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

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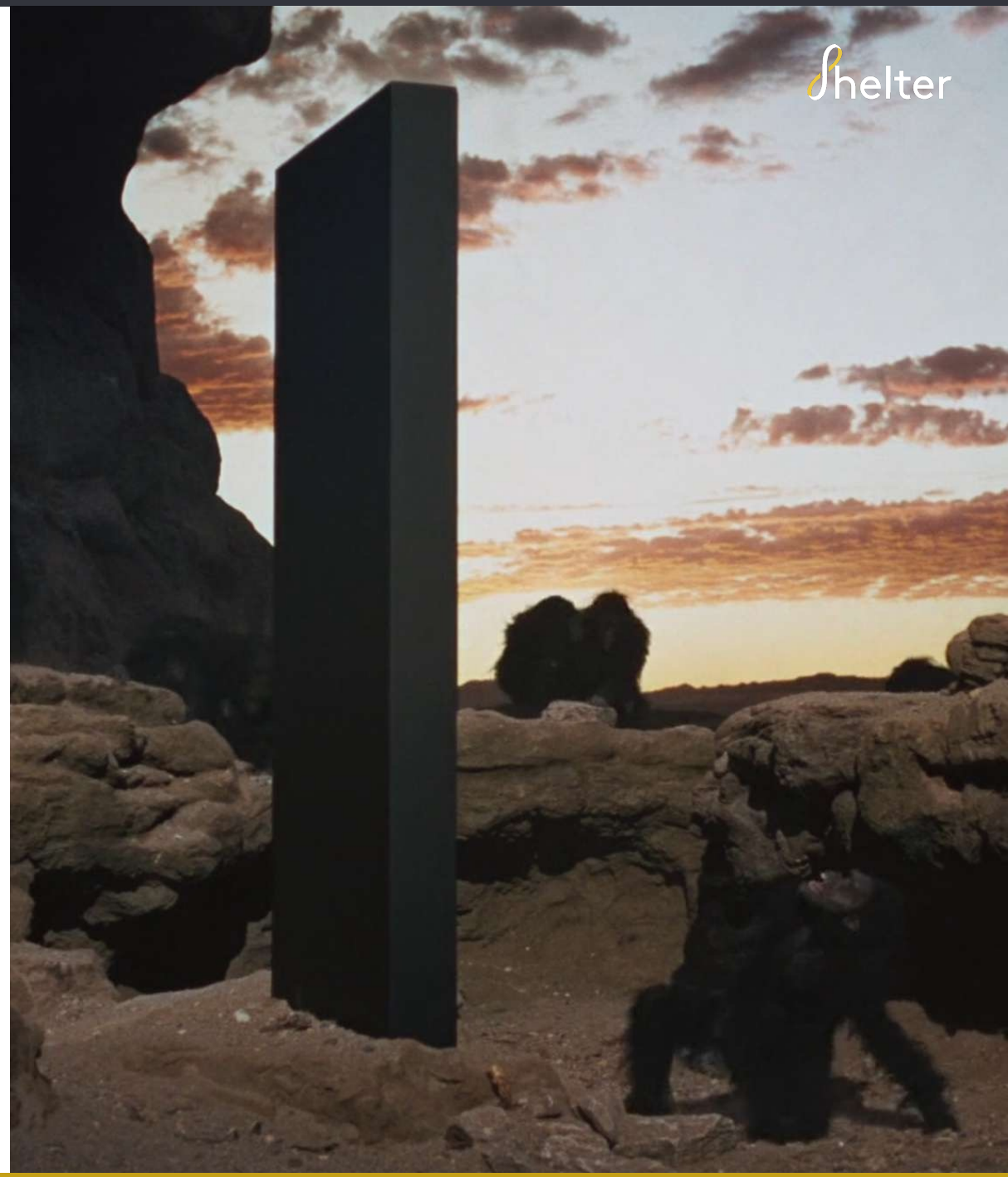
1 “*Believe in the beginnings, the rest is inevitable*”

Frank Lloyd Wright



The Topic: LC-CLA-04-2018: *Resilience and sustainable reconstruction of historic areas to cope with climate change and hazard events*

The Budget: 5.999.451 €

The Timing: June 2019-May 2023

The Acronym: SHELTER

The Name:

Sustainable Historic Environments holistic reconstruction through Technological Enhancement & community-based Resilience

