

European Union Location Framework Blueprint

Location interoperability in support of the EU data strategy



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European Commission - 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
- Located across 5 countries, the JRC hosts specialist research facilities and is home to thousands of scientists working to support EU policy



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**



Online and downloadable versions

[European Union Location Framework \(EULF\) Blueprint | Joinup](#)

5 FOCUS AREAS

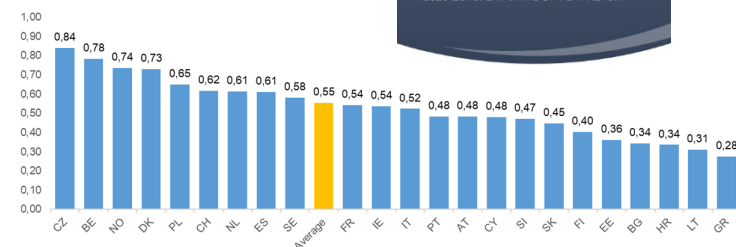
19 RECOMMENDATIONS

6 ROLES

2 RELATED FRAMEWORKS

92 BEST PRACTICES

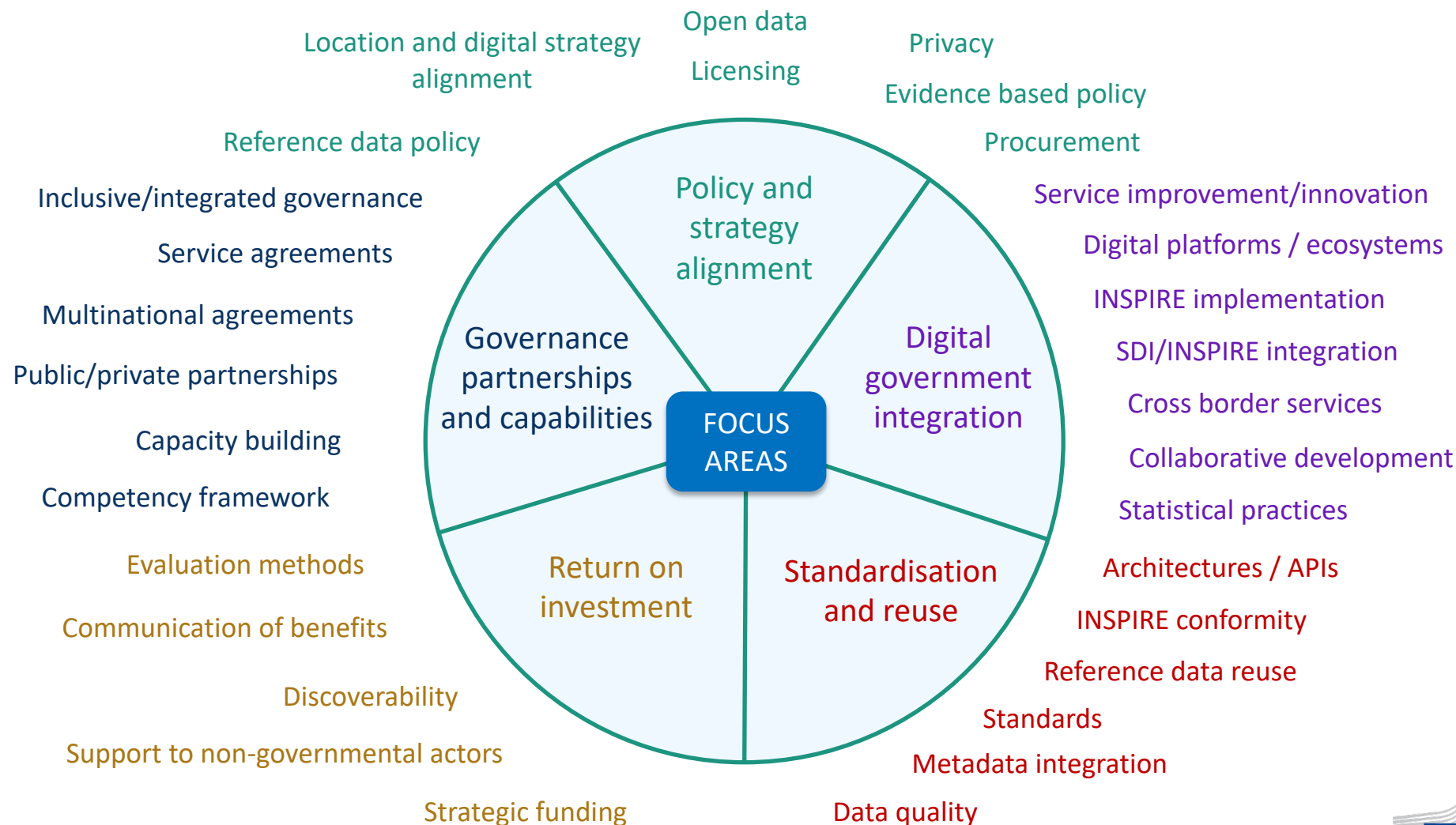
15 BENEFITS ILLUSTRATIONS



Adoption monitored through the LIFO

[Location Interoperability Framework Observatory \(LIFO\) | Joinup](#)

EULF Blueprint topics



EULF Blueprint and UN-GGIM IGIF

Presented at the GWF2022 GKI Training programme

- EULF Blueprint contains detailed two-way cross references between EULF Blueprint recommendations and IGIF strategic pathways, key elements, actions and tools
- Updated in EULF Blueprint v5.2 to 2022 versions of IGIF Implementation Guides
- 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>

		UN-GGIM IGIF STRATEGIC PATHWAYS								
		Governance and Institutions	Policy and Legal	Financial	Data	Innovation	Standards	Partnerships	Capacity and Education	Communication and Engagement
EULF BLUEPRINT RECOMMENDATION TOPICS	Policy and Strategy Alignment	1. Digital policy alignment	X	X		X				
		2. Data policy alignment		X						
		3. Location data privacy		X						
		4. Location data for policy evidence			X	X				
		5. Standards based procurement			X		X			
	Digital Government Integration	6. Location enabled digital public services				X				
		7. SDI integration	X	X	X	X				
		8. Open and collaborative development						X		X
		9. Location-based statistics			X	X				
	Standardisation and Reuse	10. Common architecture			X	X				
		11. Authentic data reuse			X	X				
		12. Use of standards					X			
		13. Location data quality			X					
	Return on Investment	14. Assessing and monitoring benefits	X	X	X					X
		15. Communicating benefits	X	X	X					X
		16. Innovation through access to data		X		X				
	Governance, Partnerships and Capabilities	17. Integrated governance	X							
		18. Effective partnerships						X		
		19. Communication and skills			X				X	X

