



## Cross-border mobility in the Alpine Region

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# Annex II: Archetype Factsheets

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# Digital Solutions

## Short Description:

A digital service or solution acts as a connector between the user and the transportation service provider. Acting as a platform for mobility, it generally does not need any extra infrastructure investment by the public sector.

## Land Use Types:



Metropolitan



Urban



Rural

## Cooperation Potential:

The potential for cooperation can vary between low – medium – high with such projects, depending on the product itself.

## Example Projects:

- [The Trainline](#)
- [FAIRTIQ](#)
- [WhimApp](#)

## Suitable to:

all hotspots, e.g.: Basel, Salzburg, Ticino

## Strengths:

- no physical infrastructure needed, low operating costs
- quick implementation (if solution available on the market)
- improved service/information access
- modal shift, multimodal journeys

## Opportunities:

- improved access to information
- personalising and/or reducing complexity of information available
- bundling ([Whim](#)) and best price ([FAIRTIQ](#)) lead to customer cost savings

## Weaknesses:

- custom solution/in-house development in the public sector can have high costs, take a long time, and require intense cooperation
- provider may not need to cooperate with public sector
  - does not share data
  - exploits loopholes

## Threats:

- not accessible to everyone (need to own smartphone, roaming, extensive data package)
- variety of apps confusing customers

# Harmonizing Standards

## Short Description:

Projects aimed at reaching a standard with respect to infrastructure or data handling. This standardization harmonizes conditions on both sides of the border. It enables seamless/non-discriminatory access to networks and facilities.

## Land Use Types:



Metropolitan



Urban



Rural

## Cooperation Potential:

Strong potential for cooperation for the Public Transport Operator/Authority

## Example Projects:

- [TfL Open Data](#)
- [e-MOTICON](#)

## Suitable to:

all hotspots, e.g.: Geneva, Lake Constance, Jura

## Strengths:

- new infrastructure standards do not necessarily entail new costs
- increase speed of technology adoption
- open data policy can be implemented quickly
- no maintenance costs for open data
- increase ridership/reduce barriers to entry for PT

## Opportunities:

- level playing field/access for different competitors (increases competition)
- range extension (E-Mobility)
- Open Data:
  - greater variety of products

## Weaknesses:

- existing standards expensive to harmonize (e.g.: electric sockets)
- effort and time needed to build consensus
- risk of standard not being adopted/accepted by all partners
- Open Data:
  - effort needed to consolidate and collect data for publishing

## Threats:

- making the wrong choice (Technology)
- threat of imposing a solutions that benefits the dominant partner/s at the expense of others (lobbying)
- Open Data:
  - variety of applications can confuse customers
  - lost business opportunity for the public sector

# Joint Ventures (Cross Border)

## Short Description:

The founding of a legal entity that is co-owned by two or more stakeholders on both sides of the border. This entity formalizes the relationship between the stakeholders and ensures a long-term partnership.

## Land Use Types:



Metropolitan



Urban

## Cooperation Potential:

Strong potential for cooperation for the Public Transport Operator/Authority

## Example Projects:

- Lémanis operating the [Léman Express](#)

## Suitable to:

Metropolitan/Urban hotspots,  
e.g.: Monaco, Trieste, Styria

## Strengths:

- leads to a long term partnership/endeavour
- can lead to/intensify cooperation in other areas
- produces quality/seamless cross border offer

## Weaknesses:

- high level political support is needed
- complex legal and institutional process
- securing funds (high capital expenditure)

## Opportunities:

- delivering a product needed by the consumer
- travel time savings to users
- increase of public transport use locally if time tables are coordinated

## Threats:

- power imbalance that could lead to bad/wrong business decisions
- financially unprofitable company

# Multimodal Hubs

## Short Description:

Transportation hubs that facilitate a seamless exchange between modes. These locations include car parking, public transport and shared mobility services making it easy for the user to choose the best mode for a particular trip. Such hubs can be extended to include micro-logistics.

## Land Use Types:



Metropolitan



Urban



Rural

## Cooperation Potential:

Strong potential for cooperation for the Public Transport Operator/Authority

## Example Projects:

- [ELEC'TRA](#)

## Suitable to:

Metropolitan/Urban hotspots,  
e.g.: Basel, Salzburg, Styria

## Strengths:

- visible/physical spot (design)
- potential for modal shift to PT, bicycle and walking
- attracts new service providers
- potential to initiate cooperation and PPP and private companies

## Weaknesses:

- can be expensive to set up and operate, depending on provisions and business model (urban/rural difference)
- requires planning, cooperation effort, space, and infrastructure
- requires scale to establish impact and attract users (network effect)

## Opportunities:

- all in one place
- something for everyone
- reduce car-ownership
- experiencing new technologies

## Threats:

- public opposition (e.g.: against taking away parking)
- vandalism
- low usage and adoption, due to low demand
- inability to attract service providers or collaboration by PTO

# Physical Link +

## Short Description:

The (+) signifies that in addition to the infrastructure, there is a branding or digital aspect to the project. This type of project does not necessarily involve construction of a completely new connection but can be seen as adding an attribute to an already existing project. This can be achieved through the addition of a mobile app that displays information about the use of a certain bicycle trail or an electronic payment option to an existing public transport service.

