



DEPLOYTOUR Common European Tourism Data Space



Co-funded by
the European Union

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Director



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DEPLOYTOUR

European Tourism Data Space

In the framework of the European Digital Europe Programme, supported by the European Commission, DEPLOYTOUR aims to **develop a trusted Common European Tourism Data Space (ETDS)**.

It is **built on the blueprint** developed by **two preparatory actions** for the European



Programme Digital Europe

DIGITAL- 2023-CLOUD-DATA-AI-05
DATATOURISM-Data Space for Tourism

EU Funding: 50%

Consortium: 15.3M euros



Coordinator:



Participants:

43 organizations from
13 countries

Duration:

3 years

Kick off:

Mallorca
November 2024

OBJECTIVES

By enabling decentralized, secure, and trusted data sharing, DEPLOYTOUR unlocks new opportunities for collaboration, innovation, and growth in tourism.

It aims to:



Develop a trusted and secure **Common European Tourism Data Space** to improve data access and sharing, fostering **innovation** and new business models.

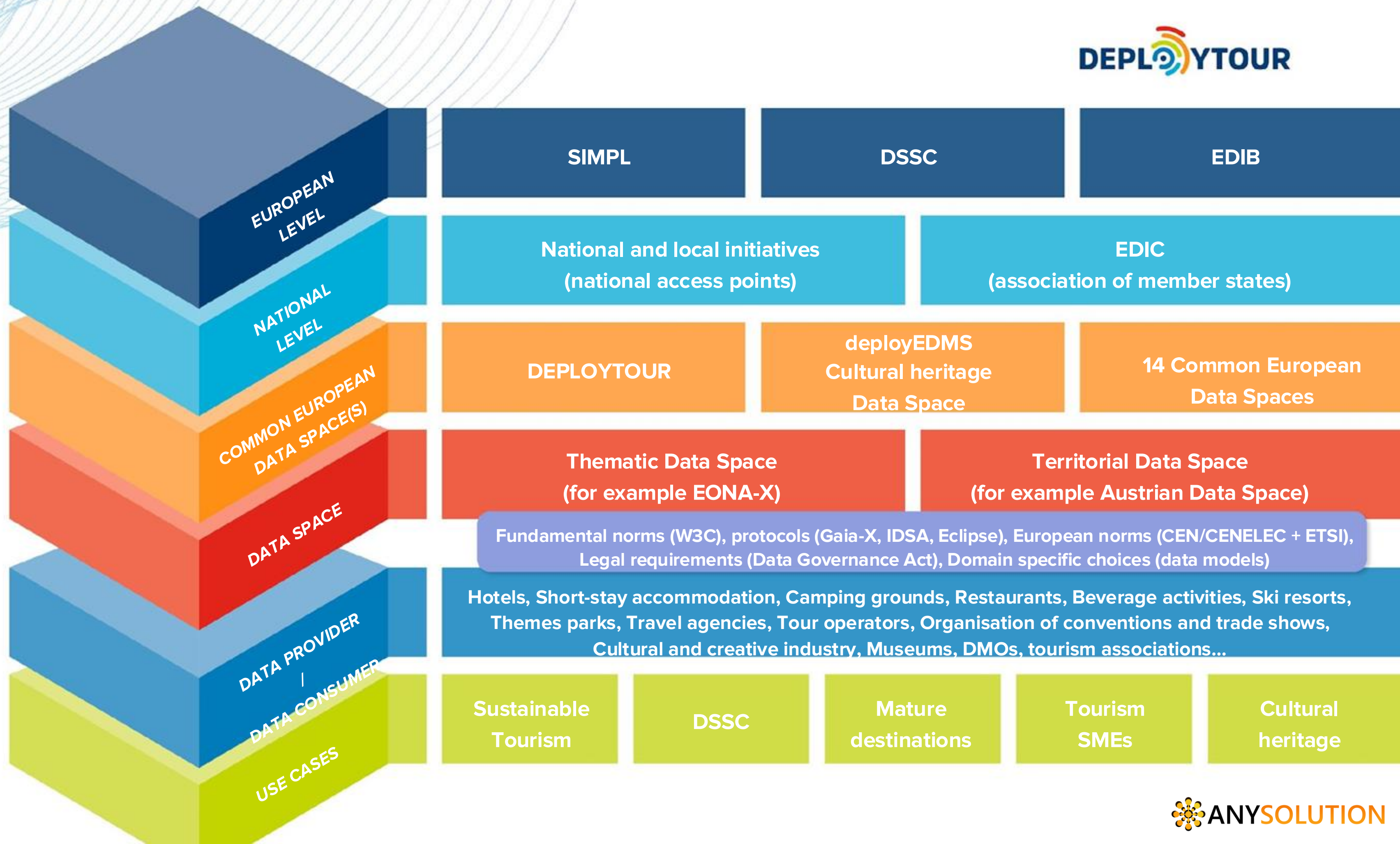


Strengthen EU digital sovereignty by establishing a federation of data spaces with common governance.



