

Shelter

Data and Knowledge extracted: operationalising data for improved heritage management





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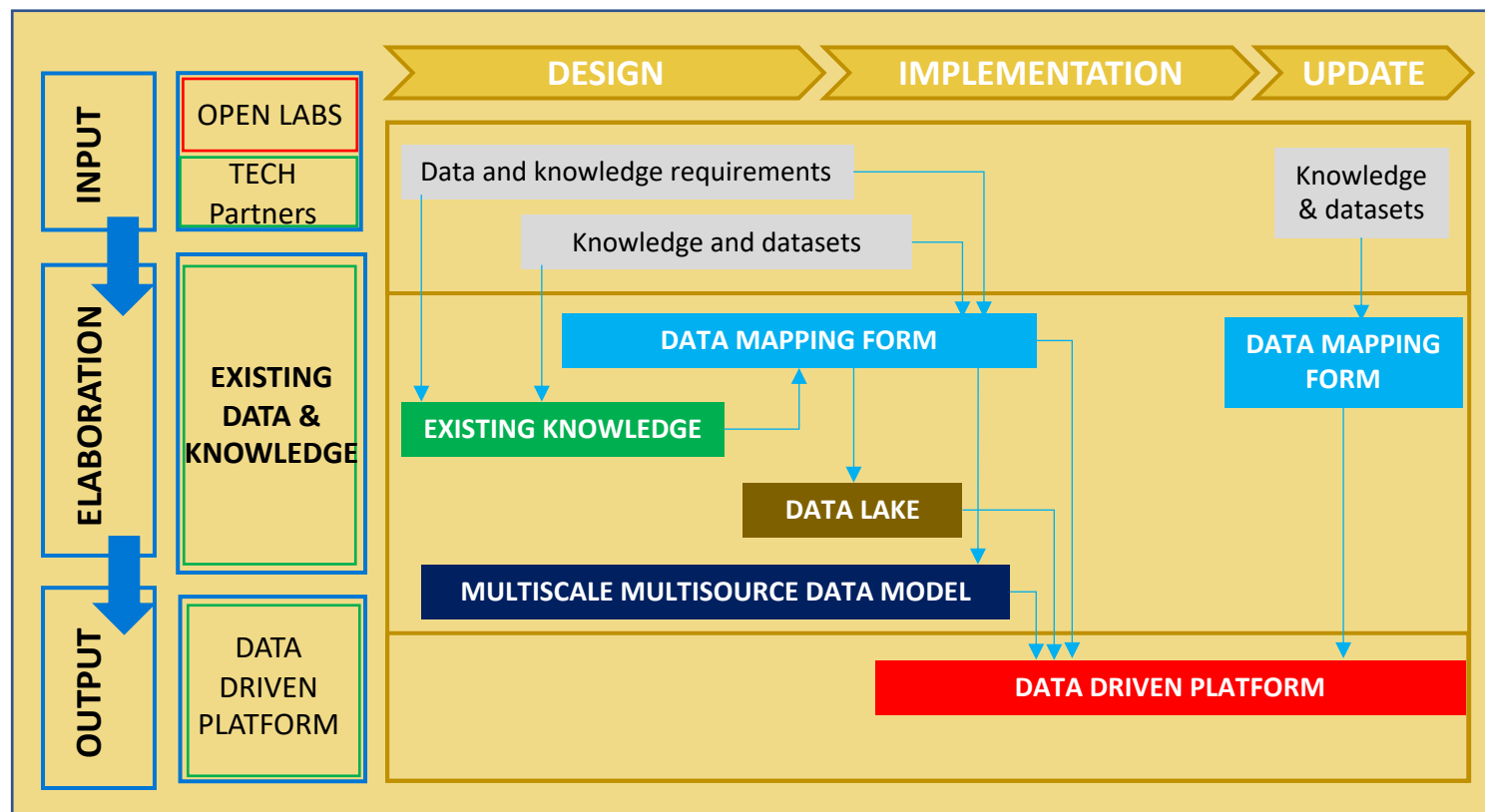
Shelter

