Innovative Tools and Strategies for Linking
Mobility Services for a Decarbonised Alpine Space

Interreg
Alpine Space
LinkingAlps
European Regional Development Fund
EUROPEAN UNION

LinkingAlps – Project in a nutshell

LinkingAlps Final Event

20.09.2022 | Aix-en-Provence

The project

INTERREG Alpine Space Program

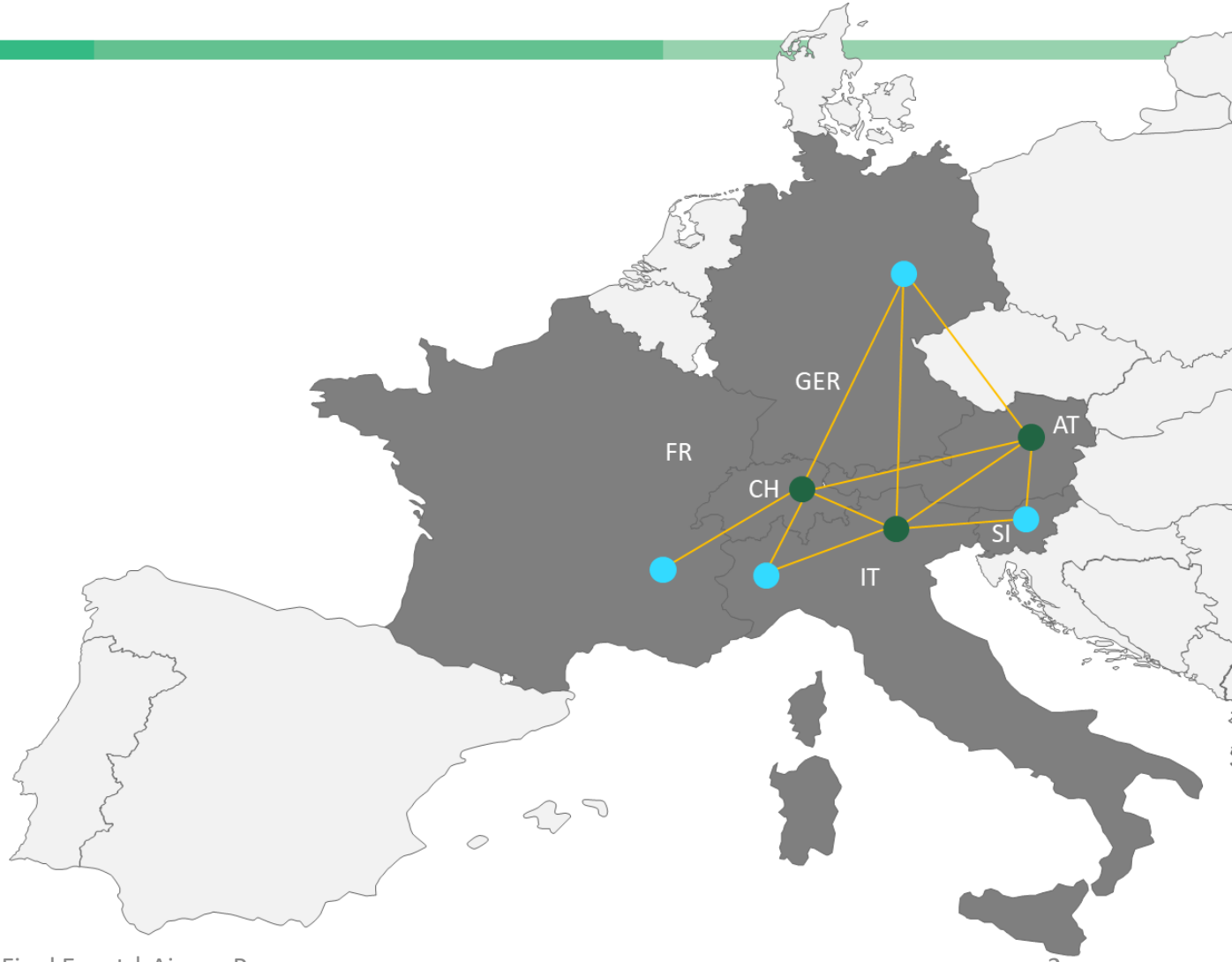
Priority 2 - Low Carbon Alpine Space

2019 – 2022 (33 months)

14 Project Partners

6 Alpine Space Countries

6 Existing travel information services/ journey planners



The consortium

Interreg Alpine Space LinkingAlps
European Regional Development Fund
EUROPEAN UNION

