

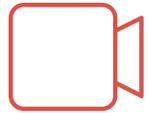
WEBINAR

data.
europa
academy 

Trends on geospatial data

- 27 October 2022
- 10.00 – 11.30 CET

Rules of the game



The webinar will be recorded



Please mute yourselves during the webinar

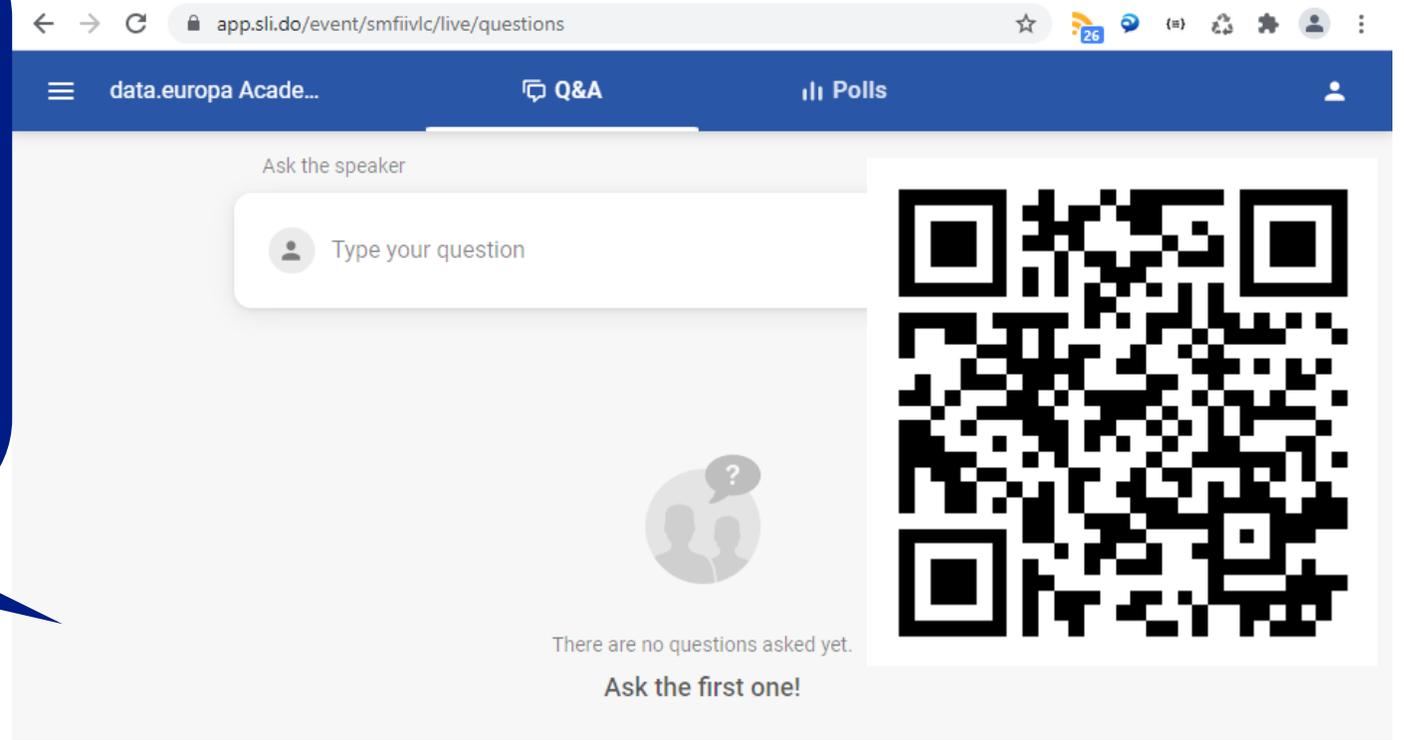
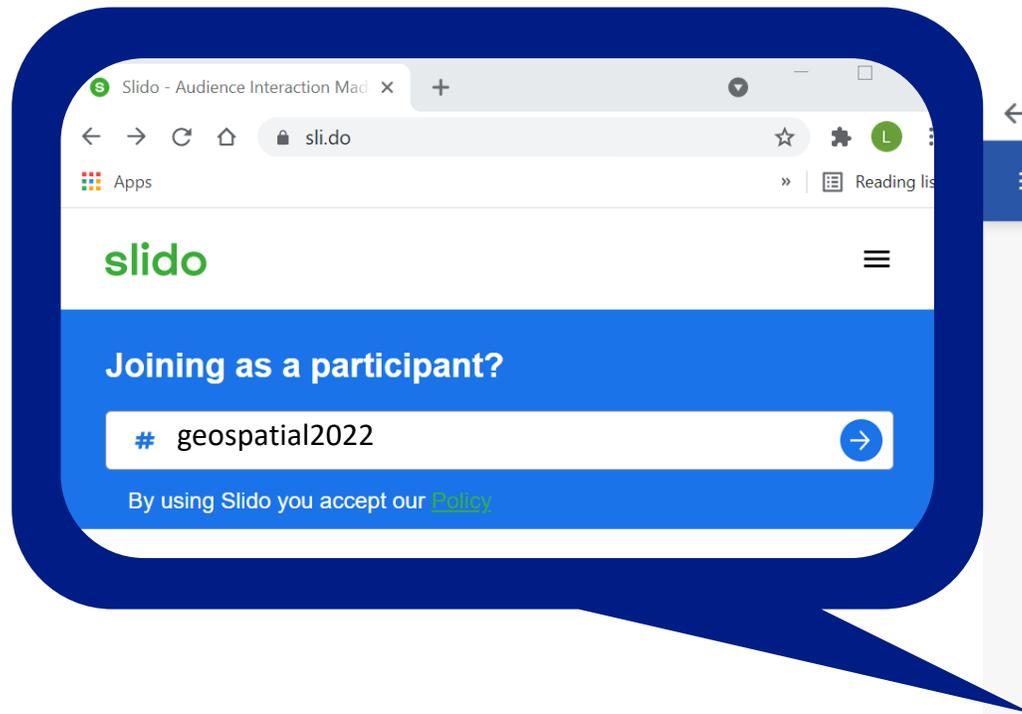