Main objective



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 821282

Overview



Objectives

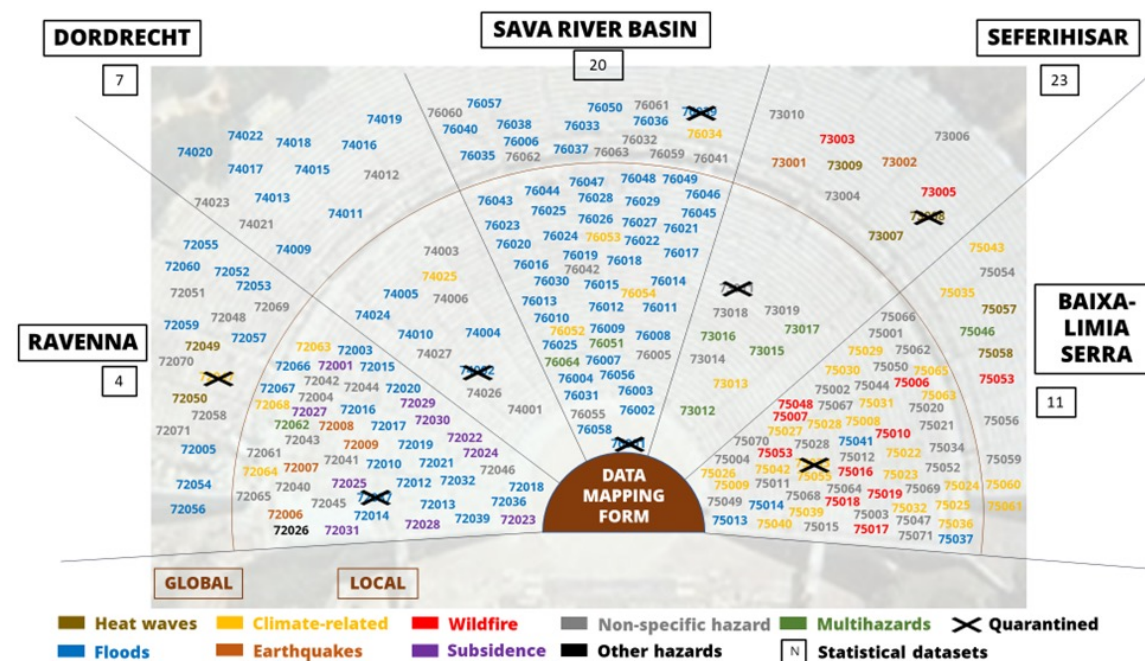
- **Requirements specification** for the data driven platform design and implementation
- Identification of **standards, interoperability** features, data **protocols**, security, timing and other constraints of the data sources
- Codification of existing knowledge by adapting existing **ontologies**, building of a lesson learned and next **practices observatory**
- Design and implementation of a **data lake** and a multisource, multiscale, regional and urban **data model**