Venice, December 2019

Derio, June 2019

Replicable,

multidimensional,

data driven and community based

operational knowledge framework

for heritage-led and conservation-friendly

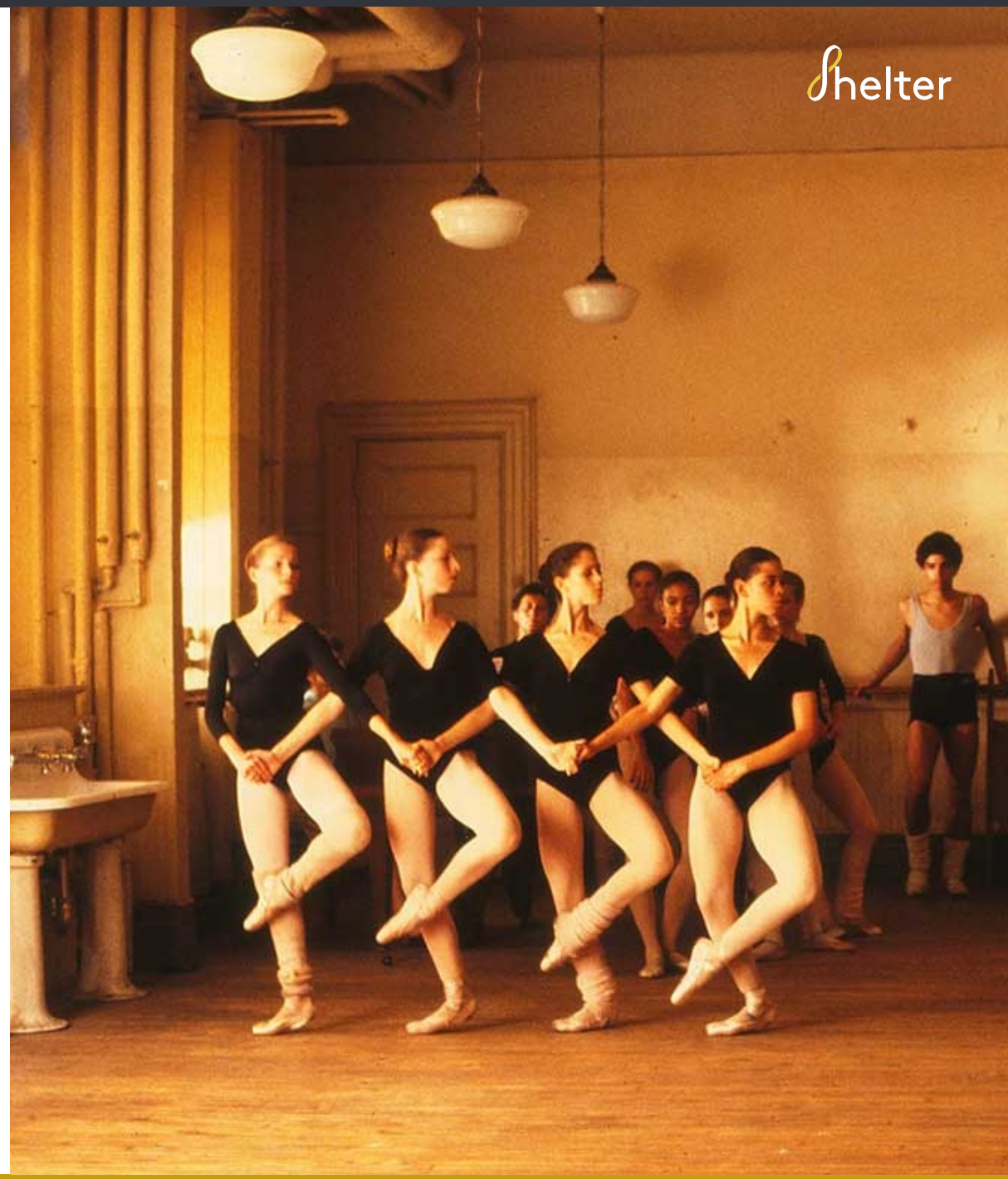
resilience enhancement & sustainable reconstruction

