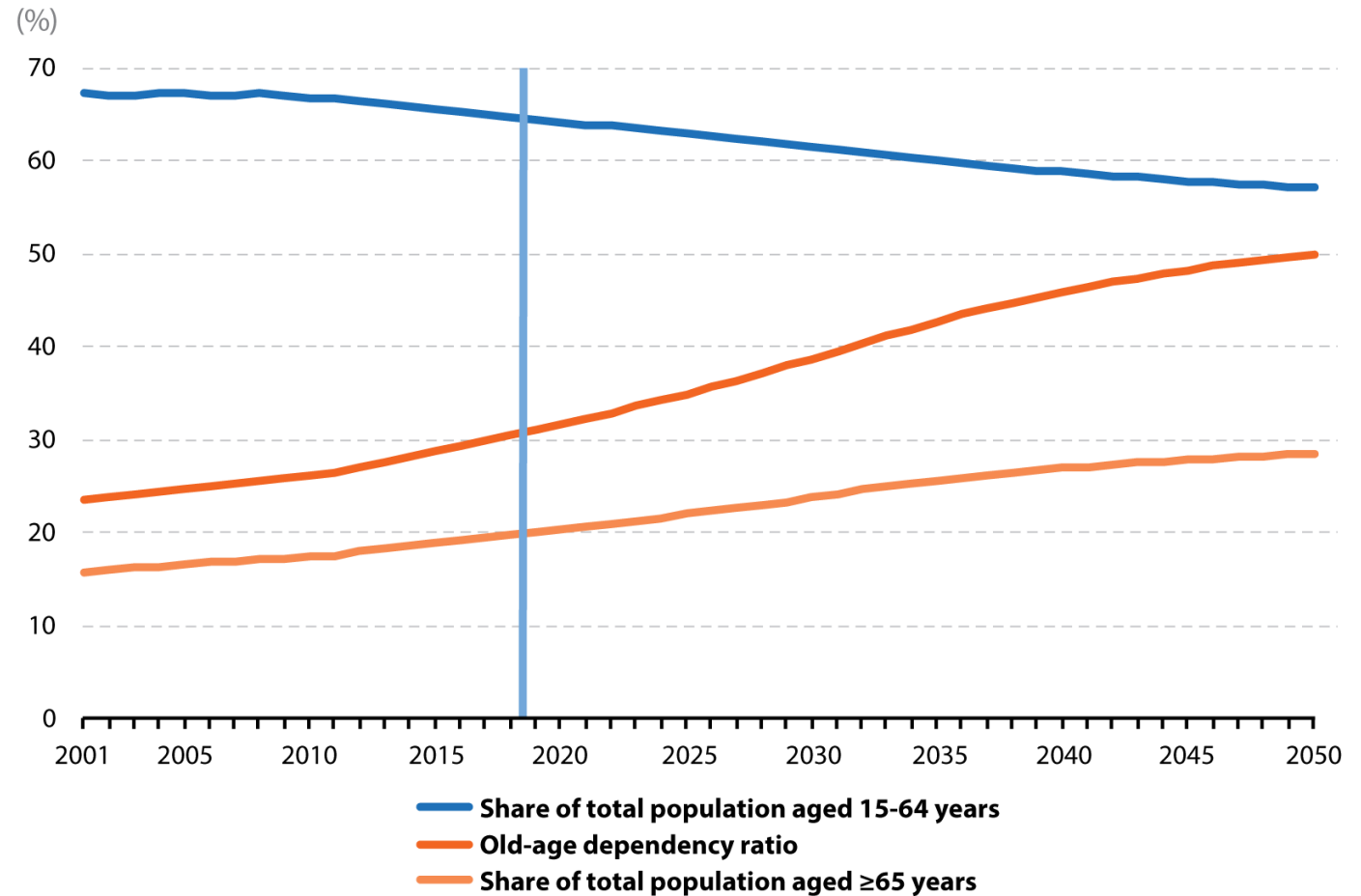


Join and participate in our discussions: <https://living-in.eu/groups/commitments/monitoring-measuring>

*Measuring digital transformation within such complex setting (EU, MS, local governments) is a complex and often futile task, **but a vital one.***