## Land Use Types:



Metropolitan



Urban



Rural

## Cooperation Potential:

The potential for cooperation can vary between low – medium – high with such projects, depending on the product itself.

## Example Projects:

- [Mobiregio](#)
- [SacraVelo](#)
- [Rejsekort](#)

## Suitable to:

all hotspots, e.g.: Geneva, Trieste, Kufstein-Rosenheim, Terra Raetica

## Strengths:

- additional cost is minimal compared to overall budget
- short timescales/no lengthy planning procedures required
- low-cost option for “upgrading” existing infrastructure

## Weaknesses:

- value for money still unclear, not a proven concept
- local partners do not participate (e.g.: directory)
- external provider (tourism platform) may not require cooperation with PTA but would probably benefit

## Opportunities:

- “visibility” – physical presence gets attention
- leveraging physical infrastructure with digital addition – additional/new users
- user perspective: increased access to information, not time/location dependent, multilingual

## Threats:

- not accessible to everyone
- low/no user demand
- external provider aims do not align with LA
  - e.g.: promoting an area for motorbike tours while local authority seeks to promote it for hiking and biking

# PT Cross-border Cooperation

## Short Description:

Cooperation by transport authorities or operators in two or more countries through the coordination of time-tables and/or tariffs. This in turn makes it more attractive to travel between these two points using public transport services.

## Land Use Types:



Metropolitan



Urban



Rural

## Cooperation Potential:

Strong potential for cooperation for the Public Transport Operator/Authority

## Example Projects:

- [Strasbourg-Kehl tramline D](#)
- [ZVON Dresden-Wroclaw Rail Connection](#)

## Suitable to:

all hotspots, e.g.: Basel, Salzburg, Styria, Jura

## Strengths:

- minimal extra cost/time entailed (TT)
- improving cross border relationships between LA/PTA/PTO (TT+TA)
- low/no implementation and maintenance costs (TA)
- opportunity to reform/simplify tariff system as a whole

## Weaknesses:

- limited impact of TT cooperation alone
- TA requires extensive discussion and political approval (time consuming)
- difference in regulatory structures/PT systems/markets
- different approach to tariff design/philosophy/regulation (TA)

## Opportunities:

- direct connections
- reduced waiting times (TT)
- reduced costs for customers (TA)
- increased ridership
- increased impact when combined with Tariff Agreement

## Threats:

- not properly advertised or change not communicated (Timetable)
- loss of revenue

# Shared Mobility in Rural Areas

## Short Description:

These services usually require financial subsidies and are introduced into low density areas to provide mobility where public transport offer is either weak or non-existent (e.g.: Call-a-bus). Furthermore, such services could be used to encourage tourism and stimulate the economy in rural areas.

## Land Use Types:



Rural

## Cooperation Potential:

Strong potential for cooperation for PTO/PTA depending on regulatory landscape and general attitude towards experimentation.

## Example Projects:

- [E-bike Net](#)
- [Co-wheels](#)

## Suitable to:

rural areas, e.g.: Kufstein-Rosenheim, Brig-Domodossola, Jura, Terra Raetica, Ticino

## Strengths:

- innovative offer, multimodal when included in PT
- promotes sustainable travel to/in the touristic destination
- need for cooperation
  - services can be tailored to specific locations and needs

## Weaknesses:

- cost for implementing, operating subsidies for private partner needed
- not accessible to anyone (license, credit card, etc.)

## Opportunities:

- increased mobility options/accessibility
- no need for (second) car ownership (seniors, low income, youth)
- pay as you go – reduced costs for users, no ownership required
- convenience, ease of use, door to door

## Threats:

- lack of or limited demand (e.g.: seasonal)
- inability to find private partner or a willing provider for the services
- vandalism



# Shared Mobility in Urban Areas

## Short Description:

These services appear in dense urban areas usually operated by private companies who are looking to make financial profit by meeting the high demand for mobility. Services include on-demand ride pooling as well as other modes of shared mobility.

## Land Use Types:



Metropolitan

## Cooperation Potential:

Strong potential for cooperation for PTO/PTA depending on regulatory landscape and general attitude towards experimentation.

## Example Projects:

- [BerlKönig](#)
- Bikesharing
- Carsharing (e.g.: [Co-Wheels](#))

## Suitable to:

Metropolitan/Urban hotspots,  
e.g.: Monaco, Geneva, Basel,  
Salzburg, Trieste

## Strengths:

- providing first and last mile connections
- in partnership:
  - reduction of underused PT
  - filling in service gaps
  - 1st class PT offer
- potential for reduced emissions (dep. on regulation) and increased utilization

## Opportunities:

- increased mobility options/accessibility
- pay as you go – reduced costs for users, no ownership required
- potential for seamless cross border journey experience
- experiencing new vehicle technologies (E-Bike, scooter, car)

## Weaknesses:

- road safety – potential risks with inexperienced drivers/cyclists
- service providers objectives may go against policy goals
- no cooperation (if no regulation in place) or no win-win scenario
- high costs of operation, subsidies needed (public money or venture capital), e.g.: Uber

## Threats:

- not accessible to everyone (Credit Card, disability, smartphones, etc.)
- induced travel/rebound effects
- potential for monopolies, dependencies
- vandalism