Travel information service providers

VAO

SBB CFF FFS

RRA LUR
regional development agency of ljubljana urban region

ARIA
AZIENDA REGIONALE PER L'INNOVAZIONE E GLI ACQUISTI

STA
Südtiroler Transportstrukturen AG
Strutture Trasporto Alto Adige SpA

TORINO METROPOLI
Città metropolitana di Torino

Regional transport authorities

VVT
VERKEHRSVERBUND TIROL
Mobil auf allen Linien

National transport authorities/agencies

austriatech

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Bundesamt für Verkehr BAV

Research organisations & consultants

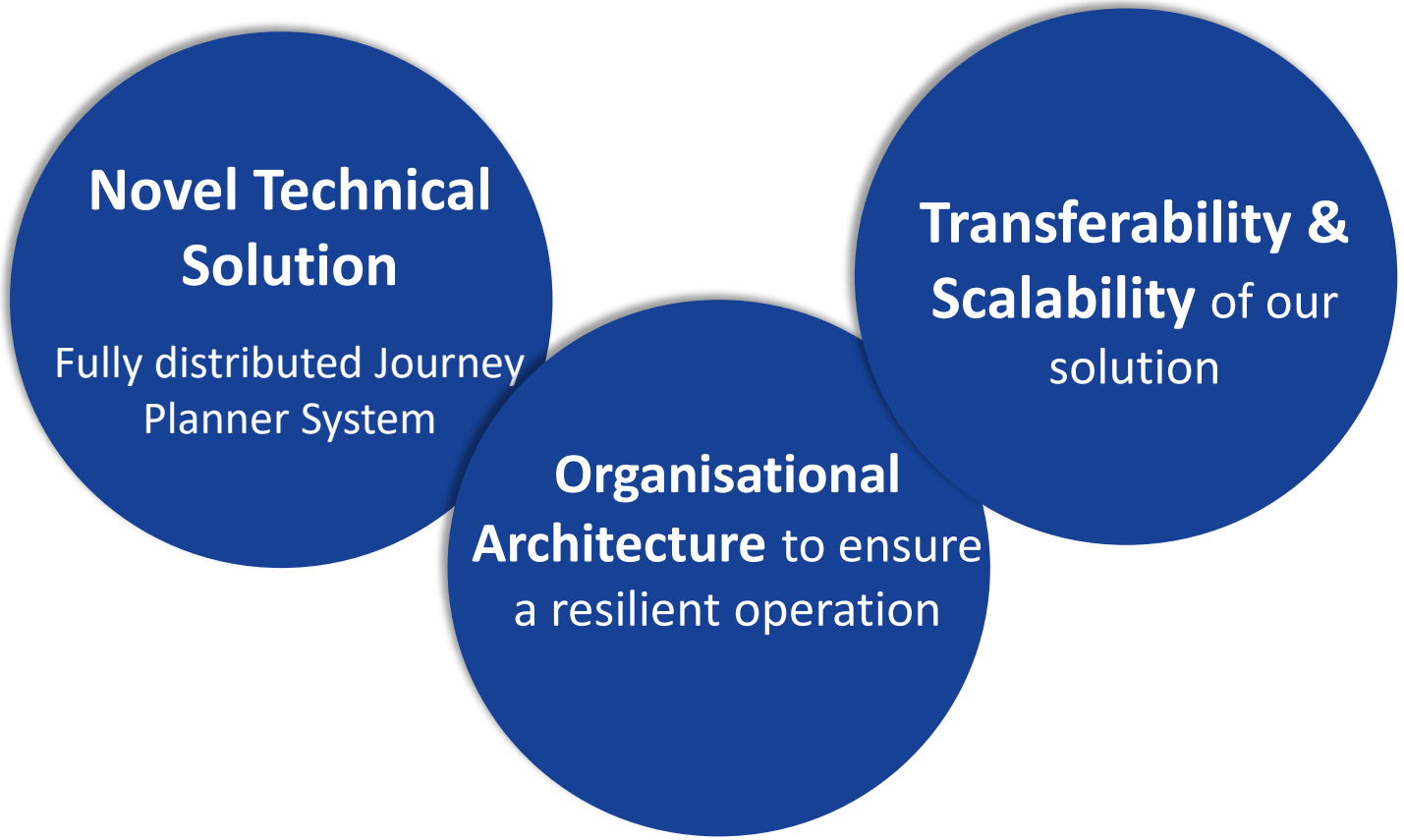
LINKS
ISMB

Cerema

Univerza v Mariboru
Fakulteta za gradbeništvo, prometno inženirstvo in arhitekturo

