

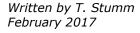
Easing legal and administrative obstacles in EU border regions

Case Study No. 13

Urban transport

Non-harmonised ticket pricing systems

(Germany – France)



EUROPEAN COMMISSION

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Abstract

Non-harmonised regional ticket pricing system

This case study looks at the legal and administrative obstacles in the field of cross-border public transport from a twofold perspective: it provides an overview of the roots and effects of the obstacles and their wider impact on different EU land borders and it focuses on a particular problem which emerged in the cross-border tramway line between the cities of Strasbourg (France) and Kehl (Germany) in the Upper Rhine Area (Germany – France - Switzerland).

Cross-border local or regional public transport aims to facilitate the mobility of people across EU borders and has many similarities with domestic local / regional public transport. However, the effort required for establishing and running cross-border local or regional public transport services is in general clearly higher than in the domestic context. The main reason for this is the variety of legal and administrative obstacles, which still hinder the development of cross-border public transport services at many internal EU land borders. Legal and administrative obstacles are most often rooted in the particular circumstances, which arise due to the presence of a border and the border-crossing nature of passenger transportation. These obstacles have a variety of negative direct effects for different types of actors (i.e. actual and potential users; local/regional authorities, transport operating companies). They often also create further undesirable developments in cross-border areas, particularly in socio-economic and environmental terms ("knock-on effects"), all of which generates a wider adverse impact on cross-border integration.

The specific case on the cross-border tramline between Strasbourg and Kehl serves as an illustration of the difficulties of cross-border public transport faced at EU borders. For quite some time the establishment of this new cross-border tramline was hampered by problems, which originated from the differences between the legal and administrative frameworks of the two countries. While the infrastructure works are now nearly completed, a further problem emerged from the non-integration of ticket pricing system on both sides of the border. Very recently, however, a pragmatic solution emerged that could be implemented on the German side eliminating this problem.

1 Outline of the obstacle (legal and administrative) and the policy context

Local or regional public passenger transport, which in this context is to be understood as a specific element (or subset) of wider public transport, is a collective passenger transport service that can be used by the general public according to predetermined conditions of carriage and within a territorially delimitated area of operation. Because the case study looks at cross-border public transport from this perspective, it does not consider interregional and intercity or long-distance passenger transport services.

Cross-border local or regional public transport aims to facilitate the mobility of people across borders. This can be achieved through better coordination and stronger integration of already well-developed local / regional public transport services of neighbouring border areas, but also through the development of new services. Cross-border public transport thereby contributes to the full implementation of the EU's freedom of movement principle, because without effective cross-border passenger transport services, many citizens would not be able to fully enjoy their rights of mobility, employment or service provision in a neighbouring country.²

Despite obvious similarities with domestic local and regional public transport, the presence of a border and the border-crossing nature of passenger transportation lead to a number of particularities that characterise cross-border public transport at EU borders.³ These are (1) a specific territorial context, (2) a heterogeneous overall legal framework, (3) a complex institutional-administrative and policy context, (4) a different demand structure and (5) a less developed and fragmented service supply.

The latter, in particular, may also explain why the actual shares of cross-border public transport in the overall volume of cross-border traffic are in general considerably lower than modal shares of regional/local public transport in domestic traffic. Findings from various border-specific analyses suggest that shares range between 7% and 14%, while the corresponding shares of domestic public transport often amount to more than double.⁴

1.1 Legal and administrative obstacles for cross-border public transport

At many internal EU borders the development of local or regional cross-border public transport services still faces significant technical, institutional and political difficulties. They are caused by various legal and administrative obstacles that are most often directly rooted in some of the above-mentioned particularities of cross-border public transport. The following general overview draws on findings from the EU-funded research project on cross-border public transport CONPASS,⁵ which are illustrated by examples currently found at different EU borders.

Many legal obstacles for cross-border public transport are rooted in the difference between overall domestic legal frameworks that apply to public transport (for concrete examples, see Box 1). Problems emanating from this only occur at the borders between neighbouring countries, because national legislation homogenously affects all actors of public transport within a country and usually does not create difficulties.