Highlights

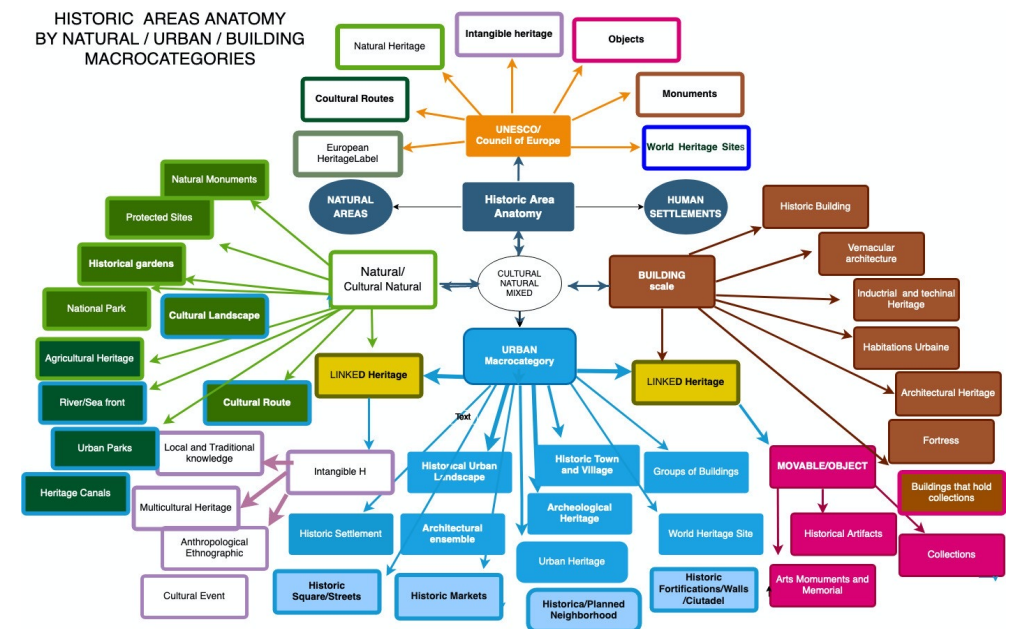
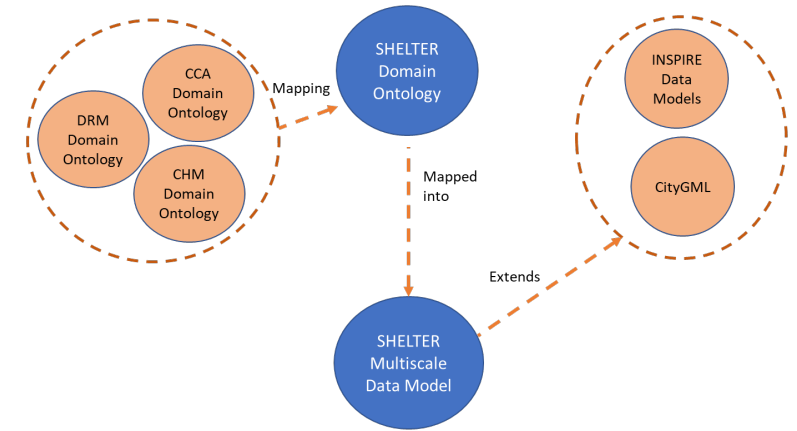
Data collection & standardization

- Codification of existing knowledge: data collection, filtering and analysis
- Development of a common understanding through the SHELTER ontology
- Common reference regulatory framework
- Collection of practices and tools for defining replication conditions



Knowledge operationalization

- Requirements specification for the Data Driven Platform
- Definition of the **data management infrastructure** through the Data Lake
- **Multiscale Multisource Data Model** design for geospatial and semantic data storage



Key challenges



Challenges

- **Data/Indicators** matching
- Data collection at **local level**
- **Metadata** structuring
- Data mapping to the Disaster Risk Management phases



Main outputs

Data Sources & Knowledge

- **Methodology** to collect, filter and analyze the data
- Structured list of datasets and knowledge sources
(Data Mapping Form)
- Mock-up for Cultural Heritage attributes
- SHELTER Wiki page and icons