**Demand for (digital)
public services is on
the rise**

Population structure indicators, EU-28, 2001-2050



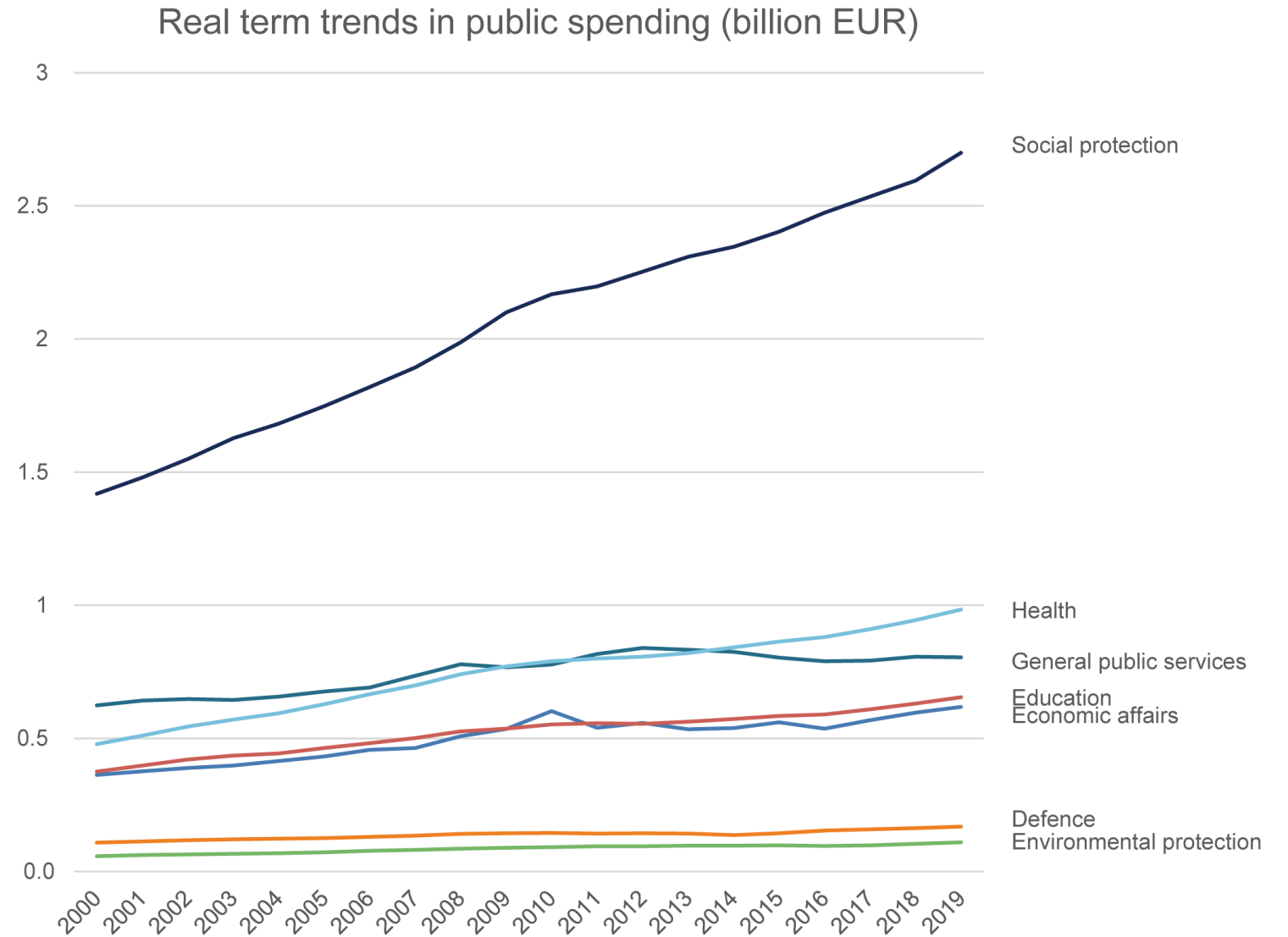
Source: Eurostat

Old age dependency is increasing 10% every 20 years.

By 2030, there will be 2.5 working age persons for one older person, 2 by 2050..

Demand for (digital)
public services is on
the rise

So is the need for
expenditure



Source: Eurostat

In 20 years, spending on social protection (incl. old age) and health have doubled.