EULF Blueprint and GKI Integrated Policy Framework

- In the GWF2022 GKI Training programme, we presented a detailed analysis of the links between the GKI recommendations for the various Integrated Policy Framework initiatives and the corresponding EULF Blueprint recommendations (summarised opposite)
- We also highlighted challenges we saw for each GKI recommendation and examples of best practices we have collected that address these challenges
- The presentation can be found [here](#)

			GKI INITIATIVES: INTEGRATED POLICY FRAMEWORK							
			Integrated Digital Governance	Core Geospatial Policies	Global Policy Alignment	Open Data	Security	Knowledge Legislation	Government Research, development and Innovation	Digital Education
EULF BLUEPRINT RECOMMENDATION TOPICS	Policy and Strategy Alignment	1. Digital policy alignment	X	X	X	X	X	X	X	
		2. Data policy alignment	X	X	X	X	X	X		
		3. Location data privacy					X	X		
		4. Location data for policy evidence		X	X			X		
		5. Standards based procurement	X	X						
	Digital Government Integration	6. Location enabled digital public services	X	X	X	X		X	X	
		7. SDI integration	X	X	X	X		X		
		8. Open and collaborative development		X			X	X		
		9. Location-based statistics		X	X					
	Standardisation and Reuse	10. Common architecture		X	X		X			
		11. Authentic data reuse		X	X					
		12. Use of standards		X	X					
		13. Location data quality		X						
	Return on Investment	14. Assessing and monitoring benefits		X		X		X		
		15. Communicating benefits		X		X				
		16. Innovation through access to data	X	X	X	X			X	
	Governance, Partnerships and Capabilities	17. Integrated governance	X					X	X	
		18. Effective partnerships	X		X				X	
		19. Communication and skills								X

EULF Blueprint relevant to all GKI Elements

- The EULF Blueprint contains guidance relevant to the initiatives and recommendations associated with all GKI elements (table opposite summarises the links).
- Although developed from a European perspective, much of the EULF Blueprint guidance is applicable generally in all parts of the world. In fact, some of the best practices in the EULF Blueprint come from outside Europe or have a global context.
- GKI users can access the relevant EULF Blueprint guidance when reviewing how to implement particular GKI initiatives or recommendations – supplementing the resources available in both the GKI and the UN-GGIM IGIF.