Boost tourism competitiveness and sustainability by supporting digital and green transitions while **empowering SMEs and DMOs** in their transformation.

CONTEXT



PROJECT MILESTONES

DEPLOYTOUR addresses the challenges of fragmented and inaccessible tourism data by enhancing access to information through:

Deploy the technical infrastructure of the Common Tourism European Dataspace (ETDS)

Implement five use case pilots that will act as demonstration of the tangible advantages the ETDS can bring and its impact on the European tourism sector

Define a governance framework by developing the rules and roles of the different stakeholders involved in governing the future ETDS

Ensure the interoperability, transversality, and synergies with other data and tourism initiatives

Implement a sound dissemination, **communication and exploitation strategy**

Kick off meeting

Rolebook of the ETDS

Use Case Pilots Launch

ETDS minimum viable product

Minimum Viable Rulebook

On-line training programme

ETDS final prototype

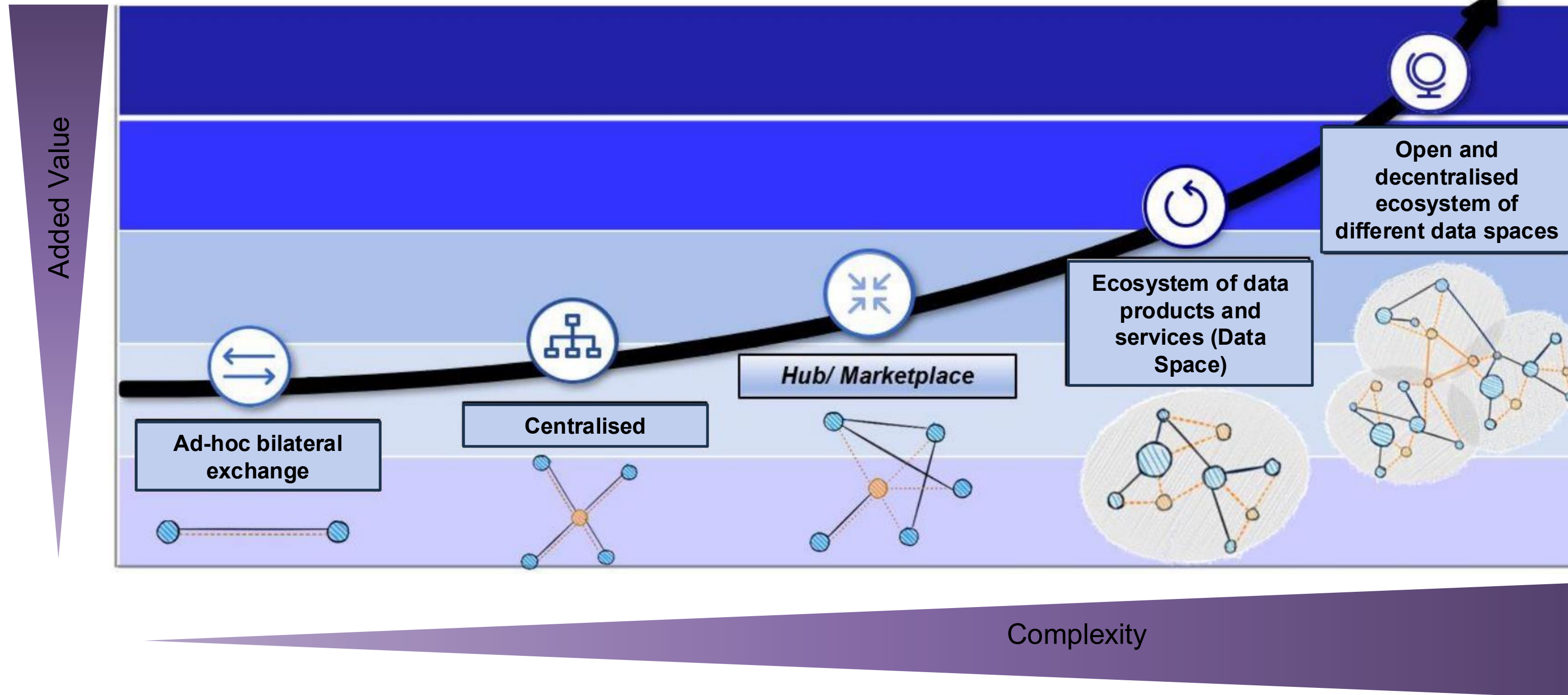
2024

2025

2026

2027

EVOLUTION TOWARDS DATA SPACES



What is a Data Space?

A public-private ecosystem...