 $^{^1}$ Barth, E. (2014), How international borders affect local public transport: analyses and evaluations of cross-border agglomerations in Switzerland, France and Germany. Thesis submitted to attain the degree of doctor of sciences of ETH ZURICH. Zürich, 2014, p.10.

 $^{^2}$ Gabrovec, M. (2013), Open borders with uncoordinated public transport: The case of the Slovenian-Italian Border. In: European Journal of Geography, Volume 4, Number 4, December 2013

³ Pp.141-156 in Barth (2014), MOT (2016); Meinhard/Winder (2003); parts 2 and 3 in CONPASS (2002), Cross-border Public Transport Toolbox. Concepts, ideas and support for improvements. Aachen/Rome/Leuven, June 2002.

⁴ Barth, E. (2014), Dörry/Decoville (2012), MOT (2016)

⁵ Part 2 in CONPASS (2002).

An array of problems and difficulties is caused by different national technical standards and safety provisions for transport vehicles, as they are one of the main causes leading to a lack of interoperability of national transportation systems. This frequently makes an operation of local or regional cross-border rail passenger services more complicated and costly or sometimes even impossible.⁶ Also differences between national transport legislations can cause problems, especially if national cabotage restrictions and licensing regulations prohibit the carriage of passengers on domestic sections of a cross-border line or reduce competition due to a focus on only one operator. Further problems and difficulties can emerge from different employment legislation and qualification requirements or from different national tax legislation.⁷

Box 1. Problems caused by different national legal frameworks

Different electricity and voltage systems and different safety-systems are applied in the railway networks of Poland, Germany, Belgium and the Netherlands, which hampers the development of new local/regional cross-border rail services or the extension and improvement of existing rail services due to high cost.

Different national legal provisions in Poland and Germany create legal uncertainty for regional passenger transport authorities on both sides of the border and make joint tendering and awarding of a concession for a direct local cross-border rail passenger transport service nearly impossible.

National legislation in Hungary, Slovakia, Estonia and Latvia makes no distinction between 100% commercial international or intercity bus lines and short-distance cross-border bus lines that are more alike to local public bus transport services. Newly created local cross-border bus services between Hungary-Slovakia and Estonia-Latvia therefore had to be registered as commercial international bus lines. This causes problems for the economic viability of these services, partly because they cannot access national or regional/local subsidies that are only granted to non-commercial domestic public bus services and also because they cannot pick up passengers who realise only short domestic trips within a border region.

At the French-Italian border, lengthy and also costly national licensing and approval processes for a cross-border use of rail rolling stock are hindering the establishment of a direct cross-border regional rail passenger service between Provence-Alpes-Côte d'Azur, Liguria and the Principality of Monaco.

Sources: INTER Regio-Rail (no date); Actieteam Economie en Arbeid – Ministerie van Binnenlandse Zaken en Koninkrijksrelaties (2015); Bundesministerium des Innern / EURO-Institut Kehl-Strasbourg (2014); Latvian Ministry for Environmental Protection and Regional Development (2014); Council of Europe (2011); European Commission, DG Regio (2015); MOT (2015a).

Another major source for obstacles is the complex institutional, administrative and policy context in which cross-border public transport usually operates (for concrete examples, see Box 2). Non-existing or weak cooperation between local or regional authorities and transport operators is often caused by a lack of political will and commitment on one or both sides of a border, or may result from a lack of information on issues relating to cross-border public transport.

This complexity can also create problems and difficulties at borders where cooperation does take place. Problems may originate due to lengthy political decision-making procedures on one or both sides of a border and very different administrative practices (working methods). They may also be caused by a highly asymmetric cooperation constellation that emerges whenever local or regional authorities and service operators on either side of a border are allocated totally different responsibilities in the

 6 e.g. due to different electrical power supply or traction systems for trains; no direct cross-border train passenger service due to a lack of adequate rail rolling stock able to cross the border.