Demand for (digital)
public services is on
the rise

So is the need for
expenditure

But capacity to
deliver is uneven
across the board

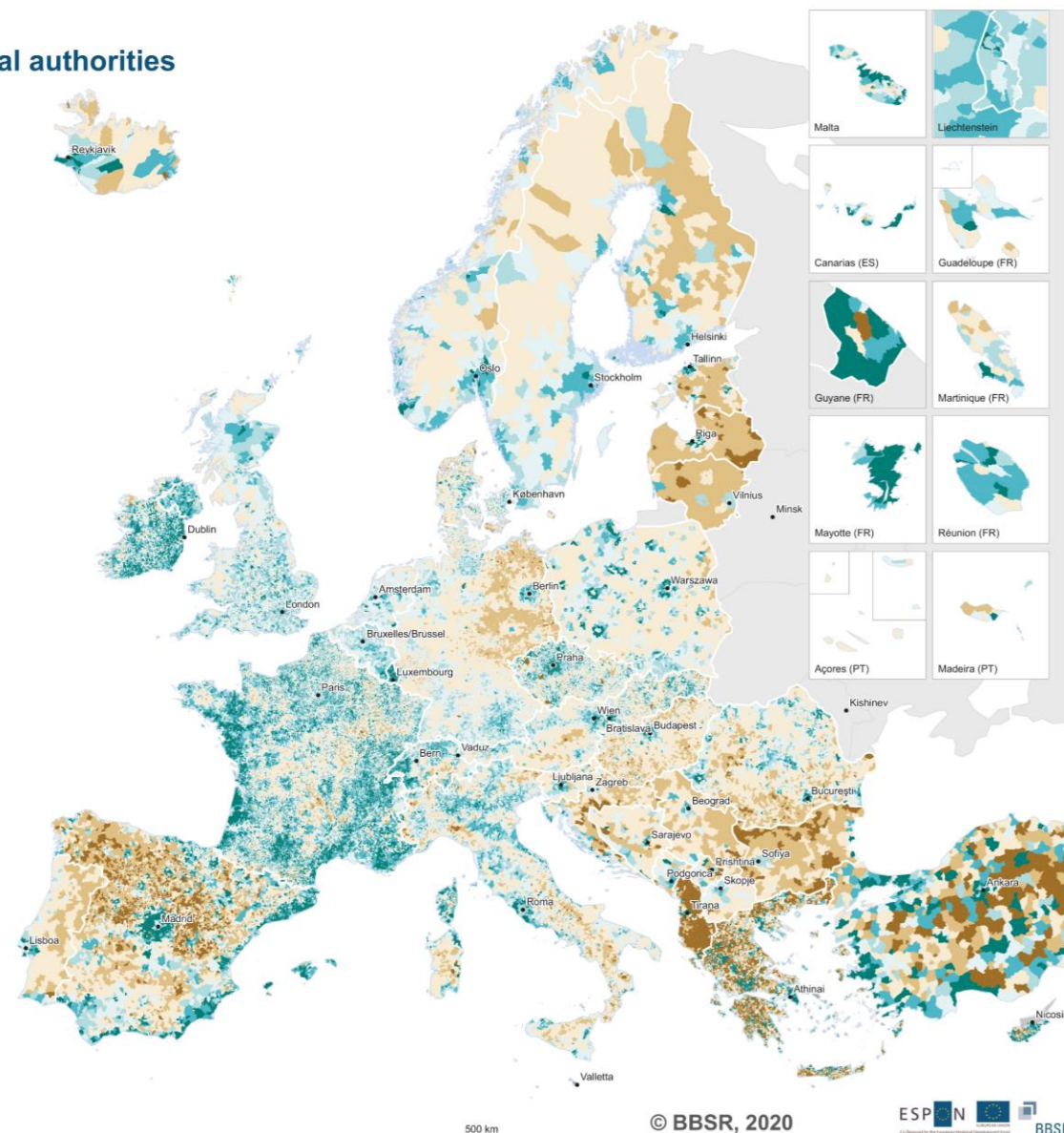
Population development in local authorities

Average annual population development
from 2001 to 2017* in local authorities (LAU)**



* Population data: 2001, 2017;
AT, HR, IT, MT: 2002, 2017; BA: 2001, 2013;
FR: 1999, 2016; IE, LT, LV, RO: 2001, 2016;
PL: 2002, 2011; KS: 2012, 2017; MK: 2005, 2017;
TR: 2009, 2017; EL, CY: 2001, 2011
** Local Administrative Units (LAU): local territorial units
Equivalent territorial units: AL, BA, KS, RS
DK: sogne; EE: vallad/linnad; PT: coelhos;
UK: wards

Regions: LAU (2017)
Data source: Spatial Monitoring System for Europe;
Data origin: national statistical offices
population estimates;
GfK GeoMarketing for the administrative boundaries