BLIC

Our Key Focuses



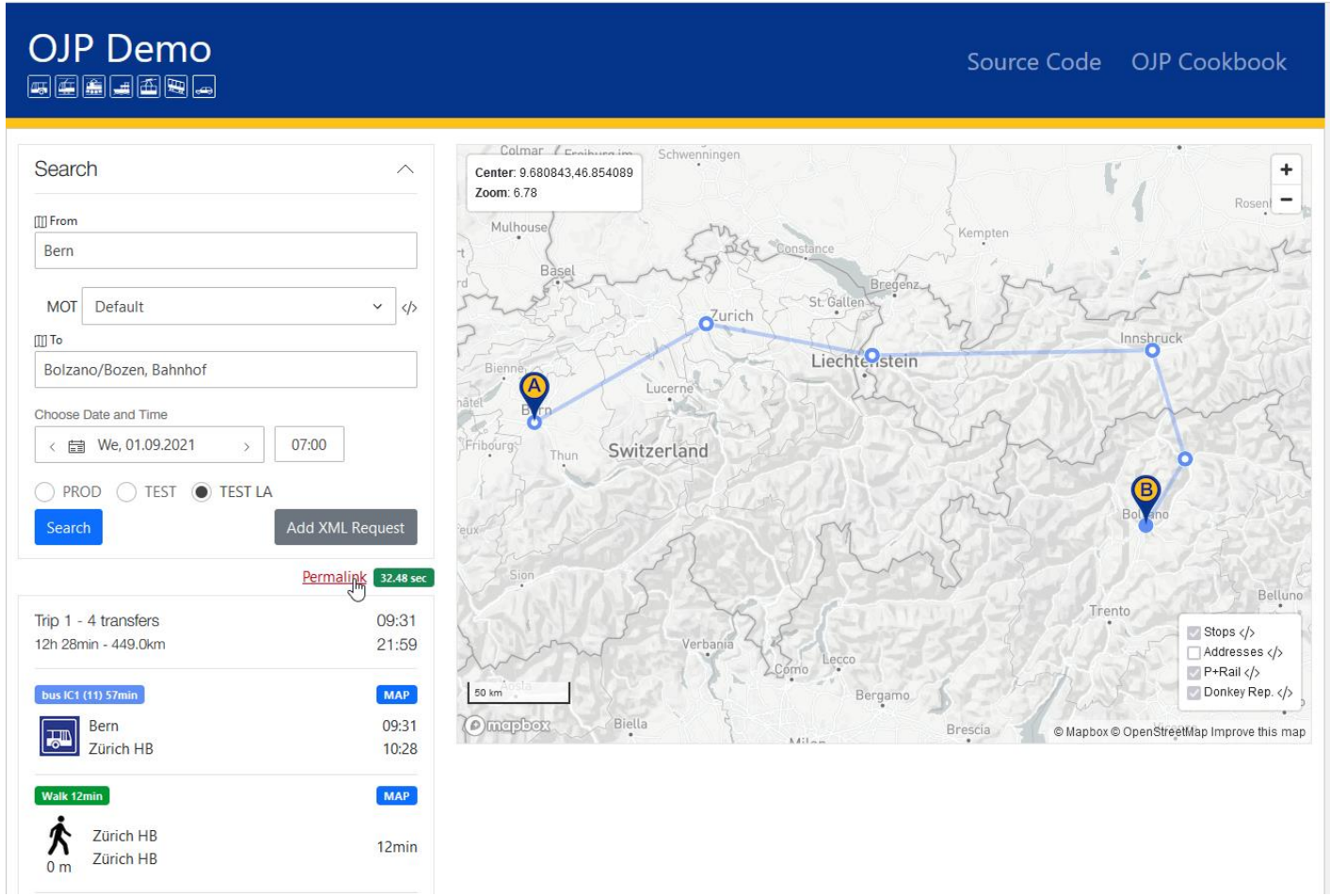
Goals

- **Evolve from a central-distributed architecture to a fully distributed architecture** for decentralised journey planning (major technical challenge!)
- Develop a viable **organisational architecture** a fully distributed OJP service
- Develop an **LinkingAlps OJP Profile** (input for EU OJP Profile)
- Develop a **framework strategy** for the aligned and harmonised OJP deployment in Europe (in cooperation with EU-Spirit and Danube Region)
- **Prepare an Operational OJP service at the end of the project between CH-AT-IT-SI** (Technological Readiness! – Solving of technical problems of the „proof-of-concept“)

