SUSTANCE

D.3.2.1 – GOVERNACE REPORT

Analysis of innovative governance schemes at regional and cross-border level

Version 03

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A. Introduction

According to the SUSTANCE Application Form (AF), the deliverable D.3.2.1 aims to perform an "*in-depth analysis of existing successful governance schemes at regional and cross-border level in Europe*". Hereinafter, this analysis will be called "**Governance report**". To meet its purpose, the Governance report is organised in three core parts (Figure 1).

The first part (Section B) investigates a series of **best practices in EU as regards the governance of public transport (PT) services and information systems at regional and cross-border level.** Sample best practices are collected from the entire EU framework, by considering experiences occurred both in Central Europe (CE) and beyond. The selected best practices are analysed by observing standardised governance aspects (see Section B.1), and by highlighting the role of the governance both in the development of connectivity measures (such as new connections or harmonised timetables) and ICT (information and communications technology) tools for PT (such as the sharing of standardised data and the integration of ICT apps). Some best practices act at a regional (domestic) level, i.e. they refer to the governance of the PT services within a single country or region (typically NUTS-2 or NUTS-3). Others have a cross-border scale, so as to explore winning forms of cooperation across countries (NUTS-0 borders).

The second part of the Governance report (Section C) focuses on **challenged governance experiences of PT in EU**. This part considers only cross-border cases, both within and outside CE, with a focus on both connectivity and ICT tools for PT. In this section, the aim is to gain useful governance insights also from governance experiences that have faced complex challenges, and have therefore experienced some barriers in achieving their initial goal.

Based on both the best and challenged practices, the third part of the document (Section D) identifies and schematises **winning governance ingredients** that may foster a positive development of connectivity and ICT tools for PT at domestic and cross-border level.

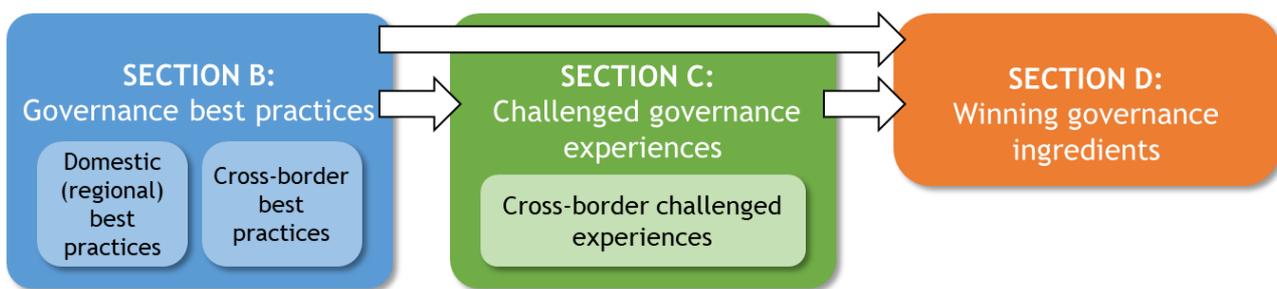Figure 1. Three-part structure of the Governance report.

B. Governance best practices

B.1. Methodological approach

The best practices are analysed by observing **standardised common elements** to gain a holistic understanding of the governance frameworks. This analysis emphasises the role of governance in the development of both connectivity (such as new connections or harmonised timetables) and ICT aspects (such

as the sharing of standardised data and the integration of ICT apps). Additionally, it takes into account the spatial contexts covered in SUSTANCE, specifically domestic and cross-border areas.

Based on various studies produced in the academia and by EU projects and reports (e.g. Cavallaro & Dianin, 2019a, 2020a; Medeiros, 2015; Neumannová et al., 2023; Wong Villanueva et al., 2022), the following **six elements (1-6)** are derived and analysed for each best practice (Figure 2). They can be clustered in **two macro groups (A-B)**: (A) elements describing the governance model, and (B) elements describing the contribution given by the governance to the PT development. In detail:

(A) Elements describing the governance model:

1) **LEVEL OF GOVERNANCE:** According to the AF, the best practices considered for this report are at "domestic" or "cross-border" level. Domestic governance involves collaborations across multiple municipalities or provinces within a specific region or group of regions, such as city networks or intermunicipal agreements (Medeiros, 2015). On the other hand, cross-border governance extends beyond national boundaries, demanding the involvement of at least two nations, such as European Groupings for Territorial Cooperation (EGTCs; Medeiros, 2015).

2) **TYPE OF GOVERNANCE:** The second element to be observed is the type of governance, which depends on the public/private nature of the involved actors. In this respect, the governance can be categorised into three types. The collaboration might occur between public entities only (public-public cooperation), between private organisations only (private-private cooperation) or between public and private sectors (public-private cooperation; Saaida & Qawasmi, 2023; Tsisinska & Podolchak; 2022). This distinction is particularly relevant in the PT sector and in rural areas especially, since private actors may be involved to e.g. fill PT supply gaps.

3) **STRUCTURE OF GOVERNANCE:** Another element to consider when analysing governance best practices is the structure of the governance's leadership, which can be structured in three typical ways: "centralised", "decentralised", or "externalised". In the first case, one partner within the actors' network assumes a leading role. In the second case, most or all network members are involved and interact on a relatively equal basis in the process of governance. In the last case, an external organisation coordinates the network by facilitating the relation between the actors that have to provide the PT services operatively (EURAC, 2020; Provan & Kenis, 2007).

(B) Elements describing the governance contribution to PT development:

4) **TECHNICAL & PLANNING SUPPORT:** To address the main thematic focuses of SUSTANCE, namely the connectivity and ICT tools for PT, the influence of the governance on the technical and operational aspects needs to be observed. According to Cavallaro & Dianin (2019, 2020), governance significantly impacts connectivity tasks like the implementation, reparation, and upkeep of PT infrastructures, as well as the coordination of PT services (timetables, rolling stock, intermodality). Additionally, governance plays a crucial role in easing the standardisation of data, harmonisation of tariffs, and provision of ticketing systems in integrated apps. Therefore, considering these aspects results fundamental for SUSTANCE.

5) **LEGAL & ADMINISTRATIVE SUPPORT:** Legal and administrative frameworks are crucial especially for cross-border PT. According to Zillmer et al. (2022), the lack of a standardised legal framework may create obstacles in (especially cross-border) PT cooperation. That is because many transport topics are managed at national level (Cavallaro & Dianin, 2020). For instance, incompatible national laws (e.g. with Switzerland and Liechtenstein), non-membership in agreements like Schengen or the Eurozone may increase waiting times due to border controls or currency differences might complicate pricing of fares. Moreover, differing political views on cross-border transport provision can create additional obstacles (European Commission, 2022; Saaida & Qawasmi, 2023). The role of

the governance is also to manage these legal obstacles when relevant for the PT development and functioning.

6) **FINANCING SUPPORT:** Finally, the financial responsibility of the different actors is a crucial element that a good PT governance should deal with. This includes defining cost (and revenue) distribution for interventions, constructions and maintenance activities, and transparency and accountability strategies (Ebster & Schmidt, 2019). In this domain, considering the differences in financial capacities among regional and local PT authorities in cross-border cases is essential. For instance, the public subsidies may strongly differ by country, impacting the financing capabilities of authorities belonging to different countries (European Commission, 2022).

By analysing these six points belonging to the two clusters for all the best practices presented in Section B.3, 4 and 5, the Governance report aims to apply a standardised approach for evaluating the best practices and ease the creation of a solid **framework for their understanding and comparison**. Figure 2 summarises these elements that methodologically guide the analysis.
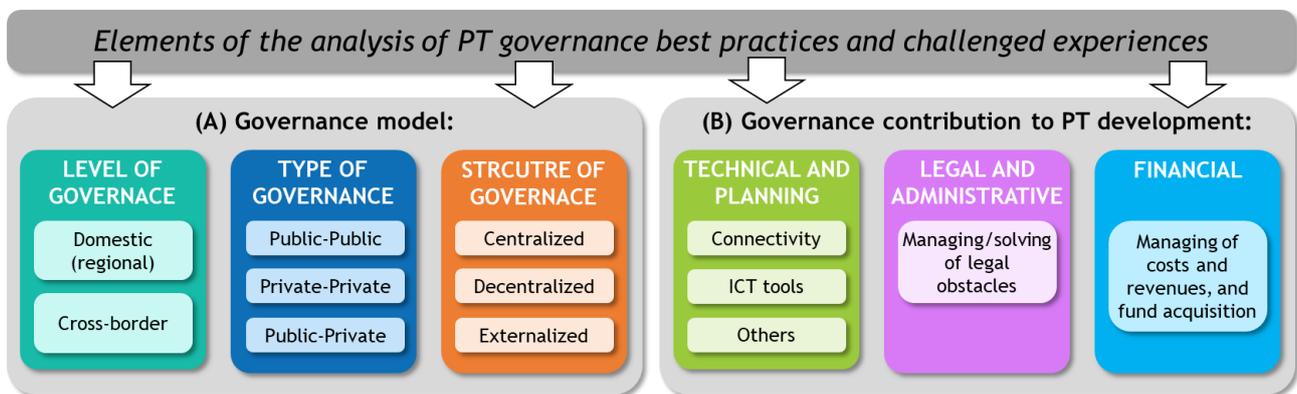

Figure 2. Standardised set of elements observed in all the governance best practices and challenged experiences.

B.2. Overview of the selected best practices

As illustrated by transport studies like Cavallaro & Dianin (2019b) or Medeiros (2015), several forms of both **domestic and cross-border** cooperation may be established at the **"micro", "meso" and "macro" scale**. For instance, two twin cities on two sides of a regional or national border may establish a strong form of transport cooperation that involves the presence of a governance system (micro scale). The same may apply to NUTS-2 or 3 regions, which join forces either within or across countries as typically made by the EGTCs (meso scale). Finally, broad strategies and governance systems may hold together a high number of regions or even countries at the domestic or cross-border level, since they share the same geographic territory (e.g. the Alps) and similar transport challenges (macro scale). Starting from these considerations and related subdivision, 16 governance best practices are presented in the next sections and they are clustered into three groups (visible in the map of Figure 3): "micro" best practices; "meso" best practices, and "macro" best practices. Independently from their scale, these best practices deal either with domestic or cross-border contexts, being both relevant for the SUSTANCE project (as visible in the table of Figure 3).

By comparing the map of Figure 3 with that one of Figure 4 (extracted from Cavallaro & Dianin, 2019b), it is possible to see that seven out of the 16 best practices are collocated in the western EU area of cross-border commuting, i.e. the zone involving big urban attractors like the Swiss hubs of Bern and Ginevra, the French pole of Strasburg, and the cross-border agglomeration across Germany, Belgium and Holland. Conversely, eight best practices are located in the Central European area of cross-border commuting, which

is shaped by more rural and dispersed settlements and flows, placing big challenges for PT development (see e.g. the German-Polish border or the Austrian border with Czech Republic, Slovakia, Hungary and Slovenia). Finally, one last best practice covers both zones, since it includes the whole Alpine arch form the western to the eastern side of Europe.
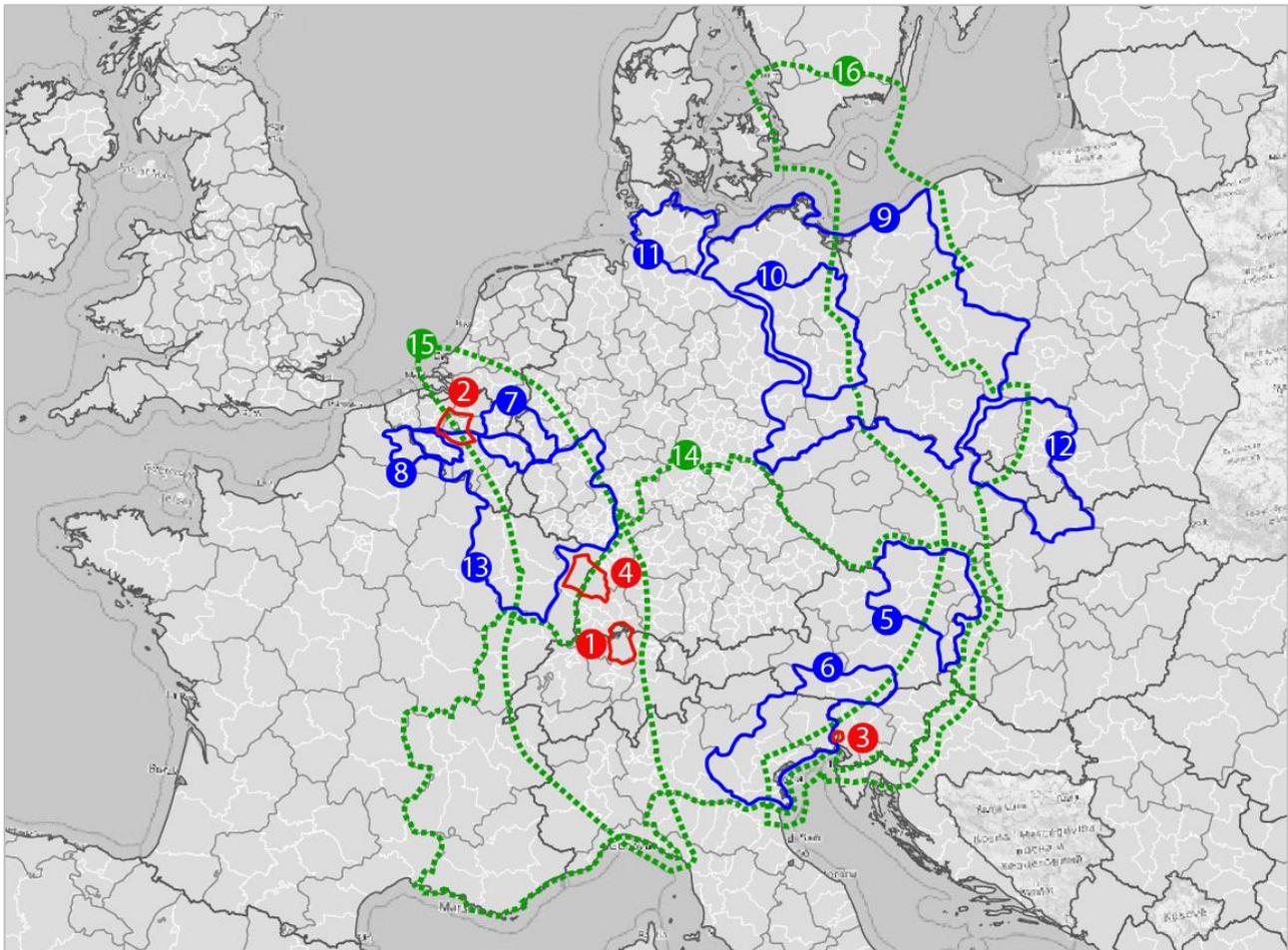
Legend: 🟥 Micro best practices (1-4); 🟦 Meso best practices (5-13); 🟩 Macro best practices (14-16).