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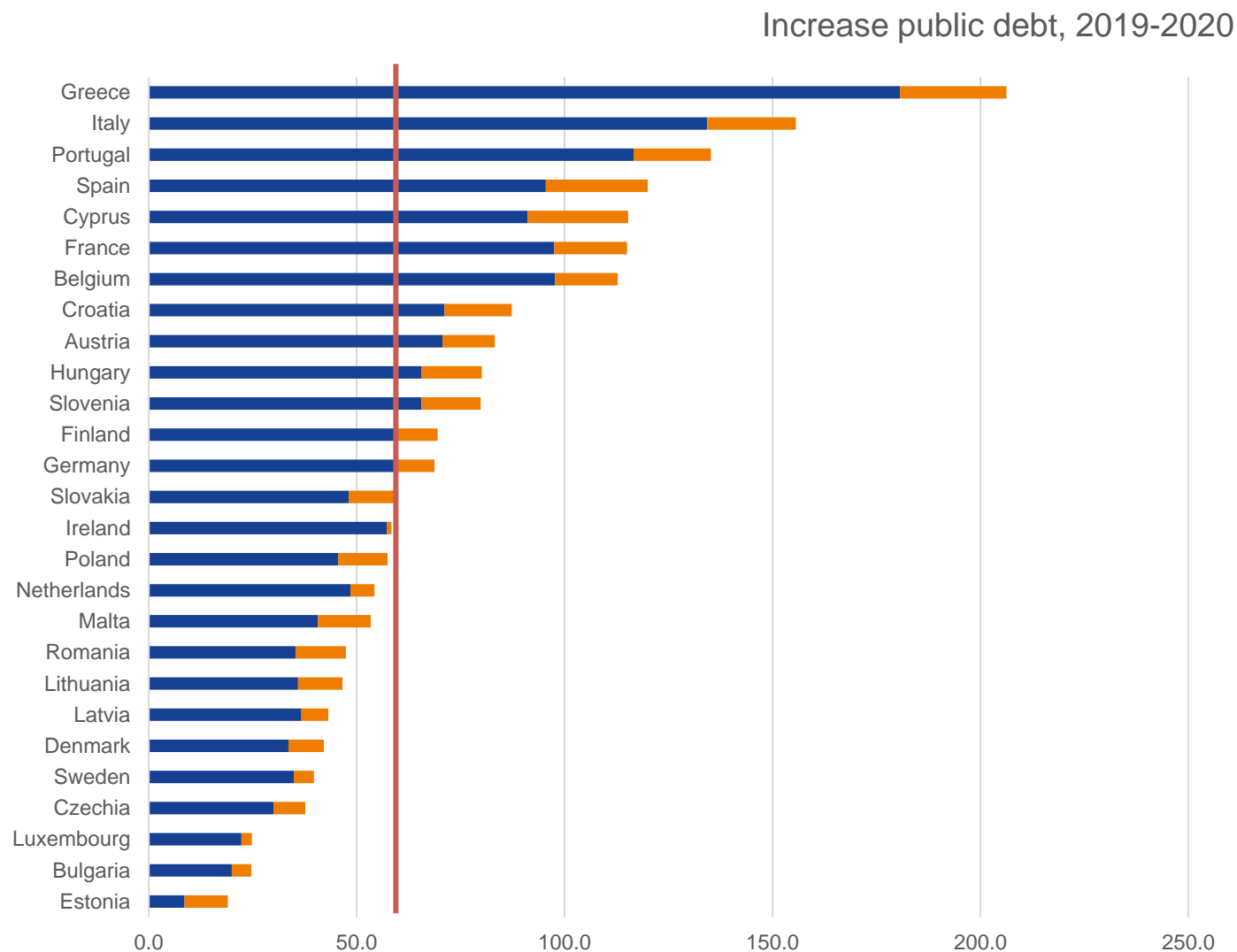
Many localities are facing significant population loss, thus also capacity.

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



Deficit and debt worse and growing faster than after financial crisis.

Fiscal rules (SGP) to keep deficit under 3% and debt under 60% temporarily suspended

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 defense, subsidies for energy and other supply chain disruptions.



To sum up:

Endless/increasing demand

but

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

- There are 32 national, 304 regional, 1034 intermediary and `95000 local governments in the ESPON countries (EU27, 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 **endlessly piloting solutions that already exist elsewhere** using large amounts up the same resources.

How does digital fit in?

The real prize and productivity gains are not in:

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

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..