Objectives & Outputs

Technical Objectives

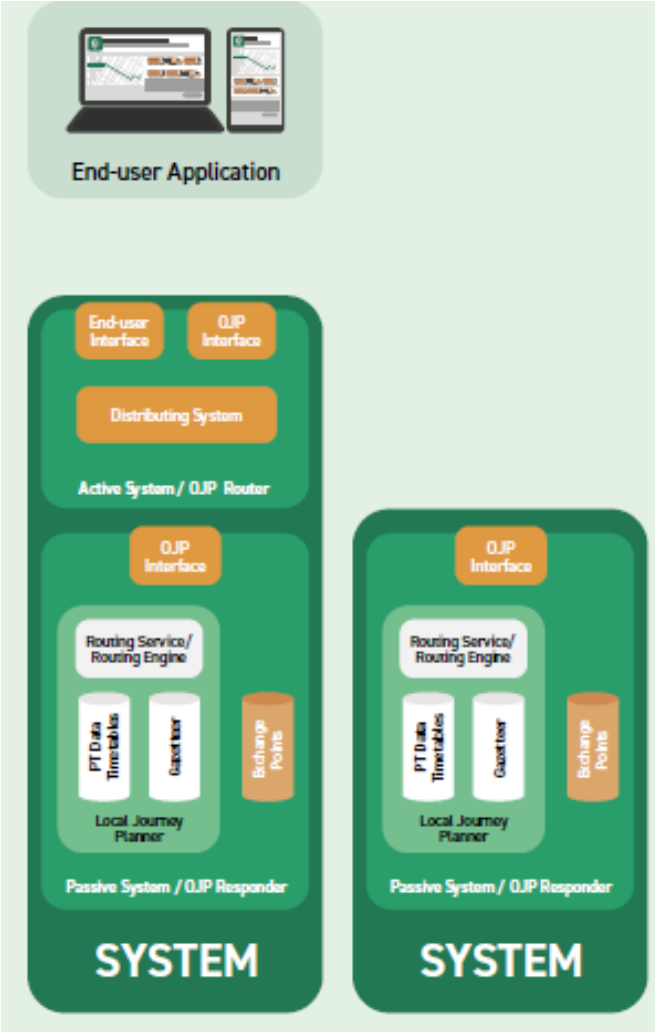
- **Develop a fully distributed architecture** for decentralised journey planning (major technical challenge!)
- Develop an **LinkingAlps OJP Profile** (input for EU OJP Profile)
- Integrate LinkingAlps Service in existing route planer(s)



Technical Architecture

Active System:

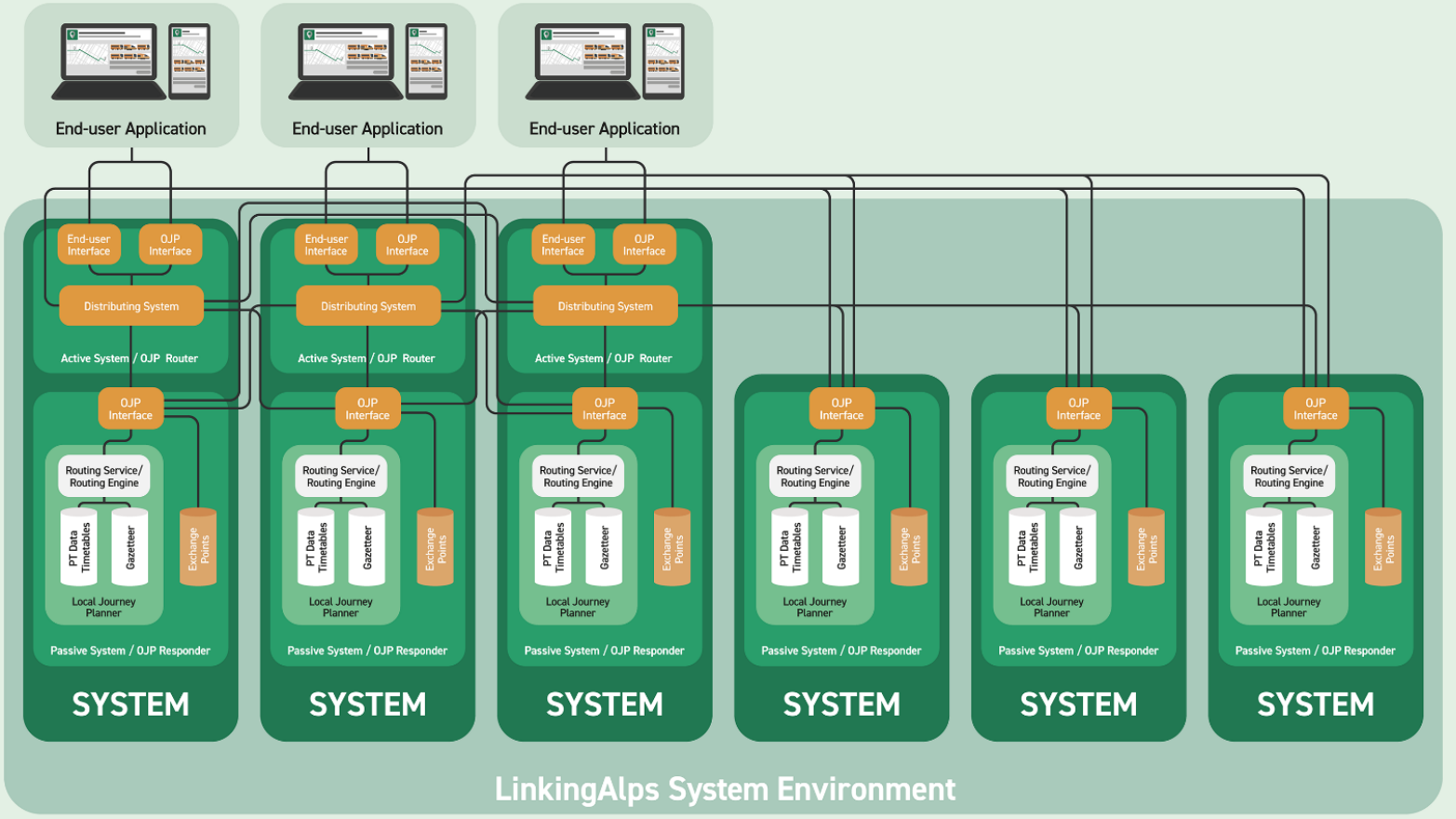
- Connected to End User Applications
- Contain Distributing System