of historic areas to cope with climate change and natural hazards

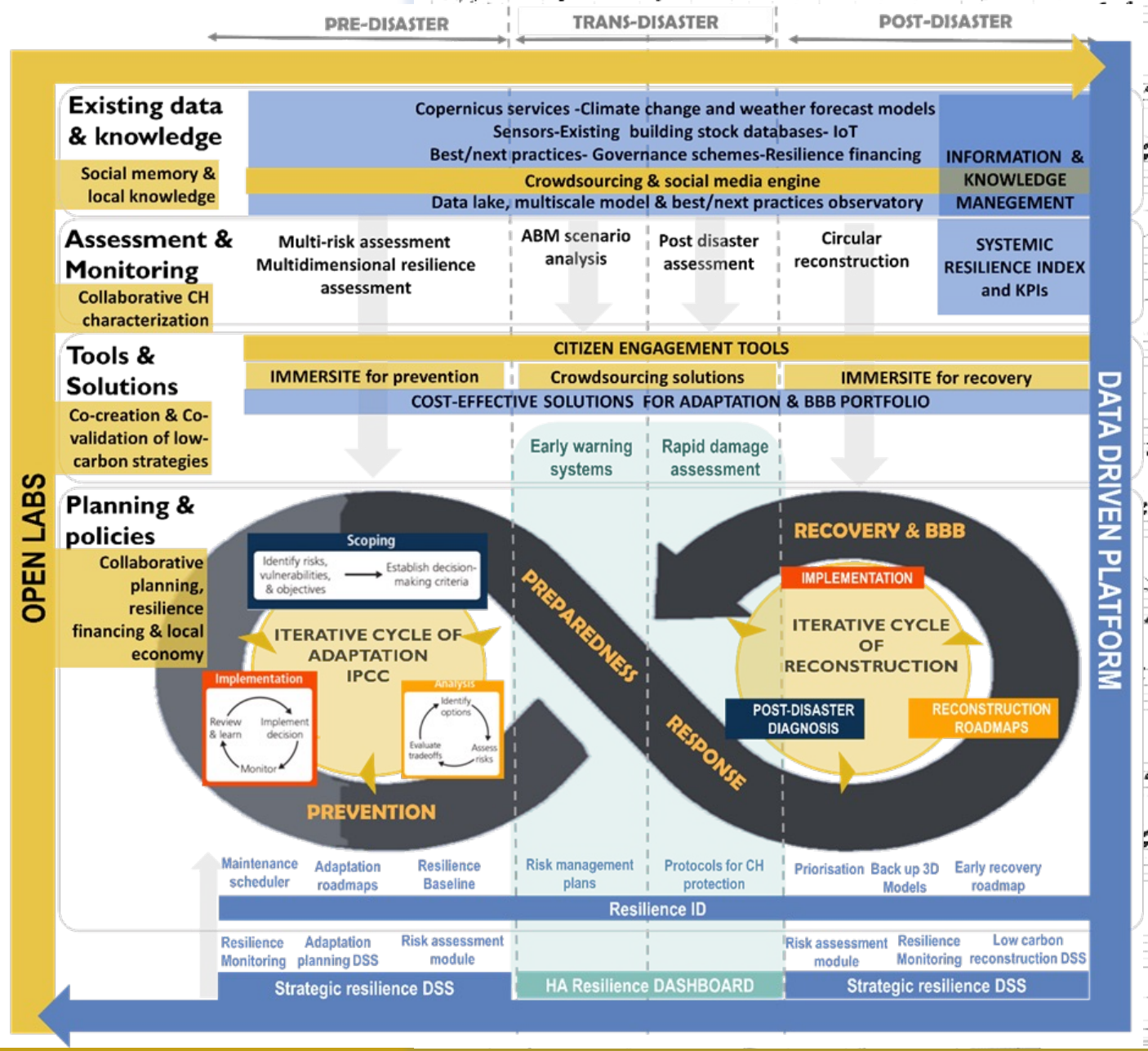
2

"No one can whistle a symphony. It takes a whole orchestra to play it."

H.E. Luccock



The sheet music of *SHELTER operational knowledge framework*



The orchestra of *SHELTER*

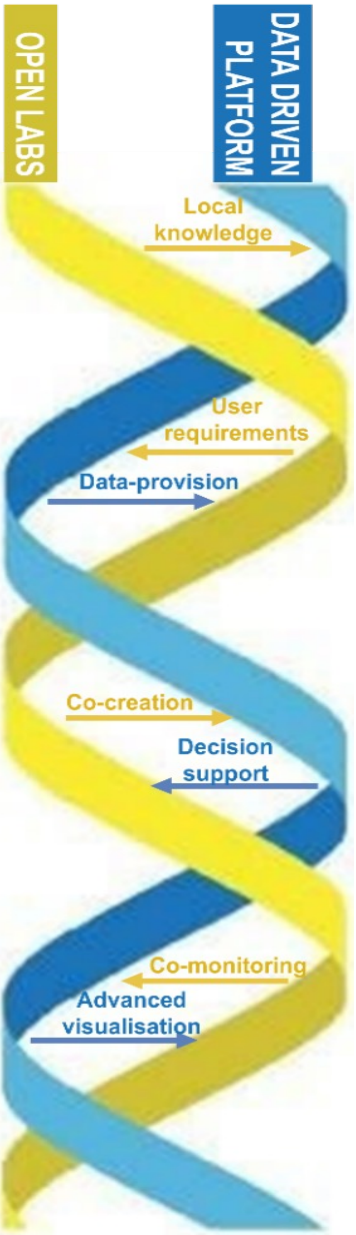
Ravenna
Seferihisar
Dordrecht
Baixa-Lima
Sava river basin

The picture can't be displayed.

7 SMEs
1 EEIG
10 Research Organisations
4 Public Bodies
1 Policy Maker

5 case studies

23 partners



data driven and Community-based resilience enhancement

as result of the interplay of two processes collaborating→ individual solutions for each HA:

- **data driven approach**→ supports diagnosis, decision making, implementation and monitoring based on existing knowledge and heterogenous data
- **Open Labs approach**→ continuous framework for local knowledge extraction, citizen's engagement, co-creation, capacity building and innovation

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3

“Data is only as valuable as the community that uses it, and the community is only as strong as the data that supports it.”

