

# Thank you for joining us! We will start shortly.



Interact! Raise your hand, and use the chat box





Mute your microphone when not speaking

# For polling join <a href="www.menti.com">www.menti.com</a> Code: 16 33 04 0 Or use Android/iOS apps

















05>09 OCTOBER 2020

12>16 OCTOBER 2020

19>22 OCTOBER 2020



LOCATION INTELLIGENCE4CITIES AND REGIONS



**#EURegionsWeek** 



RESTART EUROPE Together











#### **USEFUL INFORMATION FOR ATTENDEES**

As an attendee, you are in listen-only mode.

Please keep your microphone muted unless the moderator gives you the floor.

Two important features that you can access with buttons at the bottom of your screen:

Participants window



to view all other attendees

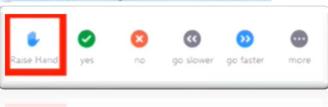
Chat window



to ask questions to panelists and share comments with other attendees

To ask a panelist a question:

- Type your question in the chat window and write the name of the panelist that you want to hear from.
- If you would like to speak, raise your hand at the bottom of the Participants window.











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**Simon Vrečar External Consultant** Joint Research Centre







**Lorena Hernandez Project Officer** Joint Research Centre



**Francesco Pignatelli** Senior Manager Joint Research Centre







# Poll 1 (<u>www.menti.com</u> Code: 16 33 04 0)

What type of organization are you coming from?(e.g. public, private, SME, consultant, academia...)









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# European Interoperability Programme

Cross-Border and Cross-Sector Interoperability Solutions

For **Public Administrations**, **Businesses** and **Citizens** 

54 different actions tackling interoperability from different angles

control extra extr



ISA<sup>2</sup>







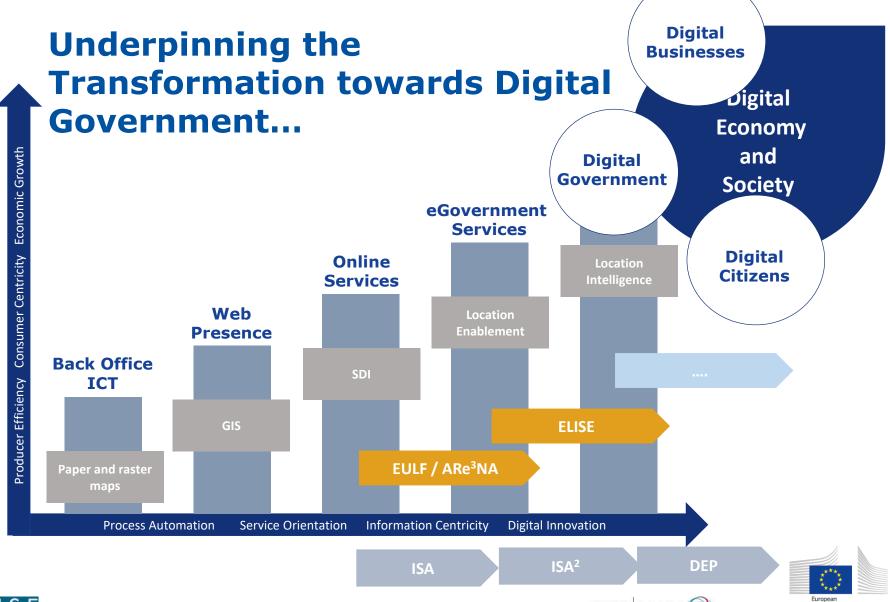




#### 18th EUROPEAN WEEK of **REGIONS** and CITIES

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# ...and Supporting Policies...

#### EIF interoperability levels



**ELISE** 

supporting

Location Interoperability Tallinn Declaration

Building the Data Economy (COM)

Al for Europe (COM)

**INSPIRE** 

eGov AP

Open Data

European Data Strategy

Digital Europe Programme















# **Digital Transformation**Location Intelligence & Data Ecosystems

#### **Location Intelligence**

"Location Intelligence is the process of deriving meaningful insight from geospatial data relationships — people, places or things — to solve particular challenges such as demographic or environmental analysis, asset tracking, and traffic planning." (Gartner)