Passive System:

- Local Journey Planner
- OJP Interface

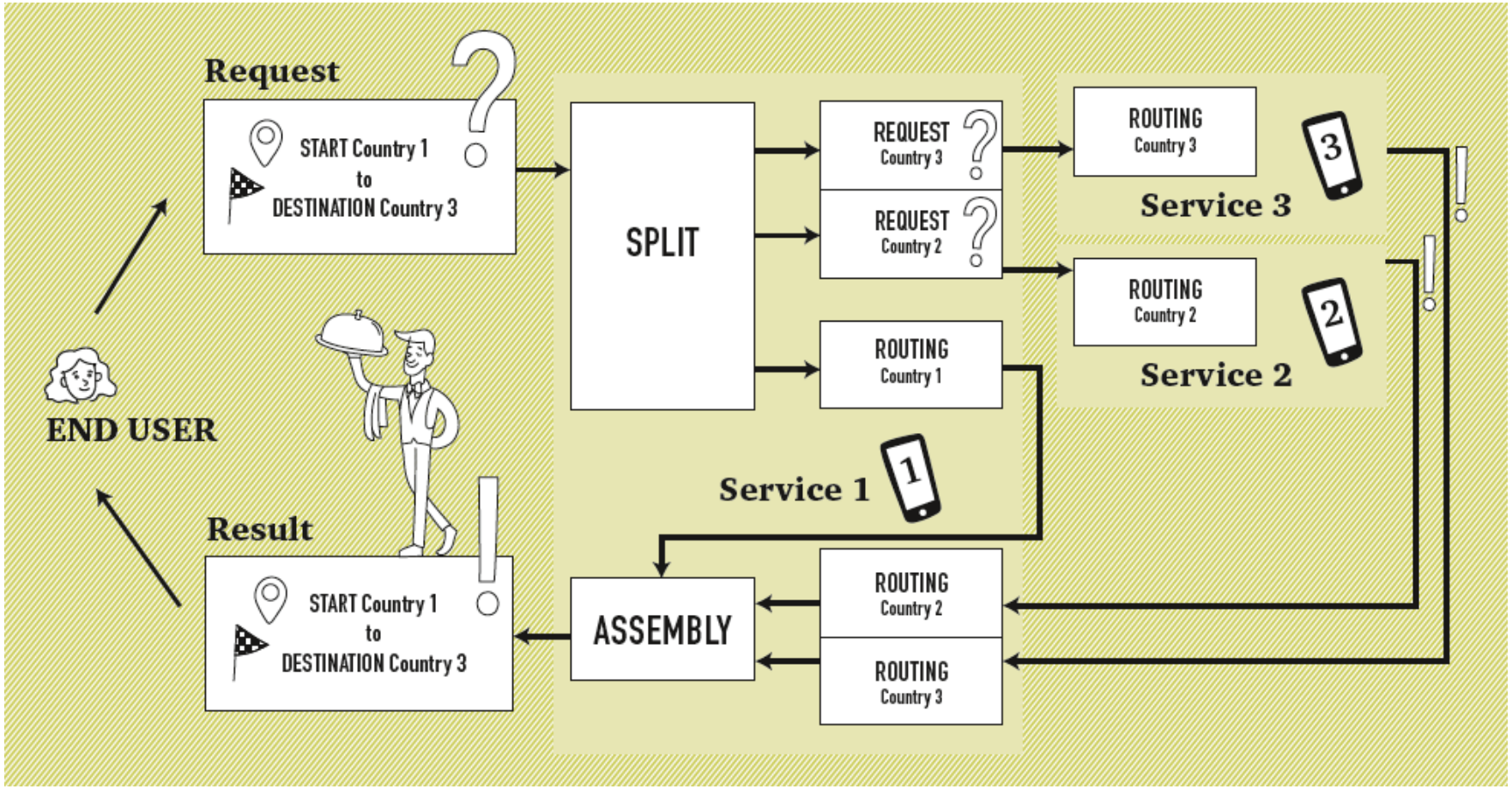
Technical Architecture



Exchange Points

- Exchange points are "transition nodes” between each of the various journey planning systems (participating systems)
- LinkingAlps uses Stations and Stops as Exchange Points

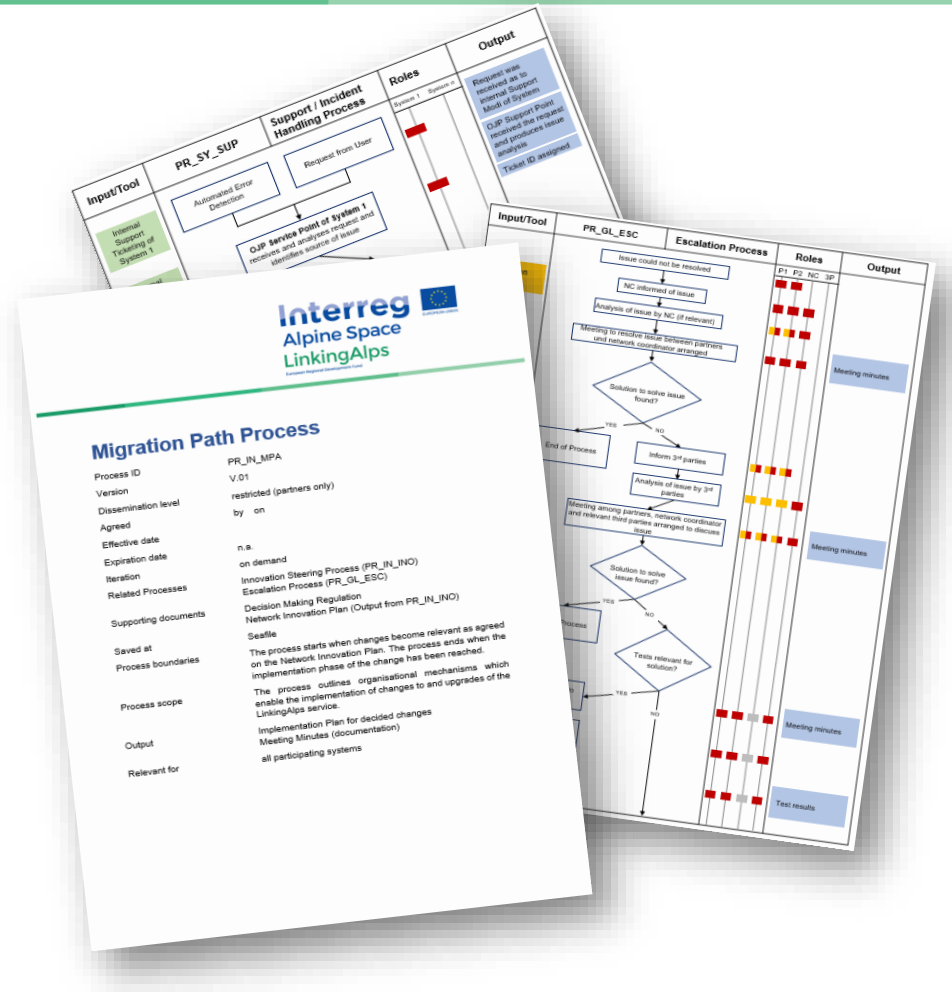
Routing Request Procedure



Objectives & Outputs

Organisational Objectives

- Develop a viable **organisational architecture** a fully distributed OJP service
- **Collaboration structure** for an operational LinkingAlps Service after the project end
- Develop a **framework strategy** for the aligned and harmonised OJP deployment in Europe (in cooperation with EU-Spirit and Danube Region)



Objectives & Outputs

Transferability & Outreach

- Develop **information material** for future adopters to foster transferability, adoption and scalability
- **Raise citizen awareness** for journey planner benefits
- **Transfer** of 'Linking of Services' approach and learning to **future adopters**