Please reserve 3 min after the webinar to help us improve by filling in our feedback form



For questions, please use [sli.do](#). Vote for the questions that are of most interest to you, those will be discussed later

Ask your questions in sli.do using the code *geospatial2022*



Introduction



Giulia Carsaniga
Research and
communication
consultant for
data.europa.eu



Antje Kügeler
con terra
Consultant
Spatial Data Infrastructures



Dr. Simon Jirka
52°North
Managing Director

Agenda

- Welcome, introduction, and the goal of the webinar
- **Warm-up:** Current trends regarding geospatial data
- Modernising INSPIRE... moving towards Open Data
- **Questions, comments**
- The role of geospatial information for Smart Cities
- **Discussion** of opportunities for data.europa.eu
- Next steps for writing the report, Closing

Goal of this Webinar

- Explain some current trends in the geospatial community
- Discuss:
 - What opportunities for data.europa.eu might arise from these trends?
 - How can data.europa.eu benefit from and support new ways of sharing geospatial data?

data.europa.eu

- data.europa.eu provides access to open data
- Single access point to open data in Europe
- Strategic objective is to improve accessibility of open data

The screenshot shows the top navigation bar of the data.europa.eu website. It includes a home icon, a 'Data' dropdown menu, a 'Studies' dropdown menu, the text 'data.europa academy', a 'News' dropdown menu, and a 'Contact' link. Below the navigation bar is a banner image featuring the European Union flag and the Ukrainian national flag, with the text 'EU Solidarity with Ukraine' centered below it. Underneath the banner are two links: '> DATASETS' and '> ARTICLES'. The main heading reads 'The official portal for European data'. Below this heading are three statistics: '175 Catalogues', '36 Countries', and '1 526 968 Datasets'. To the left is a 'Trending datasets' section with a list of five items, each with a small icon and a brief description. To the right is a 'Search datasets' section with a search input field, a search icon, and a grid of 12 category icons: Agriculture, Fisheries, Forestry & Foods; Economy & Finance; Education, Culture & Sport; Energy; Environment; Government & Public Sector; Health; International Issues; Justice, Legal System & Public Safety; Population & Society; Regions & Cities; Science & Technology; and Transport. At the bottom of the search section are three links: '> DATA CATALOGUES', '> ALL DATASETS', and '> EU INSTITUTIONS DATASETS'.

data.europa.eu

- Includes metadata from 175 catalogues
 - Open Data Portals and Geoportals
- from 36 countries
- Descriptions of more than 1.5 Mio. datasets

data.europa.eu

Home Data Studies data.europa academy News Contact

EU Solidarity with Ukraine

> DATASETS > ARTICLES

The official portal for European data

175 Catalogues 36 Countries 1 526 968 Datasets

Trending datasets

- Consolidated list of persons, groups and entities subject to EU financial sanctions
- Taxpayer Identification Number (TIN)
- BEEG processing statistics
- Cosmetic ingredient database (Cosing) - Ingredients and Fragrance inventory
- The European Commission's Oil Bulletin

Search datasets

Search datasets

Agriculture, Fisheries, Forestry & Foods

Economy & Finance Education, Culture & Sport Energy Environment Government & Public Sector Health

International Issues Justice, Legal System & Public Safety Population & Society Regions & Cities Science & Technology Transport

> DATA CATALOGUES > ALL DATASETS > EU INSTITUTIONS DATASETS

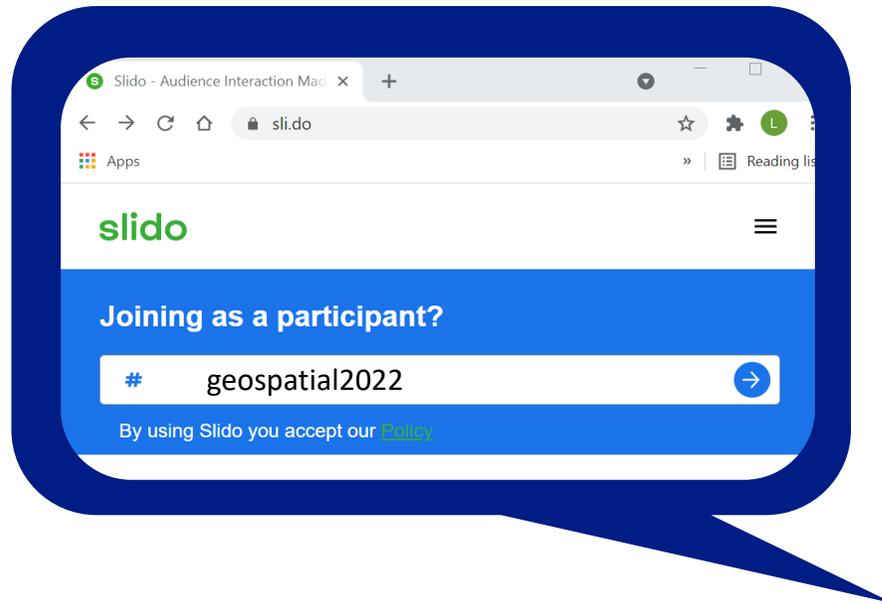
What's a trend?