Map code	Name of the best practice	Scale (micro / meso / macro)	Governance level (domestic / cross-border)
1	Züricher Verkehrsverbund (ZVV)	Micro	Domestic
2	Brussels-Capital Region (BCR)	Micro	Domestic
3	EGTC GO	Micro	Cross-border
4	Strasbourg-Ortenau Eurodistrict	Micro	Cross-border
5	Verkehrsverbund Ost-Region (VOR)	Meso	Domestic
6	EGTC Euregio Senza Confini	Meso	Cross-border
7	Euregio Maas Rhein (EMR)	Meso	Cross-border
8	EGTC Eurometropolis Lille-Kortrijk-Tournai	Meso	Cross-border
9	The Oder-Partnership	Meso	Cross-border
10	Verkehrsverbund Berlin-Brandenburg (VBB)	Meso	Domestic
11	Hamburg Verkehrsverbund (HVV)	Meso	Domestic
12	EGTC TRITIA	Meso	Cross-border

13	Greater Region of SaarLorLux	Meso	Cross-border
14	EUSALP Action Group 4	Macro	Cross-border
15	Interregional Alliance for the Rhine-Alpine Corridor (IARAC)	Macro	Cross-border
16	EGTC Central European Transport Corridor (CETC)	Macro	Cross-border

Figure 3. Map and list of the micro, meso and macro governance best practices acting at the domestic or cross-border level described in the Sections B.3, 4 and 5 respectively.
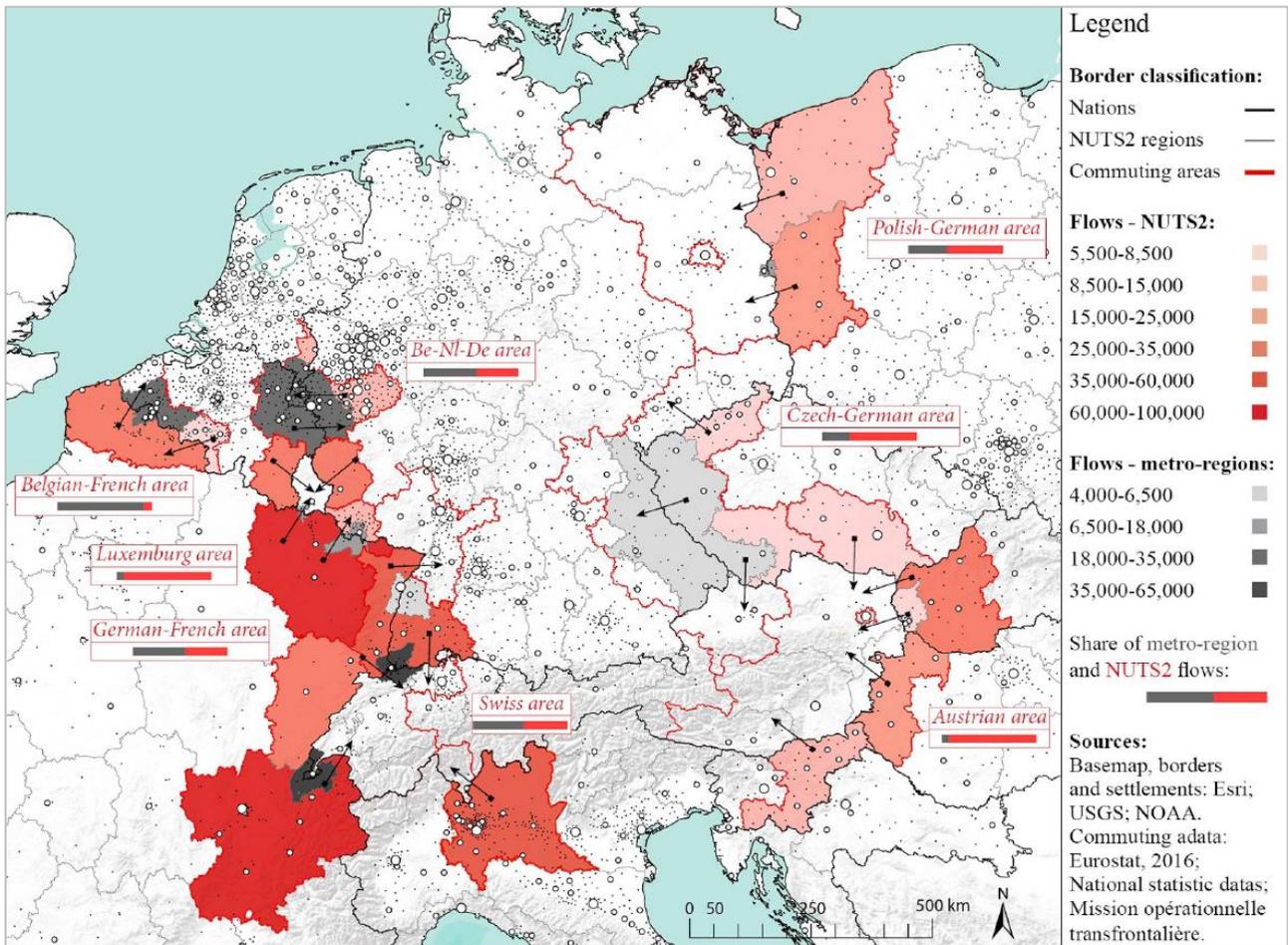
Figure 4. Map of the areas of cross-border commuting in Europe (Cavallaro & Dianin, 2019b – Figure 5).

The following sections presents the 16 selected best practices in detail, by following the methodological approach described above.

B.3. "Micro" best practices

B.3.1. Züricher Verkehrsverbund (ZVV)

The Züricher Verkehrsverbund (ZVV) represents a collaboration between the 162 municipalities within the canton of Zurich in Switzerland, established in 1990. It oversees strategic planning, financing, coordination and marketing activities of the PT in Zurich (Figure 5).

Figure 5. From left to right: 1) Fare zones of the ZVV; 2) Travel-planner app of the ZVV; 3) Transport companies responsible of PT services in eight market zones.

GOVERNANCE MODEL: The ZVV operates at a domestic level since it coordinates PT in the canton of Zurich, with no cross-border interaction. It is a public-private collaboration between the public entities of the canton, its 162 municipalities, and a set of private transport companies and operators. The ZVV sets the principles for tariffs, framework credit and budgeting, whereas the municipalities contribute by defining the timetables and organising tariff consultations. Moreover, the ZVV collaborates with private transport companies, by coordinating and contracting 35 of them within its network. These companies are divided into eight market regions, with as many so-called "market-responsible transport companies". These have to ensure that the operations in their market region work properly, that timetables are kept and that budget goals are achieved. The ZVV's structure is centralized and with a public leadership, placing it under the governance of the canton of Zurich and over the transport companies and operators mentioned above.

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: The ZVV oversees the technical and planning development of the cantons' PT, focusing on strategic planning of connections, timetable coordination, fare management and marketing activities. The network includes S-Bahn lines, bus lines and shipping lines. Tariff coordination applies within defined zones, offering a range of tickets and daily passes. For example, the price of the *Netz-Pass Jahresabo* depends on the number of selected tariff zones. Yet, the *Z-Pass* facilitates commutes to other neighbouring Swiss Verkehrsverbund (hereinafter transport association) areas, with prices based on the chosen zones even if they are in different transport areas. Moreover, the ZVV is constantly widening its PT network of railways, bus lines and night-time networks. Concerning the legal aspects, the ZVV operates in the framework of the Swiss law of Public Transport (LS 740.1). Moreover, it has been established through the approval of the Business Regulations of the transport associations of the Zurich canton (LS 740.4) in 1990, defining clear allocation of tasks within the organisational structure. For instance, the direction manages planning, marketing, communication, and finance. Financially, the ZVV supports the abovementioned eight transport companies. Approximately, 60% of the funding comes from ticket sale and station advertisement, while the rest is covered by the canton and its municipalities in equal shares. The municipal contribution depends on both the financial strength and the level of service offered. The rationale is that an increased transport supply leads to a higher contribution to the ZVV (Christodoulou, 2012; ZVV, 2023).

IN A NUTSHELL: The following Table 1 summarises the key features of this best practice.

Governance model		
Element	Category	Description
LEVEL:	Domestic	The ZVV represents an association between the canton of Zurich, its municipalities, and a series of transport companies and operators

TYPE:	Public-Private	Collaboration between public entities of the canton and municipalities, and private transport companies and operators
STRUCTURE:	Centralised	The canton of Zurich leads the governance of the system, involving municipalities, transport companies and operators.
Governance contribution to PT development		
Element	Contribution	
TECHNICAL AND PLANNING:	Strategic planning of connections within the ZVV area	
	Coordination of timetables and fares by offering various ticket types (within and between zones)	
	Fares are differing by zones	
LEGAL AND ADMINISTRATIVE:	Agreement of the "Business Regulation" of the ZVV, which is based on the Swiss Law for Public Transport	
FINANCIAL:	Full funding of the eight transport companies operating the service	
Website:	https://www.zvv.ch/zvv/en/home.html	

Table 1. Summary of the Züricher Verkehrsverbund (ZVV).

B.3.2. Brussels-Capital Region (BCR)

The Brussels-Capital Region (BCR) comprises 19 municipalities and it was created in 1989. It is one of Belgium's three regions and it deals with several policy domains, including PT development (Figure 6).

Figure 6. From left to right: 1) Map of the 19 municipalities in the BCR; 2) Cover of the summary of the "Good Move" plan; 3) An extract of the "Good Move" plan.

GOVERNANCE MODEL: The BCR operates at a **domestic level**. This is an agglomeration of 19 municipalities, and thus a **public** authority with autonomous governing authorities managing regional matters. The BCR has its own **centralised** government, overseeing key areas such as environment, economy, urban planning and transportation.

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: Regarding **technical and planning development,** the BCR has formulated a regional sustainable urban mobility plan (SUMP), reviewed every decade, aimed at reducing pollution, congestion and safety concerns of transport. Yet, the BCR offers free PT rides for children under six on the tram, bus and metro network. It provides also user-friendly online services such as a handy map for cycling, tram, bike, bus, taxi and car, coupled with real-time traffic information. Additionally, the BCR provides an open-data portal offering access to information on mobility in the region. The PT services of the BCR are operated by STIB/MIVB (Société des Transports Intercommunaux de Bruxelles/ Maatschappij voor het Intercommunaal Vervoer te Brussel), a PT company. Currently, the Regional Mobility Plan "2020-2030 - Good Move" is under development with the coordination

of BCR. This has a special focus on Mobility as a Service (MaaS), and it plans an extension of the PT cooperation also to private subjects offering complementary services. Regarding the legal aspects, BCR aims to align with EU policies and OECD recommendations, demonstrating commitment to the European standards. The BCR funds PT operations through various sources, including ticket sales, subsidies, and possibly other revenue streams. For instance, the European Investment Bank (EIB) and the BCR signed an agreement, in which the former provides a €475 million loan for the development of PT (BCR, 2023).

IN A NUTSHELL: The following Table 2 summarises the key features of this best practice.

Governance model		
Element	Category	Description
LEVEL:	Domestic	The Brussels-Capital Region is a domestic entity involving 19 Belgian municipalities
TYPE:	Public-Public	Collaboration between municipalities in the administrative region, with the involvement of public PT operators
STRUCTURE:	Centralised	The Brussels-Capital Region has its own government, managing the 19 municipalities that are part of the system
Governance contribution to PT development		
Element	Contribution	
TECHNICAL AND PLANNING:	Sustainable Urban Mobility Plan (SUMP) and Regional Mobility Plan "2020-2030 – Good Move"	
	Handy map supporting the user in the choice of active and PT modes	
	Online real-time traffic information system	
	Open-data portal	
	Common payment system in whole Belgium through the MOBIB card	
LEGAL AND ADMINISTRATIVE:	Commitment to align with the European standards (e.g. regarding ICT data)	
	Adaptation to EU policies and OECD recommendation for the MaaS initiative within the ongoing Regional Mobility Plan "2020-2030 - Good Move"	
FINANCIAL:	Internal funds through e.g. ticket sales and subsidies	
	Loan from the European Investment Bank (EIB) for the development of sustainable PT	
Website:	https://be.brussels/en	

Table 2. Summary of the Brussels-Capital-Region (BCR).

B.3.3. EGTC GO

The EGTC "GO" is a cross-border collaboration between the municipalities of Gorizia, Nova Gorica and Šempeter-Vrtojba (Italy and Slovenia; Figure 7). It was founded in 2011 and it has its seat in Gorizia, Italy.

Figure 7. From left to right: 1) Municipalities part of the EGTC GO; 2) Exemplificative project in the cross-border mobility domain (B-Solutions Project).

GOVERNANCE MODEL: The EGTC "GO" operates at a cross-border level, involving three municipalities of two different countries: the municipalities of Gorizia located in the Autonomous Region of Friuli Venezia Giulia, and the municipality of Nova Gorica and Šempeter-Vrtojba, both in Slovenia. It is a collaboration between three public entities, namely the governments of the three municipalities, without direct involvement of any private actors. The structure of the EGTC "GO" is externalised. So, it acts as a moderator bringing together stakeholders to develop common development and greater cohesion of the member regions, but also to overcome difficulties encountered in implementing and managing projects. The EGCT "GO" has autonomous legal personality and economic and managerial autonomy. It is based on the founding agreement of its members and the signed statute, which defines the organisational and functional rules.

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: The technical and planning contribution of the EGTC regarding the development of PT is mostly achieved through projects. For instance, the Cross-Border Public Urban Mobility Plan (CB PUMP) was implemented in 2012 with the aim to develop a common mobility plan between the municipalities by integrating their urban transport networks. The CB PUMP also involves the cross-border PT bus line that connects Gorizia with Nova Gorica. In the realm of legal and administrative aspects, a significant challenge addressed by the EGTC lies in the European Cabotage rule. Specifically, the Directive 1073/2009 of the European Commission regulates the international bus services in Europe restricting them to long-range and not urban-level services, to avoid foreign operators overlapping and competing with local operators. Nevertheless, these constraints can be mitigated through a bilateral or multilateral agreements, permitting cross-border urban services. So, the municipality of Gorizia and Nova Gorica established a joint agreement between PT operators through a coordinated adaptation of national legislations, in order to launch the service. For the financial management, the revenues related to the service are equally shared within the two involved municipalities (EGTC GO, 2023b, 2023a; Zillmer et al., 2022).

IN A NUTSHELL: The following Table 3 summarises the key features of this best practice.

Governance model		
Element	**Category**	**Description**
LEVEL:	Cross-border	Association between the bordering municipalities of Gorizia (IT), Nova Gorica (SI), and Šempeter-Vrtojba (SI)
TYPE:	Public-Public	Collaboration between the three public governments, with no official involvement of private actors
STRUCTURE:	Externalised	The EGCT act as mediator, bringing together stakeholders and managing common projects
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	Development of a common mobility plan at the urban and cross-border level	
	Introduction of a cross-border bus line connecting Gorizia and Nova Gorica	
LEGAL AND ADMINISTRATIVE:	Overcoming of the restrictive Directive 1073/2009 of the European commission	
	Joint agreement between Gorizia and Nova Gorica PT operators through a coordinated adaptation of national legislations	
FINANCIAL:	Equally shared costs among the involved municipalities	
Website:	https://euro-go.eu/en/	

Table 3. Summary of the EGTC "GO".

B.3.4. Strasbourg-Ortenau Eurodistrict

The Eurodistrict of Strasbourg-Ortenau, established in 2005, is a cross-border collaboration joining German and French municipalities on both sides of the Rhine. It incorporates 61 municipalities of the Eurometropolis of Strasbourg and the Association of Municipalities of Canton d'Erstein, as well as the 51 municipalities of the Ortenau district (Figure 8).

Figure 8. From left to right: 1) Map of the Eurodistrict; 2) Flyer of the Eurodistrict bus connecting Erstein (France) and Lahr (Germany)

GOVERNANCE MODEL: Operating at a cross-border level, the Eurodistrict Strasbourg-Ortenau includes the metropole of Strasbourg, the Canton d'Erstein and the Ortneau district. On the French side, it encompasses the city of Strasbourg, the urban communities of Rhinau, Erstein and Benfled that form the Canton d'Erstein, for a total of 61 municipalities. On the German side, the Ortneau district comprises the cities of Achern, Kehl, Lahr, Oberkirch and Offenburg in the region of Baden-Württemberg, for a total of 51 municipalities. This collaboration involves the local public authorities of the 112 municipalities, with the Eurodistrict operating similarly to a European Grouping of Territorial cooperation (EGTC). Therefore, its externalised governance structure serves as a mediator bringing together stakeholders fostering PT connectivity between German and French regions. The Eurodistrict focuses on topics such as education, youth, culture, environment, tourism, economy, health and mobility.

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: The Eurodistrict's technical and planning contributions to cross-border PT development are multifaceted. For instance, it established a common Mobility Action Plan and worked at projects regarding intermodality and connections between FR and DE. For instance, the introduction of the *Eurodistrict-BUS* in 2017, connecting Erstein and Lahr, benefited French employees in German companies. This service has been integrated into the PT network since 2020 and operates six times/day. However, different national fares are still applied. Moreover, a cross-border tramline connecting Strasbourg (France) to Kehl (Germany), offering bilingual information for the passengers was introduced in 2015 (Eurodistrikt, 2015). Except for the EC Cabotage Regulation and different degrees of interest and engagement from benefitting companies (Zillmer et al., 2019), no other legal and administrative challenges are faced due to historic ties between the two communities on both sides of the border. The funding of the cross-border bus line Erstein-Lahr is 50% covered by the Programme INTERREG V Oberrhein, supplemented by resources from the Eurodistrict. Operation costs are split across interested regions: Ortenaukreis covers 60%, Grand Est region 28%, and the Bas-Rhin and the Canton d'Erstein 6% each. For the tram line Strasburg-Kehl, both German and French sides share costs, which amount to €94 million, complemented by €3 million of EU contribution (Eurodistrikt, 2015).