			GKI ELEMENTS					
			Integrated Policy Framework	Foundation Data	Partnerships and Collaboration	Industry Leadership	Applications, Analytics and Modelling	Geospatial Dimension to the Digital Infrastructure
EULF BLUEPRINT RECOMMENDATION TOPICS	Policy and Strategy Alignment	1. Digital policy alignment	X		X			X
		2. Data policy alignment	X	X		X		
		3. Location data privacy	X				X	
		4. Location data for policy evidence	X	X			X	
		5. Standards based procurement	X		X			X
	Digital Government Integration	6. Location enabled digital public services	X	X	X	X	X	X
		7. SDI integration	X	X	X	X	X	X
		8. Open and collaborative development	X		X	X	X	
		9. Location-based statistics	X	X			X	
	Standardisation and Reuse	10. Common architecture	X	X		X		X
		11. Authentic data reuse	X	X		X	X	X
		12. Use of standards	X	X				X
		13. Location data quality	X	X			X	
	Return on Investment	14. Assessing and monitoring benefits	X	X			X	
		15. Communicating benefits	X	X			X	
		16. Innovation through access to data	X	X	X	X	X	X
	Governance, Partnerships and Capabilities	17. Integrated governance	X	X	X	X	X	
		18. Effective partnerships	X		X	X	X	
		19. Communication and skills	X	X				X

EULF Blueprint and EIF

- Detailed two-way cross references in [EULF Blueprint](#) and [EIF Toolbox](#) solutions on Joinup
- Enables users to access resources from both frameworks

Blueprint and EIF

Two-way cross references in [EULF](#) and [EIF Toolbox](#) solutions on Joinup

Links to access resources from both

			EIF UNDERLYING PRINCIPLES										EIF INTEROPERABILITY LAYERS					EIF CONCEPTUAL MODEL									
			Subsidiary and proportionality	Openness	Transparency	Reusability	Technological neutrality and data portability	User centricty	Inclusion and accessibility	Security and privacy	Multilingualism	Administrative Simplification	Preservation of information	Assessment of effectiveness and efficiency	Interoperability governance	Integtrated public service governance	Legal interoperability	Organisational interoperability	Semantic interoperability	Technical interoperability	Conceptual model	Internal information sources and services	Base registries	Open data	Catalogues	External information sources and services	Security and privacy
EULF BLUEPRINT RECOMMENDATION TOPICS	Policy and Strategy Alignment	1. Digital policy alignment												X		X		X									
		2. Data policy alignment		X	X										X									X			
		3. Location data privacy			X				X														X				X
		4. Location data for policy evidence																	X				X				
		5. Standards based procurement					X								X												
	Digital Government Integration	6. Location enabled digital public services						X				X						X									
		7. SDI integration					X								X				X						X		
		8. Open and collaborative development				X		X																		X	
		9. Location-based statistics						X															X				
	Standardisation and Reuse	10. Common architecture					X													X	X	X					
		11. Authentic data reuse				X		X														X			X		
		12. Use of standards		X			X								X			X	X	X			X				
		13. Location data quality									X								X					X	X		
	Return on Investment	14. Assessing and monitoring benefits											X														
		15. Communicating benefits											X														
		16. Innovation through access to data		X				X															X	X			
	Governance, Partnerships and Capabilities	17. Integrated governance						X						X	X												
		18. Effective partnerships						X							X			X	X								
		19. Communication and skills			X																						

Some cross-border interoperability challenges



Car driver wants to get a digital parking ticket in a city outside the country his car is registered in.

But: The parking app only accepts national license plates.

A hospital wants to share the capacities of free intensive care beds with the nearest hospital that is on the other side of the border.

But: The current legal and technical framework just allows sharing



A city wants to implement traffic management solutions. They are looking for a good example.

While such good examples exist across Europe, they are difficult to find and reuse.

Why a legislative interoperability package?



