

LinkingAlps Final Event

Organisational Framework Strategy

Federal Office of Transport
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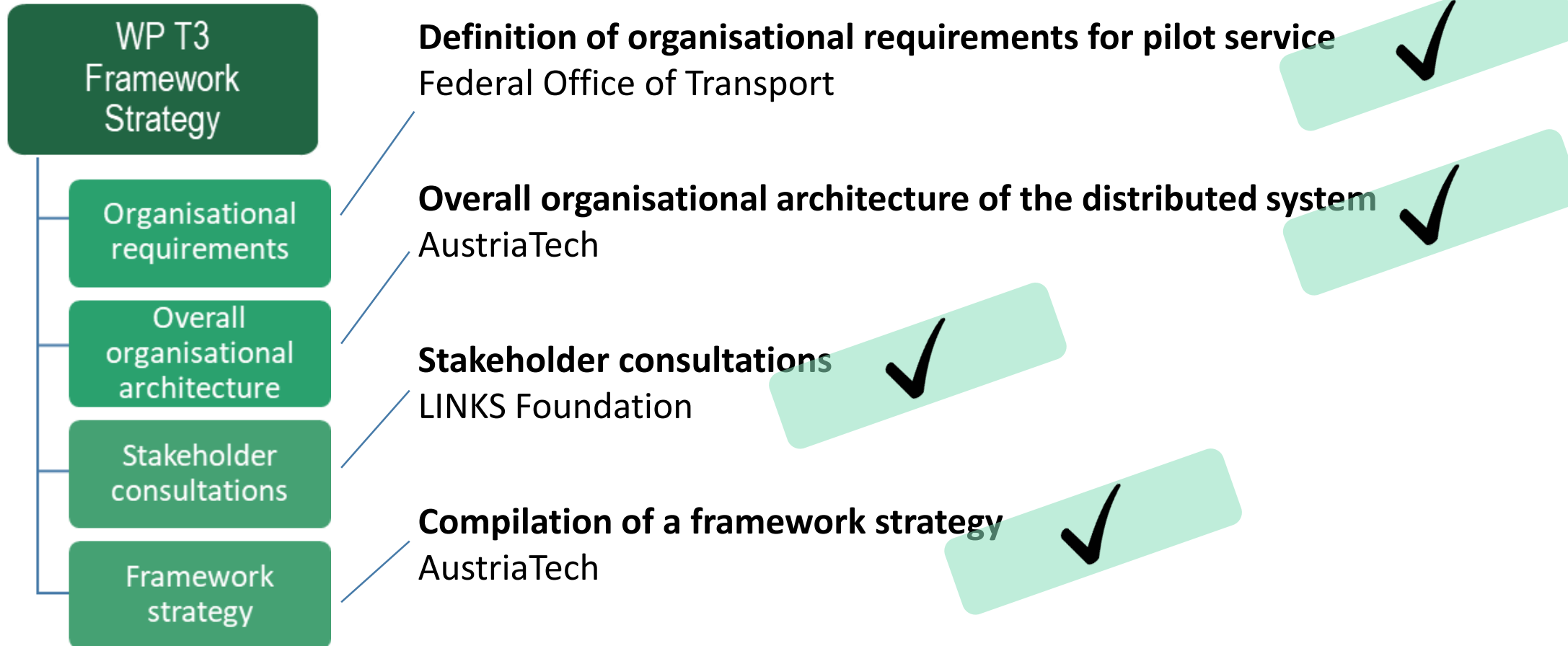
What are the jigsaw pieces needed for seamless transnational travel information services?



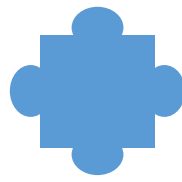
Objectives of the Framework Strategy

- Definition of **long-term** organisational and operational aspects for linking the journey planning services
- Formulation of the **rules of the game** to enable sustainable operation of the service after the end of the project
- Outline of the **lessons learned and challenges** faced, as well as an **outlook** on the future work required after the completion of the project

Basis for the Framework Strategy



1. Legal Framework



Key findings:

- EU formulates the intention of “linking of services” in the Delegated Regulation (EU) 2017/1926:

*A key solution **to enhance the geographical coverage** of travel information services and to support Union-wide multimodal travel information is by **linking** local, regional and national travel information services.*

Upon request, travel information service providers shall provide to another information service provider routing results based on static, and where possible, dynamic information.