IN A NUTSHELL: The following Table 4 summarises the key features of this best practice.

Governance model		
Element	Category	Description
LEVEL:	Cross-border	Association between the Eurometropole of Strasbourg (FR), the Canton d'Erstein (FR) and the Ortneau district (DE)
TYPE:	Public-Public	Collaboration between the local public authorities of the three regions
STRUCTURE:	Externalised	The Eurodistrict acts as a mediator bringing stakeholders together, similarly to the EGCT at the meso level
Governance contribution to PT development		
Element	Contribution	
TECHNICAL AND PLANNING:	Common Mobility Action Plan covering the cross-border dimension	
	Cross-border bus line between Erstein (FR) and Lahr (DE)	
	Cross-border tram line connecting Strasbourg (FR) and Kehl (DE)	
LEGAL AND ADMINISTRATIVE:	Overcoming the EC Cabotage Regulation by signing a dedicated agreement	
FINANCIAL:	Clear establishment of cost shares among the involved regions for cross-border services	
	Integration of EU contributions (through e.g. INTERREG programs and others)	
Website:	https://www.eurodistrict.eu/	

Table 4. Summary of the Eurodistrict Strasbourg-Ortenau

B.4. "Meso" best practices

B.4.1. Verkehrsverbund Ost-Region (VOR)

The Verkehrsverbund Ost-Region (VOR) is a regional PT association which coordinates PT services throughout an agglomeration of the federal state of Vienna, Burgenland and Lower Austria. VOR is the largest transport association in Austria and it was established in 1984 (Buehler et al., 2019; Figure 9).
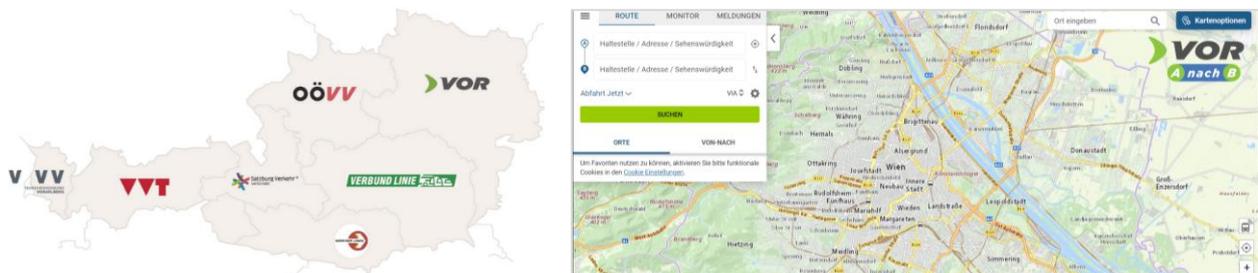
Figure 9. From left to right: 1) Map of all transport associations in Austria including the VOR; 2) VOR-App "AnachB" which includes timetables for PT, Park+Ride and car sharing.

GOVERNANCE MODEL: The VOR operates at the domestic level. It is based on a collaboration between different federal states within the Austrian area, i.e., Vienna, Burgenland and Lower Austria (NUTS-2 level). The VOR includes both public and private authorities. More specifically, the transport association is a cooperative institution regulated by contracts between public authorities, such as the federal state and municipalities, and public or private transport operator agencies. The structure of the VOR governance is decentralised since each federal state is equally involved in the governance. The government jurisdictions determine the services to contract out. However, there is also a great collaboration with the PT firms that
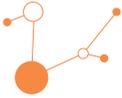
provide the service. The governing board has the dominant influence on the executive body, whereas the PT operators can cooperate, advise and provide inputs (Buehler et al., 2019; VOR, 2023).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: This kind of regional governance has a big impact on PT developments. Regarding the <u>technical and planning aspects</u>, the VOR contributes to both connectivity and ICT tools for PT. As for the former, VOR provides a unified route network for all modes and lines (a wide range of urban, suburban and regional busses and rail, trams and metros are included). It also links PT routes with walk and cycling routes and offers park+ride and bike+ride in order to promote the multimodality. Finally, VOR provides an app called "AnachB" with fully integrated timetables, centralised fare structure and ticketing system. In regard to <u>legal and administrative aspects</u>, this regional governance does not encounter relevant legal obstacles. To facilitate the organisation of the VOR, a clear allocation of tasks is established. The government jurisdictions determine the overall level of PT service and the fares and decide the condition for tendering PT services. The executive body plans and coordinates the routes and timetables, integrate the fare structure and ticketing, whereas the PT operators collect fare revenues and run PT services. As for the <u>financial aspects,</u> the costs are shared through the combined governance of city, state and federal entities. Moreover, the VOR members agreed to offset the potential revenue losses of participating PT firms resulting from the unified fare structure (VOR, 2023).

IN A NUTSHELL: The following Table 5 summarises the key features of this best practice.

Governance model		
Element	**Category**	**Description**
LEVEL:	Domestic	Association between the states of Vienna, Burgenland and Lower Austria
TYPE:	Public-private	Collaboration between federal states, municipalities, and actors of the transport operator agencies
STRUCTURE:	Decentralised	Active involvement of the federal state and the transport operators, which provide advice and inputs
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	Unified route network, including busses, trains and trams	
	Supported multimodality, especially between active and public transport	
	Coordinated timetables across involved regions and integrated fare and ticketing system	
	One travel planner app including all involved modes, lines and operators	
LEGAL AND ADMINISTRATIVE:	Legally established collaboration of all public and private actors involved	
FINANCIAL:	Agreement on clear shared costs and offsets of revenue losses	
Website:	https://www.vor.at/	

Table 5. Summary of the Verkehrsverbund Ost-Region (VOR).

B.4.2. EGTC Euregio Senza Confini

The EGTC "Euregio Senza Confini" is a collaboration between the Friuli Venezia Giulia, the Veneto Region and the Land of Carinthia. It was founded in 2012 and it is based in Trieste, Friuli Venezia Giulia (Figure 10).

Figure 10. From left to right: 1) Map of the EGTC "Euregio Senza Confini"; 2) Picture of the implemented EMOTIONWay project.

GOVERNANCE MODEL: The EGTC operates at a **cross-border level**, involving three regions of two different countries: the Autonomous Region of Friuli Venezia Giulia and the Veneto Region in Italy, and the Land of Carinthia in Austria. It is a collaboration between three **public** entities, namely the governments of the three regions, without direct involvement of any private actors. The structure of EGCT is **externalised**. As such, it acts as a mediator bringing together stakeholders to promote a common PT development and greater cohesion of the member regions; and it facilitates processes by bringing together key players. The EGCT has autonomous legal personality and economic and managerial autonomy. It started with an endowment fund of €300,000 and each region pays its annual fee, which is defined every two years. Moreover, resources are based on public national and European funds (Euregio Senza Confini, 2023).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: The **technical and planning contribution** of the EGTC to the cross-border connectivity is mostly linked to Interreg Italy-Slovenia or Italy-Austria projects, such as CROSSMOBY[1], SMARTLOGI[2], and EMOTIONWay. For instance, through the project EMOTIONWay[3] (with the EGTC as leader), the network of cycle routes has been better linked with the rail and local PT network. For instance, bike racks or carts have been integrated on existing PT lines, and strategic PT services for cyclists have been enforced. Moreover, a cross-border cycle and local PT network service in the Eastern Alps (Recao area), which is available in a WEB GIS format, was created. **Legal aspects** and divergences have also been addressed concerning the installation of racks and carts on busses. For instance, e-bikes are not allowed to be located on the racks on existing bus connections in Italy due to weighting aspects, although different regulations are dictated at European level. Thanks to the coordination of the EGTC, partners were aware of these legal limitations and adapted the racks and carts of busses accordingly (Cavallaro, 2019). Regarding the **financial aspects**, the EGTC mainly participates in the Interreg programmes, so as securing the funding for the implementation of new (test) services and initiatives to improve the cross-border connectivity (Euregio Senza Confini, 2023).

IN A NUTSHELL: The following Table 6 summarises the key features of this best practice.

Governance model		
Element	Category	Description
LEVEL:	Cross-border	Association between the Autonomous Region of Friuli Venezia Giulia (IT), the Veneto Region (IT), and the Land of Carinthia (AT)
TYPE:	Public-public	Collaboration between the three public governments, with the case-by-case involvement of further actors and service providers

[1] https://2014-2020.ita-slo.eu/crossmoby

[2] http://www.smartlogi.eu/

[3] https://euregio-senzaconfini.eu/en/attivita/lead-partner/emotionway/

STRUCTURE:	Externalised	The EGCT act as mediator, bringing together stakeholders to develop common development and greater cohesion of the member regions
Governance contribution to PT development		
Element	Contribution	
TECHNICAL AND PLANNING:	Participation in or coordination of transport-related projects	
	Cross-border cycle network in the Eastern Alps	
	Integration of bicycle transport racks or carts on PT	
LEGAL AND ADMINISTRATIVE:	Comparison of national and EU regulations, and adaptation to legal limitations	
	Overcoming legal obstacles for infrastructural interventions	
FINANCIAL:	Funding of various connectivity interventions to enhance cross-border links	
	Acquisition of EU funding to test new solutions and foster cooperation	
Website:	https://euregio-senzaconfini.eu/en/	

Table 6. Summary of the EGTC "Euregio Senza Confini".

B.4.3. Euregio Maas Rhein (EMR)

The Euregio Maas-Rhein, established in 1976, represents a partnership that covers the Aachen region, the provinces of Liège, Belgian Limburg, Dutch Limburg and Eastern Belgium, encompassing three countries i.e. Belgium, Germany and The Netherlands (Figure 11).

Figure 11. From left to right: 1) Map of the Euregio Maas-Rhein; 2) Regional Express Aachen-Maastricht; 3) Euregioticket Maas-Rhein.

GOVERNANCE MODEL: The Euregio Maas-Rhein is one of the European Union's oldest Euregio, founded in 1976. It operates at the **cross-border level** including regions from Germany, Belgium, and the Netherlands. Specifically, it encompasses the region of Aachen (DE), the provinces of Liège, Belgian Limburg, Eastern Belgium (BE), and Dutch Limburg (NL). The collaboration occurs between **public** local authorities of the involved regions. Recognised as an EGTC since 2017, the Euregio holds autonomous legal and managerial status. The **externalised** governance of the EGTC focuses mostly on the support and network of the stakeholders and the organisation and development of projects. EMR's governance focuses on diverse sectors, such as economy, culture, health, safety, tourism, and mobility (EMR, 2023a, 2023d).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: The EMR has significantly enhanced cross-border PT connectivity in terms of **technical and planning development**. For instance, it introduced the Euregio ticket, allowing unlimited travels within the entire EU-region for one day, covering most bus and train lines, and including bicycle options. It costs €20 and is valid until the end of the operating day. On weekends and national holidays, there is a similar family-friendly offer, valid for two adults and up to three children under 12. Moreover, the rail service Regional Express Aachen-Maastricht (DE-NL) operates between Herzogenrath and Heerlen once per hour, and it will be extended to Lüttich. Currently, EMR is running three

projects in the transport sector: "EMR Connect", "easyConnect" and "MaaS" aiming to expand fare options and enhance digitisation. Regarding the legal aspects, the EMR has signed a partnership agreement with the Aachen Verkehrsverbund (AVV), ensuring efficient mobility coordination within the region. Despite the challenges like differing national timetables, EMR focuses on improving cross-border passenger information and harmonising ticket sales. The EMR's cross-border PT financial resources, includes contribution from the regions and participation in INTERREG and other European programmes (EMR, 2023a, 2023c, 2023b).

IN A NUTSHELL: The following Table 7 summarises the key features of this best practice.

Governance model		
Element	**Category**	**Description**
LEVEL:	Cross-border	Association between the region of Aachen (DE), the provinces of Liège, Belgian Limburg, Eastern Belgium (BE), and Dutch Limburg (NL)
TYPE:	Public-public	Collaboration between the local public authorities of the involved provinces
STRUCTURE:	Externalised	The EMR supports and connects the stakeholders, as well as it organises and develops projects.
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	Implementation of the Euregio ticket, which allows unlimited travel in the EMR	
	Implementation of the cross-border rail line Regional Express Aachen-Maastricht	
	Currently participating in European projects regarding cross-border PT connectivity	
LEGAL AND ADMINISTRATIVE:	Signed partnership between the EMR and the Aachen Verkehrsbund	
	Planning to overcome national standard obstacles, such as fares and timetable differences	
FINANCIAL:	Internal funding of connectivity interventions to enhance cross-border links	
	Acquisition of EU funding to improve cross-border connectivity	
Website:	https://euregio-mr.info/en/	

Table 7. Summary of the Euregio Maas-Rhein (EMR).

B.4.4. EGTC Eurometropolis Lille-Kortrijk-Tournai

The Eurometropolis Lille-Kortrijk-Tournai is a collaboration between the Lille metropolis in France, the southern and central regions of West Flanders, and western Hainaut in Belgium, encompassing a total of 157 municipalities. This Eurometropolis covers an area of 3,629 km² and is an EGTC since 2008 (Figure 12).

Figure 12. From left to right: 1) Map of the Eurometropolis Lille-Kortrijk-Tournai; 2) Cross-border bus line.

GOVERNANCE MODEL: The Eurometropolis Lille-Kortrijk-Tournai operates at cross-border level encompassing 157 municipalities in Flanders (West and South Flanders), Wallonia (Picardy Wallonia), and France (European Metropolis of Lille). The governance involves only public authorities from both Belgium and France, operating across all levels of government. This collaboration dates back to 1991 when it began informally through an institution known as COPIT (Conférence Permanente Intercommunale Transfrontalière). Since 2008, it has being operated under the legal framework of an EGTC (Durand & Lamour, 2014). The EGTC has legal personality as a cooperative group and functions as an externalised governance model, facilitating and promoting cross-border cooperation. The Eurometropolis focuses on several themes such as economic development, new technologies, climate, air and energy quality, work-study apprenticeships, and mobility (Eurometropolis, 2021; MEL, 2023).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: The technical and planning contributions to the cross-border PT development of the Eurometropolis regard especially an enhanced connectivity. For instance, direct trains connecting Lille (FR) to Kortrijk (BE) are supplied. Additionally, a cross-border seasonal ticket for train commuters, and a harmonised system of rail fares in the cross-border region are provided, offering reduced rates for people under 26 and over 65. Furthermore, a cross-border bus line (MWR) connecting Mouscron (BE), Wattrelos and Roubaix (FR) is operated. As for the legal aspects, the previous COPIT partnership faced challenges in implementing its cross-border agenda due to a lack of both financial and political capacity. To overcome these obstacles, the French and Belgian governments signed an agreement to reduce the roadblocks and facilitate cross-border cooperation. This agreement established conventions and a legal framework for cooperation between local authorities. Regarding the financial resources, the Eurometropole sustains the PT development through annual contributions from its members, as well as with the revenues generated from the services, and through participations to European programmes such as INTERREG (Eurometropolis, 2023).

IN A NUTSHELL: The following Table 8 summarises the key features of this best practice.

Governance model		
Element	**Category**	**Description**
LEVEL:	Cross-border	Association between the region of Flanders, Wallonia (both Belgium), and the Metropolis of Lille (France).
TYPE:	Public-Public	Collaboration between local public authorities of the involved regions and municipalities
STRUCTURE:	Externalised	The EGTC acts as a mediator, bringing together stakeholders to develop common development and greater cohesion of the member regions
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	Participation in or coordination of transport-related projects	
	Cross-border direct train and bus connections (i.e. Lille-Kortrijk, MWR)	
	Cross-border ticket with the harmonisation of fares	
	Special offers for individuals under 26 and over 65 and on the weekends	
LEGAL AND ADMINISTRATIVE:	Agreement between Belgian and French authorities to facilitate collaboration, establishing conventions and a legal framework	
FINANCIAL:	Annual member contribution and revenues generated from services provided to enhance cross-border connectivity	
	Acquisition of EU funding (e.g. INTERREG) to contribute to cross-border PT development	
Website:	https://www.eurometropolis.eu/en	

Table 8. Summary of the Eurometropolis Lille-Kortrijk-Tournai.