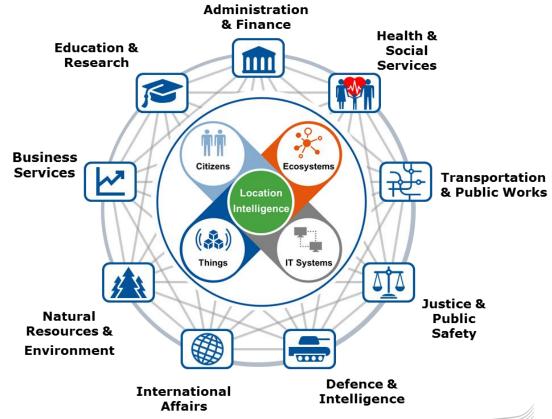
#### **Data Ecosystem**

A 'data ecosystem' (or 'data-driven digital ecosystem') is where a number of actors interact with each other and their environment for a specific purpose, generating value from the network by producing, exchanging and consuming data in a collectively governed and operated way.

Many data ecosystems involve spatial data. Typically, where spatial data is used, the data ecosystems combine spatial data with other data, include both static and dynamic spatial data, and embrace both 'raw' data and 'interpretations' based on the raw data.















# Poll 2 (www.menti.com Code: 16 33 04 0)

- How familiar are you with the concept of `Location Intelligence'?
  - Very familiar, Familiar, Slightly familiar, Not at all familiar
- How familiar are you with the concept of `Data Ecosystems'?
  - Very familiar, Familiar, Slightly familiar, Not at all familiar











# Journey #1 **Energy Efficiency**



**Giacomo Martirano External Consultant** Joint Research Centre





# **Journey #2 Data Ecosystems**



**Dr. Slim Turki** Open Data Researcher Luxembourg Institute of Science and Technology

# **Journey #3 Location Intelligence**



**Clementine Valayer Associate Director** Gartner







# **Journey #1 Energy Efficiency**











### 6 Use Cases executed within the ELISE Energy & Location Applications

- Comparative analysis of different methodologies and datasets for Energy Performance Labelling of buildings
- Digital platforms for smart management of public lighting
- > "EPC4EU" harmonisation of Energy Performance Certificates of Buildings
- The role of geospatial information in a regional energy strategy
- Interoperability of SECAP (Sustainable Energy and Climate Action Plan) data
- Scale-up at district, city and regional level the energy performance of buildings assessed using energy consumption data from smart meters







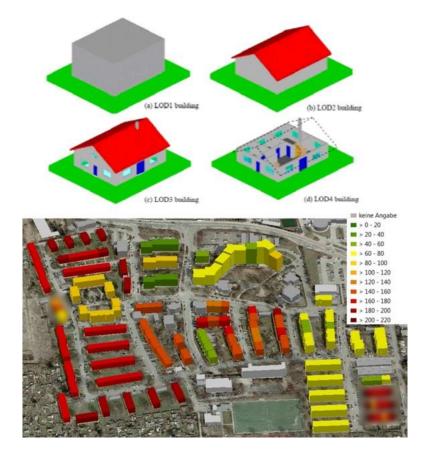




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Comparative analysis of different methodologies and datasets for Energy Performance Labelling of buildings





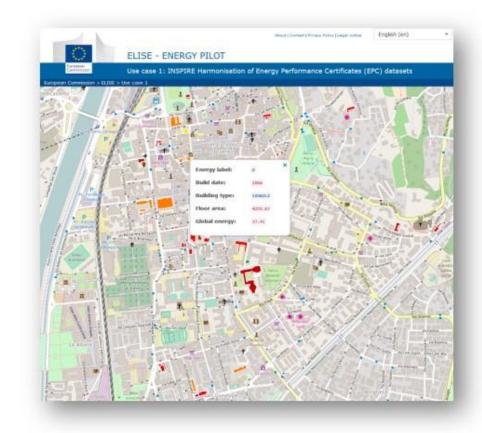








"EPC4EU" harmonisation of Energy **Performance Certificates** of Buildings









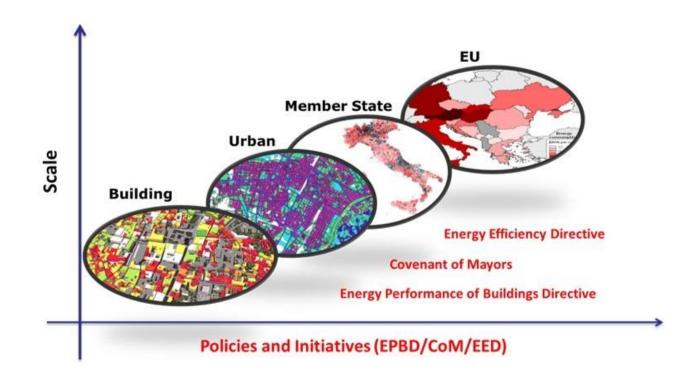




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"Bottom-up" approach, scaling-up data at building level to district, city, region level and beyond











Based on your experience, either working on similar use cases or on different ones, how the trend showed in the white board

GIS (Past) -> SDI (Present) -> data spaces and data ecosystems (Future)

is impacting the Energy Efficiency policies lifecycle in your city/region?