A trend is a
*“general development or
change in a situation or in the
way that people are behaving”*

(quoted from Cambridge Dictionary
<https://dictionary.cambridge.org/dictionary/english/trend>)

Warm-up

What trends might affect the way we use geospatial data?



Trends in working with geospatial data

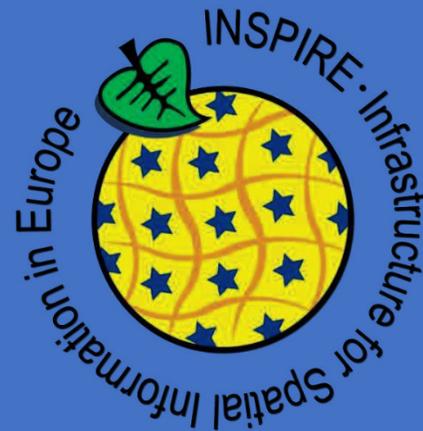
Trends to be discussed today:

1. Modernizing INSPIRE¹... moving towards Open Data²
2. The role of geospatial information for Smart Cities

¹INSPIRE Directive (2007/2/EC): <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32007L0002>

²Open Data Directive (2019/1024) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L1024>

2 ½ min. video on INSPIRE



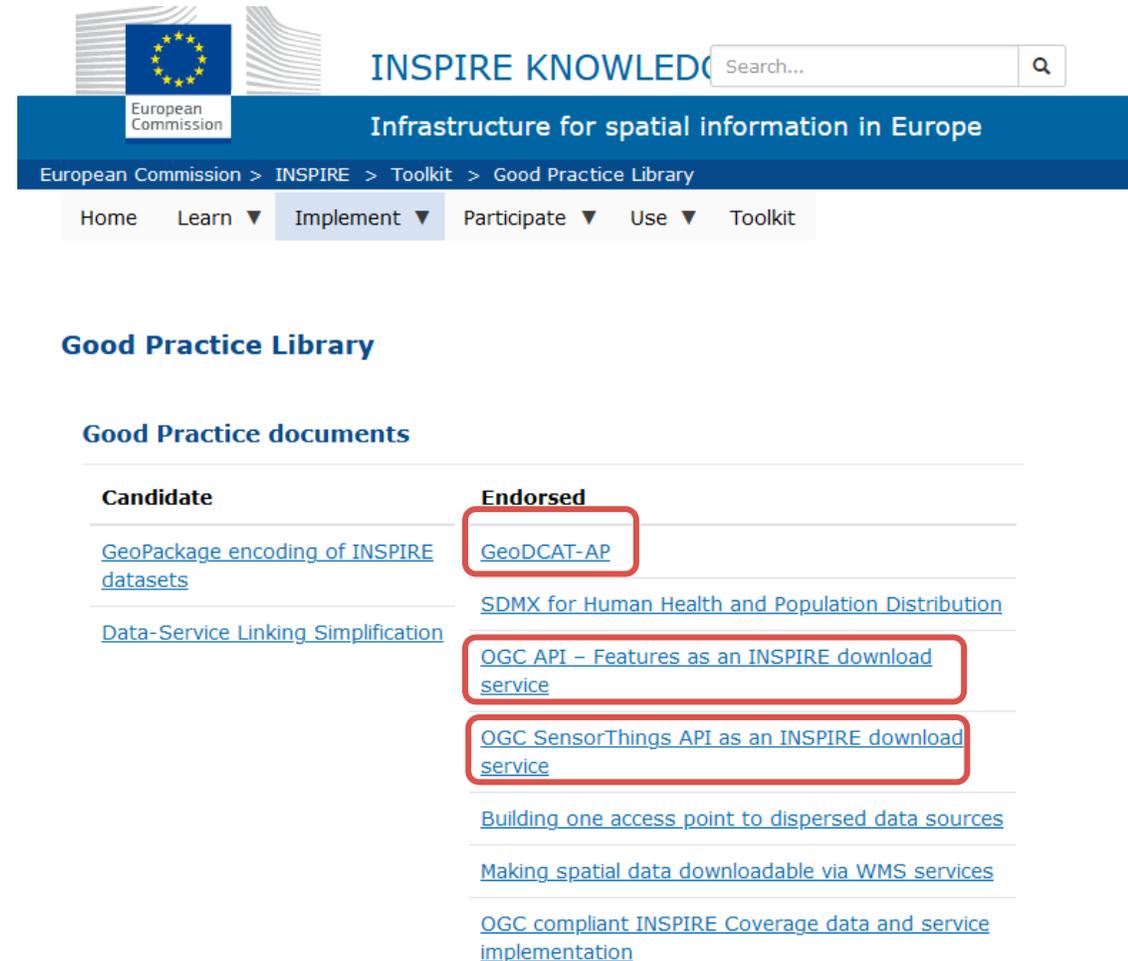
Modernizing INSPIRE

- The INSPIRE Directive came into force 2007
- Much has changed since then



Implementing INSPIRE

- 2007 to 2021: Roadmap for implementation of INSPIRE
 - Technical Guidance documents describing technical details
 - Good Practice documents