⁷ E.g. diving personnel of a transport service from one country cannot operate on the other side of the border; local cross-border passenger services cannot obtain tax reductions which are available for a domestic public transport services.

field of public transport. All these aspects can create uncertainties, hinder mutual communication or cross-border negotiations and prevent cooperation partners from finding joint solutions to shared problems or to newly emerging needs (e.g. improved coordination of existing services; launching of new cross-border services).

Problems caused by a complex political / institutional context

In the eastern part of the Pyrenees (France-Spain), cross-border coordination of time schedules and train connections is lacking. This is mainly caused by difficulties in mobilising the competent national railway and rail network companies (SNCF, RFF, RENFE), but partly also due to a lack of political will of the institutional actors.

Along the French-Belgian border, a comprehensive joint strategy for coordinating public transport is missing. This is due to a lack of precise knowledge about crossborder mobility patterns along major parts of this border, but also because domestic transport operators refuse to disseminate statistics on the use of transportation.

Institutional partners within the Greater Region (Belgium-Germany-France-Luxembourg) have considerably different competencies in the field of public transport and apply also different subsidies for fares. This pronounced asymmetry hinders cross-border cooperation because not all partners are able to act or influence in the same way a shared problem and also because it makes further cross-border harmonization and integration of public transport services virtually impossible.

Sources: MOT (2015b); MOT (2015c); Council of Europe (2011); INTER Regio-Rail (no date)

Further obstacles are rooted in particularities that characterise the supply of crossborder public transport services. Problems are caused by poorly coordinated interchange between domestic public transport lines that run only as far as the border (leading to difficult transfer conditions) or by technical coordination problems at border-close rail stations (i.e. unreliable departure / arrival times of services). Also a lack of adequate passenger information (e.g. ticket distribution, promotion of crossborder services etc.) and a non-harmonisation of local/regional tariff policies or the non-integration of existing fare systems lead to problems for cross-border public transport. The latter aspect is now briefly introduced and further detained in this case study on the cross-border tramway line between Strasbourg (France) and Kehl (Germany).

1.2 Non-harmonised local/regional tariff policies for cross-border public transport and non-integration of existing domestic fare systems

Within European countries, "integrated fare areas" are established for many cities and agglomerations and regions by the competent transport operators and/or transport authorities. In these areas, fares follow a one-ticket-policy that enables a single ticket to be valid for any public transport journey within the area, even if the journey involves different means of transport or different transport operators.8 However, problems often emerge in case of short distance travelling by public transport across a national border if neighbouring local/regional tariff policies are not harmonised or if existing fare systems on both sides are insufficiently integrated. An incompatibility of different domestic fare systems may cause less attractive price levels and higher complexity for users, due to phenomena such as9:

8

⁸ P.137 in: Barth, E. (2014), How international borders affect local public transport: analyses and evaluations of cross-border agglomerations in Switzerland, France and Germany. Thesis submitted to attain the degree of doctor of sciences of ETH ZURICH. Zürich, 2014.

⁹ Pp.137-140, 147 in: Barth, E. (2014).

- non-availability of tickets for certain cross-border connections, requiring passengers to purchase separate consecutive tickets (especially in the case of single and season tickets);
- non-applicability of fare reductions that exist for domestic public transport services (e.g. children, concessionary fares, subsidised tickets etc.);
- discontinuities of fare levels for local public transport services, sometimes triggered by different purchasing power within different areas of a cross-border agglomeration;
- high complexity of fare range;
- limited distribution channels for cross-border tickets, but also different ticket formats and different ticket validation methods.

A few examples may illustrate the very different situations of ticket pricing for short distance cross-border trips by public transport that can be currently observed at internal EU borders (see Box 3). It ranges from non-coordinated tariff policies for cross-border public transport (e.g. larger parts of the border between France and Belgium) over semi-integrated cross-border fare systems (e.g. the trilateral cross-border agglomeration Basel; the bilateral cross-border metropolitan area Lille-Kortrijk-Tournai) to fully integrated cross-border fare systems (e.g. Geneva cross-border metropolitan area).