# Journey #2 Data Ecosystems













### Rennes Métropole, France

Pioneering the Open Data movement in France, since 2010

#### **Challenges**

- Provide high quality and efficient public services
- Guarantee public services principles: fair treatment, neutrality, continuity of service, protection of privacy, etc.

# DATA INTERFACE

455 000 inhabitants 43 municipalities **32 000** companies **69 000** students 335 Open Data sets 1000 citizens engaged to co-create RUDI along with the 12 partners involved





#### **Metropolitan Data Public Service, since 2016**

- Genuinely collaborative and partnership-based data strategy
- Quadruple Helix: Administrations, Private companies (start-ups and major groups), Associations, Researchers and Residents
- Identify and Map data of territorial interest and their producers (Public and Private sectors)
- Define the legal, technical and economic frameworks for data release and re-use data
- Identify and support projects re-using data
- Promote public debates on data related societal impacts and ethical issues

**Gartner** 

Deloitte.

#### **RUDI (Rennes Urban Data** Interface), 2019-2022

- IT infrastructure, supporting the implementation of a sustainable Local Data Ecosystem
- City as trusted third-party, to allow citizens to take back control over their personal data
- Give local companies the opportunity to improve the production of efficient, costeffective services, and respectful of public interest







# **Local / Regional Data Strategies** Evolution of the Paradigms

### **Data Provision** Logic



- "If you build it, they will come!"
- IT enthusiastic
- Open Data
- Cities apps

### **Problem Solving**



- PA specify the problem to solve + KPI
- PS offer solution

### **Data Ecosystem Thinking**

- Co-design and codelivery
- Sustainability
- Ecosystem Stimulation / Orchestration









**Gartner** 







# **Discussion**Local / Regional Data Strategies



- Where does you city / region stand?
- What are the challenges and opportunities?











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#### **Citizen Data**

How your city / region enables the collection and sharing of data on and from the citizens?











**Gartner** 



#### **Data of Public Interest**

How does your city / regions manage or intend to get data publicly available from its PPP?

Data generated by the utilities and transport sectors has tremendous re-use potential.











Gartner

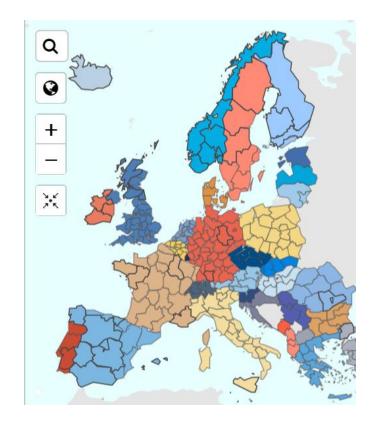


#### **Territorial Scales**

How does your city / region interact with other regional and national administrations for data creation/collection?

How to address the discrepancies between the need of the city / region (scale) and the data produced by other administrative bodies and companies, created at different granularity level?

Deloitte.











# Journey #3 Location Intelligence



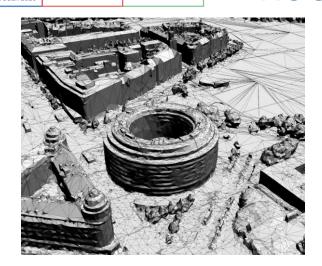


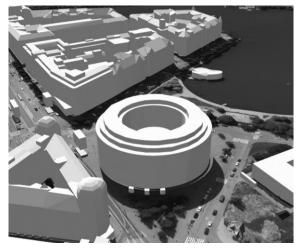






### **ELISE Location Intelligence Case Study** Helsinki digital twin







- Two 3D city models of Helsinki available: a semantic City Information Model (CityGML) and a visually high-quality Reality Mesh Model. The models are available as open data (covering the whole city area 500 km2). The use of models is licensed under CC BY 4.0
- The city information model allows users to perform a variety of analyses focusing on energy consumption, greenhouse gases or the environmental impacts of traffic, for example.
- The reality mesh model can be used in various online services or as the basis for all types of design projects, such as planning the exit routes and the locations of performance stages and sales stalls for city events.