Christina Pagel

Shelter

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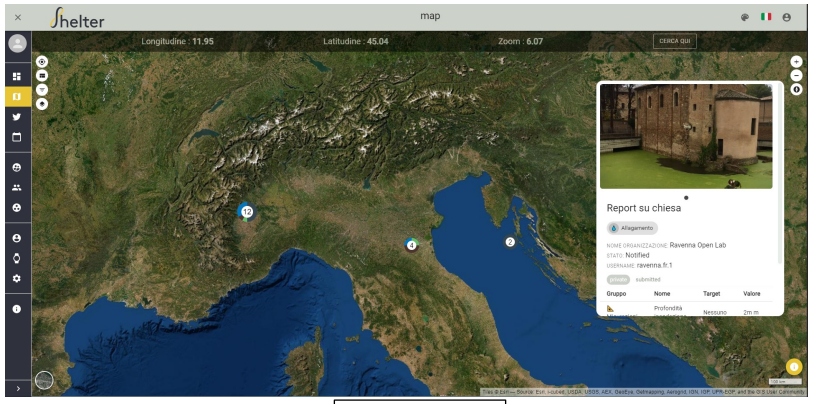
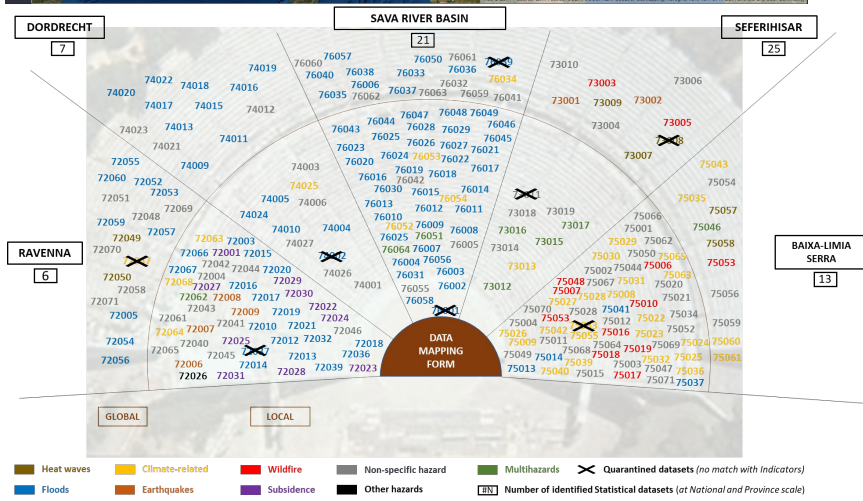
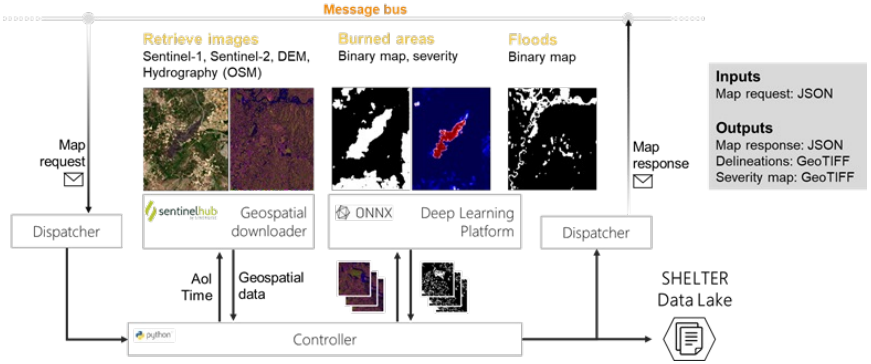
We GATHERED MAPPED STRUCTURED FORMATTED PROCESSED DIGESTED USED SUFFERED LOVE Data





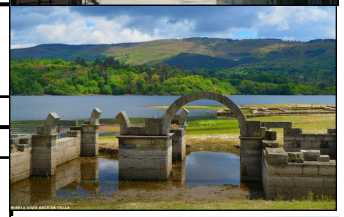


GLOCAL stakeholder-centred approach

What is an open lab?

knowledge generator case studies
evaluation frameworks and demonstration sites
long-term thinking living- and transition labs
learning environments

			Area of Santa Croce. Ravenna	Seferihisar	Dordrecht	Baixa Limia-Serra Do Xurés	Sava River Basin
Affected population by the case-study			5.000	31.400	118.000	1.614.535	9.000.000
Geographical zone (EU)			South	South-East	North	South-West	Central-East
Demo scales	Building						
	District						
	City						
	Region						
	Cross-regional						
Hazards	Geophysical	Earthquakes					
	Meteorological	Storms					
	Hydrological	Floods					
	Climatological	Heat waves					
		Wildfire					
		Subsidence					
Governance & planning	Level of experience in DRM instruments		High experience in Emergency Operative Plans	Medium. Heat wave warning system and earthquake recovery	High. Protection plans local and national protocols for evacuation	Medium-High. Civil Protection Plan for forest fires	High experience in transboundary protocols
	Experience in co-creation		Medium.	Medium.	High		High
CH	Type of CH		Immaterial, archaeological and urban	Immaterial, urban, earthen architecture	Immaterial, urban and industrial	Immaterial, natural and cultural	Immaterial, natural and cultural
	Level of protection		Very High	Medium	High	Medium	Medium
Existing data/ tools	Level of information		Medium	Medium	High	High-medium	High-medium
	Type		GIS, Cultural Heritage Catalogue and documentation, 3D model of the site, subsidence monitoring (level, GNSS, interferometric)	GIS, Cultural Heritage Catalogue, 3D model, data on protected area boundaries, mobile App. on Google Play	GIS, Cultural Heritage Catalogue, flood risk database and monitoring, climate change impact analysis, 3D models	GIS geoportal and databases, Cultural and Natural Heritage catalogue and geoportal	GIS geoportal, Flood risk maps & analysis, material studies, Digital Elevation Model based on LIDAR, hydraulic model