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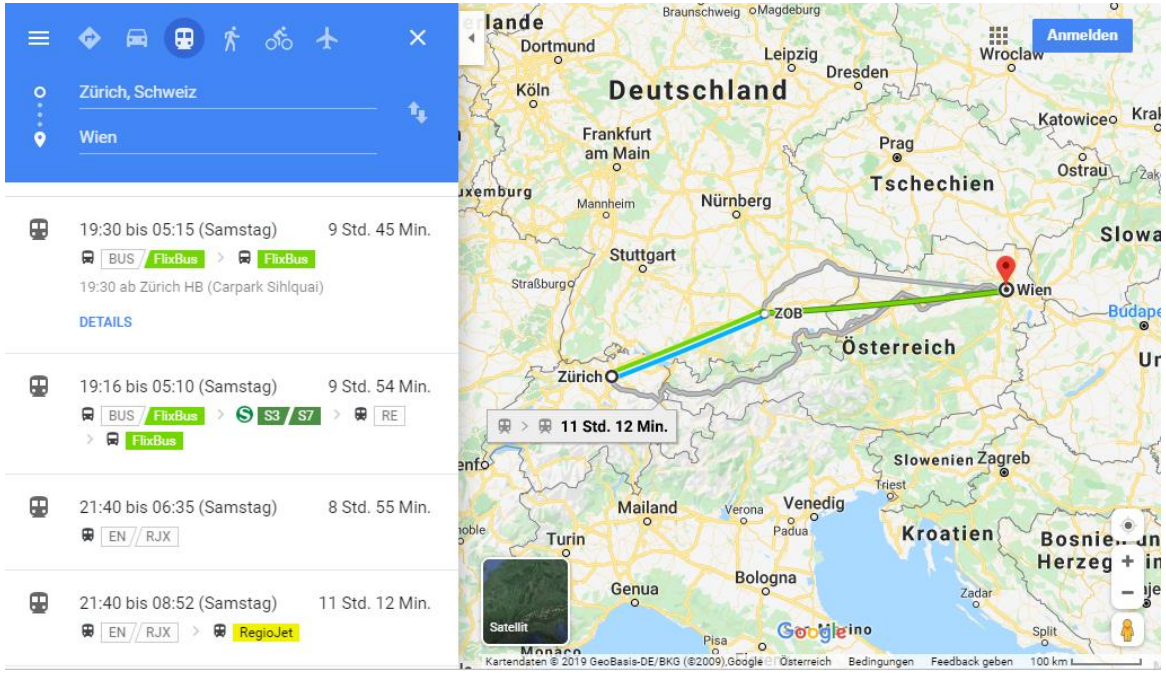
Decision Support Handbook, Technical Blueprints, EU OJP Profile, Q&As for future adopters

The operator’s motivation for OJP

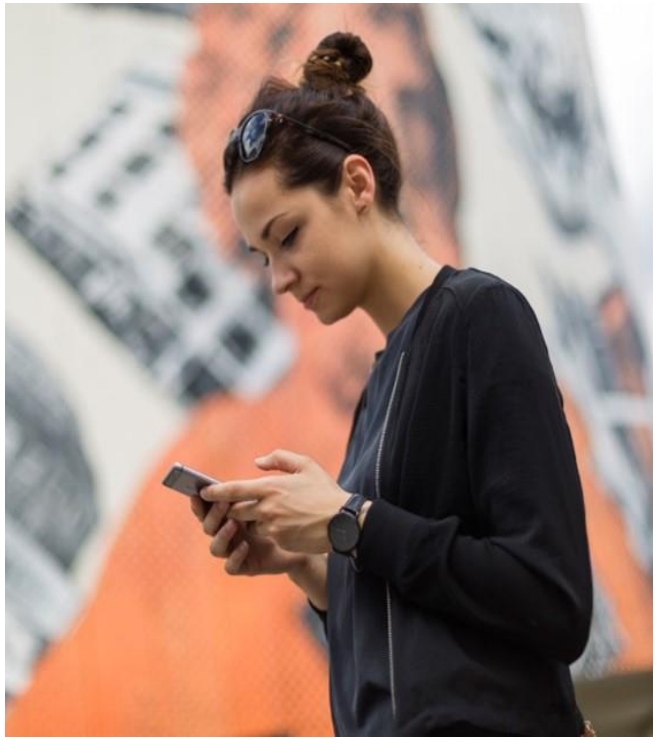
Problem with third party services

- **data are provided** by transport operators through quasi standards (GTFS)
- Information supply to end users (customers) is externalised
- Operators **loose sovereignty** over the update interval, level of detail of the provided information, …
- No legal agreements and “rights / guarantees” to the data provider



The operator‘s benefits with OJP

- **Advantage for routing operators/MMTS service providers:**
  competitiveness against Third Party Services through increased coverage of service without resources intensive data integration
- **Advantage for public transport operators/associations:**
  control of service quality and hence customer satisfaction
- **Advantage for traffic control and management:**
  controlability of information & routing excludes the risks of a sub-optimal routing that contacarizes local traffic measures
- **Advantage for the end user**
  seamless information in one application in highest quality