...that

- Enables the voluntary and secure **sharing** and **governance** of data, fostering trust among participants
- Ensures data **sovereignty** and facilitates the **discovery** of new high-value datasets

...with the objective of

- **Generating value** around data
- Enabling **use cases** such as digital twins, AI applications or data analytics

...through mechanisms of

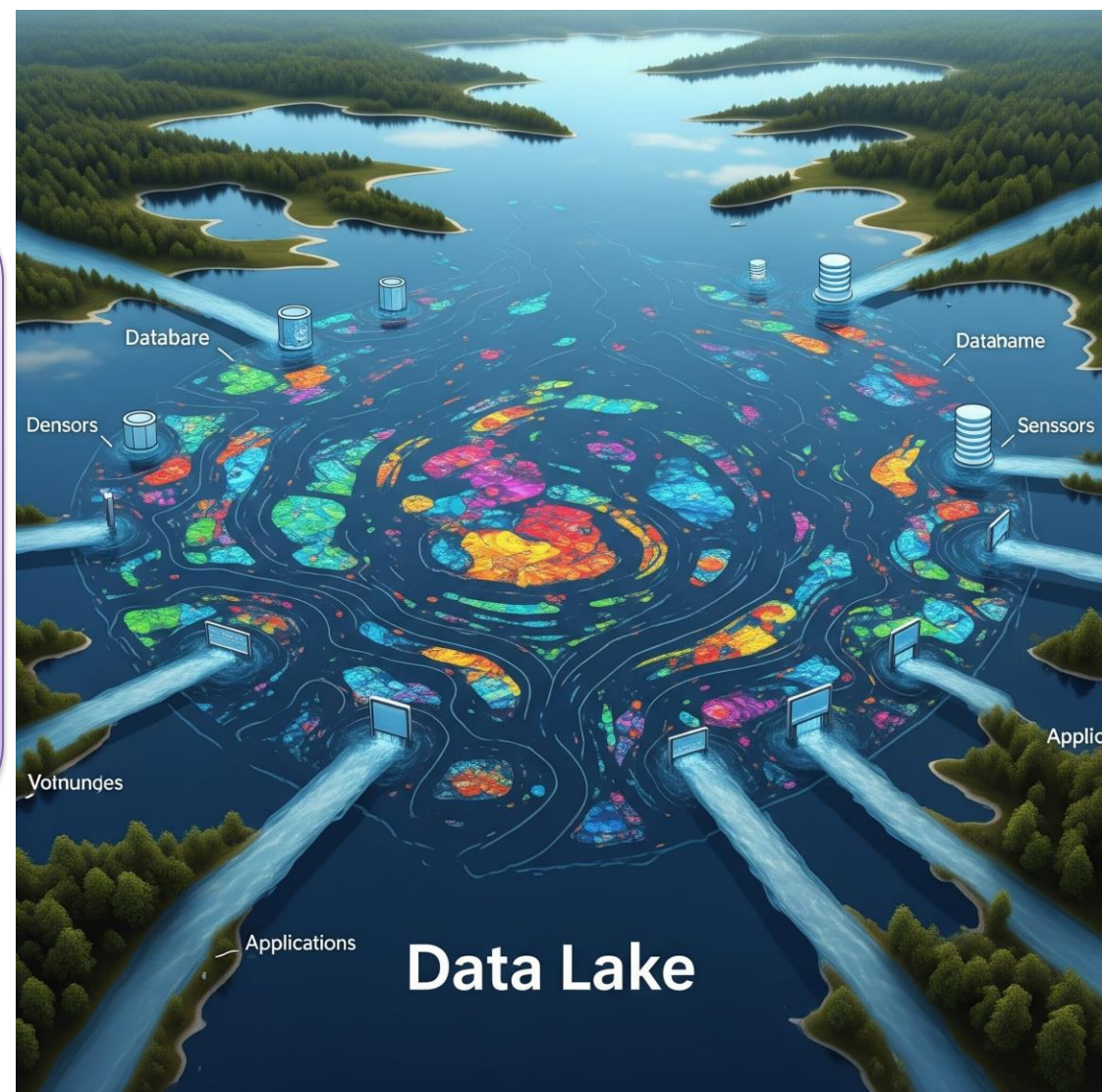
- Governance, regulatory **frameworks**
- Organisational **structures**, technical infrastructure

...with the objective of

- **Interoperable** architectures, **semantic** technologies, **connectors** and **digital identity**

DATA LAKE vs DATA SPACES

- Data is stored
- No control of data



- Data is NOT stored
- Data owner has the control (data sovereignty)

HIGH LEVEL ROADMAP



Governance layer: Rolebook and Rulebook. Clear rules and roles for the actors of the data space ensuring compliance

Technical Requirements

Mapping capabilities and requirements, defining data products



Phase 1: Obtaining data sources for each use case



Phase 2: Identification of Data Product Offerings (DPOs) for each use case that will be included in the future catalogue of the tourism data space



Phase 3: Analysis of the DPOs identified for the mapping of requirements and capabilities

MVP definition

Minimum services and functionalities of the minimum viable data space for the European Tourism Data Space