The establishment of attractive and easy-to-use fare systems for cross-border public transport is often associated with major difficulties because stakeholders from both sides of a border cannot start from a commonly available system. Therefore, tailor-made solutions have to be developed by transport authorities and/or transport operators that define modalities for sharing ticket revenues and also for jointly delivering various other tasks such as marketing and planning.

Box 3. Examples from internal EU borders

Across large parts of the French-Belgian border, different fare levels for short distance cross-border rail trips are applied. On the French side, the national rail operator SNCF applies high fares for short cross-border rail trips to Belgium than for a comparable national trip. In Belgium, the national operator SNCB considers short distance cross-border rail trips up to the first major stop in France a "domestic route" and therefore applies the corresponding domestic fare. Only in the cross-border area Lille-Kortrijk-Tournai there are advantageous ticket prices for short distance cross-border rail trips. However, this offer is not easily accessible and not widely promoted and therefore also not used by passengers from both sides at the desired and possible extent.

The tri-national cross-border agglomeration of Basel (Switzerland-Germany-France) is covered by operator-based integrated fare areas in the Swiss part (i.e. Tarifverbund Nordwestschweiz) and the German part ('Regio-Verkehrsverbund Lörrach), while the "Communauté de communes des trois frontiers" authority governs bus tariffs of the so-called 'distribus' network in the French part. These fare systems are well-established within each part of the agglomeration (i.e. for domestic tickets) and fares for cross-border journeys are mostly based on various bilateral agreements between the relevant institutions. Despite this, there are still a number of shortcomings especially in the case of single tickets and season tickets that make cross-border travelling for customers difficult. A further harmonisation of the cross-border fare offer in the cross-border area is therefore needed and it was even recommended to merge the different fare areas, in the long term, at least to such an extent that they appear to customers as a unitary organisation.

The Geneva cross-border metropolitan area (France-Switzerland) is an example where cross-border integration of all fares, including single and season tickets, has been achieved. The establishment of the agglomeration-wide, cross-border fare area

"unireso" was made possible thanks to an institutionalised, multi-lateral cross-border cooperation framework that was created by the Local Grouping for Cross-Border Cooperation (GLCT) "Cross-border Public Transport". The functioning of "unireso" can be seen as an exemplary case, since it has simplified a very complex local/regional constellation through a cross-border fare system that is relatively easy to understand and use.

Sources: MOT (2015b); MOT (2015c); Barth, E. (2014)

1.3 What has been done to address legal and administrative obstacles for cross-border public transport?

Since the mid-1990's, considerable efforts have been made to further improve international passenger and freight transport within the EU through developing the trans-European road and rail network (i.e. infrastructure investments, investments in interoperability, harmonisation of levels of service etc.).

During the same period, however, comparatively little has been done at the EU and national levels to further improve the context conditions for developing cross-border regional or local public transport services. This lack of attention can be illustrated by several examples, such as:

- EC Regulation 1073/2009¹⁰ on common rules for access to the international market for coach and bus services maintains restrictions for cabotage operations performed by regular international service (Article 15c), which continues to create difficulties especially for local cross-border bus services. However, the regulation includes options for better considering border-regional particularities.¹¹
- The European Commission's 2011 White Paper on transport discussed the organisation of effective (cross-border) transport over intermediate distances and European transport corridors as well as "clean urban transport and commuting", but local or regional cross-border public transport was not mentioned in this strategic roadmap for the next decade. 12

Despite this static situation and persistence of many obstacles, regional and local authorities in border regions have become more active in the field of cross-border public transport. They used support from Interreg programmes in the programming periods 2000-2006 and 2007-2013 to further improve existing cross-border public transport services and establish new ones.

This shows that EU border regions increasingly recognise the need to deal with a growing volume of cross-border mobility flows and in particular commuter flows, mainly through developing a cross-border public transport offer by road and rail that is tailored to the demand of border residents.¹³

¹⁰ European Union (2009), Regulation (EC) No 1073/2009 of the European Parliament and of the Council of 21 October 2009 on common rules for access to the international market for coach and bus services, and amending Regulation (EC) No 561/2006, Official Journal of the European Union, 14.11.2009.