B.4.5. The Oder-Partnership

The Oder-Partnership is an informal collaboration between the German and Poland regions along the Oder River. The partnership was established in 2006 with the first joint projects in several policy areas (Figure 13).

Figure 13. From left to right: 1) Map of the Oder-Partnership regions; 2) A regular "round table" discussion.

GOVERNANCE MODEL: The Oder-Partnership is a cross-border collaboration between the regions along the Oder River in North Germany and Poland. It encompasses the Federal States of Berlin, Brandenburg, Mecklenburg-Western Pomerania, the Free State of Saxony and the western Polish Voivodeships Greater Poland, West Pomerania, Lower Silesia and Lubusz. The informal network involves public actors, such as the major political and administrative representatives of the abovementioned regions and it started with joint projects related to various policy fields such as innovation, technology, tourism and transport. The transport field is coordinated by the Verkehrsverbund Berlin-Brandenburg (Tölle, 2010). As such, the Oder-Partnership is a centralised project-oriented type of governance, since one member acts as leader and manager with no mediation of an external coordinator. The aim is to establish an efficient regional network that link the regions on both sides of the Oder closely in terms of infrastructure and politics (Oder Partnerschaft, 2023).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: The Oder-Partnership has significantly contributed to the technical and planning aspects of PT development by organising regular "round table" discussions. These discussions have played a crucial role in enhancing cross-border rail connectivity, coordinating timetables, and devising common lobbying strategies. Additionally, the Partnership is actively engaged in project-oriented initiatives, participating in INTERREG programs aimed at enhancing connectivity among countries (Tölle, 2010), such as the involvement in the Via Regia[4] project. However, challenges arise due to differences in the legal frameworks shaping PT in Germany and Poland. These differences range from the absence of common administrative procedures and legal bases to practical issues such as the absence of a common working language (European Commission, 2022). Despite these challenges, the Oder Partnership implements a pragmatic approach in overcoming obstacles, working together towards acceptable solutions. Nevertheless, a common legal framework would increase the commitment and improve reliability for planning. In terms of financial aspects, the Oder-Partnership adopts a project-oriented approach, participating actively in European program calls such as INTERREG. This ensures access to funding opportunities, enabling the Partnership to address critical issues and foster cross-border connectivity (Oder Partnerschaft, 2023).

IN A NUTSHELL: The following Table 9 summarises the key features of this best practice.

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[4] http://www.oder-partnerschaft.eu/verkehr/via-regia-plus---sustainable-mobility-and-regional-cooperation-along-the-pan-european-transport-corridor-iii

Governance model		
Element	**Category**	**Description**
LEVEL:	Cross-border	Informal association between Germany and Poland encompassing Berlin, Brandenburg, Mecklenburg-Western Pomerania, Saxony, Greater Poland, West Pomerania, Lower Silesia and Lubusz
TYPE:	Public-Public	Collaboration between political and administrative representatives of the involved regions
STRUCTURE:	Centralised	Informal network to establish a common infrastructural and political strategies. The transport activities are led by one member: Verkehrsverbund Berlin-Brandenburg (VBB)
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	Participation in or coordination of transport-related projects	
	Regular "round tables" to coordinate timetables and common strategies	
	Participation to European programmes (e.g. INTERREG) to enhance infrastructure and governance development	
LEGAL AND ADMINISTRATIVE:	Legal and administrative challenges due to different national legal frameworks	
	Practical challenges due to different working languages	
	Challenges might be overcome through regular meetings and working on common solutions	
FINANCIAL:	Participation to European programmes (e.g. INTERREG) to foster cross-border connectivity	
Website:	http://oder-partnerschaft.eu/	

Table 9. Summary of the Oder-Partnership.

B.4.6. Verkehrsverbund Berlin-Brandenburg (VBB)

The Verkehrsverbund Berlin-Brandenburg (VBB) is a regional collaboration between the German federal states of Berlin and Brandenburg. It has been coordinating PT in both states since 1999 (Figure 14).
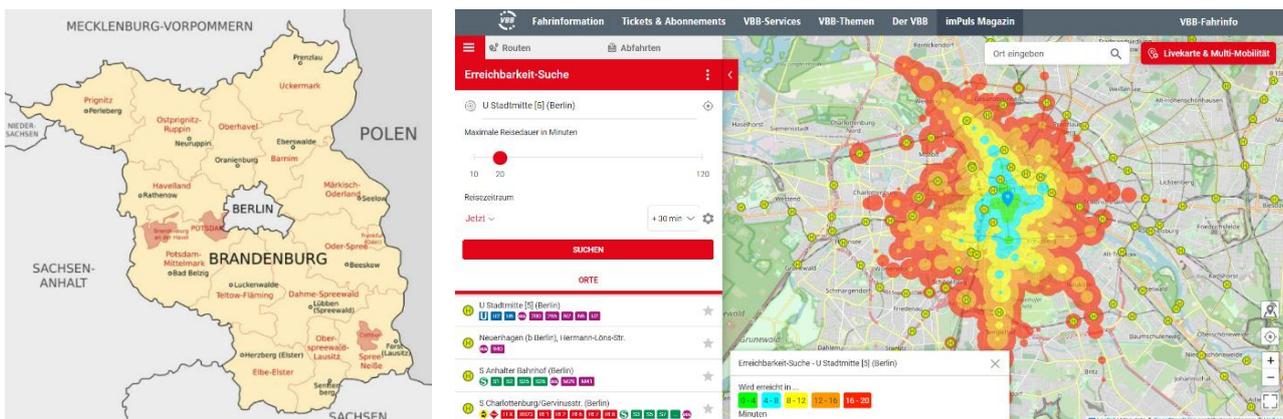
Figure 14. From left to right: 1) Map of the VBB; 2) Screenshot of the VBB-accessibility search service.

GOVERNANCE MODEL: The Verkehrsverbund Berlin-Brandenburg (VBB) is a **domestic** collaboration within Germany between the federal states of Berlin and Brandenburg, both in Germany. It is **public and private** collaboration, operating under contractual agreements between the public-government bodies of both states and private transport companies. The governance structure is **decentralised**, ensuring participation and management tasks from each federal state in the decision-making process. The governing

board holds significant influence over the executive body, while public and private transportation companies contribute through cooperation, advisory roles, and input provision (VBB, 2023).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: The VBB significantly contributes to the PT development of connectivity and ICT tools through <u>technical and planning</u> initiatives. For instance, during the CONNECT2CE[5] project, its pilot action focused on improving cross-border rail services between Berlin and the Western Pomeranian Voivodship, and the Cottbus-Wrocław railway line. Moreover, the VBB area is clustered into tariff zones A, B and C, providing flexibility for combining tickets based on travel needs. Additionally, the *VBB-fahrCard* offers mobile tickets to subscribers. This card allows also to use secure bicycle parking boxes at the Berlin Central Station, bookable online, which improve multimodality. The VBB-App *Bus&Bahn* offers detailed PT information, including timetables, real-time traffic updates, mobile ticket options, route networks, delay alerts or live navigation. Furthermore, the VBB-accessibility-search facilitates the identification of accessible destinations via bus and train from a specific starting point, integrating travel time and information on stops and local bike-sharing services. Regarding <u>legal aspects</u>, in 1996 with the implementation of the Regionalisation Act, the responsibility for the regional rail services was transferred from the federal level to the states of Germany. So, the states of Berlin and Brandenburg established the VBB, which is organised as a limited liability company (GmbH). The political shareholders set the framework conditions for PT, while the transport companies implement these operationally with buses and trains. In terms of <u>financial aspects</u>, resources from the Regionalisation funds are delivered to the states for the suburban and regional rail transport. These funds, along with ticket revenues, are used to commission railway companies to provide the services. This process is guided by procurement law and the most economically advantageous offer is awarded (BVG, 2023; VBB, 2023).

IN A NUTSHELL: The following Table 10 summarises the key features of this best practice.

Governance model		
Element	**Category**	**Description**
LEVEL:	Domestic	Association between the states of Berlin and Brandenburg
TYPE:	Public-Private	Collaboration between public authorities of both states and transport operator agencies
STRUCTURE:	Decentralised	Coordination of the federal states with active inputs of the transport operators
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	Improvement of cross-border rail services between Germany and Poland	
	Flexible tickets combination tailored to the tariff zones (A, B, and C)	
	Mobile ticket and multimodality through VBB-*fahrCard*	
	Detailed and live timetable information on VBB-App *Bus&Bahn*	
	Travel time to reach certain destinations on VBB-accessibility-search	
LEGAL AND ADMINISTRATIVE:	The VBB is organised as a limited liability company (GmbH) setting the framework conditions for PT	
FINANCIAL:	Regionalisation funds and ticket revenues to enhance connectivity and ICT tools	
	PT companies are commissioned through procurement law to rail services	
Website:	https://www.vbb.de/	

Table 10. Summary of the Verkehrsverbund Berlin-Brandenburg (VBB).

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[5] https://programme2014-20.interreg-central.eu/Content.Node/CONNECT2CE.html

B.4.7. Hamburg Verkehrsverbund (HVV)

The Hamburger Verkehrsverbund (HVV) is a regional partnership between Lower Saxony, Schleswig-Holstein, and the City of Hamburg in Germany. It was established in 1965 as the first transport association worldwide (Figure 15).
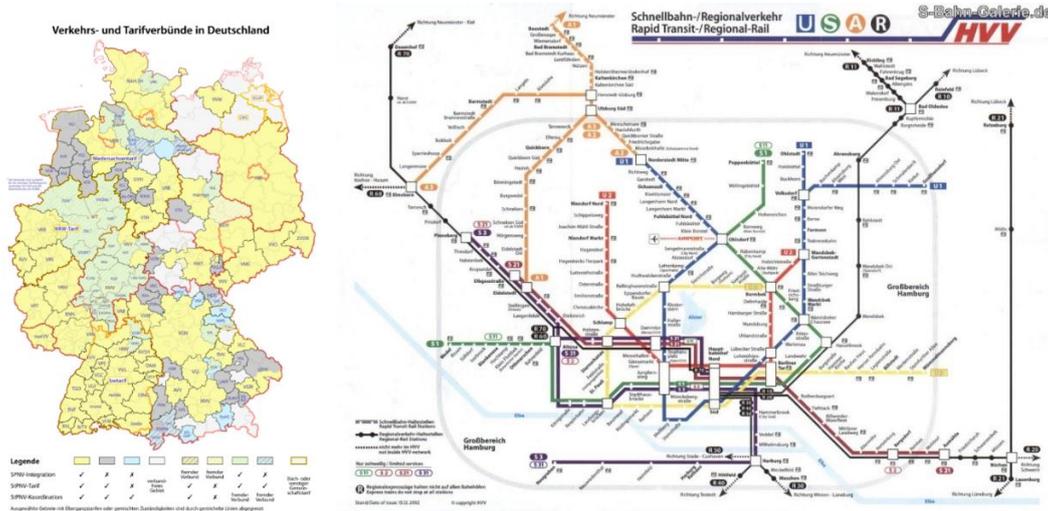

Figure 15. From left to right: 1) Map of all German transport associations including HVV; 2) Regional rail map.

GOVERNANCE MODEL: The Hamburger Verkehrsverbund (HVV) is a domestic collaboration within Germany between Lower Saxony, Schleswig-Holstein and the City of Hamburg. More specifically, it encompasses the administrative districts of the Duchy of Lauenburg, Pinneberg, Segeberg, Stormarn, Harburg, Lüneburg, and Stad. HVV joins a collaboration with the public authorities of the involved districts and numerous transport operators, operating as a public-private entity. The HVV is organised as a decentralised governance, as each federal state is involved into the decision-making process with equal weight. The HVV is orchestrating and managing service operations, while transport operators are responsible for providing the services (HVV, 2023).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: The HVV plays a crucial role in advancing the technical and planning aspects of PT by enhancing connectivity and ICT tools. Specifically, it actively promotes the establishment of an integrated network both within and outside the association, and it provides several services, such as the cashless payment methods. Specifically, tickets are conveniently accessible through multiple channels, such as online platforms, the HVV-Card, and mobile ticket options. The HVV consistently expands its sales outlets via electronic media. To ensure the development of PT, the HVV collaborates with transport operators to establish legal frameworks, encompassing their rights and obligations through various agreements. These agreements cover several aspects, including revenue distribution and quality standards. The financial arrangements for PT can vary based on the specific transport operator or local authority involved. While funding mechanisms may differ, the revenues generated from ticket sales by transport operators are pooled. Subsequently, these funds are distributed to individual transport operators according to the demand through established revenue distribution procedures. Any remaining deficit is typically reimbursed by the transport operator, either through contracts for PT services or subsidies provided to the transport operators (HVV, 2023).

IN A NUTSHELL: The following Table 11 summarises the key features of this best practice.

Governance model		
Element	**Category**	**Description**
LEVEL:	Domestic	Association between Lower Saxony, Schleswig-Holstein and the City of Hamburg
TYPE:	Public-private	Collaboration between involved federal states and transport operator agencies
STRUCTURE:	Decentralised	Each federal state is involved in the management and coordination of the PT
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	Online ticketing system	
	Establishment of an integrated network (also outside the association)	
	Integrated fare system	
LEGAL AND ADMINISTRATIVE:	The rights and obligations of HVV and transport operators are regulated by agreements	
FINANCIAL:	The funding of PT services depends on the transport operator	
	Tickets revenues are pooled to the transport operators according to the PT demand	
Website:	https://www.hvv.de/	

Table 11. Summary of the Hamburg Verkehrsverbund (HVV).

B.4.8. EGTC TRITIA

Established in 2013, the European Grouping of Territorial cooperation (EGTC) TRITIA is as a cross-border association encompassing the Moravian-Silesian Region (CZ), Silesian and Opole Voivodship (PL), and Žilina region (SK). It spans over an area of 24,566.09 km^2 and a population of 6.5 million, it includes two key urban centres: Katowice (PL) and Ostrava (CZ) (Figure 16).

Figure 16. From left to right: 1) Map of the EGTC TRITIA regions; 2) The Interreg CE project TRANS TRITIA.

GOVERNANCE MODEL: The EGTC TRITIA is a **cross-border** collaboration encompassing three different countries: Poland, Slovakia and the Czech Republic. Formed by the governing bodies of the four regional governments of Moravian – Silesian Region (CZ), Opole Voivodeship (PL), Silesian Voivodeship (PL) and Žilina Self – governing Region (SK), the EGTC is a **public** entity. Moreover, it operates as an **externalised** structure

of governance aiming to facilitate cross-border cooperation of its members and to strengthen social cohesion through the implementation of projects for a common strategic development. To achieve this, the EGTC TRITIA is working in the fields of energy, tourism, economy and transport (EGTC TRITIA, 2023).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: The EGTC TRITIA main technical and planning contribution to the PT is the development of cross-border transport infrastructure, taking into account the needs of the involved regions and implementing an environmentally friendly approach. Achieving this implies the establishment and operation of an expert platform, identifying shared transport solutions and supporting more efficient PT. An important project related to that is TRANS TRITIA[6] (Interreg CE), which focused on fostering cross-border cooperation between regional authorities, transport managers and operators. Furthermore, the EGTC maps the green and alternative forms of transport, such as cycle transport, water transport, walking trails and other forms through the Green Transport Service[7] project. Regarding the legal aspect, the cross-border area is located on the Baltic-Adriatic Core Network Corridor which is part of the TEN-T Regulations of the EU that define the general objectives and priorities for core network corridor development. In order to be financially able to implement and support cross-border PT, the EGTC TRITIA participates to European programs (like INTERREG), Visegrad funds and has other internal funding sources (Böhm, 2015; EGTC TRITIA, 2023).

IN A NUTSHELL: The following Table 12 summarises the key features of this best practice.

Governance model		
Element	**Category**	**Description**
LEVEL:	Cross-border	Association between Moravian – Silesian Region (CZ), Opole Voivodeship (PL), Silesian Voivodeship (PL) and Žilina Self – governing Region (SK)
TYPE:	Public-Public	Collaboration between governing bodies of the involved regions
STRUCTURE:	Externalised	The EGCT acts as mediator, facilitating the cross-border cooperation of its members to strengthen social cohesion through projects for common strategies
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	Participation in or coordination of transport-related projects	
	Dedicated platform aimed to identify common and efficient transport solutions	
	Map of sustainable modes of transport	
LEGAL AND ADMINISTRATIVE:	The PT in the area is standardised according to the EU TEN-T regulations	
FINANCIAL:	Acquisition of EU funding/Visegrad funding to develop cross-border PT	
	Internal funding of various connectivity interventions to enhance cross-border links	
Website:	https://egtctritia.eu/	

Table 12. Summary of the EGTC TRITIA.