Business processes

Onboarding of
participants

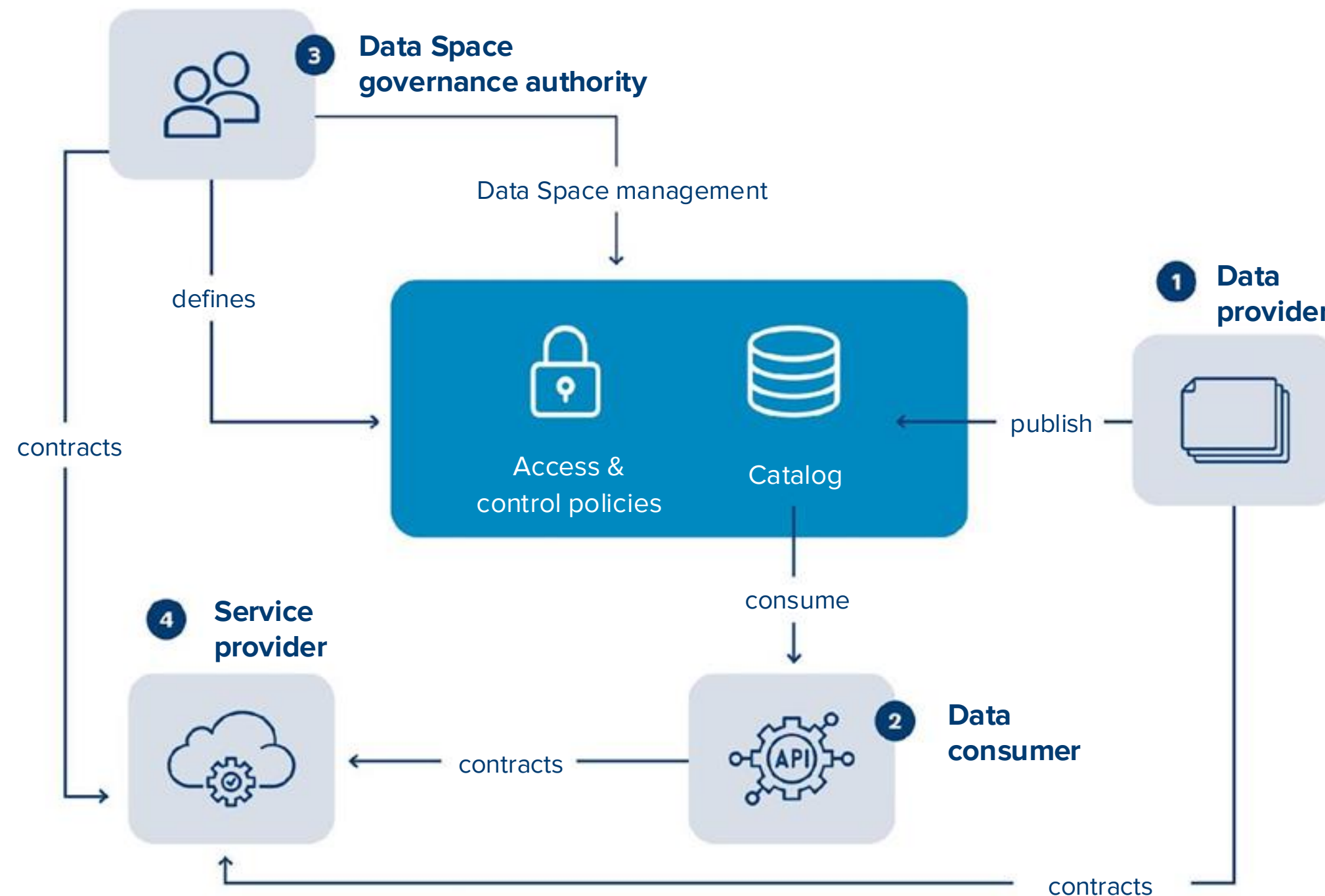
Data Product publication

Data Product
discoverability

Data Exchange



TECHNICAL ASPECTS



Main journeys: actors and roles

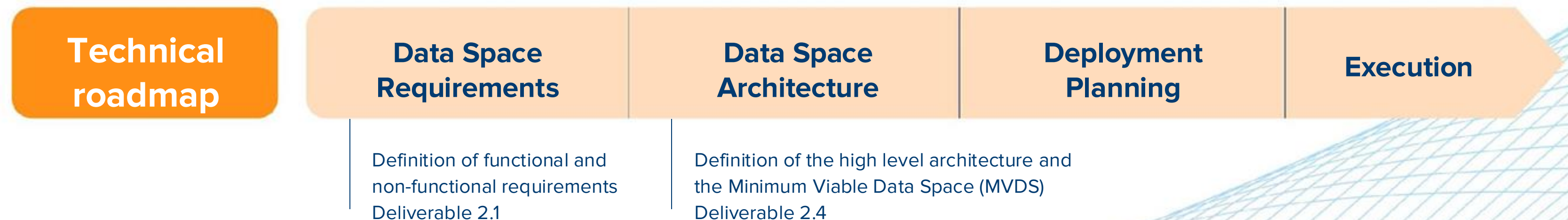
- 1 Data provider**
Entity that provides the data
- 2 Data consumer** / data user / beneficiary
Entity that consumes data from the ecosystem
- 3 Data Space Governance Authority**
Entity that governs the data space
- 4 Service provider**
Entity that provides services to the data space

TECHNICAL ASPECTS

The project aims to establish essential elements for a tourism-focused data space, enhancing data and service sharing across related areas like mobility and cultural heritage.