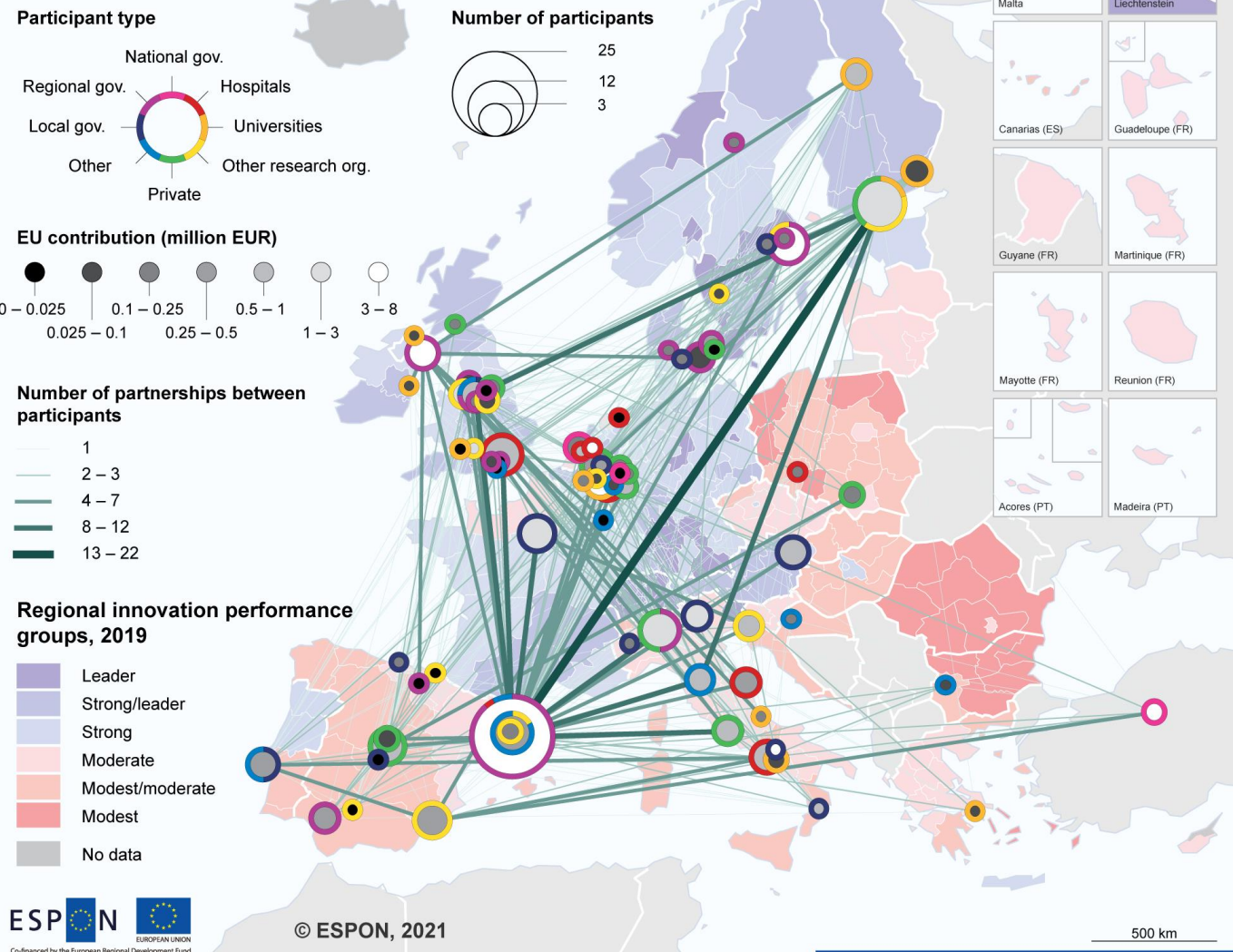
Hence, increasingly important to monitor and measure not only the outcomes, but also processes.

Example: local healthcare providers collaborating with one another to procure tech.

If done at scale, winners are not only taxpayers, municipalites/service providers, but also SMEs who can compete in a larger and more attractive market.

EU funded projects implementing Pre-Commercial Procurements (PCP) or Public Procurement of Innovative Solutions (PPI) in healthcare sector

Participation intensity and network dynamics in EU funded joint cross-border PCP and PPI projects in digital healthcare, 2013–2020



Territorial level: NUTS2 (2016), Urban Centres (2015)
Source: ESPON, 2021

Origin of data: European Innovation Scoreboard, 2020, CORDIS, 2021, ESPON 2021
© UMS RIATE for administrative boundaries

Next steps:

Short term (next months)

Finalising data collection for the pilot

- 29 indicators
- Minimum 250 cities covered, more if there is data

Dissemination, visualization, exploration and analysis

- Development of an interactive dashboard
- Focus is not on rankings, but relative positioning

Medium term (throughout the new Programming Period)

Sustainability

- Strengthening collaboration with municipalities (carrots)
- Integrating self-assessment tools into the dashboard
- Keep collaborating with platforms, networks and organisations who can provide data.
- Further integrating the monitoring with policy processes.



Co-financed by the European Regional Development Fund

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Thank you!

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