B.4.9. Greater Region of SaarLorLux

The Greater Region of SaarLorLux, established in 1980, is a Euroregion encompassing the state of Luxemburg, Belgium's Walloon Region, France's Lorraine region and the French departments of Moselle and Meurthe-et-Moselle, the German federal states of Saarland and Rhineland-Palatinate (Figure 17).

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[6] http://www.egtctritia.eu/projects/our-projects/trans-tritia

[7] http://www.egtctritia.eu/projects/our-projects/green-transport-service

Figure 17. From left to right: 1) Map of Greater Region of SaarLorLux ;2) Cross-border railways within the Greater Region;

GOVERNANCE MODEL: The Greater Region of SaarLorLux stands as a cross-border cooperation among four distinct states, namely Luxembourg, Belgium, France and Germany. This collaborative initiative includes the state of Luxemburg, Belgium's Walloon Region, France's Lorraine region and the French departments of Moselle and Meurthe-et-Moselle, the German federal states of Saarland and Rhineland-Palatinate. The Greater Region officially involves only the public institutions, regional governments and local authorities to address common challenges and promote shared interests. Structured as an externalised governance, it functions as a mediator, facilitating collaboration, coordination, dialogue and joint initiatives among the participating regions (Grande Region, 2023b).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: The Greater Region records the highest cross-border mobility of workers in the EU. In 2022, the Greater Region counted over 267,300 cross-border commuters, with nearly 215,600 commuting to Luxembourg. Therefore, regarding the technical and planning contributions to the PT development, the Greater Region of SaarLorLux has minimised obstacles related to cross-border mobility. It actively encourages and supports innovative projects on soft mobility, which combine PT with individual eco-mobility. Furthermore, it established a working group on transport, which enables cooperation between national and regional experts to develop solutions that facilitate and simplify commuting between the regions. The website of the Greater Region lists several online journey planners that provide real-time traffic information on all available modes of transport. The legal founding of SaarLorLux is an agreement between the governments of the French Republic (République française), the Federal Republic of Germany and the Grand Duchy of Luxembourg concerning collaboration in the border regions. This agreement serves as the legal basis for boundary-crossing cooperation. However, no formal process of enlargement was established for the other involved regions. New members joined specific treaties of cooperation, embracing different bilateral and multilateral treaties among different members, creating different grades of cooperation. The financial resources to contribute to the PT development are derived from the internal budget and participation in European program calls (Grande Region, 2023b, 2023a).

IN A NUTSHELL: The following Table 13 summarises the key features of this best practice.

Governance model		
Element	Category	Description
LEVEL:	Cross-border	Association between state of Luxemburg, Walloon Region (BL), Lorraine region and departments of Moselle and Meurthe-et-Moselle (FR), the Saarland and Rhineland-Palatinate (GER)
TYPE:	Public-Public	Collaboration between public authorities of the involved regions

STRUCTURE:	Externalised	The Greater Region acts as mediator, facilitating the collaboration, coordination, dialogue and joint initiatives among the participating regions
Governance contribution to PT development		
Element	Contribution	
TECHNICAL AND PLANNING:	Participation in or coordination of transport-related projects	
	Supporting of innovative projects on soft mobility	
	Establishment of a working group on transport enabling cooperation among the regions	
	Online journey planners that provide real-time information on all available transport modes	
LEGAL AND ADMINISTRATIVE:	Agreement on cross-border cooperation among the founding members	
	Bilateral and multilateral treaties for the cooperation with more recent members	
FINANCIAL:	Acquisition of EU funding to develop cross-border PT	
	Internal funding of various connectivity interventions to enhance cross-border links	
Website:	https://www.granderegion.net/en	

Table 13. Summary of the Greater Region of SaarLorLux.

B.5. "Macro" best practices

B.5.1. EUSALP Action Group 4

The EUSALP AG4 is part of the EU Strategy for the Alpine Region and focuses on mobility. Its core aim is to promote inter-modality and interoperability in passenger and freight transport, involving six different European national states located in the Alps (Figure 18).
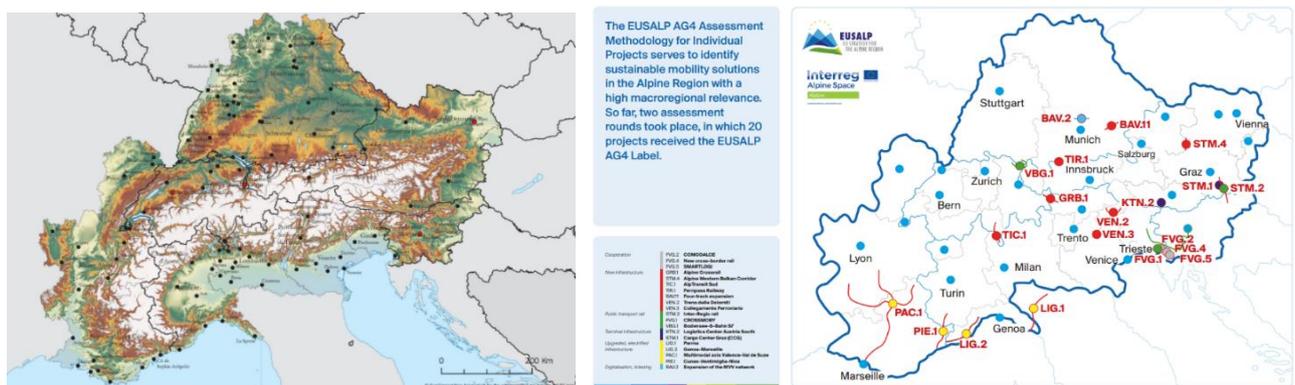
Figure 18. From left to right: 1) Map of the EUSALP; 2) Assessment Methodology for Individual Projects.

GOVERNANCE MODEL: The governance of EUSALP AG4 operates at cross-border level, involving NUTS-2 regions of six different nations: Austria, France, Germany, Italy, Liechtenstein, Slovenia, and Switzerland. The type of governance is totally public since it involves provincial and regional governments, with no official involvement of private entities. The structure of the governance is somehow centralised. The presidency is periodically assigned to a single member. However, the rotation of this role ensures a balanced distribution of power. The EUSALP offers a platform to share, coordinate and harmonise the activities of the involved regions, countries and stakeholders that are engaged in transport and mobility systems (EUSALP, 2021, 2023).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: The technical and planning contribution of the EUSALP AG4 to the PT development is highly diverse. For instance, it establishes three-year work plans that detail the thematic focus of the group's actions. Furthermore, the Platform of Knowledge is a technological public platform aimed to connect EU members and leaders and facilitate knowledge transfer and dialogue while making different targets (policy makers, stakeholders, researchers, citizens) aware about EUSALP, its projects, results and impacts. The platform contains several tools, some of which are accessible to all users, others only to EUSALP members and registered people (EUSALP, 2023). Moreover, EUSALP developed a map which identifies the most important challenges and conflicts of transport and mobility in the Alps. Also, it developed an assessment methodology for individual projects, which serves to identify projects relevant to a sustainable mobility shift. The EUSALP encompasses several countries, most of them are part of the EU, but Liechtenstein and Switzerland are not. This can lead to complex legal and administrative challenges for cross-border PT. For instance, the regulatory framework for passenger mobility and the interoperability of the European railway sector remains major barriers to more user-friendly transport services. However, the EUSALP increases the co-activity to coordinate EU policies, programmes and strategies that are playing a role in the Alps. Moreover, it promotes networking and common targets in a coordinated and integrated policy framework. Regarding the financial aspect of cross-border PT, the EUSALP facilitates the connections between the activities and available funding by enhancing dialogue and exchange of information between the members (EUSALP, 2021, 2023).

IN A NUTSHELL: The following Table 14 summarises the key features of this best practice.

Governance model		
Element	**Category**	**Description**
LEVEL:	Cross-border	Association between Austria, France, Germany, Italy, Liechtenstein, Slovenia, and Switzerland
TYPE:	Public-public	Collaboration between various regional or provincial governments of the various countries
STRUCTURE:	Centralised	Presidency of the governance assigned to one of the members. However, the presidency rotates on period basis
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	Establishment of a three-year work plan to detail the thematic focus of the AG4	
	Map and tools addressing common challenges and conflicts in transport and mobility in the Alps	
	Assessment methodology for individual projects to mark them as relevant for the modal shift	
LEGAL AND ADMINISTRATIVE:	Promoting networking and common legislative targets in a coordinated policy framework	
	Increasing co-activity to coordinate EU policies, programmes and strategies	
FINANCIAL:	Facilitating connections and knowledge about available funding possibilities	
Website:	https://alpine-region.eu/topics-action-groups/detail/mobility	

Table 14. Summary of the EUSALP AG4

B.5.2. Interregional Alliance for the Rhine-Alpine Corridor (IARAC)

The Interregional Alliance for the Rhine-Alpine Corridor, founded in 2015, it focuses on one of the nine European Core Network Corridors. It runs from north to south, connecting the North Sea ports of Rotterdam and Antwep to the Mediterranean basin in Genoa (Figure 19).
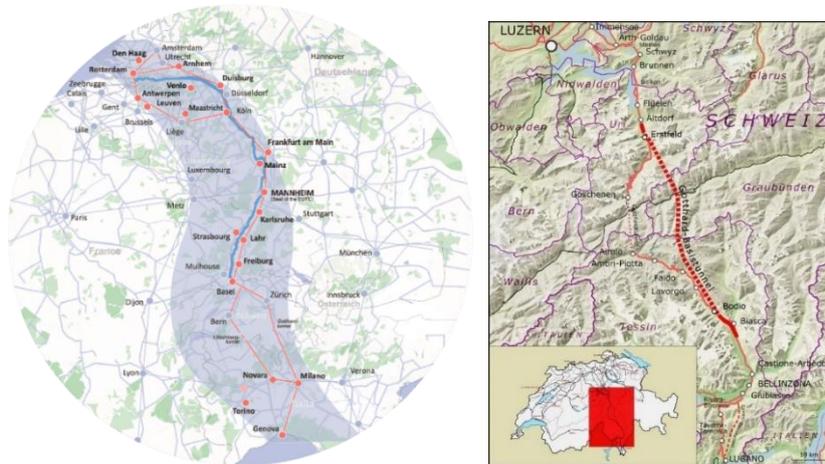
Figure 19. From left to right: 1) Map of the Interregional Alliance for the Rhine-Alpine Corridor; 2) Location of the Gotthard Base Tunnel.

GOVERNANCE MODEL: The Interregional Alliance for the Rhine-Alpine Corridor (IARAC) represents a **cross-border** collaboration along the Rhine-Alpine Corridor, encompassing six different countries: Netherlands, Belgium, Germany, Switzerland and Italy. Comprising 24 **public** administrative representatives from these nations, IARAC operates as intermediary among stakeholders within the member states. Its governance structure is therefore **externalised** and holds legal personality status since it is classified as an EGTC. It aims to facilitate and promote the territorial cooperation among its members and to jointly strengthen and coordinate the territorial and integrated development of the Rhine-Alpine Corridor from the regional and local perspective (European Commission, 2017; Palacio & Wojciechowski, 2015).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: IARAC has made significant **technical and planning** contributions to the PT connectivity and ICT tools development along the Rhine-Alpine Corridor. These contributions primarily focus on enhancing infrastructure, such as optimising the network, repairing sections, and accelerating speed. Additionally, IARAC has provided a central platform for exchange of information and experiences through the Corridor Information System (CIS). A key milestone of the IARAC was the opening of the Gotthard Base Tunnel in 2016. While the Rhine-Alpine is a mature corridor and does not have major missing links, challenges persist due to increased traffic flows, especially in Germany and Italy and between Belgium and Netherlands. In terms of **legal aspects**, the Rhine-Alpine Core Network Corridor is one of the nine corridors of Trans-European Network for transport (TEN-T), which are based on EU Regulations 1315/2013 and 1316/2013. The recent revision of these regulations requires ERTMS-equipped infrastructure, interoperability of national networks, full electrification, safety and multimodal nodes connected to rail (European Commission, 2021b). However, these requirements are not uniformly met across all countries. Therefore, IARAC is actively working towards developing the necessary infrastructure, aiming to achieve these standards, including the installation of ERTMS throughout the entire network by 2040. Regarding the **financing**, Rhine-Alpine projects draw support from various sources including public grants, EU Grants such as CEF (Connecting Europe Facility), and ESIF (European Structural and Investment Funds), as well as private and own resources (EGTC Rhine Alpine, 2023).

IN A NUTSHELL: The following Table 15 summarises the key features of this best practice.

Governance model		
Element	**Category**	**Description**
LEVEL:	Cross-border	Alliance between Netherlands, Belgium, Germany, Switzerland and Italy along the Rhine-Alpine Corridor
TYPE:	Public-public	Collaboration between various regional or provincial governments of the involved countries

STRUCTURE:	Externalised	The IARAC operates as an intermediator between stakeholders of the member states
Governance contribution to PT development		
Element	Contribution	
TECHNICAL AND PLANNING:	Infrastructure development along the corridor (e.g., increasing travel speed, repairing sections, extending the network)	
	Platform for exchange (CIS) of information and experience for members	
LEGAL AND ADMINISTRATIVE:	The Rhine-Alpine Corridor refers to EU Regulations that have specific requirements	
	Development of a common plan to achieve these requirements	
FINANCIAL:	EU funding, such as CEF and ESIF to promote PT connectivity	
	Internal or other private resources to fund projects enhancing cross-border connectivity	
Website:	https://www.egtc-rhine-alpine.eu/	

Table 15. Summary of the Interregional Alliance for the Rhine-Alpine Corridor (IARAC).

B.5.3. EGTC Central European Transport Corridor (CETC)

The EGTC Central European Transport Corridor (CETC) has been established in 2014 between Sweden, Poland, Hungary, Czech Republic, and Slovakia to ensure fast, safe, environmental-friendly and relatively cheap passenger and freight transport in Central Europe (Figure 20).

Figure 20. From left to right: 1) Map of the CETC and future EU challenges; 2) Members of the CETC.

GOVERNANCE MODEL: The CETC is a **cross-border** collaboration between Sweden, Poland and Croatia. The Skåne County (SE), West Pomeranian, Lubuskie, Lower Silesian Voivodships (all PL), Varazdin and Primorsko-goranska Counties (both HR), are the founding members, while the Opole Voivodship (PL) is an associate member with observer status. The governance brings together **public** authorities of the regions involved. Moreover, as an EGTC, the governance is an **externalised** type, which aims to facilitate and promote cross-border cooperation within the framework of the Central European Transport Corridor and to strengthen economic and social cohesion, particularly through the implementation of projects and programs of territorial cooperation (CETC-EGTC, 2023a).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: Regarding **technical and planning aspects**, the EGTC contributes to the cross-border PT development by the participation in or coordination of transport-related projects. Moreover, it created a common CETC planning area, in which missing transport links are identified and classified according to the type of transport mode and location. For these missing links, preliminary evaluations such as feasibility studies are initiated. In terms of **legal aspects**, the involved countries signed agreements and declarations in order to overcome regulatory divergences that could hamper the PT connectivity in the area. Regarding the **financial part**, the EGTC-CETC funds the transport-

related projects with the annual contributions of the members, and by participating to European funding programs (CETC-EGTC, 2023a, 2023b).

IN A NUTSHELL: The following Table 16 summarises the key features of this best practice.

Governance model		
Element	**Category**	**Description**
LEVEL:	Cross-border	Association between regions of Sweden, Poland and Croatia along the Central Europe Corridor
TYPE:	Public-public	Collaboration between public authorities of the different countries
STRUCTURE:	Externalised	The CETC aims to facilitate and promote cooperation
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	Participation in or coordination of transport-related projects	
	Development of a common planning area	
	Identification of missing transport links in the CETC area	
	Development of initial feasibility studies	
LEGAL AND ADMINISTRATIVE:	Agreements and declarations between the countries to overcome national regulatory divergences in transport-related domains	
FINANCIAL:	Internal funding from members and EU funding to promote cross-border connectivity	
Website:	https://cetc-egtc.eu/	

Table 16. Summary of the Central European Transport Corridor (CETC).