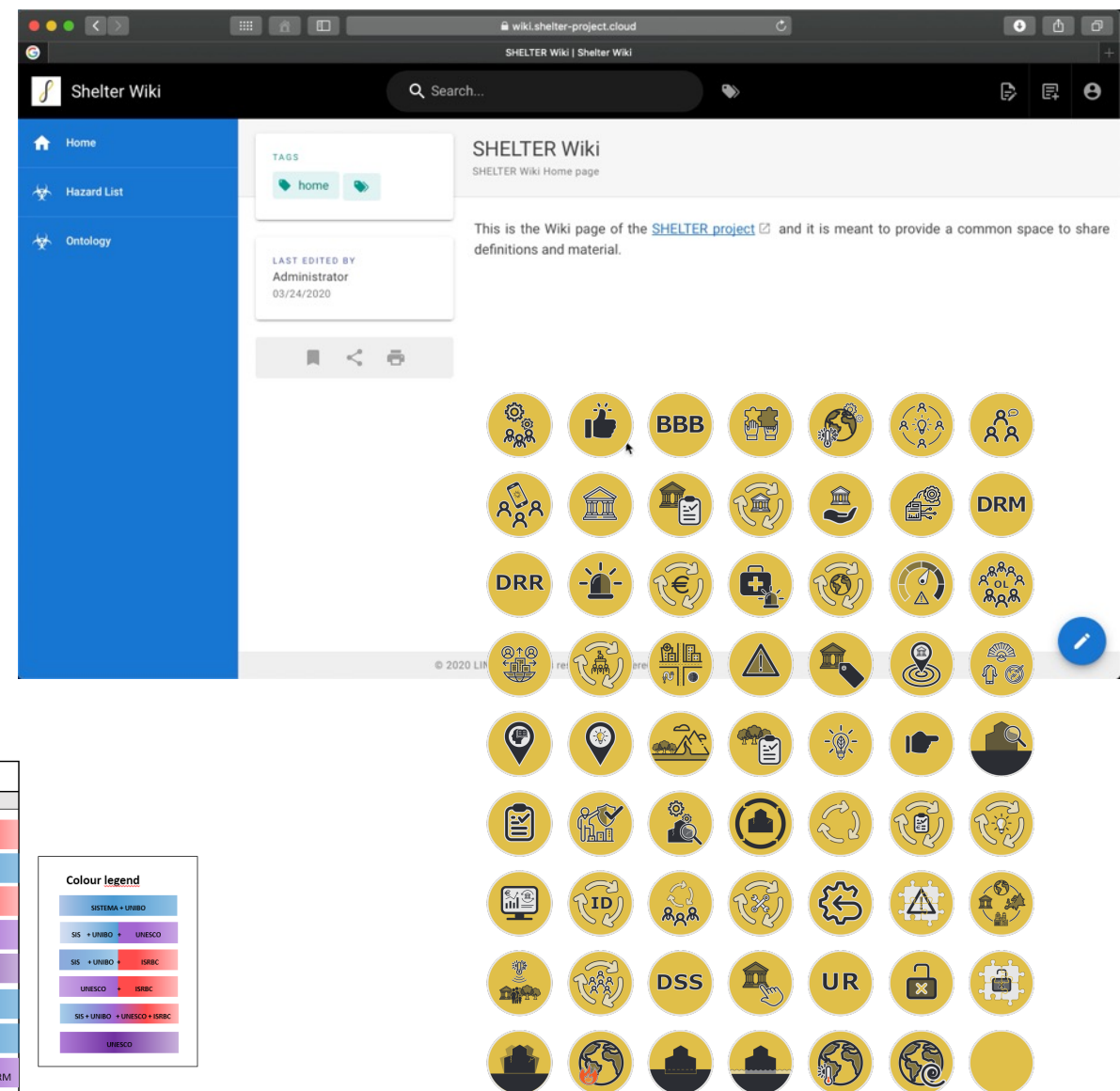
General Information
ID
Asset
Geographical localization
Catalogue category
Codes
Admin information
Compiling information