¹¹ Article 25 of the regulation states that Member States may conclude bilateral and multilateral agreements on the further liberalisation of the services covered by this Regulation, in particular as regards the authorisation system and the simplification or abolition of control documents, especially in border regions.
¹² The Commission White Paper sets out 40 concrete initiatives to build a competitive transport system that will increase mobility, remove major barriers in key areas and fuel growth and employment. At the same time, the proposals will reduce Europe's dependence on imported oil and cut carbon emissions in transport. See: European Commission (2011a).

¹³ MOT - Mission Opérationelle Transfrontalière (2016), Transport. http://www.espaces-transfrontaliers.org/en/resources/topics-of-cooperation/transports/transport/ (accessed in November 2016)

2 Case Study Context

The tri-national cross-border area of the Upper Rhine is located in the eastern part of France, the south-western part of Germany and in the northern part of Switzerland. The River Rhine is its natural border. The main functional urban areas are Basel in the South, Karlsruhe in the North and Strasbourg-Kehl in the centre, with the latter forming part of the wider "Eurodistrict Strasbourg-Ortenau". The Upper Rhine Area is very well connected to important European or worldwide destinations and numerous road crossings of the River Rhine and the national borders make daily commuting to the neighbouring countries relatively easy. However, there are shortcomings in the Upper Rhine Area with respect to intra-regional connectivity in public transportation because an integrated regional cross-border public transport network does not exist. Only in the southern part, the suburban train lines of Basel (Switzerland) penetrate deeply into German and French territory. This was mainly driven by the development pressure of the global city of Basel.

Map 1. The Upper Rhine Area (FR-DE-CH)

Territors de la Conférence de Planders de Conférence de Conférence

Map 2. The "Eurodistrict Strasbourg-Ortenau" (DE-FR)



Source: http://www.eurodistrict.eu/de/gebiet

Around 510,000 inhabitants live in the cross-border urban area of "Strasbourg-Kehl"¹⁷ and many inhabitants from Strasbourg travel to Kehl by car on a daily basis, either for work or shopping. On working days around 36,000 vehicles cross the "Europe Bridge" (Europabrücke, Pont de l'Europe) each day and on Saturdays this figure even reaches 42,000 vehicles. Around 65% of this traffic consists of intra-municipal traffic between Strasbourg and Kehl and the rest is transit traffic.¹⁸

¹⁴ Eurodistrict Strasbourg-Ortenau official website: http://www.eurodistrict.eu/fr

 $^{^{15}}$ I.e. by motorways, high-speed rail, regional airports and international air traffic hubs in the neighbourhood.

¹⁶ pp.5, 10, 21, 22 in: ESPON (2012), Ulysses - Using applied research results from ESPON as a yardstick for cross-border spatial development planning. Targeted Analysis 2013/2/10. Scientific Report for the Final Report. Multi-Thematic Territorial Analysis of the Upper Rhine Trinational Metropolitan Region. Version 30/07/2012

 $^{^{17}}$ I.e. the metropolitan area of Strasbourg with around 476,000 inhabitants (2015) and the city of Kehl with around 34,000 inhabitants (2011).

¹⁸ Kehl am Rhein official website,,,Gute Gründe für die Tram": http://www.kehl.de/stadt/tram/vorzuege.php

Both cities have a long-standing common history in the field of public transport which dates back to the end of the 19th century. ¹⁹ Today, public transport policy is designed by the respective urban authorities which are the Strasbourg metropolitan area on the French side and the City of Kehl on the German side. Both authorities determine the offer (route, frequency) and the price, with the latter being voted by the respective councils on a yearly basis. The transport operators in Strasbourg (CTS - Compagnie des transports strasbourgeois) and Kehl (TGO – Tarifverbund Ortenau GmbH) supply for the daily operation of local public transport in compliance with their respective concession contracts. These companies are empowered to make proposals to public authorities and provide expertise.

