EU Digital Strategy overview: JRC’s scientific support to policies

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European Commission – the Joint Research Centre

- The European Commission science and knowledge service for over 60 years
- Mission to support EU policies with independent evidence throughout the whole policy cycle, working 30 EC policy departments
- Located across 5 countries, the JRC hosts specialist research facilities and is home to thousands of scientists working to support EU policy
Push for new commitments
European Commission priorities 2019-2024

The twin green & digital transition is at the top of the policy agenda.

A European Green Deal
Europe aims to be the first climate-neutral continent by becoming a modern, resource-efficient economy.

A stronger Europe in the world
The EU will strengthen its voice in the world by championing multilateralism and a rules-based global order.

A Europe fit for the digital age
The EU’s digital strategy will empower people with a new generation of technologies.

Promoting our European way of life
Europe must protect the rule of law if it is to stand up for justice and the EU’s core values.

An economy that works for people
The EU must create a more attractive investment environment, and growth that creates quality jobs, especially for young people and small businesses.

A new push for European democracy
We need to give Europeans a bigger say and protect our democracy from external interference such as disinformation and online hate messages.

EU Digital Strategy: building blocks

- Monitoring and shaping the Digital Transition
- Focus on techno-socio-economic impacts of the Digital Transition
European strategy for data

Aims to create a European single market for data

Highlights the problems to address

- data availability, interoperability, quality
- governance & infrastructures
- skills & data literacy
- cybersecurity

- Envisages establishing
  - common European sectoral data spaces

Implementing Act on high-value datasets

High-value datasets (HVD)

datasets the re-use of which is associated with important socio-economic benefits

To be made available

for free, under open access licenses (CC BY 4.0 or less restrictive)
in machine-readable formats, via APIs and (when relevant) as a bulk download

Thematic categories of HVD

- Geospatial
- Earth observation and environment
- Meteorological
- Statistics
- Companies and company ownership
- Mobility

The Implementing Act defines

the list of high-value datasets for each thematic category
the requirements for their provision: key attributes, granularity, formats, license, etc.
Proposal to adopt an Artificial Intelligence Act

- **Unacceptable risk**
e.g. social scoring
- **Prohibited**
- **High risk**
e.g. recruitment, medical devices
- **Permitted subject to compliance with AI requirements and ex-ante conformity assessment**
- **AI with specific transparency obligations**
  - ‘Impersonation’ (bots)
- **Permitted but subject to information/transparency obligations**
- **Minimal or no risk**
- **Permitted with no restrictions**

Proposal to adopt an Interoperable Europe Act

**EU's digital strategy**
- Digital Decade: Key public services 100% online by 2030
- Cross-border interoperability as an enabler

**Gaps in existing legislation**
- Inefficient governance of interoperability efforts between EU policies, the Commission and Member States for all administrative levels and sectors.
- Lack of common minimum interoperability specifications, shared solutions, standards.
- Lack of an 'interoperability-by-default' approach in the design and implementation of EU and MS's legislation and policies.
Digital Decade Programme targets by 2030

The success of the Digital Decade will be critical for the EU’s future prosperity. Achieving the EU’s Digital Decade agenda could unlock over EUR 2.8 trillion in economic value that is equivalent to 21% of the EU’s current economy.


Member States to address investment gaps, to accelerate digital transformation in Europe.

Collaboration envisaged between the EC and MS on how to achieve our common goals, i.e. through the implementation of large-scale multi-country projects, for example, the newly introduced European Digital Infrastructure Consortia (EDiCs).
European Union Location Framework (EULF) Blueprint

A European ‘location interoperability framework’ with guidance for the exchange and use of location information in government policy and digital public services, building on the implementation of INSPIRE, and allied closely to the interoperability principles of the EIF.

5 Focus Areas
19 Recommendations
6 Roles
2 Related Frameworks
92 Best Practices
15 Benefits Illustrations

Online and downloadable versions

Adoption monitored through the LIFO

European Union Location Framework (EULF) Blueprint | Joinup
EULF Blueprint and the UN-GGIM Integrated Geospatial Information Framework (IGIF)

Presented at the Geospatial World Forum 2022 Geospatial Knowledge Infrastructure (GKI) Training programme

- EULF Blueprint contains detailed two-way cross references between EULF Blueprint recommendations and IGIF strategic pathways, key elements, actions and tools
- Enables users to access resources from both frameworks in defining their strategies, implementation actions, guidance and monitoring
- Start your exploration here: https://joinup.ec.europa.eu/node/704325

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EU Digital policies: impact on the Geospatial domain

Digital policies are transversal across sectors and across thematic domain, including vertical applications (e.g. for the data spaces, such as agriculture, green, health, tourism, mobility...).

Geospatial data and technologies are also transversal, i.e. all these policies also relate to the geospatial community independent if they deal with space, environment, utilities, urban planning, etc.

Equally geospatial solutions can help implementing these policies, and they create a market beyond sectorial applications - especially for sharing, integrating and processing data from multiple sources, which has always been a strength of the geospatial industry.

As these policies create a common framework and governance structure across different sectors, it might be easier to scale-out from nice applications and address a larger pan-European market.

Many of the recent digital policies (i.e. Data Governance Act, AI Act, Interoperable Europe Act) target include governance processes, such as the creation of boards and communities. It will be important for the geospatial community to be aware of these developments and to contribute.
EU Digital policies: benefit for the Geospatial community

The benefits for the geospatial community are twofold.

First, even if there is no ‘geospatial’ dataspace, location is increasingly important as it would allow to integrate the different citizen, business and public data. The policy and legal framework allows to morph the geospatial data with completely new sources such as IoT and personal data.

Second, the improved access to data would allow geospatial businesses to develop new innovative products that are aligned with the EU legal frameworks and values. This would enhance AI applications adoption and implementation in the Geospatial Sector and companies across industry segments such as Construction and Engineering, Earth Observation, Location Analytics and Business intelligence or Smart Cities, just to mention a few, leading to improve growth, productivity, efficiency and innovation.
Next: a Geospatial strategy for data spaces

- There is **no geospatial data space foreseen** in the **European Strategy for data**

- Nonetheless, the **geospatial dimension remains of fundamental importance** due to the possibility to integrate data from different sources (private, public, satellite, citizen) through their location

- In addition, **spatial analysis and visualisation** provide huge opportunities for extracting value from data made available in a data space and the **creation of new products** such as **digital twins** and **virtual worlds**

- For those reasons, a **geospatial strategy for data spaces can be conceptualised** that would cater for the **integration of data within and across domain-specific data spaces**.
JRC knowledge base
Extensive research on data strategy and technology
Thank you

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