The screenshot shows the INSPIRE Knowledge Hub website. The header includes the European Commission logo and the text "INSPIRE KNOWLEDGE" with a search bar. Below the header is a navigation menu with options: Home, Learn, Implement (highlighted), Participate, Use, and Toolkit. The main content area is titled "Good Practice Library" and "Good Practice documents". It is divided into two columns: "Candidate" and "Endorsed". The "Endorsed" column contains several links, with three of them highlighted by red boxes: "GeoDCAT-AP", "OGC API – Features as an INSPIRE download service", and "OGC SensorThings API as an INSPIRE download service". Other links in the "Endorsed" column include "SDMX for Human Health and Population Distribution", "Building one access point to dispersed data sources", "Making spatial data downloadable via WMS services", and "OGC compliant INSPIRE Coverage data and service implementation".

INSPIRE Directive evaluation 2022*

- „INSPIRE has improved efficiency by creating a framework for distributing spatial data according to **FAIR (Findable, Accessible, Interoperable, Reusable)** principles.“
- “the INSPIRE Directive is still **very relevant** for addressing data sharing obstacles from the past and data needs for the future.”
- “the INSPIRE Directive’s **technical over-specification** renders the legal framework less fit for the future in the light of technological evolution”
- “the evaluation demonstrated **simplification potential** of the implementation in terms of addressing the too detailed interoperability requirements. ”
- “The INSPIRE Directive has been designed to be consistent with the EU legal framework on data sharing and dissemination and can support implementation of Public Access to Environmental Information Directive and the **Open Data Directive.**”

***“let’s leave the
geospatial bubble”***

collaboration

OGC API “Evolution”

OGC API Features

**Open Data Directive
High-value datasets**

**Application
Programming
Interfaces (API)**



Directive on
Open Data and
the re-use of
Public Sector
Information
(Recast 2019)

formerly
“PSI-Directive”

Open Data Directive

High-Value Datasets

via Application
Programming
Interfaces (APIs)

re-use

minimal
legal restrictions

bulk download

free of charge

machine-readable format

High Value Datasets

Thematic Categories

Geospatial

Earth observation and environment

Meteorological

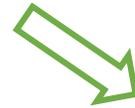
Statistics

Companies and company ownership

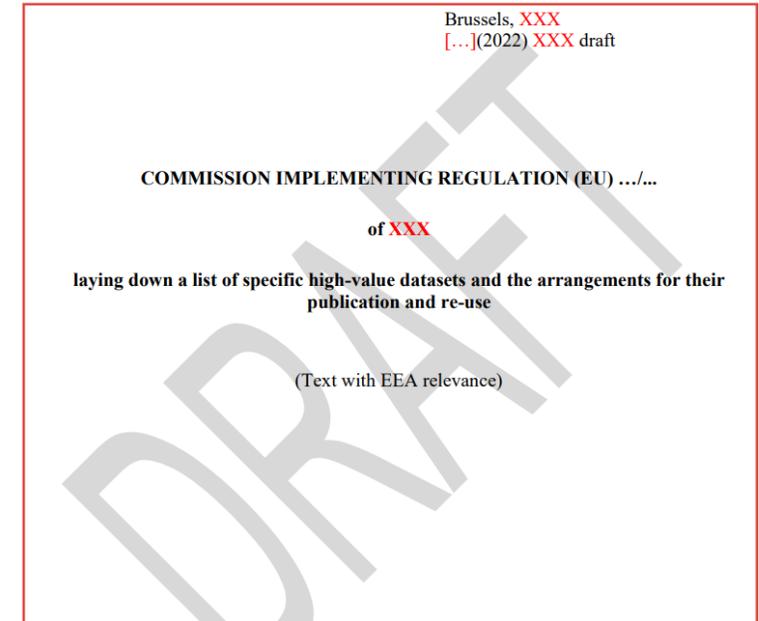
Mobility

Draft Implementing Regulation laying down a list of specific high-value datasets and the arrangements for their publication and re-use

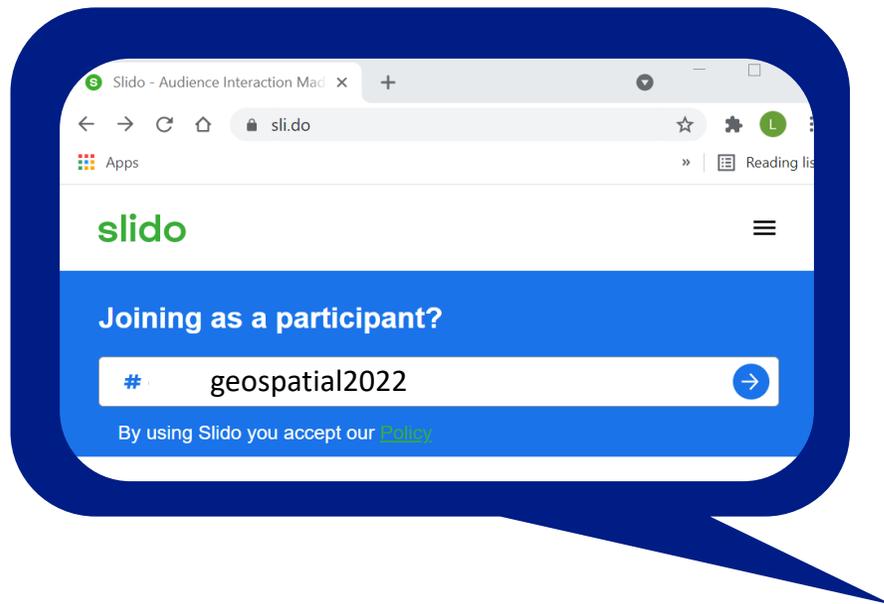
https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12111-Open-data-availability-of-public-datasets_en