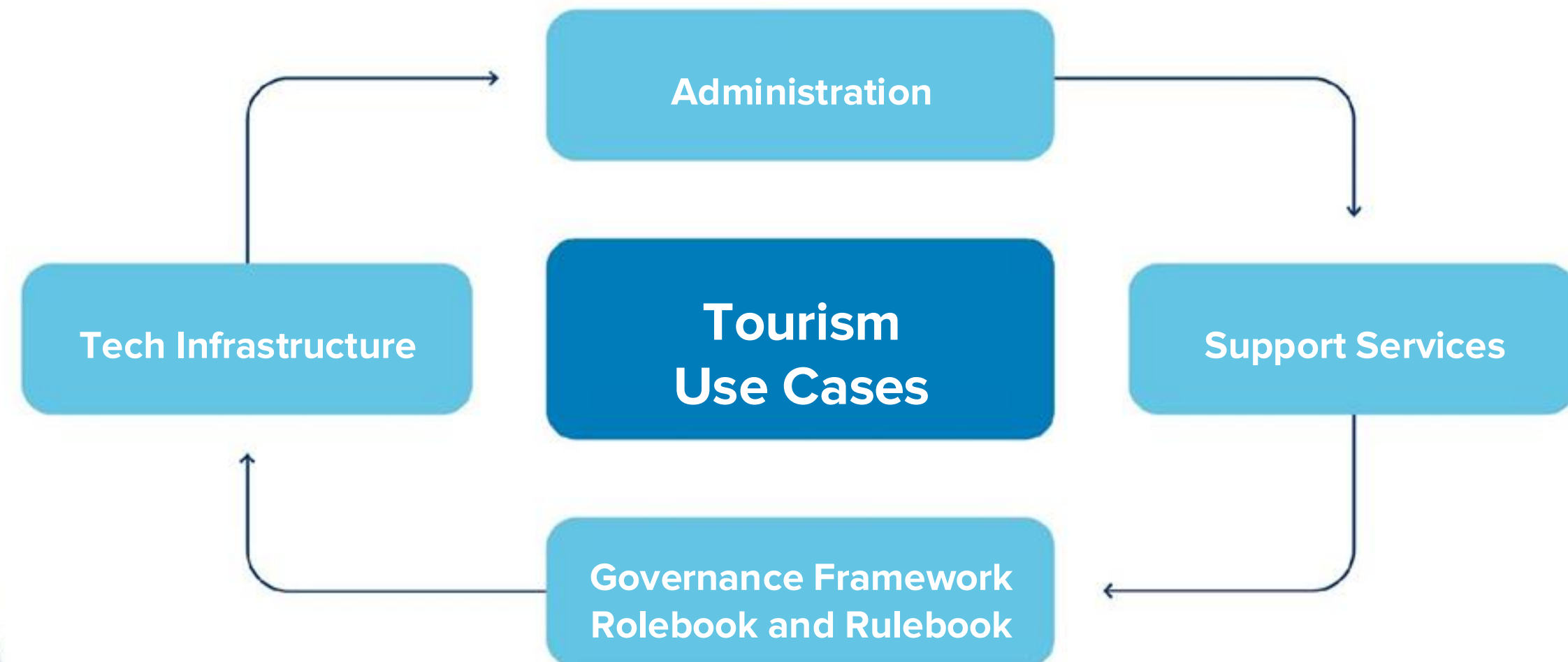
Key objectives include:

- 1. Understand tourism ecosystems:** Deeper insights into alignment with regional digital services.
- 2. Facilitate access and sharing:** Support technical infrastructure development.
- 3. Leverage existing frameworks:** Integrate and adapt established data space frameworks.
- 4. Define technical requirements:** Establish and apply uniform ETDS infrastructure standards.
- 5. Comply with reference frameworks:** Align DEPLOYTOUR with European and international standards, using advanced tools and demonstrating technology to manage and govern data heterogeneity.
- 6. Ensure interoperability:** Develop strategies for effective data exchange across sectors, aligning with European data standards.