5 Open Labs

with different

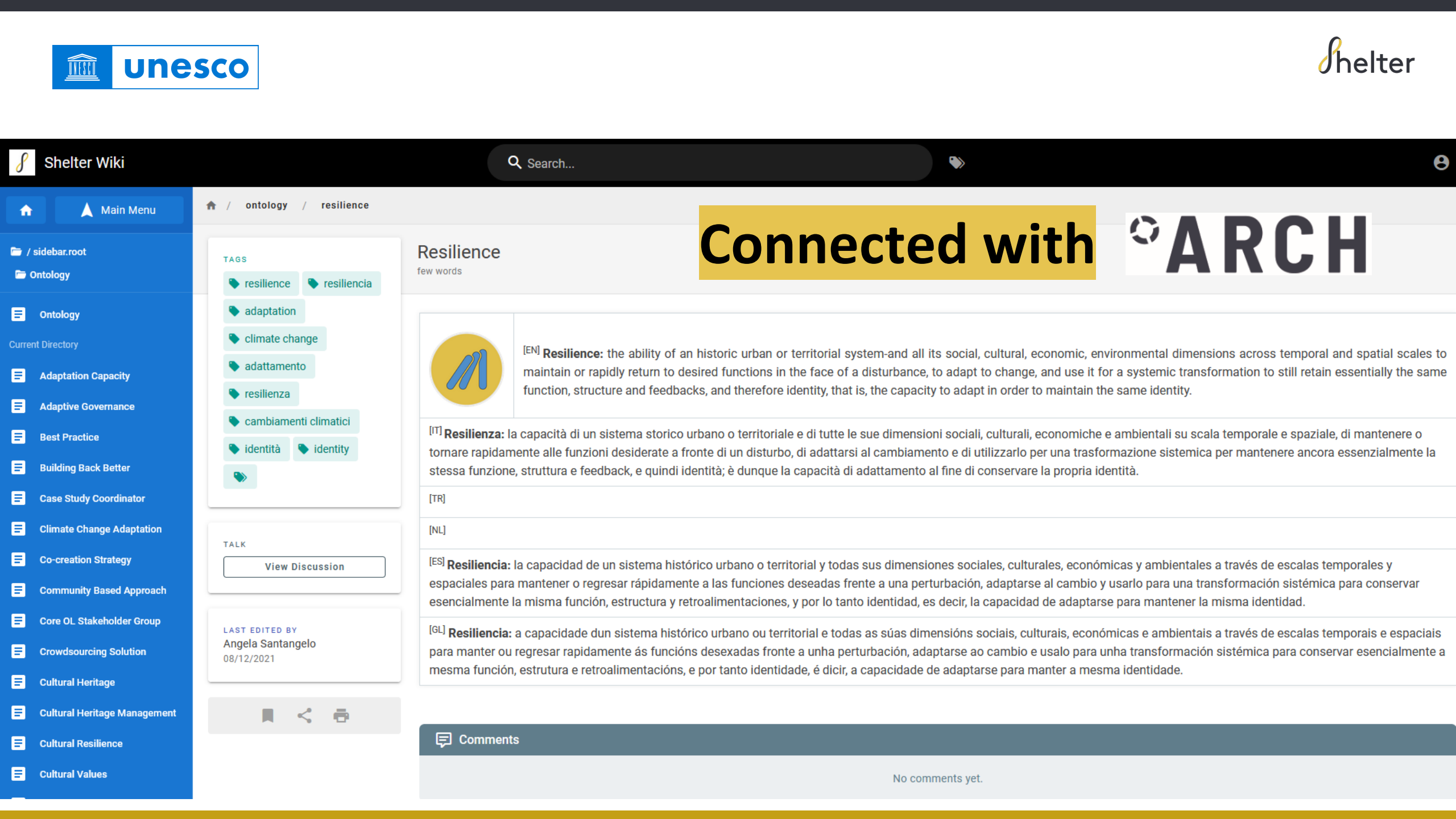
→scales
→mix of hazards
→Cultural and Natural Heritage
→governance structures
→experience and availability of data and tools

→to maximize replicability

4

“The limits of my language mean the limits of my world.”