Geography
ID
Site information
Territory information

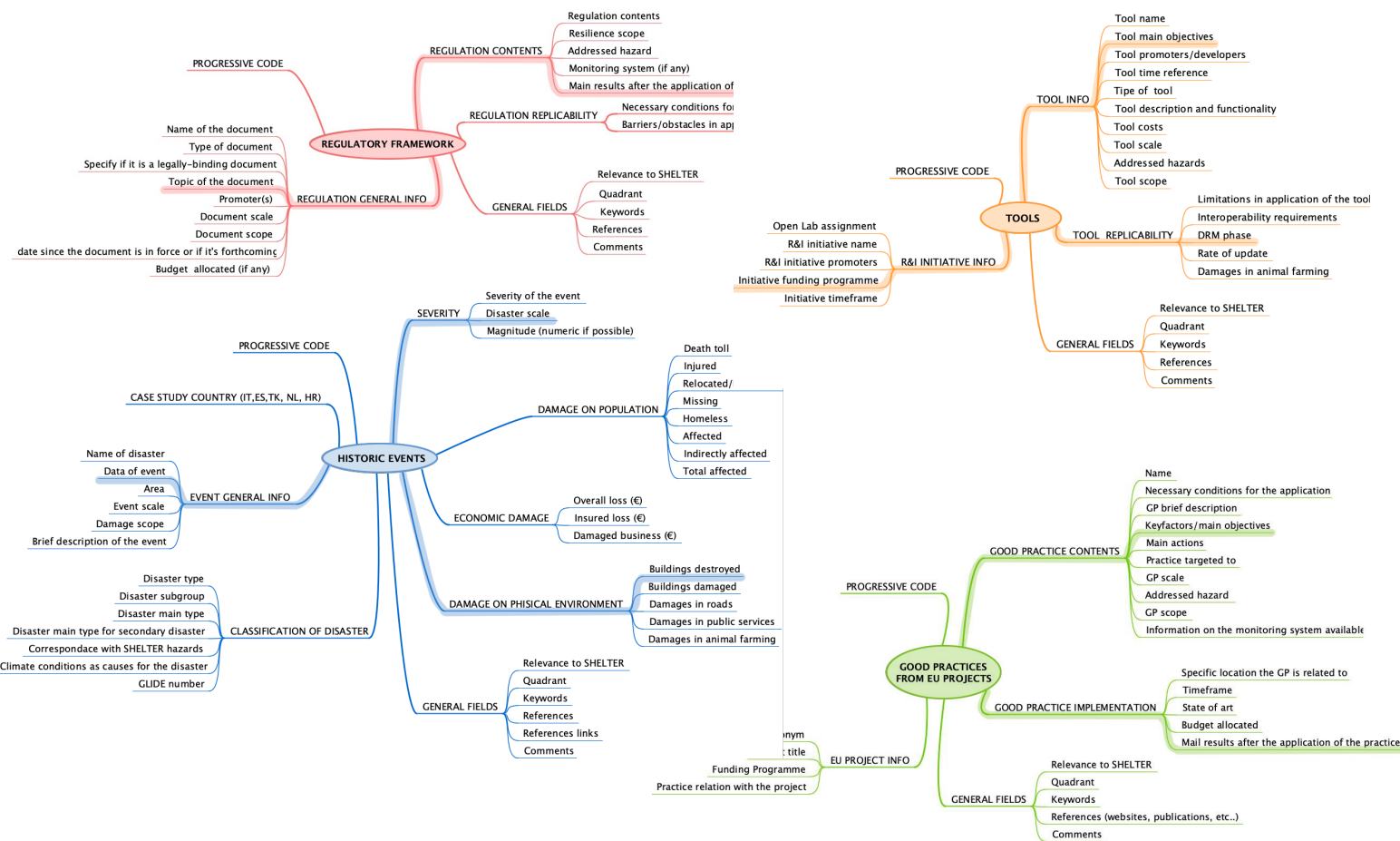
History
ID
Historical background
Conservation/Restoration
Current status
Sources/relations

RiskMgt
ID
Risk manager
Risk management type
Risk assessment
Damage and losses manif.
Risk management plan
Relations
Events
Recommended actions vs DRM
Level of priority

Colour legend
SISTEMA + UNIBO
SIS + UNIBO + UNESCO
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Best/next practices observatory