The current tramway network of Strasbourg was developed at the end of 1990's and is 60 kilometres long. It has a daily transport capacity of 300,000 passengers (2015). Up to now, the main direct public transport link between Strasbourg and Kehl was the Strasbourg bus line 21 which crosses the River Rhine on the "Europe Bridge". Line 21 is the busiest bus line of Strasbourg²⁰ and the number of passengers increased by 65% between 2007 and 2012. The extension of the Strasbourg tramway network to the centre of Kehl via the new tramline "D" is therefore not only useful for citizens, but also leads to decongestion in urban areas that are not yet well connected by public transport. This considerably promotes sustainable cross-border urban mobility.²¹

The cross-border tramway line is not a recent project; a related feasibility study was already supported under the Interreg IIA programme "Upper Rhine Centre-South" (1994-1999).²² In its current form, the cross-border tramway line was initiated back in 2009. A first consultation phase was conducted in 2010, so that inhabitants could give an opinion on the new tram route. As a result of this process, the old 'historic' route was abandoned and replaced by a more ambitious project. The tramway route is now embedded into an integrated urban renewal strategy²³ and planned together with the redevelopment of port wasteland across the river. This strategy focusses on three main goals:

- connecting the municipalities of Strasbourg and Kehl with a convenient and comfortable mode of transportation;
- opening up the 'Port du Rhin' area by improving current public transport;
- serving the new urbanized areas in compliance with the urban master plan approved in 2011, including the creation of an EcoCity.²⁴

A second consultation process was conducted in 2013²⁵, which presented the new route and led to the adoption of the current line "D" that directly connects the Aristide

¹⁹ The first tramway line Straßburg–Kehl was opened in 1898 and operated as a domestic line in the German Empire. After the First World War, owing to the new French-German border between Strasbourg and Kehl, the existing tramway networks on either side of the border were split and made independent from each other. See Blaesius and Gérard (1994) in Barth (2014), p.49

²⁰ Kehl am Rhein official website, "Gute Gründe für die Tram": http://www.kehl.de/stadt/tram/vorzuege.php
²¹ By extending the Strasbourg tramline to Kehl City Hall, around 350 tonnes of carbon dioxide could be saved annually and also 30,500 bus kilometers travelled annually will fall away. See: Kehl am Rhein official website, "Gute Gründe für die Tram", http://www.kehl.de/stadt/tram/vorzuege.php

²² INTERREG II official website, INTERREG II Oberrhein Mitte-Süd: Streckenverlauf einer Straßenbahnlinie Strasbourg/Kehl. Machbarkeitsstudie für die Anbindung Kehls an das Straßburger Straßenbahnnetz:, http://www.interreg-oberrhein.eu/projet/streckenverlauf-einer-strassenbahnlinie-strasbourgkehl/

²³ The new 2.7 km tramway route prolongation from Strasbourg to Kehl also belongs to a major urban renewal project designed with a time horizon up to 2030, the urban renewal master plan 'Deux Rives' which was adopted in 2011 by the Strasbourg metropolitan area. This master plan obeys to the French 'EcoCity' framework that includes mandatory provisions for sustainable public transport.

²⁴ The label is delivered by the French Ministry of Ecology; the Strasbourg-Kehl EcoCity project was graded at the third position on a selection of 19 projects. See: Strasbourg.eu official website, Délibération au Conseil de Communauté du vendredi 15 avril 2011 Approbation des propositions programmatiques et fonctionnelles du schéma directeur deux Rives,

 $http://media.strasbourg.eu/alfresco/d/a/workspace/SpacesStore/991b0157-fa29-45a2-91aa-416f800573a8/delib_schema-dir_2rives110415.pdf$

Briand neighbourhood in Strasbourg and the Kehl city hall (see: Figure 1). Infrastructure work for line "D" is well advanced: the new tramway bridge across the River Rhine was completed in spring 2016 and the finalisation of tramlines on both sides is underway. The service is expected to start operating end 2016 until the tram stop "Kehl railway station" and in 2017 until the last stop "Kehl city hall". ²⁶

With the opening of the line coming closer, the issue of ticket pricing started to be addressed. The discussion involved technical staff from Strasbourg and Kehl urban authorities as well as from the public transport operating companies on the German side (TGO) and on the French side (CTS). The rationale behind the ticket price was to follow the model used for the Strasbourg bus line 21, which had been in place for 50 years. To the surprise of all persons involved, however, there were no legal provisions for this historical cross-border bus ticket in place. As a consequence of this, the pricing system for the new tramway line had to be installed ex nihilo.