### **ELISE Location Intelligence Case Study**

### Guimarães urban platform

- The Urban Platform provides cities with a holistic view of their urban environment which enables the management of the city and provides insight, informing local policy decisions.
- The platform allows the monitoring of various indicators (reducing environmental emissions, improving the energy and mobility efficiency, etc.) by displaying information of several domains in real-time in a customisable dashboard.













- > How might we ensure that LI and data ecosystems are key elements of solutions for citizens in your city/region?
- How might we tackle the main challenges for implementation in your city/region?
- > How might we adapt location based solutions to support energy efficiency policies in your city/region?
- How might we use common platforms to implement other policies?











# **Wrap-up Session Journey #1**

- Regarding the situation about data availability, most of the participants said they are still in the Past. However, they are confident that the jump from Past to Future is feasible.
- Accelerating the availability of open data, in particular of 3D city data models, could effectively support the transition.
- Public Authorities (and not other stakeholders) should guide the process of the transition toward the future, addressing at the same time several problems related to data governance (not only related to privacy).
- There are a lot of private data containing public value, whose exploitation should be encouraged.

Deloitte.

- Adopting appropriate data models can play a key role to achieve data interoperability, even though certain freedom to use heterogeneous data models should be left to different communities and, in such a case, proper mappings to achieve semantic interoperability should be made available. AI can play a key role in this respect.
- There is an evident need to fill-in existing skill gaps suffered by the end users of LI solutions, primarily sharing best practices showing tangible benefits.









# Wrap-up Session Journey #2

- European Cities/Regions are in varying levels of maturity as regards the progress towards a data ecosystem thinking and local data strategies.
  - While many appear to be in the data provision step, some are (already) experimenting the problem solving approach. Only few are taking advantage from the data ecosystem thinking.
  - While in theory the paradigm is represented in an incremental flow, going from data provision, to problem solving and finally data ecosystem thinking, in practice, Cities/Regions may start from the second step. Indeed, Problem Solving may fuel the need for Data Provision rather than the other way round.
  - It is not always clear for public data holders 'why' data should be made available, in view of which benefits/use cases hence the data is not provided at all.
  - Local/regional authorities awareness of data ecosystems should be addressed
- Taping in the potential public value from citizens private data and private data of public interest (e.g. from PPPs) requires inclusive governance of local/regional data ecosystems.
  - Collaborative approaches and dialogue between data holders and re-users is a crucial enabler to the creation of sustainable data ecosystems, with impactful benefits to the wider society and citizens.
  - Digital twins cited as solutions to improve the delivery of efficient, cost-effective services, and respectful of public interest. Data sandboxes could foster stakeholders engagement (including citizens).









# Wrap-up Session Journey #3

- Value of location intelligence needs to be clear for all involved stakeholders to ensure willingness to invest and ensure data sharing by all stakeholders
- Capacity and resources need to be available at local levels
- Data availability, quality and accuracy and combining dataset is key and a major challenge. Data is not available outside of the cities – data from homes and companies in suburbs should be tapped into.
- IoP among the various levels is key local, regional, national and across countries. Organisational interoperability relates to proper data governance, currently missing.
- Opportunities exist to implement these solutions:
- Digital twins are very useful for many use cases
- Reuse of existing models can help (e.g. City models from Helsinki)
- Starting from valuable use case is key a big bang approach such as creating a data lake has low uptake











#### **Conclusion**

- > Location Intelligence plays important role in local and regional structures
- ➤ Implementation should be based on lessons learnt at EU and national level considering the specifics of regional and local environments
- Accelerate the availability of reliable, quality open data from different sources (public, private, citizen)
- Sharing and reusing of existing models can help (e.g. energy efficiency, Rennes, Helsinki,...)
- ➤ Gaps, geographical and vertical (level of governance) in maturity of progress towards the data ecosystems paradigm should be minimised
- Collaboration among different stakeholders is crucial
- > Build the capacity of knowledge and resources on regional and local level











### **Survey**

Let us know what was your experience today... (www.menti.com Code: 74 39 96 8)









### **Stay Tuned**



Join the *ELISE* community in <u>JoinUp</u>



@eu location



eulocation@ec.europa.eu



**ELISE** playlist