EU's digital strategy

- Digital Decade: Key public services 100% online by 2030
- Cross-border interoperability as an enabler



Gaps in existing legislation



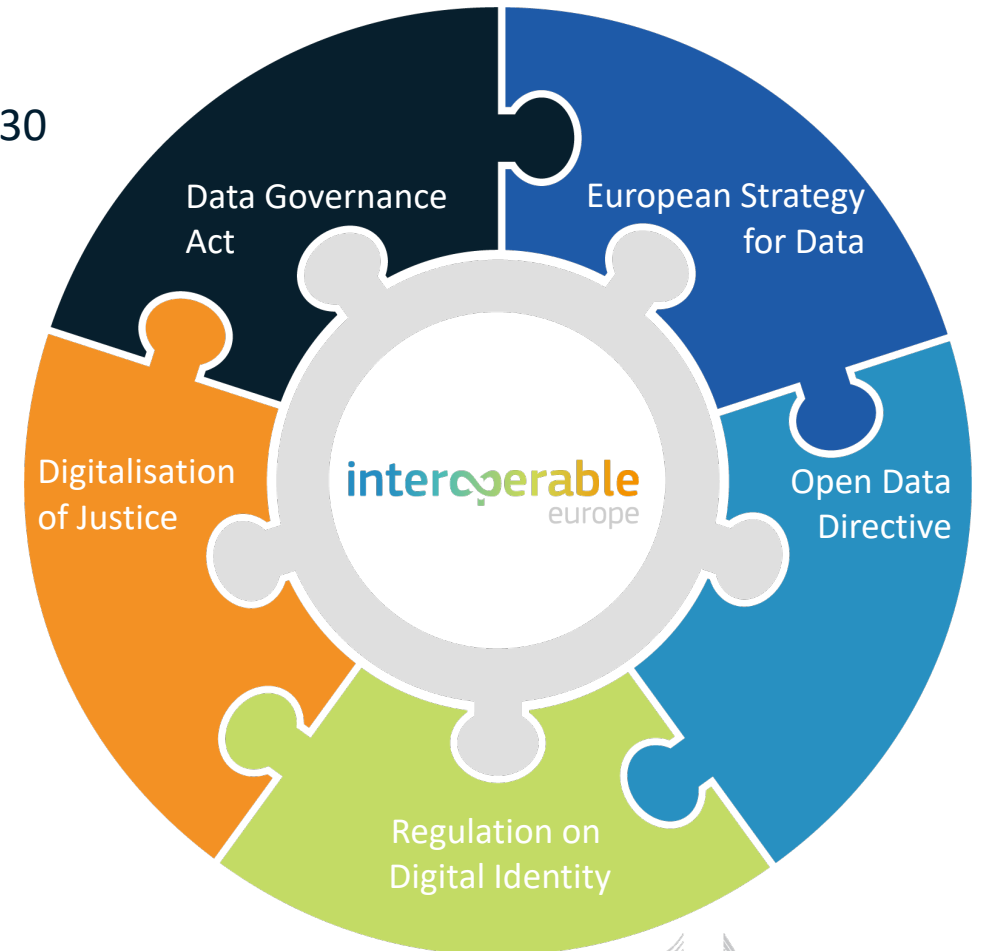
Inefficient governance of interoperability efforts between EU policies, the Commission and Member States for all administrative levels and sectors.



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.



Interoperable Europe Act - Ambition and objectives

Help EU and Member States administrations to deliver connected digital services to citizens and businesses across Europe



To ensure a consistent, human-centric EU approach to interoperability from policy-making to policy implementation



To establish an interoperability governance structure to enable public administrations to work together and agree on shared interoperability solutions



To create an ecosystem of interoperability solutions for the EU's public sector so that public administrations in the EU and other stakeholders can contribute to and re-use such solutions, innovate together and create public value

Communication
to set the context
and next steps

Supports the
achievement of the
Digital Decade 2030
targets

Main deliverables of the Interoperability regulation



- Mandatory **interoperability assessment**: Impacts on cross-border interoperability of the legal, organisational, semantic and technical requirements for the IT system in scope (Art 3)
- Keeping '**European Interoperability Framework**' (EIF) up-to-date and strengthening alignment (Art 6)
- Common '**Interoperable Europe**' label for openly accessible & reusable solutions (Art 7), published in the **Interoperable Europe Portal** (Art 8)
- Mandatory **sharing and reuse** of publicly developed solutions (Art 4)
- **Innovation measures**, such as GovTech (Art 10) and regulatory sandboxes (Art 11-12)
- **Policy implementation support** projects (Art 9.), incl. trainings (Art 13) and peer reviews (Art 14)
- **Interoperable Europe Agenda** - annual strategic planning (Art 19)
- **Monitoring** - implementation of EIF, take-up of IOP solutions and development of OS solutions (Art 20)