B.6. Summary

This summary is structured into two parts. The first part presents an **overview of the 16 best practices arranged in a table format**. This table shows which combinations of governance structure, level, and type are more diffused in the best practices. Moreover, it incorporates the most diffused governance contributions to PT development, encompassing technical and planning aspects, legal and administrative considerations, and the financial dimension. The second part provides a **textual summary pointing out the primary findings derived from the analysis of the best practices** in governance models across Europe. This part provides a comprehensive understanding of the key insights acquired from analysing various governance structures and their potential impact on cross-border cooperation. The **summary table** taking into account the 16 best practices and summing up their common trends in terms of governance model and contribution to PT development is presented below.

Governance model							
	LEVEL:	**Domestic**			**Cross-border**		
	TYPE:	Public-Public	Public-Private	Private-Private	Public-Public	Public-Private	Private-Private
STRUCTURE: Centralised		●[1]	●●[2]	○	●●[4]	○	○
STRUCTURE: Decentralised		○	●●[3]	○	○	○	○
STRUCTURE: Externalised		○	○	○	●●●●●●●●●●[5]	○	○

<table>
<tr><td colspan="3">
Legend:
● Each dot represents a best practice with the considered combination of governance level, type and structure.
○ No best practice with the considered combination of governance level, type and structure.
Notes:
[1] Brussels-Capital Region (BCR).
[2] Züricher Verkehrsverbund (ZVV); Hamburger Verkehrsverbund (HVV).
[3] Verkehrsverbund Ost-Region (VOR); Verkehrsverbund Berlin-Brandenburg (VBB).
[4] EUSALP Action Group 4; Oder-Partnership.
[5] EGTC GO; Strasbourg-Ortenau Eurodistrict; EGTC Euregio Senza Confini; Euregio Maas-Rhein (EMR); EGTC Eurometropolis Lille-Kortrijk-Tournai; EGTC TRITIA; Greater Region of SaarLorLux; Interregional Alliance for the Rhine-Alpine Corridor (IARAC); EGTC Central European Transport Corridor (CETC).
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Governance contribution to PT development		
LEVEL:	**Domestic**	**Cross-border**
TECHNICAL AND PLANNING CONTIRBUTION:	• Concrete participation to strategic and unified planning of PT in the area	
	• Implementation of unified ticketing systems • Organisation of fare zones • Integration of real-time PT updates in apps	• Implementation of new PT services across borders (trains, busses, and trams) • Implementation of integrated ticketing systems • Development of cross-border journey planners for an integrated PT network
LEGAL AND ADMINISTRATIVE CONTIRBUTION:	• Establishment of an official agreement among the involved actors, outlining rights, duties and tasks, as well as cost/revenue-sharing agreements	
	• Solving of minor legal barriers within the region, not related with cross-border issues	• Addressing of national regulations posing limits to cross-border cooperation • Overcoming constraints outlined in the European Commission directives
FINANCIAL CONTIRBUTION:	• Establishment of an internal fund system for the PT services derived from a) members´ direct contribution, b) tickets revenues and c) in- and out-of-vehicle advertising	
	• Establishment of a system of either equal distribution of the funding among participants or pooled according to the demand for services	• Integration of the internal funding with the participation in EU funding calls (such as INTERREG) to enhance PT development • Establishment of the funding responsibilities of the members to support the governance itself and the PT measures

Table 17. Summary of the 16 best practices presented in Sections B.3-5.

Based on the summary provided in Table 17, a set of **findings** for each of the six examined governance elements are derived. These findings help understanding the main common features of the presented best practices and may be useful for the SUSTANCE project and its future governance challenges.

Governance LEVEL[8]:

[1]. **The primacy of the EGTCs in cross-border cooperation:** The most prevalent governance model at the <u>cross-border level</u> is the European Grouping of Territorial Cooperation (EGTC). Functioning as a <u>public-public entity</u> with an <u>externalised structure</u>, this model is successful due to its legal personality under EU law. This legal standing allows it to manage budgets, employ staff, own property, and engage in legal procedures. Notably, it facilitates collaboration among actors from different countries on joint projects, such as INTERREG, without requiring international bilateral agreements at the national level. This governance model is mostly applied to the "meso" scale.

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[8] The governance level refers to the scale of the cooperation: domestic or cross-border in this report.

[2]. The relevance of the transport associations in domestic cooperation: At the domestic level, the transport association is one of the most common governance models, particularly in German-speaking countries. Often operating as a public-private entity, this structure can be either centralised (e.g., Züricher Verkehrsverbund and Hamburger Verkehrsverbund) or decentralised (e.g., Verkehrsverbund Ost-Region and Verkehrsverbund Berlin-Brandenburg). This model has demonstrated success by expanding services, enhancing service quality, integrating apps and fares, and improving marketing campaigns (Buehler et al., 2019; Pucher & Kurth, 1995). Its flexibility allows adaptation to various needs, geographical areas, and sizes of cooperation.

Governance TYPE⁹:

[3]. The primacy of the public-public cooperation at the cross-border level: Cross-border PT governance mainly relies on collaborative efforts among public authorities operating at different levels, encompassing municipalities, provinces, and regions. This model of governance is often connected with government funding and subsidies, strategically directed to enhance PT initiatives. Within this framework, public governance is purposefully structured to prioritize long-term planning, ensuring alignment with public interests, and giving priority to equal access and overarching social objectives.

[4]. The relevant role of public-private cooperation at the domestic level: Some domestic best practices adopt a public-private partnership model (often involving transport associations). In these cases, public entities that are part of the governance system do not directly operate PT services, and thus actively engage private companies to ensure the delivery and operation of PT. This public-private collaboration demonstrates adaptability and flexibility in addressing the needs of PT systems, although it is not a diffused approach at the cross-border scale.

Governance STRUCTURE¹⁰:

[5]. The primacy of the externalised structure at the cross-border level: The most frequently adopted cross-border governance structure, particularly evident in European Groupings of Territorial Cooperation (EGTCs), is the externalised model. This organisational framework plays a pivotal role in bringing stakeholders together, mediating their interests especially at the cross-border scale, and fostering collaboration for the advancement of PT and the promotion of cohesion among member regions. Furthermore, the externalised governance model plays a key role to ease the access to European Union funds and the application to EU calls.

[6]. The centralised structure as domestic and cross-border alternative: The centralised model emerges as the second most diffused structure (five cases, both domestic and cross-border). In this arrangement, the decision-making authority is concentrated in a single member of the partnership, assuming a leading role in the governance of the entire system (e.g., one leading region in a consortium of more cooperating regions). This clear hierarchy can contribute to effective communication, decisive actions, and accountability. However, it may limit the equal involvement of all governance members into the decision-making process. For this reason, some of the observed best practices rotate the leadership role.

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[9] The governance type refers to the kind of cooperation: public-public, private-private or public-private in this report.

[10] The governance structure regards the kind of leadership: centralised, decentralised or externalised in this report.

TECHNICAL AND PLANNING Contribution[11]:

[7]. **Concrete participation to strategic PT planning:** One key aspect of the best practices is the implementation and elaboration of a comprehensive strategic plan for PT development. This is a crucial basis for governance, both at domestic and cross-border level. A strategic plan facilitates the implementation of connectivity measures and ICT tools for PT. Moreover, it improves the long-term allocation of resources, balancing new financial investments and needed works of PT infrastructure maintenance (e.g. Züricher Verkehrsverbund, Verkehrsverbund Ost-Region, Eurodistrict Strasbourg-Ortenau, Oder-Partnership, EGTC TRITIA).

[8]. **Implementation of flagship connectivity measures or ICT tools for PT:** Building on the strategic planning, another key aspect is the implementation of flagship PT connectivity measures and ICT tools. This often includes, e.g.: (a) the establishment of new cross-border transport links; (b) the harmonisation of timetables; (c) the integration of fare and ticketing systems; and (d) the integration of real-time PT information in apps. These services are not only useful to the public, they represent also symbols of cross-border cooperation that governance systems have to foster (e.g. Brussel Capital Region, EGTC GO, Strasbourg-Ortenau Eurodistrict, Euregio Maas-Rhein).

[9]. **Establishment of unified journey planners:** The creation of platforms or apps integrating all modes of transport and operators within the governance area is a typical measure supported by almost all the observed best practices. Therefore, it is a sort of requirement for any governance system. This digital service offers a more coordinated network by minimising connection gaps and it stands as a crucial tool to allow users to plan and navigate within a transport network (e.g. EGTC TRITIA, EUSALP AG4, Interregional Alliance for the Rhine-Alpine Corridor).

LEGAL AND ADMINISTRATIVE Contribution[12]:

[10]. **Formalisation of a jointly established agreement**: This is a significant contribution of the best practices in legal and administrative terms. This agreement serves as a comprehensive document that clearly defines rights, duties, tasks, and cost/revenue allocations within a specific area of interest. Moreover, it forms a solid basis for effective cross-border cooperation. These agreements become also the basis for addressing specific legal obstacles at the national level, particularly concerning issues related to timetables and fares (e.g. Brussel Capital Region, Hamburg Verkehrsverbund, EGTC "Euregio Senza Confini", Greater Region of SaarLorLux).

[11]. **Agreements to overcome cross-border challenges posed by EC directives:** Governance systems play a relevant role in setting up agreements to overcome challenges posed by EC directives, especially the 1073/2009 Directive. This directive regulates international bus services in Europe, by limiting them to long-range services and excluding urban-level services. The directives' intention is to prevent foreign operators from overlapping and competing with local service providers, but it also generates some obstacles to the establishment of local cross-border bus services. Collaborative agreements established by some of the analysed governance systems have resolved conflicting interests and found mutually beneficial solutions within the framework of the directive (e.g., EGTC GO, Eurodistrict Strasbourg-Ortenau).

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[11] The technical and planning contribution refers to the support given by the governance system to the development of concrete measures in the fields of either connectivity or ICT tools for PT.

[12] The legal and administrative contribution covers the ability of the governance system to address legal and administrative challenges for the PT development.

FINANCIAL Contribution[13]:

[12]. **The importance of internal funding for the governance itself and for the PT measures:** Securing internal funding for (a) PT measures and (b) the functioning of the governance system is crucial. This internal funding involves two core sources. The first source comprises the ticketing revenues and station advertising, which have to be regulated to establish their contribution to the governance funding. The second source is the direct financial contribution of governance members, which may be municipalities, regions or other public/private entities (e.g. Brussel Capital Region, Verkehrsverbund Ost-Region, Eurodistrict Strasbourg-Ortenau, Central European Transport Corridor).

[13]. **The contribution of EU funding for the PT measures:** Another common trend among the best practices is the access to European funds to integrate the internal funding. These EU funds are usually obtained through the participation in EU programs (like INTERREG) to finance specific PT projects. This reduces financial risk and ease the implementation of experimental PT initiative. In particular, the EU-funded pilot actions typically serve as demonstrations and testbeds, and they contribute making more informed decisions for future service planning (e.g. EGTC "Euregio Senza Confini", Euregio Maas-Rhein, Oder-Partnership).

C. Challenged governance experiences

C.1. Methodological approach

The **identification of challenged governance practices** has been carried out by examining dissolved EGTCs, referring to the European Commission's report titled "*Analysis of cross-border obstacles between EU Member States*" (European Commission, 2021a). Moreover, the paper by Kaucic and Sohn's (2021) has been consulted, since it provides extensive maps of cross-border collaborations (ongoing and expired).

To **analyse the identified challenged governance experiences**, the same methodological approach used for the best practices is applied. This allows a better comparison of positive and challenged experiences, and a more coherent derivation of considerations useful for the SUSTANCE future governance. As such, the proposed challenged governance experiences cover the "micro", "meso" and "macro" levels proposed above and refer only to the cross-border dimension, due to lack of data on the domestic level. The common set of elements is observed also in this case, namely the level, type and structure of the governance model; as well as the technical, legal and financial contribution given by the governance to the PT development in the area. At the end of each case study, a summary table is provided as in the best practices.

C.2. "Micro", "Meso" and "Macro" case studies

C.2.1 EGTC Karst-Bodva

The EGTC Karst-Bodva, initiated in 2009 and closed in 2017, was a collaboration between the Gömör-Torna Karst region and Bodva valley area on the Hungarian-Slovakian border.

GOVERNANCE MODEL: The EGTC Karst-Bodva was a micro cross-border collaboration between the countries of Hungary and Slovakia. The governance included the local public authorities of the municipalities

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[13] The financial contribution encompasses the system of financing of the governance itself and of the PT interventions to which the governance system actively contributes.

of Hrušov (SK), Perkupa and Varbóc (HU). It operated as an **externalised** governance entity, with the aim to promote cooperation and foster harmonious development between cross-border territories. However, the EGTC Karst-Bodva faced several challenges already during its start-up phase, including financial issues and strained relations with neighbouring local and regional authorities and administrations, intensified by language barriers. Consequently, the EGTC has not being operational since 2017. Despite that, it still exists legally, as neither liquidation nor deregistration has occurred (Zillmer et al., 2018).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: In terms of **technical and planning contributions** to the PT development, the EGTC aimed to improve cross-border local and regional infrastructure. Additionally, it pursued to establish and execute a joint development programme based on a shared strategy. On the **legal aspects**, the involved municipalities conducted an agreement for the establishment of the EGTC, intending to enhance cross-border connectivity. However, due to the lack of **financial resources** and operational capacity as an EGTC, the objectives have never been achieved. This example indicates how a clear and solid financial plan for the desired initiatives is a key point, which deeply influences the functioning of a cross-border governance structure as an EGTC.

IN A NUTSHELL: The following Table 18 summarises the key features of this case study.

Governance model		
Element	**Category**	**Description**
LEVEL:	Cross-border	Association between the municipalities of Hrušov (SK), Perkupa and Varbóc (HU)
TYPE:	Public-public	Collaboration between the public authorities of the municipalities involved
STRUCTURE:	Externalised	The EGTC aimed to support cooperation and harmonious development between the involved municipalities
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	The EGTC aimed to improve cross-border local and regional infrastructure	
	The EGTC planned to develop and implement a common development programme based on a shared strategy	
LEGAL AND ADMINISTRATIVE:	Agreement signed for the establishment of the EGCT	
FINANCIAL:	Lack of financial resources hindered the achievement of the objectives	

Table 18. Summary of the EGTC Karst-Bodva.

C.2.2 EGTC Sajó-Rima

The EGTC Sajó-Rima was a cross-border collaboration between Hungary and Slovakia. The EGTC was registered in 2013 and it became inactive in 2014.

GOVERNANCE MODEL: The EGTC Sajó-Rima was a micro **cross-border** collaboration between Hungary and Slovakia, which encompassed the municipalities of Putnok and Ózd in Hungary and the municipalities of Rimavská Sobota and Tornal'a in Slovakia. The governance included the **public** authorities of the government of the involved entities. Furthermore, the governance was **externalised** since it aimed at facilitating the economic and social cohesion among the members. However, the EGTC Sajó-Rima has faced challenges in achieving stability and has ultimately become inactive in 2014. These challenges suggested a need for organisational changes. More specifically, a process of competition and induced consolidation took place, resulting in the creation of the EGTC Slanà-Rimava (Kaucic & Sohn, 2021; Pucher & Hauder, 2016).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: Regarding the technical and planning contributions to the PT development, the main planned tasks were: generate projects, raise funds and provide the necessary human resources to foster PT development. Regarding the legal aspects, the involved municipalities signed an agreement for the registration as an EGTC. Furthermore, the EGTC planned to receive financial support from both the European Union and the respective member states involved to improve the cross-border cooperation. Nevertheless, the small dimension of the involved entities (municipalities) has played a core role in limiting the activity of the EGTC as initially planned.

IN A NUTSHELL: The following Table 19 summarises the key features of this case study.

Governance model		
Element	**Category**	**Description**
LEVEL:	Cross-border	Association between the municipalities of Putnok and Ózd in Hungary and the municipalities of Rimavská Sobota and Tornal'a in Slovakia
TYPE:	Public-public	Collaboration between public authorities of the involved municipalities
STRUCTURE:	Externalised	The EGTC aimed to facilitate the economic and social cohesion among members
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	EGTC aimed to generate projects to enhance cross-border connectivity	
	EGTC planned to raise funding and human resources to improve cross-border connectivity	
LEGAL AND ADMINISTRATIVE:	Agreement and regulation signed regarding the internal tasks	
FINANCIAL:	EGTC planned to promote connectivity with internal and European financial resources	

Table 19. Summary of the EGTC Sajó-Rima.