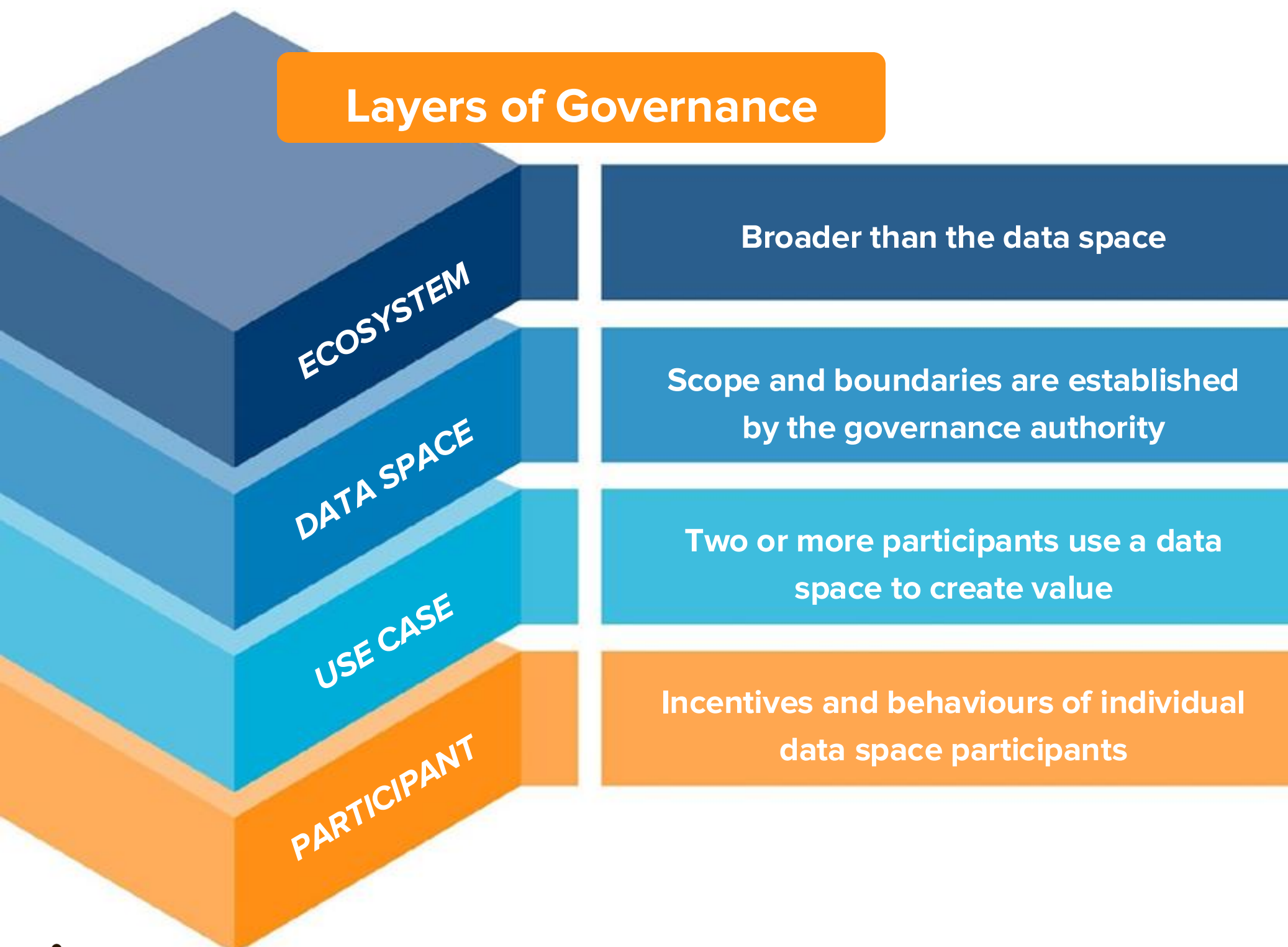
GOVERNANCE ASPECTS

“The structured set of principles, processes, and practices that guide and regulate the governance, management and operations within a data space to ensure effective and responsible leadership, control, and oversight. It defines the functionalities the data space provides and the associated data space roles, including the data space governance authority and participants” (from DSSC Blueprint)



GOVERNANCE ASPECTS

Layers of Governance



Layers of Interoperability

Inside the layers
Between the layers

Organisational
Legal
Semantic
Technical

- Seamless
- Efficient
- Compliant
- Traceable
- Trustful

The Rolebook

Identify mandatory and optional roles in the ETDS

Roles directly engaged in data sharing

Data Provider

Data consumer

Service Provider

Use Case Teams

Data Space Governance authority and inherent expert roles

DS-Governance authority (in the narrower sense)

DS-Executive

Use Case Coordination

Legal Experts

Technical Experts

Rulebook Maintainer

Data Modelling Experts

Financial Experts

Platform Operator/Core Service Provider

Marketing/Communication Experts

Supportive roles and external stakeholders

Data Space Participants (as members of the organisation)

EC/Data Space Sponsor/Founder

EU Member States

Tourism Organisations/DMOs/SMEs

External subject matter experts

Other Common European Data Spaces (same sector or cross-sectoral)

Tourism Focused Roles

Administrative Roles

Technical Roles

Miscellaneous Roles

- Organization independent
- Redistributable
- Scalable
- “Shareable”

TRANSVERSALITY, COMPLEMENTARITY AND SYNERGIES

**Synergies with other data spaces,
projects and initiatives:**

- Mobility data space, deployEMDS
- Smart Cities Data Space
- Green Deal
- Media data space, TEMS
- Skills data space
- Cultural Heritage data space
- D3HUB
- DSSC
- SIMPL
- EDIC
- National, local initiatives
- Ministries
- TourMIS
- ...