Ludwig Wittgenstein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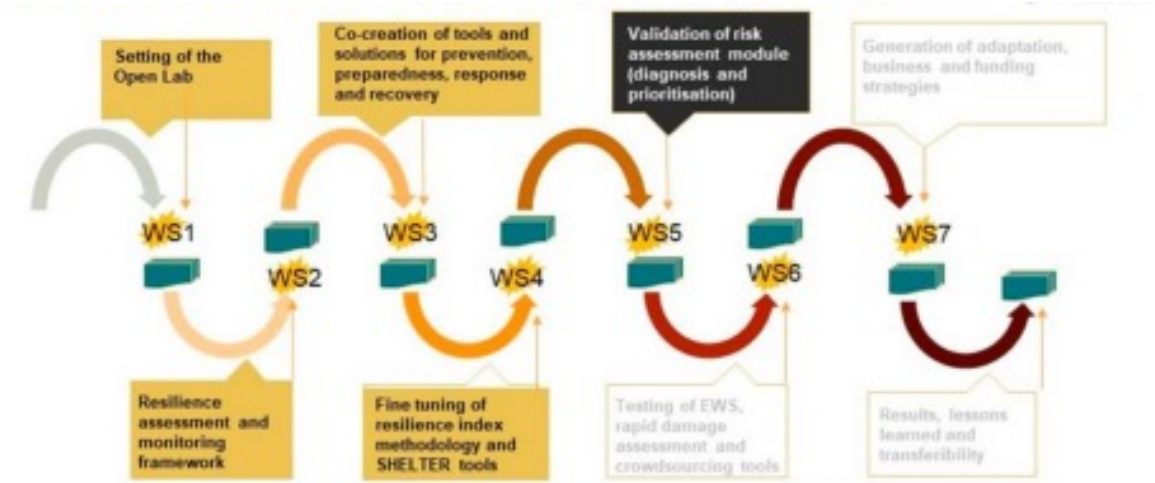
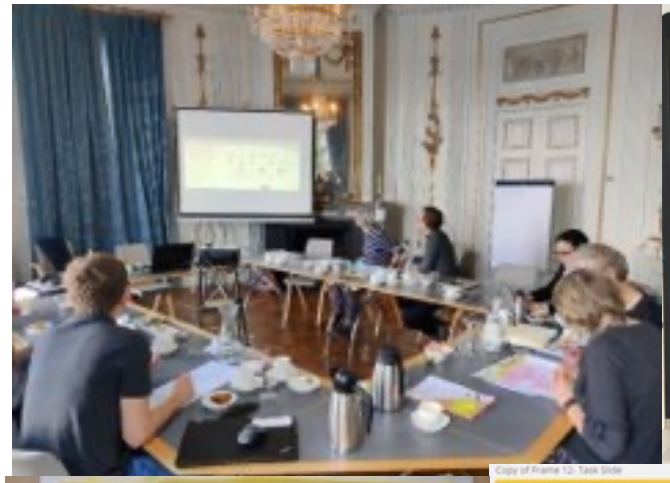
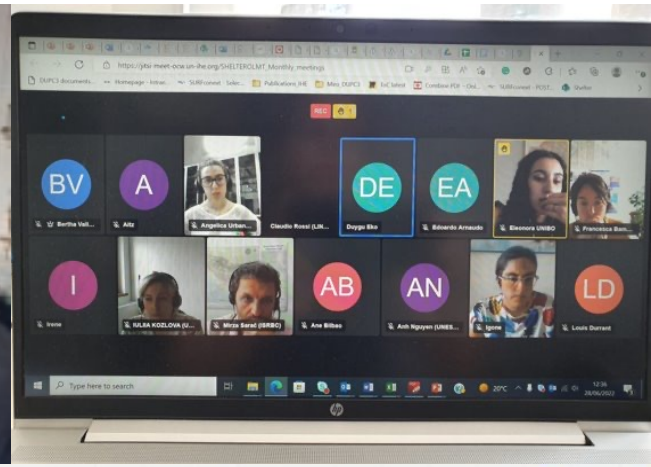
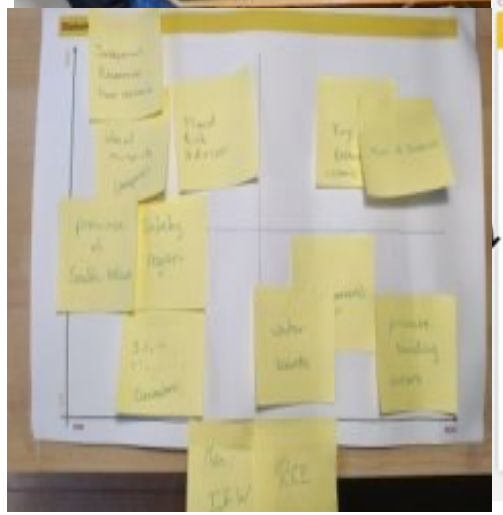
Adaptive Governance
Best Practice
Building Back Better
Case Study Coordinator
Climate Change Adaptation
Co-creation Strategy
Community Based Approach
Core OL Stakeholder Group
Crowdsourcing Solution
Cultural Heritage
Cultural Heritage Management
Cultural Resilience
Cultural Values
TAGS
resilience
resiliencia
adaptation
climate change
adattamento
resilienza
cambiamenti climatici
identità
identity
TALK
View Discussion
LAST EDITED BY
Angela Santangelo
08/12/2021
Resilience
few words
Connected with
ARCH
[EN] Resilience: the ability of an historic urban or territorial system-and all its social, cultural, economic, environmental dimensions across temporal and spatial scales to maintain or rapidly return to desired functions in the face of a disturbance, to adapt to change, and use it for a systemic transformation to still retain essentially the same function, structure and feedbacks, and therefore identity, that is, the capacity to adapt in order to maintain the same identity.
[IT] Resilienza: la capacità di un sistema storico urbano o territoriale e di tutte le sue dimensioni sociali, culturali, economiche e ambientali su scala temporale e spaziale, di mantenere o tornare rapidamente alle funzioni desiderate a fronte di un disturbo, di adattarsi al cambiamento e di utilizzarlo per una trasformazione sistemica per mantenere ancora essenzialmente la stessa funzione, struttura e feedback, e quindi identità; è dunque la capacità di adattamento al fine di conservare la propria identità.
[TR]
[NL]
[ES] Resiliencia: la capacidad de un sistema histórico urbano o territorial y todas sus dimensiones sociales, culturales, económicas y ambientales a través de escalas temporales y espaciales para mantener o regresar rápidamente a las funciones deseadas frente a una perturbación, adaptarse al cambio y usarlo para una transformación sistémica para conservar esencialmente la misma función, estructura y retroalimentaciones, y por lo tanto identidad, es decir, la capacidad de adaptarse para mantener la misma identidad.
[GL] Resiliencia: a capacidade dun sistema histórico urbano ou territorial e todas as súas dimensións sociais, culturais, económicas e ambientais a través de escalas temporais e espaciais para manter ou regresar rapidamente ás funcións desexadas fronte a unha perturbación, adaptarse ao cambio e usalo para unha transformación sistémica para conservar esencialmente a mesma función, estrutura e retroalimentacións, e por tanto identidade, é dicir, a capacidade de adaptarse para manter a mesma identidade.
Comments
No comments yet.