C.2.3. EGTC Espacio Portalet

The EGTC Espacio Portalet was a cross-border collaboration between the Government of Aragon (Spain) and the Conseil départemental des Pyrénées-Atlantiques (France). It was active from 2011 to 2021.

GOVERNANCE MODEL: The EGTC Espacio Portalet was a meso cross-border collaboration between the Autonomous Government of Aragon in Spain and the Département des Pyrénées-Atlantiques in France. Its governance united public authorities of both participating governments. Functioning as an EGTC, the governance was externalised, with the aim to facilitate and promote cross-border cooperation, implementing programs and projects regarding territorial cooperation co-financed by the European Union. The EGTC acted as intermediary, fostering collaboration between public and private entities (Espacio Portalet, 2023). However, the EGTC Espacio Portalet dissolved in May 2021. The main reason for the dissolution was the presence of overlapping initiatives in the EGTC Pirineos-Pyrénées. Thus, the decision was made to merge and consolidate it into a unique structure, by transferring the right and obligations to this latter EGTC. This consolidation could be attributed to various factors, such as optimising cross-border cooperation, achieving economies of scale, or enhancing overall visibility (Kaucic & Sohn, 2021). This example gives important lessons regarding the need of avoiding doubling the governance systems, which may finally make cross-border cooperation more complex.

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: Regarding the technical and planning aspects of the Espacio Portalet, the EGTC had to carry out all the necessary actions for the management of the Portalet cross-border crossing, to ensure the good condition and correct maintenance of the infrastructure, especially in terms of winter roads. Moreover, the EGTC improved the cross-border infrastructures. Regarding legal aspects, both municipalities signed an agreement to improve the cross-

border connectivity along the Portalet passage. In **financial terms**, the EGTC made proportional allocation of funds from the members as well as participating to EU-funding calls in order to enhance their collaboration.

IN A NUTSHELL: The following Table 20 summarises the key features of this case study.

Governance model		
Element	**Category**	**Description**
LEVEL:	Cross-border	Association between the region of Aragon in Spain and the department ofs Pyrénées-Atlantiques in France
TYPE:	Public-public	Collaboration between the involved public authorities
STRUCTURE:	Externalised	The Espacio Portalet aimed to facilitate and promote cross-border cooperation by implementing programs and projects regarding territorial cooperation
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	Management of the Portalet cross-border connectivity	
	Ensure the good condition and correct maintenance of the infrastructure, especially in winter	
	Improving cross-border infrastructures	
LEGAL AND ADMINISTRATIVE:	Signing of an agreement in order to enhance connectivity along the Portalet passage	
FINANCIAL:	Internal funding and EU-funding allocated to the members to improve cross-border connectivity	

Table 20. Summary of the EGTC Espacio Portalet.

C.2.4. Danube-Drava-Sava Euroregion

The Danube–Drava–Sava Euroregion, established in 1998, represents a cross-border initiative comprising areas of the countries of Bosnia and Herzegovina, Croatia and Hungary.

GOVERNANCE MODEL: The Danube–Drava–Sava Euroregion is a macro **cross-border** collaboration between the countries of Bosnia and Herzegovina, Croatia and Hungary. The governance unites **public** authorities at county, municipality and city level. Moreover, as an EGTC, the governance is **externalised** and it aims to facilitate, promote and coordinate cross-border cooperation. Nevertheless, the cooperative dynamics within the Danube-Drava-Sava Euroregion witnessed a decline after Croatia's accession to the EU in 2013. Challenges in governance structures along with persistent issues of trust (particularly between Croatia and Bosnia and Herzegovina) have contributed to this decline. Additionally, the lack of initiatives, e.g. during the presidency of Bosnia and Herzegovina, has resulted in a stagnation of activities within the Euroregion (European Commission, 2021a).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT: Regarding **technical and planning contributions** within the Danube-Drava-Sava, the Euroregion played a key role in coordinating activities related to the construction of traffic infrastructure and the management of road traffic maintenance. The region also directed efforts towards improving the functionality of border crossing and organising cross-border transportation services. The Euroregion does not function as a **legal** entity. This limitation means it cannot apply for or act as a partner in EU-funded projects. **Financially**, the Euroregion faced limitations due to the absence of a separate dedicated bank account, making it ineligible for any financial transactions and hindering the establishment of a more professionalised organisational structure (Vugrinovic & Dominko, 2016).

IN A NUTSHELL: The following Table 21 summarises the key features of this case study.

Governance model		
Element	**Category**	**Description**
LEVEL:	Cross-border	Association between Bosnia and Herzegovina, Croatia and Hungary
TYPE:	Public-public	Collaboration between the public authorities of the involved entities
STRUCTURE:	Externalised	The Euroregion is an external entity aimed to facilitate, promote and coordinate cross-border cooperation
Governance contribution to PT development		
Element	**Contribution**	
TECHNICAL AND PLANNING:	Coordination of activities regarding the traffic-infrastructure construction and maintenance	
	Enhancing the functionality of cross-border connectivity	
	Organising cross-border transportation services	
LEGAL AND ADMINISTRATIVE:	The lack of a legal identity of the Euroregion has limited the participation in and application to EU-funded projects and financial transactions	
FINANCIAL:	Difficulties to finance joint projects and professional collaborators due to the lack of a dedicated budget for the Euroregion activities	

Table 21. Summary of the Danube-Drava-Sava Euroregion.

C.3. Summary

Based on the case-study descriptions presented above, the following textual summary proposes a series of **"lessons learned"** that should be taken into account when defining a governance system. These lessons encompass the governance level and type, structure, the technical and planning contributions to the PT development, legal and administrative aspects, and also financial attributes.

Governance LEVEL[14] (and TYPE[15]):

[1]. **Question whether the involved institutions are ready for cross-border cooperation.** It is necessary to understand whether local and regional authorities are willing to cooperate and adequately prepared for cross-border cooperation. This is challenging especially for micro-level governance, where municipalities and small authorities tend to have less cross-border experience. Ideally, governance members should have a sufficient knowledge about the legal frameworks and the capacity to facilitate the process of governance (Zillmer et al., 2022). Moreover, the possible non-willingness of authorities to support solutions, or the existence of an asymmetric motivation to participate among the involved authorities, need to be understood in advance to prevent future challenges.

[2]. **Acknowledge/address cultural differences among institutions (especially at cross-border level).** Cultural differences might be challenging in cross-border cooperation. A key aspect to consider is language, which can become a barrier. This challenge may be more evident when linking rural and small municipalities with a very local focus and limited cross-border experience. To ensure effective collaboration, participants of governance systems should anticipate and address potential cultural barriers that may surface during both the implementation and operation phases of the collaboration.

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[14] The governance level refers to the scale of the cooperation: domestic or cross-border in this report.

[15] The governance type refers to the kind of cooperation: public-public, private-private or public-private in this report.

Governance STRUCTURE[16]:

[3]. **Avoid the overlap with existing governance systems.** In setting up new governance collaborations, it is crucial to avoid overlap with existing systems that can already achieve the same objectives. The overlap may arise due to similar activities, and it could lead to institutional replication if the same authorities participate in multiple networks (Kaucic & Sohn, 2021). To avoid this issue, a consolidation and improvement of already existing governances is advisable, by e.g. optimising cross-border cooperation, achieving economies of scale, or enhancing visibility (Kaucic & Sohn, 2021). It is relevant to consolidate governance structures by merging territorial areas and aligning topics, thereby saving social and economic resources.

TECHNICAL AND PLANNING Contribution[17]:

[4]. **Ensure a stable contribution of the governance system to PT development over time.** The stability of this contribution over time is crucial to maintain motivation, secure budgets and enhance visibility of the governance system. To this end, the governance system should work on concrete plans for medium and long-term PT projects and initiatives, along with durable financial plans. A decline in commitment or initiative can result in a reduction in practical contributions, leading to a regression of the overall progress and perceived relevance of the governance system.

LEGAL AND ADMINISTRATIVE Contribution[18]:

[5]. **Ensure that a governance system has an official legal status.** The absence of an official legal status implies multiple issues. First, it limits the participation in EU-funding applications. Second, it hampers the establishment of a budget dedicated to the governance system, hindering the possibility to e.g. employ staff or acquire property. Thus, obtaining official legal status is important for the success and functioning of a governance system. Especially, it enables the access to opportunities and resources available within the EU framework.

FINANCIAL Contribution[19]:

[6]. **Set from the beginning a financial plan to bear the governance and PT interventions.** A financial strategy is essential to ensure the functionality and operational capacity of governance structures. Its absence can hinder the success of established objectives, especially at cross-border level and for externalised structures. For effective cross-border governance, it is relevant to strategically plan practical operations and plan corresponding financing procedures. This involves active participation in EU-funding calls and the establishment of an independent budget (especially when an externalised governance is set). The latter can be integrated by regular contributions from members or revenues generated from services. The possession of an own budget acts as a central tool for executing transactions, employing staff, and establishing a more professionalised organisational structure.

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[16] The governance structure regards the kind of leadership: centralised, decentralised or externalised in this report.

[17] The technical and planning contribution refers to the support given by the governance system to the development of concrete measures in the fields of either connectivity or ICT tools for PT.

[18] The legal and administrative contribution covers the ability of the governance system to address legal and administrative challenges for the PT development.

[19] The financial contribution encompasses the system of financing of the governance itself and of the PT interventions to which the governance system actively contributes.

D. Winning governance ingredients

The goal of this chapter is to identify the core **winning ingredients of a governance system**, based on the inputs given by the presented 16 best practices and four challenged case studies. For this purpose, Section D.1 provides a general selection and analysis of these ingredients, by considering the "micro", "meso" and "macro" scales, as well as the domestic and cross-border level. The two summaries presented in Section B.6 and C.3 represent the fundamental inputs to identify such winning ingredients.

D.1. Winning ingredients

Coherently with the rest of the report, the winning ingredients are identified for the two observed macro topics: 1) **governance model** (including its level, type and structure); and 2) the **governance contribution to PT development** (including the technical, legal and financial contribution).

GOVERNANCE MODEL (Table 22): One winning ingredient is the setup of <u>transboundary</u> governance collaborations across either local, regional or even national borders. This is especially relevant to ensure a unified vision on the development of the PT network, which in most cases needs to go beyond the single administrative borders. Furthermore, the involvement of <u>public</u> authorities of the involved areas is always relevant for facilitating collaboration between regions, ensuring a long-term perspective on PT development, and maintaining a focus on social objectives and equitable PT service access. However, public entities may not always e.g. own a vehicular fleet or run PT services independently due to lack of direct competence on the PT service provision (e.g. the Istrian case). In such cases, it is required to establish active collaborations with <u>private</u> transport companies to operate PT services effectively. Moreover, an inclusive participation of private and public governance members in decision-making processes through <u>decentralised</u> governance structure or rotating leadership is important to consider different perspectives and to maintain power balances. However, in a broader-scale governance that involves actors of different regions and nations, it is often more convenient to set an <u>externalised</u> structure that is capable to mediate several stakeholder's interests and perspectives, contributing to a more complete decision-making process. It is relevant to mention that an effective governance (especially if externalised) requires a <u>dedicated and skilled governance staff</u>, which effectively organises and coordinates the PT initiatives and is fully involved in the mediation among the involved public (and private) members of the governance system.

Governance model			
N.	Ingredient kind and description	Why is it winning?	Related best practices[1]
1	**LEVEL:** Concrete collaboration on PT development across local, regional or national border (relevant for both domestic and international governance).	Setting up a concrete collaboration between border municipalities, regions or nations is crucial for promoting and establishing a unified vision regarding PT development (even in domestic governance systems). This applies especially to e.g. rail and extra-urban bus services, which typically cross administrative borders.	(1)-(16)
2	**TYPE:** Involvement of public authorities in governance systems, both in <u>domestic and cross-border</u> contexts.	Collaboration of public authorities is crucial due to several reasons: 1) It brings a long-term planning perspective, ensuring that decisions align with public interests and serve social objectives; 2) It facilitates dialogue with both public	(1)-(16)

		authorities and private operators; 3) It enhances cohesion, cooperation, and addresses regulatory issues that can be solved only by public bodies.	
3	**TYPE:** Active involvement of private actors (e.g. transport companies), especially in <u>domestic</u> contexts.	Involving actively private transport companies is especially relevant in domestic contexts. That is because local public authorities often do not directly operate transport services. Thus, private companies play a crucial role in providing PT services, but also in enhancing them through their operational expertise.	(1), (11), (5), (10)
4	**STRUCTURE:** Decentralised governance structure for an inclusive participation in decision-making processes, especially in <u>domestic</u> contexts.	A decentralised governance (or rotating leaderships) promotes an equal and active participation of governance members in the decision-making process, particularly in domestic contexts. This governance structure prevents power imbalances and ensures the consideration of diverse perspectives.	(1), (5), (7), (10), (11)
5	**STRUCTURE:** Externalised governance structure to mediate different interests among stakeholders, especially in <u>cross-border</u> contexts.	An externalised governance, typical of the EGTCs, is essential to manage an articulated group of stakeholders and mediate their different perspectives and interests. This governance structure promotes cooperation and social cohesion, but also guarantees an impartial mediation and decision making.	(3), (4), (6), (7), (8), (12), (14), (15), (16)
6	**STRUCTURE:** Empowering the governance's organisation through a dedicated staff, especially in <u>cross-border</u> contexts and <u>externalised</u> structures.	The presence of a dedicated skilled staff that organises and coordinates the activities of the governance system is essential especially when an externalised structure is adopted (e.g. to manage a cross-border cooperation). This staff enhances accountability, effectiveness, and continuity of the governance system.	(3), (6), (7), (8), (12), (13), (14), (15), (16)
[1] **Best practices:** (1) Züricher Verkehrsverbund (ZVV); (2) Brussels-Capital Region (BCR); (3) EGTC GO; (4) Strasbourg-Ortenau Eurodistrict; (5) Verkehrsverbund Ost-Region (VOR); (6) EGTC Euregio Senza Confini; (7) Euregio Maas-Rhein (EMR); (8) EGTC Eurometropolis Lille-Kortrijk-Tournai; (9) Oder-Partnership; (10) Verkehrsverbund Berlin-Brandenburg (VBB); (11) Hamburger Verkehrsverbund (HVV); (12) EGTC TRITIA; (13) Greater Region of SaarLorLux; (14) EUSALP Action Group 4; (15) Interregional Alliance for the Rhine-Alpine Corridor (IARAC); (16) EGTC Central European Transport Corridor (CETC).			

Table 22. Winning ingredients for a governance system (regarding the governance model).

GOVERNANCE CONTRIBUTION TO PT DEVELOPMENT (Table 23): In terms of <u>technical and planning</u> aspects, having a unified strategic plan for the area involved is ideal/the best option to ensure shared priorities and long-term objectives for the governance and the introduction of new PT services in the area. However, the achievement of these commonly established long-term objectives requires continuous commitment in the implementation of short-term PT measures, such as new PT connections, integrated timetables or ticketing systems. To support this process the formalisation of a commonly structured agreement, MoU or other legal act that promotes transparency, accountability and the development of concrete measures is recommended. Furthermore, ad-hoc agreements are essentials for overcoming regulatory challenges, especially concerning fare and ticketing systems or operational hurdles. Regarding the <u>financial</u> aspects, having a clear internal financial plan that covers administrative and more operational measures is relevant. This plan should encompass the financing of both the planned PT measures, but also of the governance system itself (e.g. staff costs and other day-to-day governance expenses). Additionally, for funding transport-related projects and measures, active participation in EU

funding programs like INTERREG is crucial. This complements the internal budget and contributes to a long-term financial sustainability of governance structures.