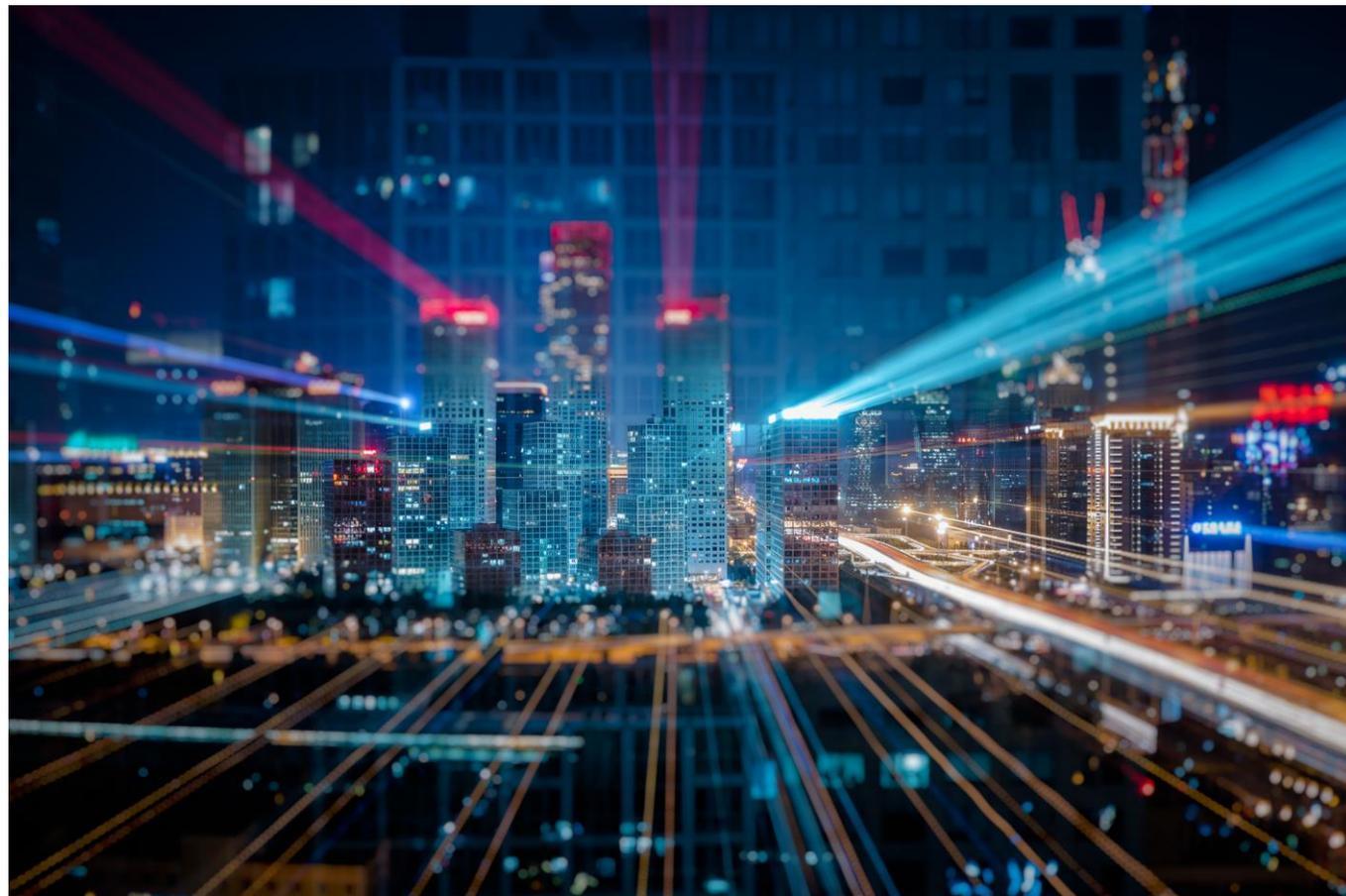
Draft
references
INSPIRE data
themes



Questions?



The role of geospatial information for Smart Cities



[Image by fanjianhua on Freepik](#)

What does "smart city" mean?