DEPLOYTOUR supports the Tourism Transition Pathway's pledges to advance the strategy for digital and sustainable transition.



To generate and ensure sound synergies to reinforce complementarities, avoid overlapping and generate new added value.

THE COMMON EUROPEAN DATA SPACE

A tool for:



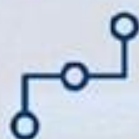
a) Raising awareness about data spaces for tourism stakeholders and encouraging their participation in data sharing ecosystems



b) Improving the availability and discoverability of data through a federated catalogue in the tourism ecosystem and with other sectors



c) Enhancing data interoperability at the semantic or structural level



d) Helping apply rules and governance models to conform with EU legislations regarding data in the digital world



e) Providing services (training, mentoring, consulting) for the adoption and operationalization of the pilot data spaces



f) Promoting scenarios that show the potential of data spaces as a tool for collaboration or exchange, support the EU data strategy

Why sharing data?

Customer segmentation

Demand prediction

Sentiment analysis of reviews

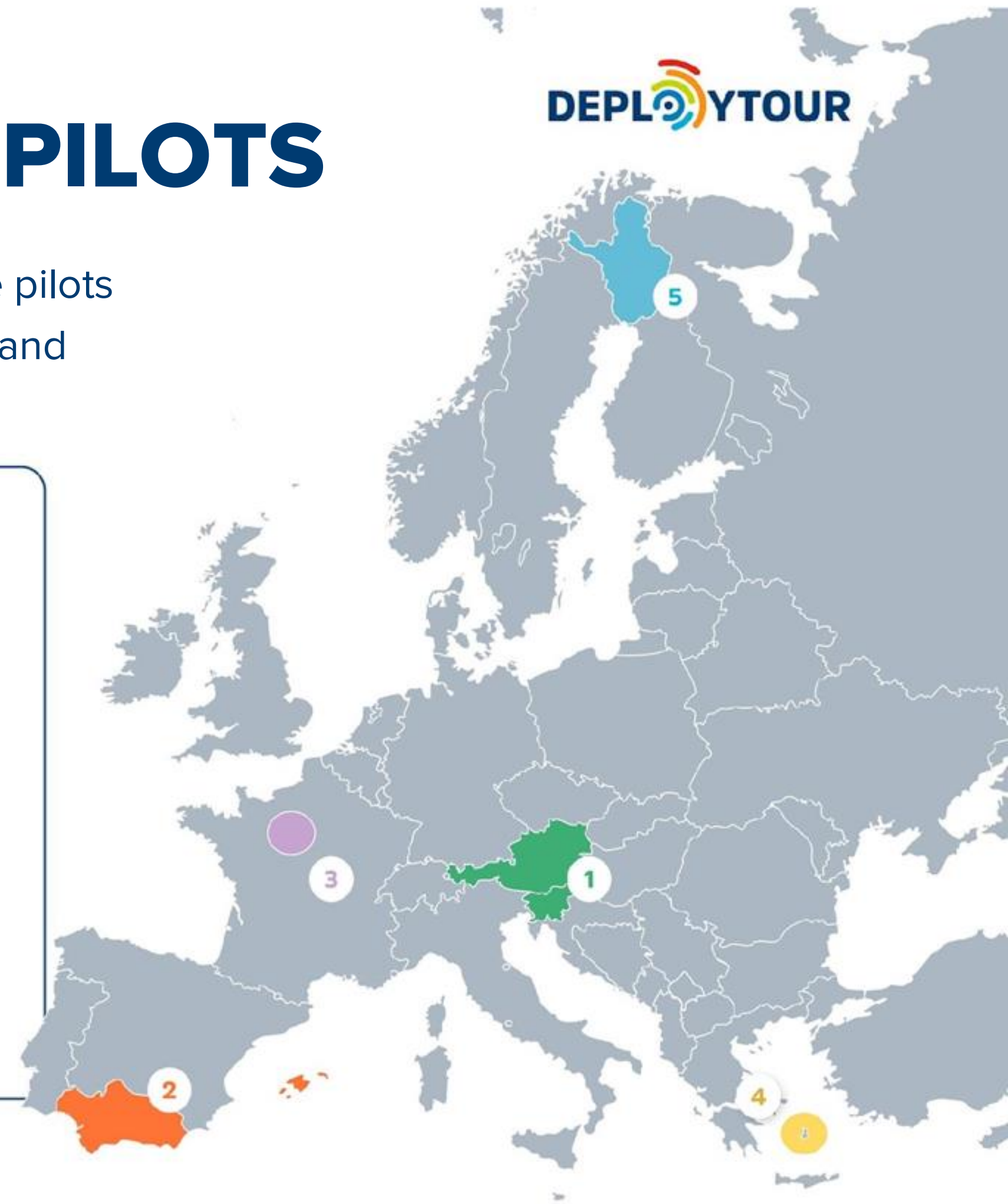
Heatmaps of visitor
movement

....