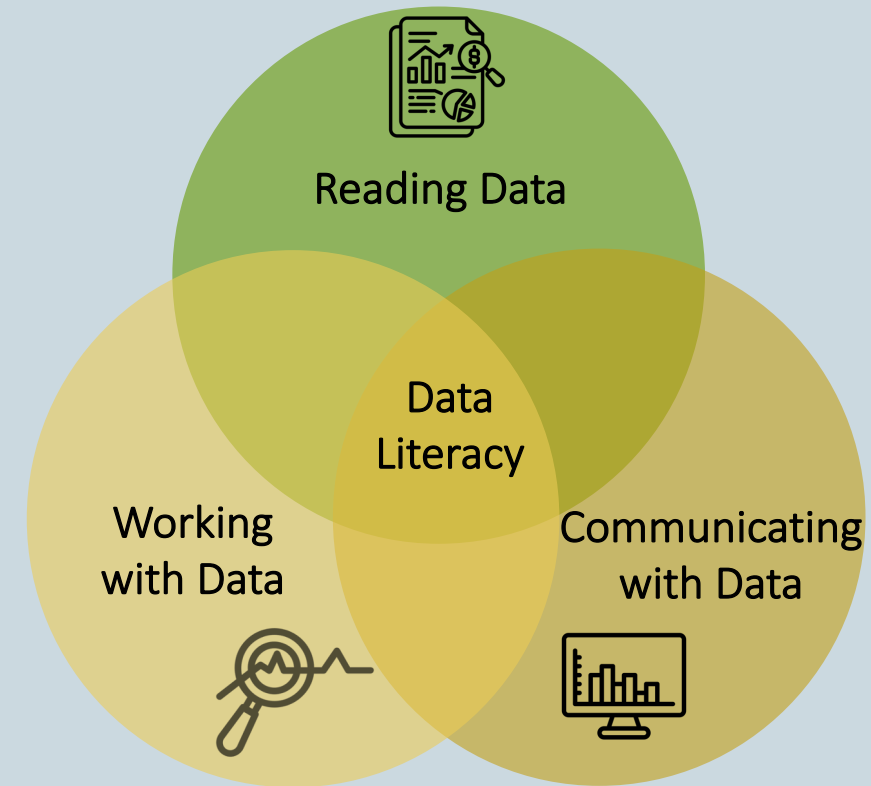


Conclusions



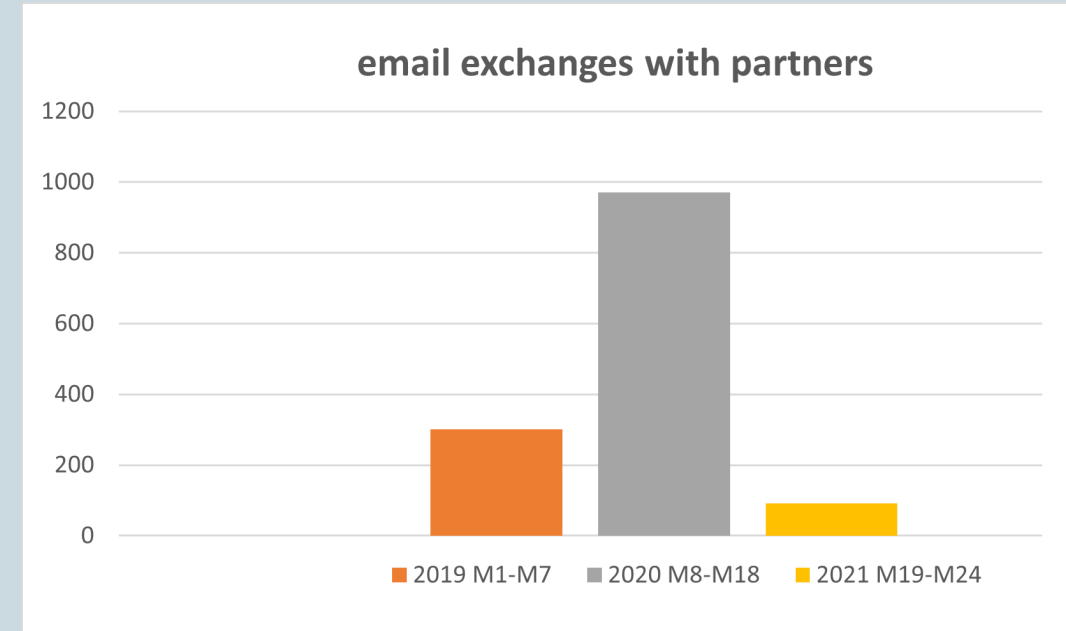
Data Literacy

- Data and knowledge are essential parts of decision making for Cultural Heritage
- Simply collecting data is not enough!
- To make the most of this asset, **DATA LITERACY** must be a priority



A few numbers...

- Number of emails exchanged with partners: **1364**
- Number of work package meetings: **15**
- Number of bilateral meetings: **39**



THANK YOU!

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