European Commission:

*"A smart city is a place where traditional networks and services are made more efficient with the **use of digital solutions** for the benefit of its inhabitants and business.*

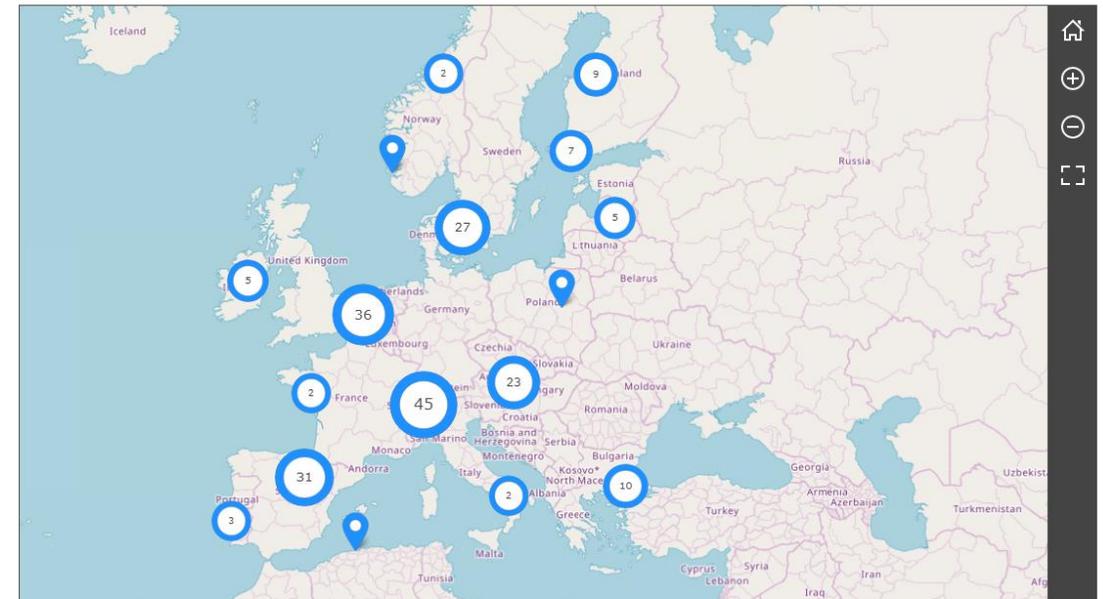
*A smart city **goes beyond the use of digital technologies** for better resource use and less emissions. It means **smarter** urban transport networks, upgraded water supply and waste disposal facilities and more efficient ways to light and heat buildings. It also means a more interactive and responsive city administration, safer public spaces and meeting the needs of an ageing population."*

https://ec.europa.eu/info/eu-regional-and-urban-development/topics/cities-and-urban-development/city-initiatives/smart-cities_en

Smart city initiatives and projects

- High strategic value
- Support on European, national, and regional levels
- Reaches beyond pure technical infrastructures

Smart city project sites



Webtools + Leaflet | © OpenStreetMap contributors © GISCO | Disclaimer

Source: <https://smart-cities-marketplace.ec.europa.eu/>

Smart cities and geospatial data

- Up to date data is an important foundation for building smart cities
- Geospatial references of data are essential
- Important types of data
 - Geospatial base data (e.g., background maps)
 - Traffic (car counts, person counts, traffic lights, parking spaces, bike sharing, ...)
 - Public transportation (real-time schedules, delays and disturbances, ...)
 - Environmental conditions
 - Lighting
 - Utility network data
 - 3D models



[Image by rawpixel.com](https://www.rawpixel.com) on Freepik

Smart city data on data.europa.eu

- data.europa.eu helps to discover different types of smart city related information
 - Background documents
 - Historical data
 - Base data (e.g., smart city infrastructure)
 - Real-time data

The screenshot displays the data.europa.eu website interface. The top navigation bar includes a home icon, 'Data', 'Studies', 'data.europa academy', 'News', and 'Contact'. The left sidebar contains a search filter for 'comune-firenze' with 8 results, a 'Data services' toggle set to 'No', and a 'Metadata Quality' filter with options: Excellent, Good+, Sufficient+, and Any. Below this is a 'Formats' table:

Format	Count
CSV	71
JSON	30
Esri Shape	13
ZIP	9
GML	8
PDF	5

The main content area shows three data entries:

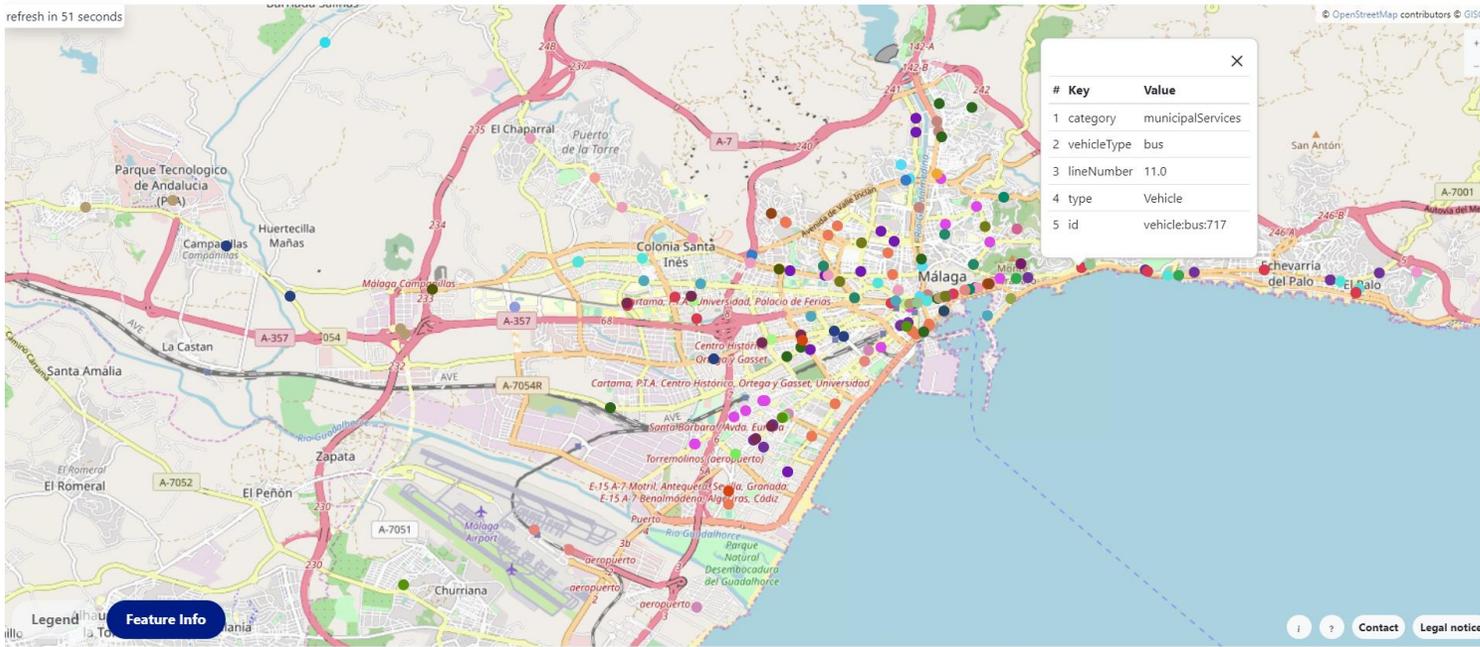
- Smart waste bins**: Description: 'Smart waste bins on the territory of the City of Brussels.' Updated: 10.12.2015 00:00. Format: CSV. Source: data.gov.be.
- List of sites equipped with urban wifi**: Description: 'The list of city sites or urban wifi is accessible free of charge. The file shall also indicate sites equipped with street access points and/or internal access points.' Updated: 28.07.2022 02:00. Created: 08.07.2019 02:00. Formats: JSON, CSV. Source: data.gov.be.
- Location of public transport online**: Description: 'In this set, you can view the public transport location in the online mode'. Updated: 28.07.2022 02:00. Created: 08.07.2019 02:00. Format: HTML. Source: data.gov.ua.
- Traffic and passenger traffic at Ernst-Reuter-Platz**: Description: 'Counting the advent of vehicles, people, mobile devices and car park occupancy at and'. Format: JSON.

Smart city data on data.europa.eu

data.europa.eu
The official portal for European data

Locations of public buses.

refresh in 51 seconds

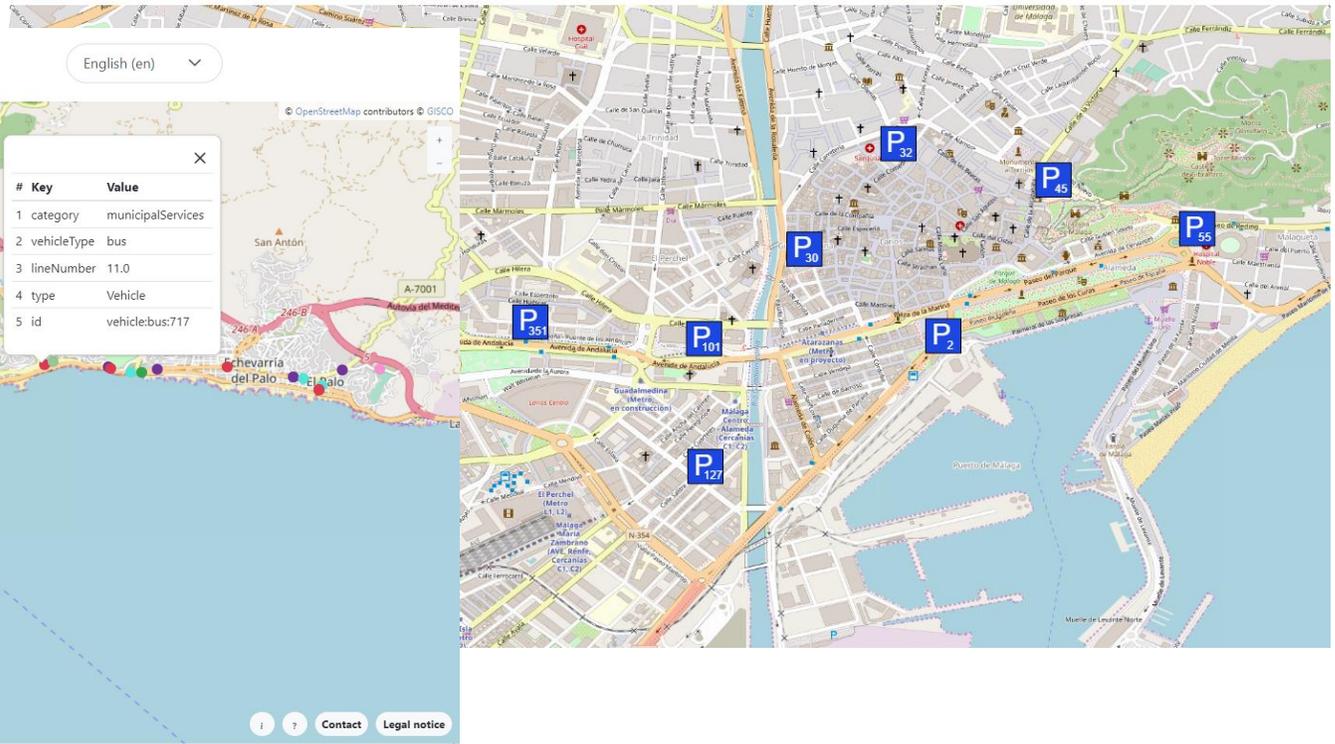


data.europa.eu

The official portal for European data

Occupation of parking spaces.