Challenges:

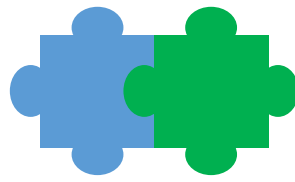
- There are different implementations of the Delegated Regulation with regard to **National Access Points** and **transnational routing**. These need to be aligned.



Possible solutions / required activities:

- A minimum level of **data quality** should be ensured.
- In addition to static data, the provision of **dynamic data** should also be mandatory.
- In accordance with the EU Directive, all relevant data should be made **publicly accessible** in an appropriate manner.

2. Policy Framework



Key findings:

- When it comes to the provision of data and information, different policy related framework conditions apply.
- Some of the partners want to offer the service as an open service, providing free access to the API (request limits at marginal cost excluded) → low entry barriers to use the service and high dissemination.
- Other partners have business models that do not allow them to offer the service for free to third parties outside the consortium.



Challenges:

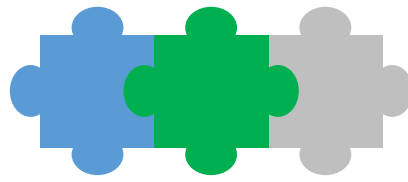
- Contradicting framework conditions on the topic of open data and free access make it difficult to reach agreement on licenses.



Possible solutions / required activities:

- In line with EU Directives, the relevant data and services must be made publicly accessible.

3. OJP Standard



Key findings:

- Delegated Regulation (EU) 2017/1926:

*It is recommended that travel information services should use the European Technical Specification entitled 'Intelligent Transport Systems — Public Transport — **Open API for distributed journey planning (CEN/TC 278 (2017))**' (= **OJP standard**) when performing distributed journey planning.*

- The OJP standard describing the use of a common, open API enables the **exchange of journey planning information** between any participating local, regional or national journey planning system.
- Within the project, the **LinkingAlps OJP profile** has been specified and implemented.



Challenges:

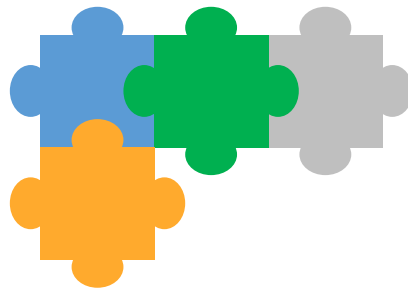
- Different interpretations of the standard are possible and so far, there is no **commonly agreed profile**.



Possible solutions / required activities:

- A clear, interpretation-free OJP profile needs to be defined (**OJP EU profile**).
- Europe-wide **harmonization** must be driven in OJP standardization groups.

4. Distributed Solution Approach



Key findings:

- The OJP interface was implemented in such a way that it supports a **high degree of distribution**, but also includes the exchange and central integration of the necessary supporting data (such as exchange points, gazetteers, long-distance transport).
- A first technical **concept for the fully distributed** approach has been created.
- As a novelty, not just one but **two OJP Routers** were implemented and OJP Responders were connected to both OJP Routers. In addition, OJP Routers and Responders from different suppliers have been connected.



Challenges:

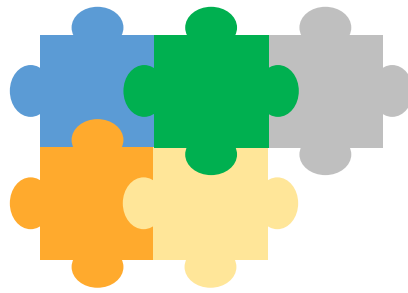
- Due to the high **complexity**, not all aspects of the fully distributed approach could be tested during the project.
- New **versions of profiles** must be handled.



Possible solutions / required activities:

- Further **research** is needed for the fully distributed approach.
- The integration of the required supporting data must be **globally specified, harmonised** and automated, and the data quality must be controlled at the source of the raw data.

5. Data availability & service quality



a. Long-distance data



Key findings:

- There are limitations in the number of journey planning services (regions) that can be covered in one request (2 or 3-net search).
- Therefore, and also to meet the performance requirements of users, there is a need for a **long-distance service** when remote regions are connected.