[Join the Interoperable Europe Community!](#)

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

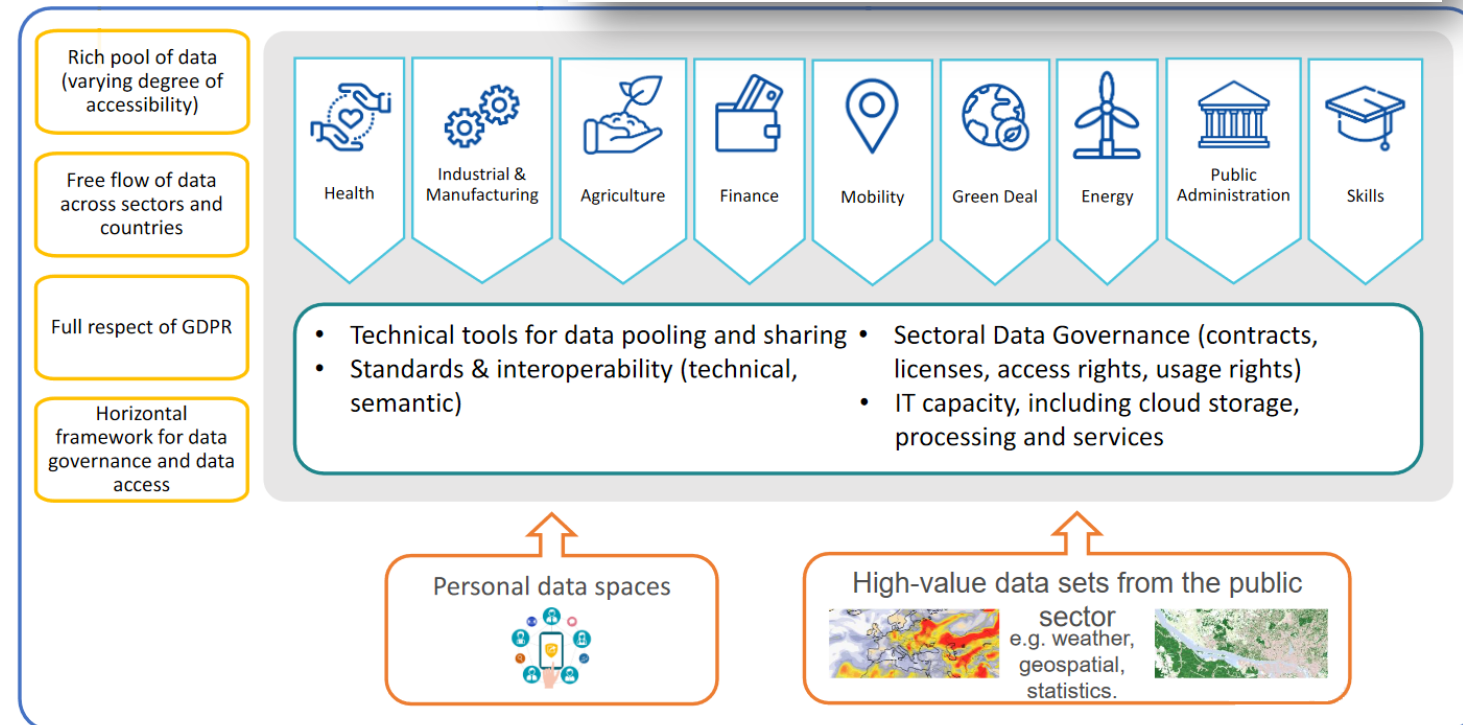
<https://digital-strategy.ec.europa.eu/en/policies/strategy-data>



Brussels, 19.2.2020
COM(2020) 66 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS

A European strategy for data



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



- 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.

JRC knowledge base

- Extensive research on (location) data and technology



Thank you!



EU Science Hub – Joint Research Centre



EU Science, Research and Innovation
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@EULocation



EU Location Interoperability & Innovation



<https://joinup.ec.europa.eu/collection/interoperable-europe/interoperable-europe>



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