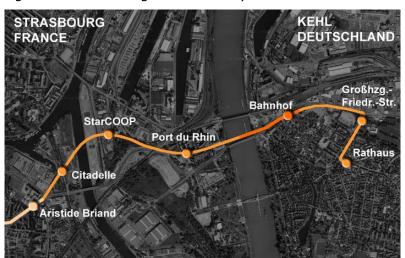


Figure 1. Strasbourg-Kehl tramway line "D" route

Source: http://www.kehl.de/stadt/tram/strecke.php

According to the civil servant in charge of implementing the public transport master plan for Strasbourg, the first objective was to ensure that all stakeholders equally share the operating deficit. It was a very complex exercise because the rationale used for defining the pricing system is different in France and in Germany. However, there was consensus that the price must be of greatest 'readability' for the end user, ideally with no extra cost and total reversibility when compared to a domestic local public transport ticket. Any passenger going from Strasbourg to Kehl or vice-versa should be able to buy a ticket in the same 'normal' conditions as for any other city tram route.

The technical proposal to establish a 'fair fare' thus required good will from all parties involved, which are the greater Strasbourg metropolitan area and its transport operator CTS and the municipality of Kehl and the regional public transport company TGO. The main difficulty was that both transport operators have different commitments in relation to their respective pricing system. While TGO in Germany obeys to the principle of a unified pricing system for all regional public transport including bus, tram and train, CTS only operates local urban public transport for the Strasbourg metropolitan area.

Once the technical discussions on a fair and needs-oriented pricing system were finalised, the political-administrative process for establishing the service contract with

²⁵ The final report of the public hearing is available online (in FR). See: Bas-Rhin department official website, Avis et conclusions motive relative à la déclaration d'utilité publique concernant le projet d'extension de la ligne D du tramway vers Kehl, http://www.bas-

 $rhin.gouv.fr/content/download/7053/47861/file/Avis+et+conclusions+motiv\%C3\%A9s.pdf \end{substitute} \label{eq:content}$

²⁶ Baden online website, Tram Kehl, http://www.bo.de/dossiers/tram-kehl

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the operator started. Although the metropolitan council of the greater Strasbourg area as well as Kehl's municipal council submitted the contract for consideration and vote, different legality control procedures applied on both side. On the German side, in the Land of Baden-Württemberg, the legality of the decision was checked ex-ante before the deliberation by the competent district administration under the supervision of the regional ministry of transport. In France, this verification is done ex-post by the regional prefecture²⁷, after the deliberation has occurred. Although it was clear that the concession contract will go to CTS on the French side, one obstacle remained to be solved: the search for a commercial arrangement that suits all parties involved.

 27 Formerly called region Alsace, currently being merged into a wider region called 'Grand Est' as of summer 2016

3 Impact analysis

Legal and administrative obstacles in the field of cross-border public transport can have various negative direct and secondary effects, which together adversely impact the integration of cross-border regions. In order to get a picture of the nature of such effects and the potential scope of the impact, this sections focuses on the internal EU land borders and then on the case of the cross-border tramline Strasbourg-Kehl.

3.1 Direct effects, secondary effects and overall impact

There are multiple negative direct effects that emerge from the difficulties and problems caused by legal and administrative obstacles in the field of cross-border public transport (see Table 1). People living in border areas are most affected by these problems, either in their role as passengers who actually use cross-border public transport services or in their role as potential users. However, also local or regional institutional actors and transport operators seeking to establish or improve cross-border public transport services are directly affected by problems that emerge from different national legislation on public transport or from institutional complexity.