Governance contribution to PT development			
N.	Ingredient kind and description	Why is it winning?	Related best practices[1]
7	TECHNICAL/PLANNING: Establishment of a strategic PT plan for a long-term collaboration.	Defining a strategic PT plan involves the setup of common priorities and objectives for the PT development of the area. This ensures a long-term definition of PT measures. Furthermore, it improves the allocation of financial and infrastructural resources.	(1), (2), (3), (4), (10), (11), (12), (13)
8	TECHNICAL/PLANNING: Continuous commitment of governance members for the implementation of short-term connectivity measures or ICT tools for PT.	The strategic plan has to be translated in a stable implementation of PT measures in the short term, showing the concrete contribution of the governance system to PT improvement. Short-term measures may be e.g. creating new PT connections, aligning timetables, integrating fare and ticketing systems or organising events.	(4), (6), (7), (8), (9), (14)
9	LEGAL/ADMINISTRATIVE: Formalisation of a commonly structured governance agreement that aligns with the EU standards.	Establishing an agreement is recommended for the operation of any governance systems. The agreement could include, where applicable, e.g. the rights and duties, costs and revenues shares or the members of the governance system.	(1), (2), (6), (12), (15)
10	LEGAL/ADMINISTRATIVE: Overcoming restrictive national and European legal obstacles with ad-hoc PT-related agreements.	Establishing ad-hoc agreements allows addressing restrictive European or national regulatory obstacles for PT operation. These agreements are relevant for measures like integrated fare and ticketing systems and new connectivity services, especially across borders.	(3), (4), (6), (7), (9), (13), (16)
11	FINANCIAL: Establishment of an internal financial plan to cover the costs of the governance system itself.	This financial plan has to define the coverage of governance costs such as staff salaries, office spaces, utilities and administrative costs. This ensures a long-term functioning of the governance system. These costs may be usually sourced through 1) members´ contribution and/or 2) service revenues.	(1), (2), (3), (4), (5), (6), (10), (11), (12), (13)
12	FINANCIAL: Establishment of an internal financial plan to fund the implementation of PT measures.	This financial plan has to define the coverage of costs for planned PT measures to ensure a continuous implementation of projects aimed at improving connectivity or ICT tools. These resources are primarily obtained through 1) members´ contribution and/or 2) service revenues.	(1), (2), (3), (4), (5), (6), (10), (11), (12), (13)
13	FINANCIAL: Integration of internal economic resources (derived by the financial plan) with external funding for the PT development.	Combining internal funds with the participation to European funding programs or contributions from private entities increases financial stability and operational functioning of the governance. Especially, it enables the implementation of new (experimental) PT measures that can be hardly covered by internal funds.	(2), (4), (6), (8), (9), (12), (15), (16)

[1] **Best practices:** (1) Züricher Verkehrsverbund (ZVV); (2) Brussels-Capital Region (BCR); (3) EGTC GO; (4) Strasbourg-Ortenau Eurodistrict; (5) Verkehrsverbund Ost-Region (VOR); (6) EGTC Euregio Senza Confini; (7) Euregio Maas-Rhein (EMR); (8) EGTC

Eurometropolis Lille-Kortrijk-Tournai; (9) Oder-Partnership; (10) Verkehrsverbund Berlin-Brandenburg (VBB); (11) Hamburger Verkehrsverbund (HVV); (12) EGTC TRITIA; (13) Greater Region of SaarLorLux; (14) EUSALP Action Group 4; (15) Interregional Alliance for the Rhine-Alpine Corridor (IARAC); (16) EGTC Central European Transport Corridor (CETC).

Table 23. Winning ingredients for a governance system (regarding the governance contribution to PT development).

E. Conclusions

SUMMARY: This Governance report has presented 16 best practices and four challenged case studies regarding the governance of PT in EU. In order to guarantee a coherent analysis of the case studies and enable their comparison, common aspects have been observed. They encompass elements of the governance model itself (namely its level, type and structure) and elements describing the governance contribution to PT development (in the technical, legal and financial domain). Both for the best practices and challenged experiences, a summary has been elaborated. This presents the key trends of the best practices and derives overall findings and lesson learned. The key results of the two summaries have been used to define a set of 13 "winning ingredients" that can be taken into account when approaching the PT governance.

RELEVANCE OF THE RESULTS FOR SUSTANCE: Results suggest that the SUSTANCE partnership, operating at the cross-border level and meso-scale, is well-suited for transboundary collaboration involving especially public authorities (but not excluding the participation of strategic private actors). Yet, SUSTANCE is suited for both decentralised and externalised governance structures, considering the constant involvement of all partners in the decisional process and the leadership currently provided by Central European Initiative (CEI). This governance model aligns with the successful best practices presented in this report and it facilitates coordination of PT initiatives across borders, as well as the mediation of planning, legal and financial barriers. Moreover, this kind of governance system is effective to develop a strategic plan of long-term PT interventions of interest for the SUSTANCE group and purpose (e.g. through the six Roadmaps of Activity 1.3 and the two Transnational Action Plans of Activity 1.4), to be potentially translated in a series of short-term concrete actions. These long-term perspectives may be strengthened by the Long Term Strategy for better PT governance, as well as by the setup of a Transnational Cooperation Network (both Activity 3.4), which will foster cooperation beyond the SUSTANCE duration.

UPCOMING STEPS: In the upcoming project steps, the Governance report (D.3.2.1) will be presented to the stakeholders during the first round of consultation (D.3.3.1) taking place in early 2024 and involving all the PPs. In this occasion, local governance strengths and weaknesses will be identified together with the stakeholders, with the end objective of understanding the main governance challenges currently faced by cross-border and peripheral areas of CE in the PT domain. The results of the governance report (Activity 3.2), of the three stakeholder consultation rounds (Activity 3.3), and of the WP1 Activities 1.2 and 1.3 will feed the elaboration of the Long term strategy for promoting cooperation and better governance of public transport in CE (D.3.4.1).

F. References

BCR. (2023). *Transport, Mobility*. Région de Bruxelles-Capitale. http://swr-drupal-prod.prod.svc.cluster.local/en/transport-mobility

Böhm, H. (2015, June 18). *Cross-border co-operation as a tool of environmental protection—Example from Czech-Slovak Borderland*. 5th International Multidisciplinary Scientific Geoconference and EXPO, SGEM 2015. https://www.researchgate.net/publication/291957951

Buehler, R., Pucher, J., & Dümmler, O. (2019). Verkehrsverbund: The evolution and spread of fully integrated regional public transport in Germany, Austria, and Switzerland. *International Journal of Sustainable Transportation*, *13*(1), 36–50. https://doi.org/10.1080/15568318.2018.1431821

BVG. (2023). *Tariff information and tariff zones*. Tariff Information. https://www.bvg.de/en/subscriptions-and-tickets/tariff-zones-and-information

Cavallaro, F., & Dianin, A. (2019a). Cross-border commuting in Central Europe: Features, trends and policies. *Transport Policy*, *78*, 86–104. https://doi.org/10.1016/j.tranpol.2019.04.008

Cavallaro, F., & Dianin, A. (2019b). Cross-border commuting in Central Europe: Features, trends and policies. *Transport Policy*, *78*, 86–104. https://doi.org/10.1016/j.tranpol.2019.04.008

Cavallaro, F., & Dianin, A. (2020a). Cross-border public transport as a driver for tourism in the Alps. *Transportation Research Procedia*, *48*, 2446–2461. https://doi.org/10.1016/j.trpro.2020.08.262

Cavallaro, F., & Dianin, A. (2020b). Efficiency of public transport for cross-border commuting: An accessibility-based analysis in Central Europe. *Journal of Transport Geography*, *89*, 102876. https://doi.org/10.1016/j.jtrangeo.2020.102876

CETC-EGTC. (2023a). *Basic information and aims*. About. http://cetc-egtc.eu/about

CETC-EGTC. (2023b). *Central European Transport Corridor European Grouping of Territorial Cooperation*. http://cetc-egtc.eu/

Christodoulou, D. A. (2012). *The governance of urban public transport systems: The case of Zurich (ZVV)*. Networked Regions and cities in times of fragmentation.

Durand, F., & Lamour, C. (2014). Cross-border metropolitan governance: The multi-faceted state power. *Space and Polity*, *18*. https://doi.org/10.1080/13562576.2014.957041

Ebster, M., & Schmidt, C. (2019). *Summary Report—Collection of existing cooperation models for cross-border mobility* (Cross-Border Mobility in the Alpine Region). CIPRA International. https://www.alpine-region.eu/publications/cross-border-mobility-alpine-region

EGTC GO. (2023a). *Project CB PUMP - GECT GO / EZTS GO*. https://euro-go.eu/en/programmi-e-progetti/progetto-cp-pump/

EGTC GO. (2023b). *What is EGTC GO and how it operates*. https://euro-go.eu/en/chi-siamo/cosa-%C3%A8-gect-go-e-come-funziona/

EGTC Rhine Alpine. (2023). *Organisation*. https://www.egtc-rhine-alpine.eu/organisation/

EGTC TRITIA. (2023). *Basic Information*. European Grouping of Territorial Cooperation TRITIA, Ltd. http://www.egtctritia.eu/basic-information

EMR. (2023a). *Eine Strategie der Zukunft für Euregio Maas-Rhein—EMR2030* (Mobility and Infrastructure, p. 6). https://www.euregio-mr.info/de/ueber-uns/strategie/

EMR. (2023b). *Euregio Maas-Rhein. Mobilität und Infrastruktur*. https://euregio-mr.info/de/themen/mobilitaet.php

EMR. (2023c). *Euregio Maas-Rhein. Startseite*. https://euregio-mr.info/en/

EMR. (2023d). *Euregionale Koordinierungsstelle*. Euregio Maas-Rhein. https://euregio-mr.info/de/themen/mobilitaet/aachener-verkehrsverbund.php

Espacio Portalet. (2023). *EGTC Espacio Portalet*. Espacio Portalet. https://www.espalet.eu/

EURAC. (2020). *Analisi dei modelli di governance idonei alla creazione di reti di impresa*.

Euregio Senza Confini. (2023). *Atti generali*. Amministrazione Trasparente. https://euregio-senzaconfini.eu/it/trasparenza/disposizioni-generali/atti-generali/

Eurodistrikt. (2015). *Studie zum grenzüberschreitenden ÖPNV im Eurodistrikt Strasbourg – Ortenau* (p. 168). TransportTechnologie-Consult Karlsruhe GmbH (TTK).

Eurometropolis. (2021). *Documentation*. Actions. https://www.eurometropolis.eu/fr/leurometropole-lille-kortrijk-tournai

Eurometropolis. (2023). *Mobilité*. Eurometropolis. https://www.eurometropolis.eu/fr/actions/mobilite

European Commission. (2017). *Study on the TEN-T Core Network Corridor Rhine-Alpine—Final Report*. https://transport.ec.europa.eu/system/files/2022-02/ralp_corridor_final_report_2017.pdf

European Commission. (2021a). *Analysis of cross-border obstacles between EU Member States and enlargement countries: Final report*. Amt für Veröffentlichungen der Europäischen Union. https://data.europa.eu/doi/10.2776/164787

European Commission, D.-G. for M. and T. (2021b). *Regulation of the European Parliament and of the Council on Union guidelines for the development of the trans-European transport network, amending Regulation (EU) 2021/1153 and Regulation (EU) No 913/2010 and repealing Regulation (EU) 1315/2013*. https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM%3A2021%3A812%3AFIN

EUSALP. (2021). *To promote inter-modality and interoperability in passenger and freight* (EU Strategy for the Alpine Region) [Factsheet]. https://www.alpine-region.eu/action-group-4-mobility#:~:text=To%20promote%20inter-modality%20and%20interoperability%20in%20passenger%20and,of%20public%20transport%2C%20modernizing%20infrastructure%20and%20enhancing%20cooperation.

EUSALP. (2023). *Platform of knowledge*. EUSALP. https://www.alpine-region.eu/p/dashboard

Federico Cavallaro, G. S., Philipp Corradini. (2019). *EMOTIONWay—Valutazione di fattibilità tecnica e finanziaria dei collegamenti mancanti* (Deliverable D.3.2.3.). EURAC.

Grande Region. (2023a). *Rückblick—Projekte—Großregion*. https://www.grossregion.net/Kooperationsfonds/Rueckblick-Projekte

Grande Region. (2023b). *The Greater Region at a Glance—Grande Région*. https://www.granderegion.net/en

HVV. (2023). *Organisation*. Hamburger Verkehrsverbund. https://www.hvv.de/en/about-us/the-hvv/organisation

Kaucic, J., & Sohn, C. (2021). Mapping the cross-border cooperation 'galaxy': An exploration of scalar arrangements in Europe. *European Planning Studies*, *30*, 1–21. https://doi.org/10.1080/09654313.2021.1923667

Medeiros, E. (2015). Territorial Impact Assessment and Cross-Border Cooperation. *Regional Studies, Regional Science*, *2*(1), 97–115. https://doi.org/10.1080/21681376.2014.999108

MEL. (2023). *Eurométropole: Le transfrontalier à l'œuvre*. https://www.lillemetropole.fr/eurometropole-le-transfrontalier-loeuvre

Neumannová, M., Pařil, V., Hrůza, F., Jakubčinová, M., & Farbiak, M. (2023). Regional and local border effects after two decades of Central European unification. What matters? *Miscellanea Geographica*, *0*(0). https://doi.org/10.2478/mgrsd-2023-0007

Oder Partnerschaft. (2023). *Willkommen—Über uns*. http://oder-partnerschaft.eu/

Palacio, A., & Wojciechowski, P. (2015). *Work Plan of the European Coordinator Rhine Alpine*. European Commission. https://transport.ec.europa.eu/system/files/2020-09/4th_workplan_ralp.pdf

Provan, K. G., & Kenis, P. (2007). Modes of Network Governance: Structure, Management, and Effectiveness. *Journal of Public Administration Research and Theory*, *18*(2), 229–252. https://doi.org/10.1093/jopart/mum015

Pucher, J., & Hauder, N. (2016). *EGTC monitoring report 2015: Implementing the new territorial cooperation programmes*. European Committee of the Regions. https://data.europa.eu/doi/10.2863/3529

Pucher, J., & Kurth, S. (1995). Verkehrsverbund: The success of regional public transport in Germany, Austria and Switzerland. *Transport Policy*, *2*(4), 279–291. https://doi.org/10.1016/0967-070X(95)00022-I

Saaida, M. B. E., & Qawasmi, M. (n.d.). The challenges of public administration in managing cross-border cooperation. *International Journal of Multidisciplinary Research and Development*.

Tölle, A. (2010). Networking in a transnational cooperation space—The case of the Oder Partnership. *Europa XXI*, *20*, 131–144. https://doi.org/10.7163/Eu21.2010.20.10

Tsisinska, O., & Podolchak, N. (2022). MECHANISMS AND PRINCIPLES OF INTERACTION BETWEEN PUBLIC ADMINISTRATION ENTITIES IN CROSS-BORDER COOPERATION. *Scientific Journal of Polonia University*, *55*(6), Article 6. https://doi.org/10.23856/5526

VBB. (2023). *Verkehrsverbund Berlin-Brandenburg- Mobilität mit Zukunft*. Über uns. https://www.vbb.de/der-vbb/ueber-uns/

VOR. (2023). *Der Verkehrsverbund Ost-Region*. Unternehmen - Über Uns. https://www.vor.at/

Vugrinovic, A., & Dominko, A. (2016). Case Study of the Euroregion Danube-Drava-Sava. *Crossing the Borders. Studies on Cross-Border Cooperation within the Danube Region*, 59. https://budapest.cesci-net.eu/wp-content/uploads/_publications/EUSDR_Studies/EUSDR_Part_Two_13_DanubeDravaSava.pdf

Wong Villanueva, J. L., Kidokoro, T., & Seta, F. (2022). Cross-Border Integration, Cooperation and Governance: A Systems Approach for Evaluating "Good" Governance in Cross-Border Regions. *Journal of Borderlands Studies*, *37*(5), 1047–1070. https://doi.org/10.1080/08865655.2020.1855227

Zillmer, S., Hans, S., Lüer, C., & Montàn, A. (2018). *EGTC monitoring report 2017*. European Committee of the Regions. https://data.europa.eu/doi/10.2863/506306

Zillmer, S., Hans, S., Lüer, C., Montàn, A., Hsiung, C.-H., Le Moglie, P., & Gnetti, V. (2019). *EGTC: Good practice booklet*. European Committee of the Regions. https://data.europa.eu/doi/10.2863/826842

Zillmer, S., Holstein, F., Lüer, C., Stumm, T., Schürmann, C., & De Stasio, C. (2022). *Study on providing public transport in cross-border regions: Mapping of existing services and legal obstacles : final report*. European Commission. https://data.europa.eu/doi/10.2776/289862

ZVV. (2023). *Zurich Transport Network (ZVV)*. About Us. https://www.zvv.ch/zvv/en/home.html