DEPLOYTOUR USE CASE PILOTS

The DEPLOYTOUR consortium is implementing five use-case pilots across Europe to show the tangible advantages of the ETDS and address key challenges in tourism:

- 1 **Tourist overcrowding in natural areas and environmental impacts:**
Use Case Pilot 1
- 2 **Transforming mature destinations to make them more competitive, resilient, and sustainable:** Use Case Pilot 2
- 3 **Meeting hyper-personalized client demands in the MICE sector:**
Use Case Pilot 3
- 4 **Managing high-seasonality destinations:** Use Case Pilot 4
- 5 **Addressing the lack of a centralized platform to empower tourism SMEs:** Use Case Pilot 5



USE CASE PILOT 1

Sustainable Tourism Management in Alpine Regions

DEPLYTOUR

Location: Alpine Regions in Austria and Slovenia.

Challenges: Overcrowding in natural areas and environmental impacts of tourism, climate change and lack of tourist awareness about sustainable practices.

Solutions: Leveraging AI and data analytics to promote eco-friendly tourism practices, understand tourism flows and reduce environmental impact.

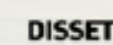
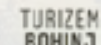
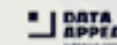
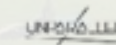
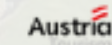
Innovating to attain better resilience and competitiveness in mature destinations:

- Developing a dashboard to monitor destination capacity
- Creating an end-user application for enriched data sharing, and scaling these solutions for broader regional impact



Contributors:

Lead:



USE CASE PILOT 2

Resilience and Competitiveness in Mature Destinations

Location: Canary Islands, Andalusia and the Balearic Islands (Spain).

Challenges: The need to transform the tourism offerings, accessing and utilizing relevant data and developing tailored, data-driven solutions that empower tourism SMEs.

Solutions: Utilizing data insights to enhance the sustainability and competitiveness of popular destinations.

**Innovating to attain better resilience and competitiveness
in mature destinations:**

- Developing a dashboard for DMOs to monitor and drive sustainable tourism practices
- Providing tailored tools and services for SMEs to improve their business strategies by leveraging processed data
- Enabling tourism companies to act as both data providers and consumers



USE CASE PILOT 3

Supporting the MICE Industry

Location: Île-de-France region (France).

Challenges: Adapting to post-COVID market changes, managing last-minute bookings and ensuring flexibility, meeting hyper-personalized client demands and responding to the growing demand for sustainable travel options.

Solutions: Developing a real-time data tool for MICE professionals, offering personalized, AI-driven insights on transportation, leisure, and cultural activities to meet diverse client needs.

Innovating to support the MICE industry:

- Developing a data-driven concierge tool for MICE professionals to meet hyper-personalized demands, blending business services with leisure
- Providing sustainability, economic and social insights for congress and event organizers
- Enhancing decision-making capabilities



Contributors:

Lead:



AMADEUS

UNPARALLEL

DATA APPEAL

DISSET

CITY DESTINATIONS ALLIANCE

USE CASE PILOT 4

Leveraging Cultural Heritage for Tourism Diversification

Location: Syros Island (Greece).

Challenges: Reliance on seasonal sun-and-sea tourism and vulnerability to climate change.

Solutions: Using data to revitalize cultural heritage sites and attract a wider range of visitors and build a sustainable destination model as exemplified by Syros Island.

Innovating to leverage cultural heritage for tourism diversification:

- Integrating advanced technology with the use of 3D scanning, modeling, and digital twin technologies
- Engaging local communities and stakeholders to align digitization with their needs, encouraging sustainable growth and stronger ties between tourism and culture
- Enhancing visitor experience by leveraging digital tools to create immersive and meaningful cultural engagements



USE CASE PILOT 5

Empowering SMEs

in Tourism

Location: Lapland (Finland)

Challenges: Difficulty in collecting, processing, and interpreting complex datasets, limited resources and lack of a centralized platform

Solutions: Creating a collaborative platform to connect SMEs with innovative TravelTech solutions and data resources

Innovating to empower SMEs in tourism:

- Empowering SMEs thanks to TravelTech apps that include tools to enhance operations and customer engagement through data-driven insights
- Enabling SMEs to improve operational efficiency, boost customer satisfaction, and strengthen market competitiveness



Contributors:

Lead:

LAPIN AMK

ANYSOLUTION



NECSTOUR

CITY DESTINATIONS ALLIANCE

UNIVALL

DATA APPEAL

DISSET

ENGAGE WITH THE PROJECT

Synergies & Collaborations

- Meet DEPLOYTOUR at key tourism & data events across Europe
- Visit **www.deploytour.eu** to not miss any events!
- Participate in our regular webinars with other initiatives

Communication and Dissemination activities

- Subscribe to the Newsletter to follow the updates of the project
- Follow DEPLOYTOUR on social media and visit our website for regular updates



Follow us!

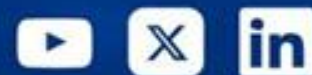


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