The operator‘s benefits with OJP

- **no extensive data exchange and data integration efforts** (pooling) **are required**
- the route calculation is always performed by the source system and **up-to-date travel information is gathered dynamically**
- **data-quality and correctness** is up to the local operators that is the **“local” and “trusted” specialists** for its region
- → usage of grown and long-established data integration structures in the other country

Milestones

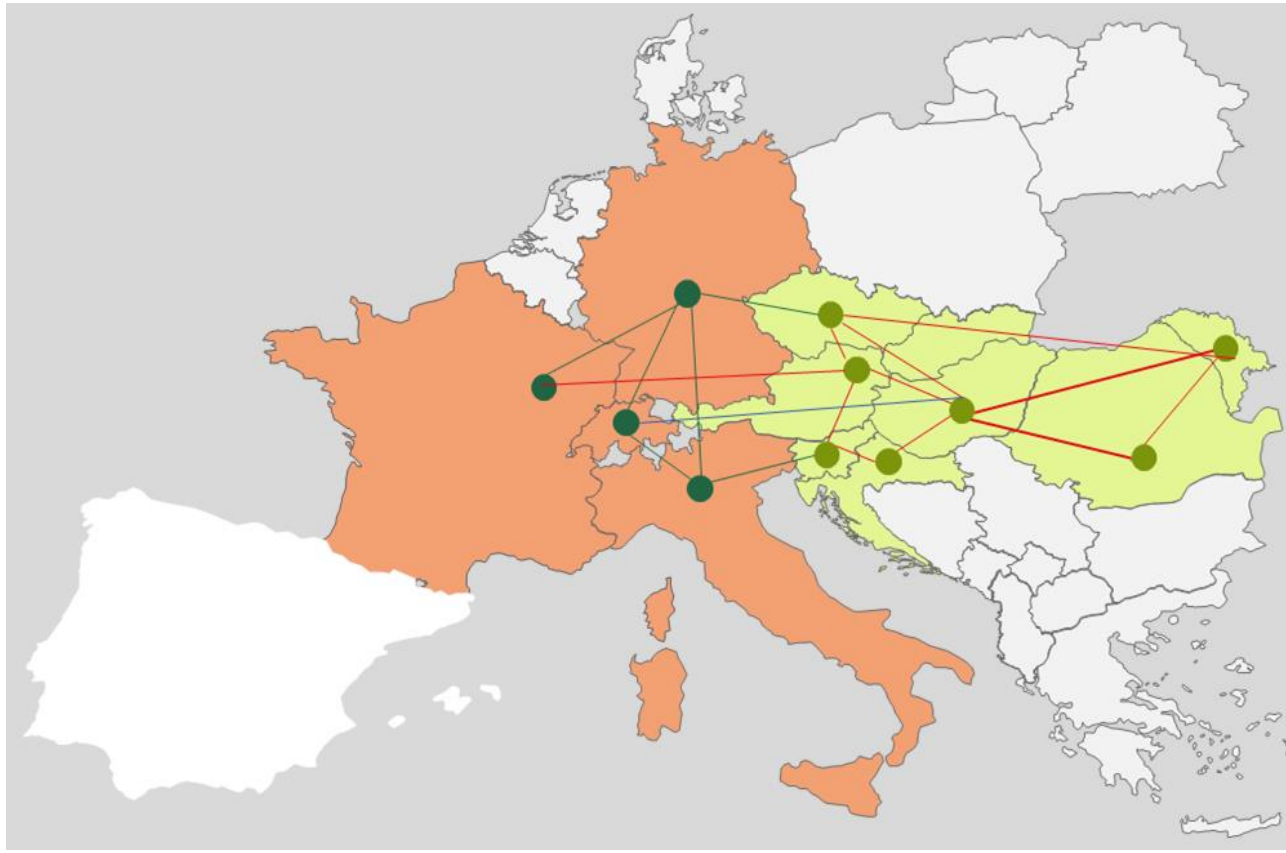
- Technical Architecture - finalised
- Technical requirements & specifications and OJP Profile - finalised
- Organisational architecture and organisational processes - finalised
- Demonstrator of the LinkingAlps Service – finalised
- Implementation of the fully distributed service – “finalised”
- Collaboration & governance structure of the fully distributed service –> Beta Phase

→Establish a resilient operational LinkingAlps Service - **Beta Phase**

→Link with other European journey planning services via OJP interfaces

Our Vision

Strong Networking & preparation for collaboration with European OJP Networks



Thank you for your attention!

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