English (en) ▾



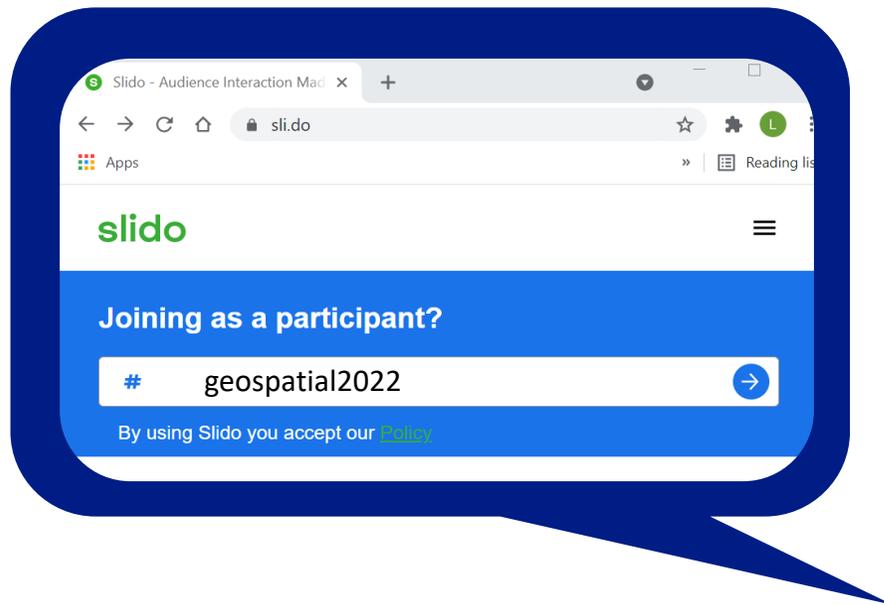
Which opportunities do smart cities offer for data.europa.eu?

- Smart city initiatives and projects strengthen the collection of data
 - Real-time information
 - Infrastructure data
 - (Citizen science activities)
- Smart city portals as additional catalogues for data resources

Which challenges need to be addressed?

- Identify relevant types of data sources
 - Standards
 - Interfaces
- Encourage the provision of metadata
- Enable new approaches for data preview

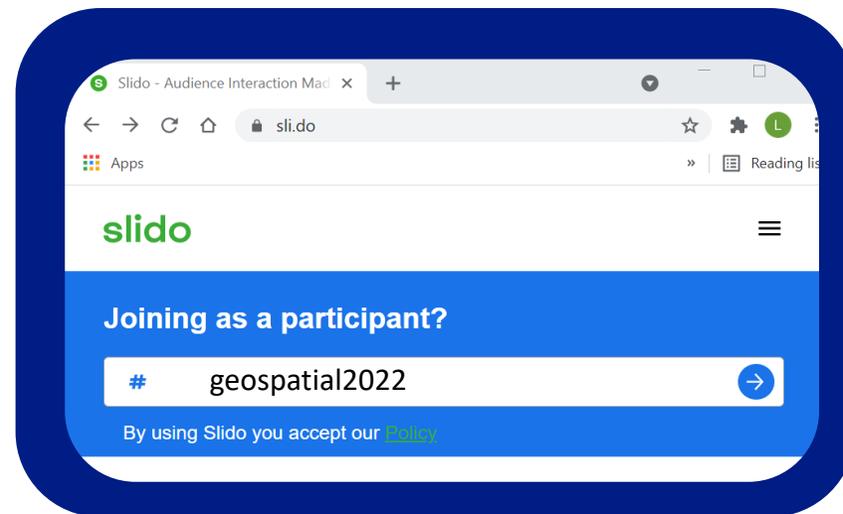
Questions?



Discussion

Interactive with sli.do

- What opportunities for data.europa.eu might arise from these trends?
- How can data.europa.eu benefit from and support new ways of sharing geospatial data?



Next steps

- Short report to be published
Link to last year's report:
https://data.europa.eu/sites/default/files/course/Geospatial_Trends_2021.pdf
- Findings will provide input to further development of data.europa.eu

Thank you!

Geospatial Trends 2021:

Opportunities for data.europa.eu from
Emerging Trends in the Geospatial Community

data.europa.eu
The official portal for European data

Please provide
your feedback!



Don't miss our next webinars!

3rd webinar for data providers on legal openness

Registration open

WEBINAR FOR DATA PROVIDERS

data.europa academy

Understanding open data: legal openness

18 November 2022
10.00-11.30 CET

QR code

The poster features a dark blue background with a red 'data.europa academy' logo on the left. A white banner at the top reads 'WEBINAR FOR DATA PROVIDERS'. The main title 'Understanding open data: legal openness' is in white. Below it, the date and time are listed. A QR code is positioned on the right side.

Training course on Geospatial Harvesting (29/11)

Registration opening soon

WEBINAR

data.europa academy

Geospatial harvesting for data.europa academy

29 November 2022
10.00 – 11.30 CET

The poster features a dark blue background with a red 'data.europa academy' logo on the left. A white banner at the top reads 'WEBINAR'. The main title 'Geospatial harvesting for data.europa academy' is in white. Below it, the date and time are listed. The poster includes decorative yellow and blue corner elements.

Stay updated!

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