…and thousands of (virtual and physical) sticky notes









- 8 general assemblies
- 7 working cycles
- Monthly Open lab meetings and steering committee meetings
- More than 30 workshops with stakeholders

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5

"If you want to go fast, go alone.
If you want to go far, go together."

African Proverb

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Our project officer

Piret Noukas

Our advisory board

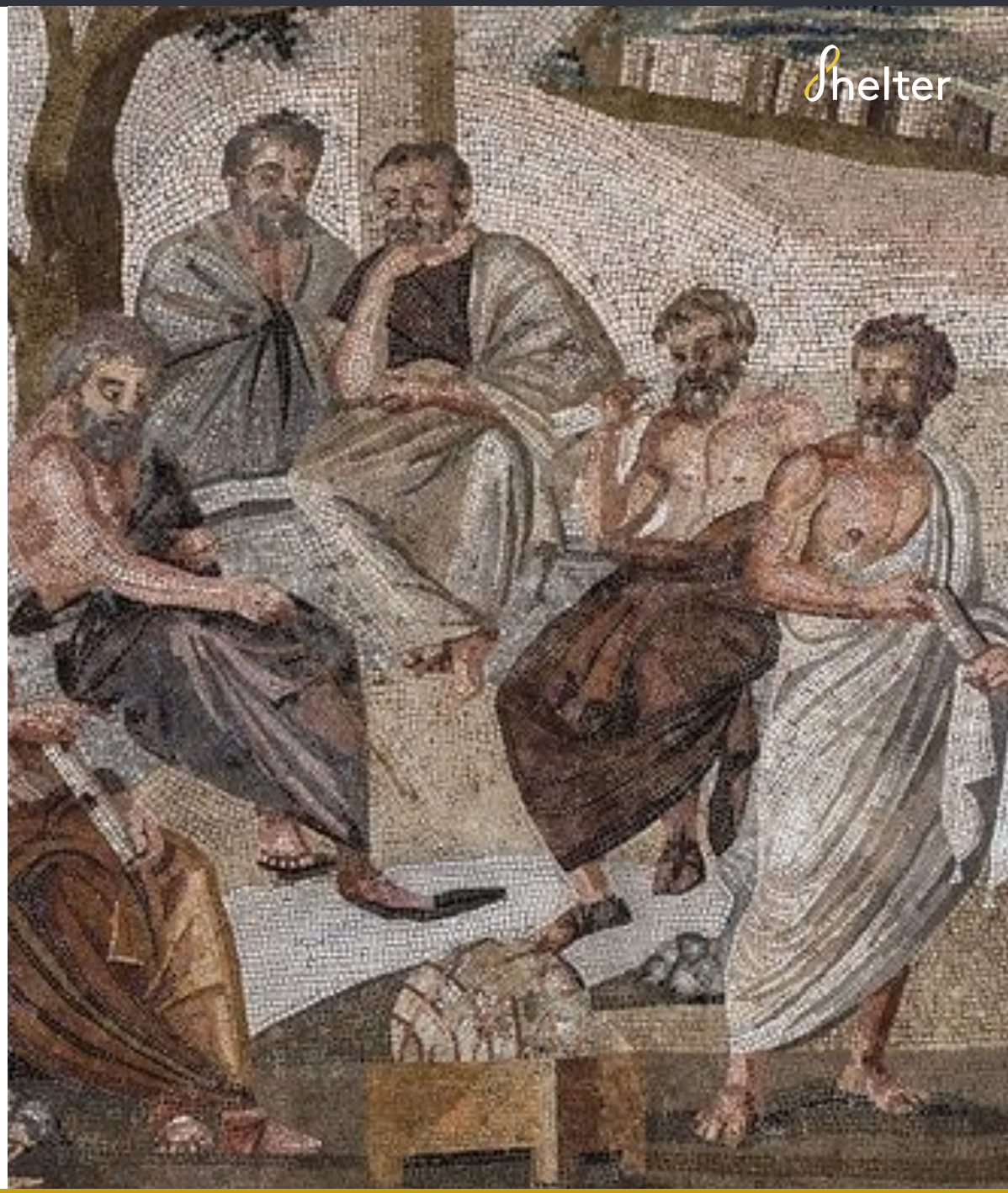
Mathias Ripp
Karl Kupka
Dowon Kim
Jiri Pelikan
Dionysia Kolokotsa