Challenges:

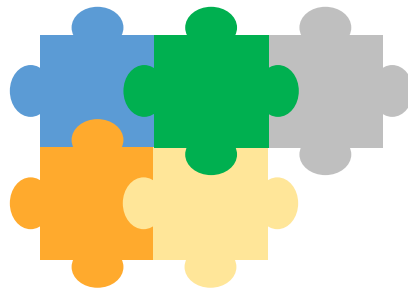
- **Long-distance data** for rail are currently usually only available to railway companies.
- For some of the relevant regions in the project, long-distance data is not available.
- The provision of long-distance rail data is crucial for the further development of high-quality services in the field of OJP.



Possible solutions / required activities:

- A Europe-wide commitment to provide this data via National Access Points is needed.

5. Data availability & service quality



b. Availability of data within the services



Key findings:

- Depending on the coverage of the service, the national or regional framework conditions, the **availability of data** varies greatly.
- Where applicable, the lack of data availability must be addressed and resolved.



Challenges:

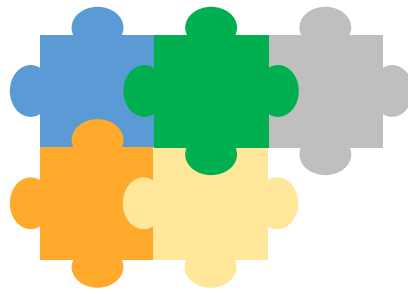
- The differences in data availability are for example: real-time (including disruption) data; long-distance transport; territorial coverage; availability of public transport routes and providers; update frequency of time tables.
- There are different views for the modelling of stops and stop edges.



Possible solutions / required activities:

- These differences need to be addressed on a political, organisational and technical level. In the long term, the availability of **real-time data** is a must.

5. Data availability & service quality



c. Harmonisation of the linked services



Key findings:

- The OJP interface enables the interconnection of existing journey planning services which are already operating in their respective regions.
- These services have different levels of data quality and of the quality of the routing information that they provide to their users, which affects the overall **quality of the linked service**.



Challenges:

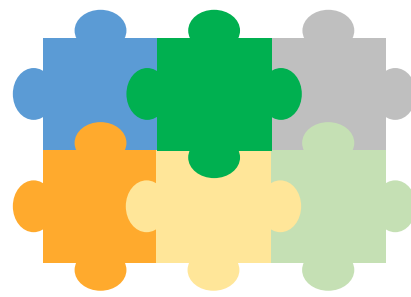
- The quality levels of the different services need to be aligned.



Possible solutions / required activities:

- Requirements for **data and service quality** need to be defined and implemented for all services.
- **Performance and multilingual service provision** need to be improved.

6. Organisational Architecture



Key findings:

- The main goal of the pilot and the phase after the LinkingAlps project is to develop a stable, operational service that enables interoperable and seamless cross-border OJP Services for travellers in the Alpine Region.
- For the beta-phase after project finalisation and for the operational service, a commitment is required from the participating systems for further operation, upgrade and maintenance of the OJP interfaces.



Challenges:

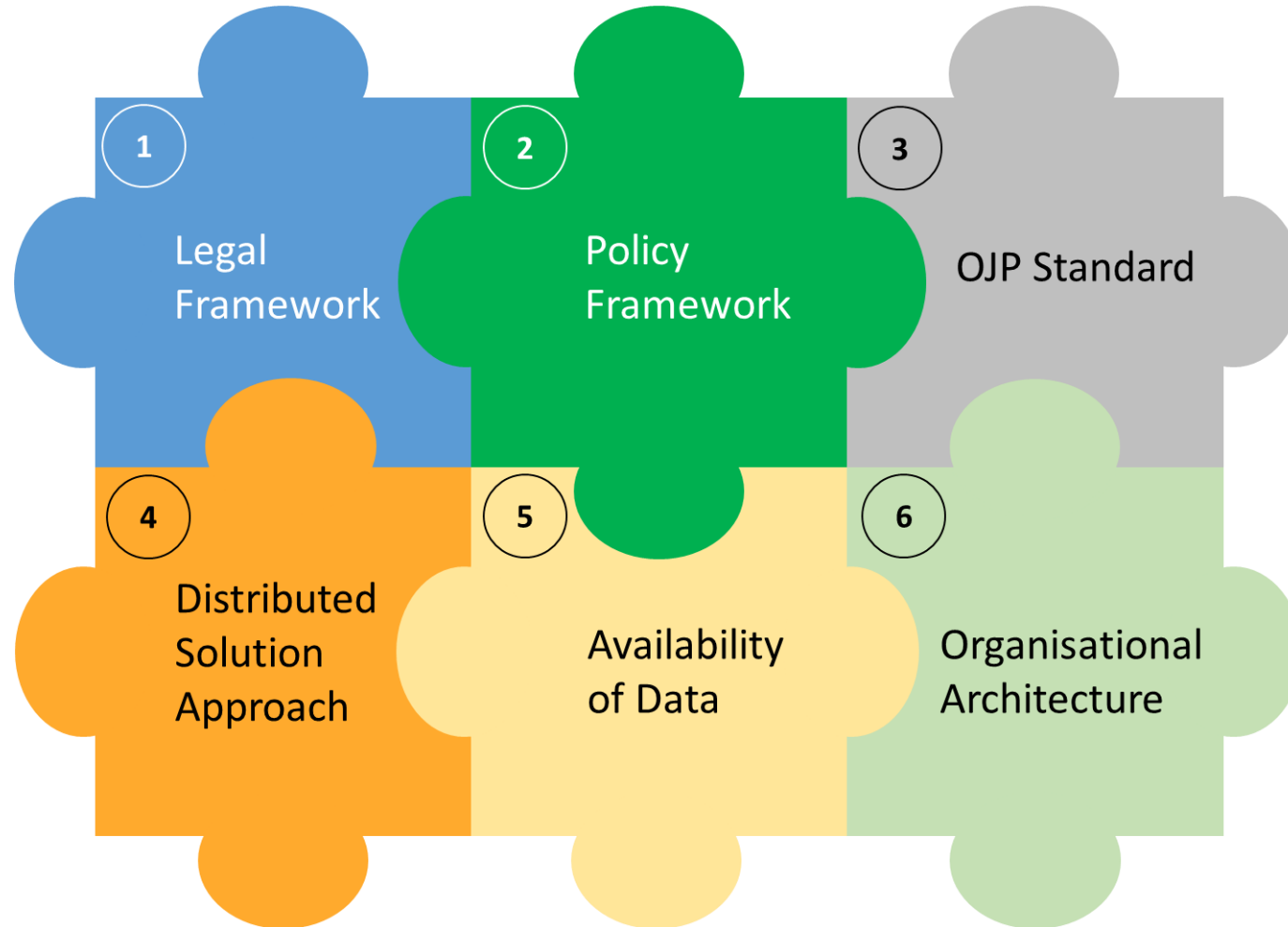
- The passive and active systems must meet defined technical and organisational requirements to ensure service quality.



Possible solutions / required activities:

- A written **agreement** for the commitment of the parties to collaborate and jointly advance technical and organisational aspects of the LinkingAlps Service after project finalisation will be implemented.
- In order for a journey planning system to participate in the LinkingAlps service, it must meet the technical and organisational requirements defined in the **Terms of Reference** (integral part of the agreement) including data quality, system performance, multilingualism, support processes, contacts, bug reporting, SLA, timeline and milestones.