Our sister projects

ARCH

Hyperion

17727:2022 STANDARD



And the Task Force…

Joint Paper

1. Provision of a **conceptual framework**

Historic districts as socio-ecological-technical systems

Definition of resilience in view of historic districts

Connection between resilience, climate change adaptation / mitigation, disaster risk management

2. Location of the work of the task force in the **policy landscape**

3. **Challenges** for resilient historic districts & **recommendations** to overcome challenges

Protecting cultural heritage

Saving the past to preserve the future

shelter

Paving the Way for Climate Neutral and Resilient Historic Districts

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Everyone must leave something behind when he dies…Something your hand touched some way, so your soul has somewhere to go when you die.

Ray Bradbury

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So far…

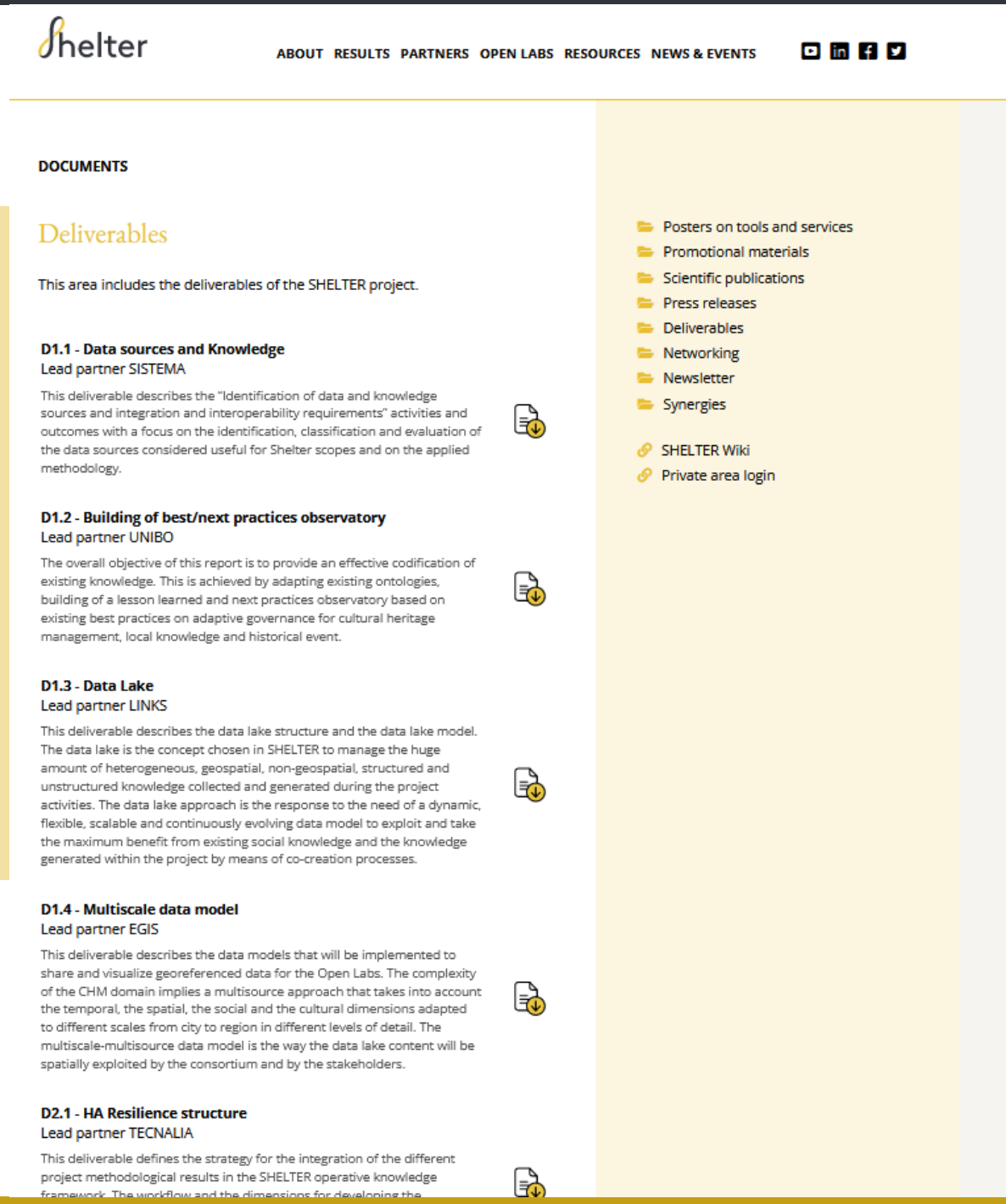
37 deliverables approved

3 deliverables submitted

11 deliverables pending

31 public

https://shelter-project.com/documents/deliverables/



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…soon

the step-by-step guide!

7

“The end is where we start from.”

T.S. Eliot

THANK YOU!

aitziber.egusquiza@tecnalia.com