OJP in the Alpine Space and beyond



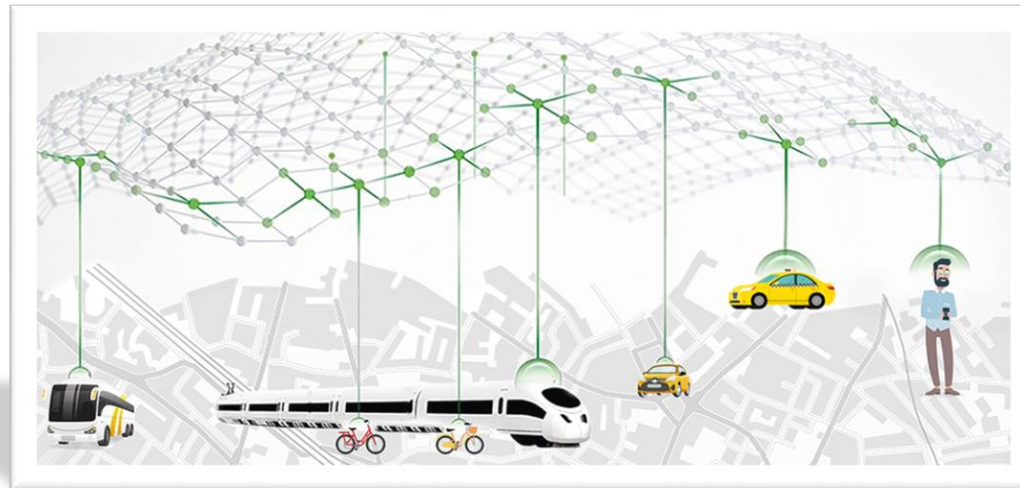
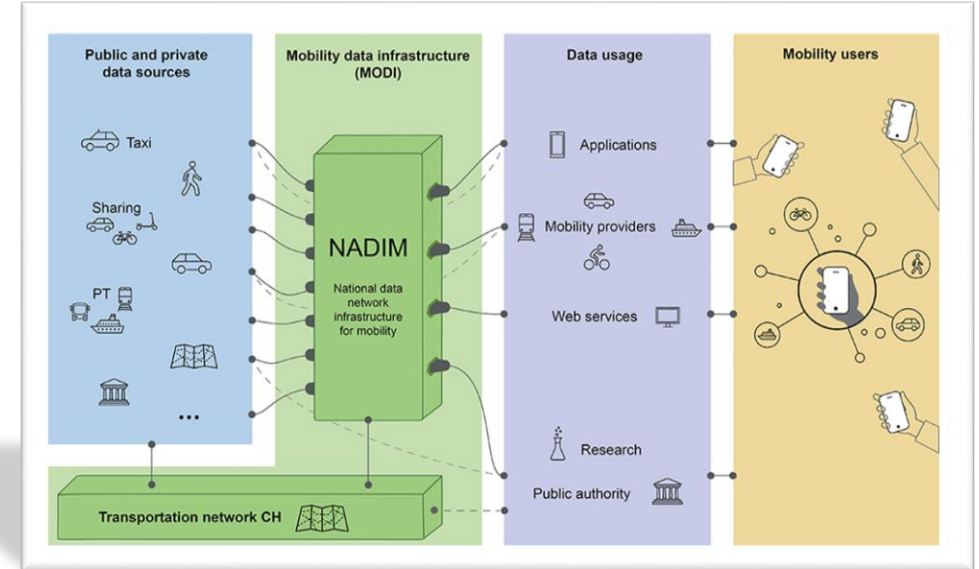


What lies ahead in Switzerland?

Vision:

«One journey, one ticket» for all types of mobility.

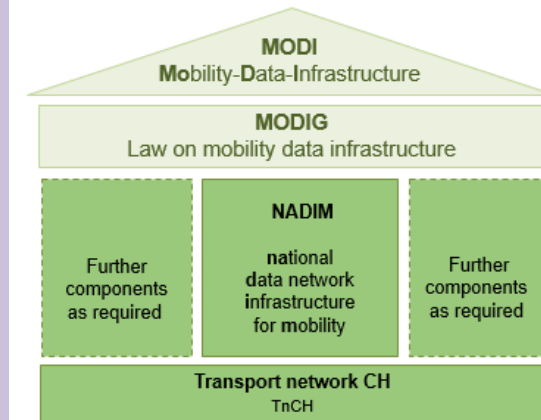
- Mobility data infrastructure
- Rules/regulations: a.o. funding basis
- Principles: a.o. neutral operator and open data



HOW? Principles for the MODI

The following **principles** apply to the operation of MODI:

- Federal task / no profit orientation
- Openness / voluntariness
- Independence / non-discrimination
- Participation / transparency
- Open Data / basically free of charge
- Quality
- Reliability / Cybersecurity
- Flexibility / Adaptability



Financing: MODI costs fully financed by the federal government for 10 years
- subsequent user financing sought.

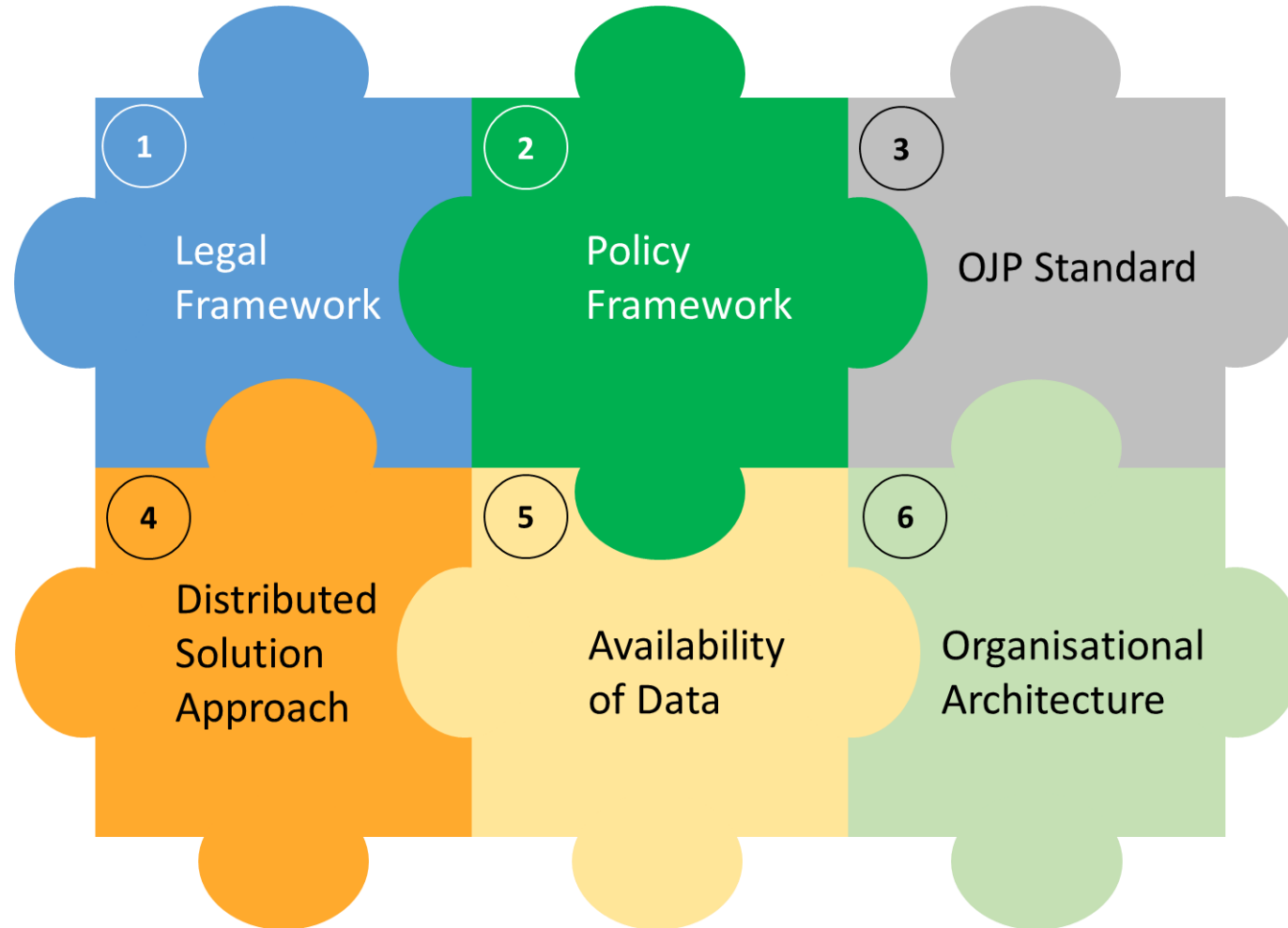
Conclusion: What do we want to achieve with MODIG?

Promote innovation through access to mobility data for everyone.

- More efficient mobility system (ecological, financial)
- Customer-oriented offers
- New business models
- Reduction of dependencies



OJP in the Alpine Space and beyond



Thank you for your attention

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