Table 1. Observed negative direct effects and their primary causes

Direct effects	Causes observed at different EU land borders
Strongly reduced cross-	Complete absence of cross-border local services in sparsely
border mobility of people	populated and rural border areas or in very isolated parts of a
especially in peripheral	cross-border area. Poor coordination of few existing public
border regions.	transport connections. Closure of existing cross-border transport
	services due to lack of economic viability.
Long waiting / travel time	Absence of a cross-border direct service requires passengers to
and inconvenient travelling	change train / bus lines to get to their final destination. Badly
for all passengers.	coordinated arrivals and departures of different domestic public transport services at border-close train or bus stations. Lengthy
Long travel-to-work time for cross-border workers.	technical or organisational hand-over procedures for cross-border
for cross-border workers.	rail traffic at border-close train stations. Lacking or badly
	disseminated / not easily accessible passenger information on
	timetables or connections.
Passengers bear high ticket	Lack of harmonisation of tariff policies or non-integration of tariff
cost for short cross-border	systems, leading to ticket prices or further supplements for local
rail trips.	cross-border rail trips which are higher than prices for
	tickets/supplements on an equivalent domestic rail trip.
Actual and potential users	Lack of adequate passenger information (e.g. about tariffs / types
bear un-necessary extra	of tickets, places to get tickets and how to use them) or limited
cost.	access to advantageous formulas for short-distance cross-border
	trips, making actual and potential users pay more for their trip
	than they have to.
Local / regional institutional	A better cross-border planning and coordination of public
actors cannot elaborate a	transport cannot take place due to missing detailed statistical
cross-border strategy for	information about the situation of domestic and cross-border
public transport or establish	public transport demand and supply. The launching of new cross-
direct cross-border public	border public transport services or a better coordination / further
transport services or	integration of existing domestic services does not take place
improve the quality of existing services.	because local or regional authorities and transport operators on either side of a border are allocated very different responsibilities
existing services.	in the field of public transport.
Cross-border passenger	Lacking interoperability of national railway systems requires
transport services are more	additional rolling stock for operating local/regional cross-border
expensive than they need	rail services. The purchase of modern vehicles able to operate on
to be and a quality	both sides of a border is often too expensive for local/regional
improvement of services is	operators, which hinders a quality-improvement of existing cross-
hindered.	border rail services.
Transport operators bear	Due to different technical standards and safety provisions for
additional cost for running	transport vehicles, operators have to make costly modifications to
local / regional cross-border	their transport equipment (esp. rail rolling stock) or need to
bus or rail services.	undergo complex licensing and approval processes before they

Direct effects	Causes observed at different EU land borders
	can deliver services across the border.
Transport operators cannot establish new or continue to run economically viable local cross-border bus or rail services.	Domestic laws require operators of local cross-border bus services to register as 100% commercial international bus lines, which prevents them from picking up passengers realising only a short domestic trip or from getting access to public subsidies available for domestic local bus services. New national legislation increases fees/taxes for the use of domestic railway equipment and network installations by international trains, thereby also leading to higher cost for local cross-border light rail services that are operating on conventional rail tracks.

Also adverse secondary effects emerge if a legal or administrative obstacle creates other undesirable socio-economic and environmental developments in cross-border areas ("knock-on effects") or if other contextual factors further increase the negative direct effect of an obstacle ("re-enforcement effects").

Adverse "knock-on effects" for the environment and for sustainable cross-border mobility frequently emerge from an insufficient cross-border integration of public transport systems. This motivates large proportions of cross-border workers to use their individual cars for commuting, which then causes traffic jams and air or noise pollution. An adverse influence on sustainable mobility can also emerge from high ticket prices for local cross-border rail trips. They deter potential users from choosing cross-border rail services or increase the likelihood that current users will realise cross-border trips more frequently in private cars. The lack of adequate passenger information, often further aggravated by the fact that this information is only available in one language and not in the languages of both neighbouring regions (i.e. language barrier leading to a re-enforcement effect), can also hinder more sustainable mobility. This is mainly because people living in border areas are not aware of public transport services that they could use on the other side of the border.

At some internal EU borders, adverse "knock-on effects" also exist for the socio-economic development of cross-border areas. This is frequently the case for the cross-border labour market, where a lacking cross-border integration of public transport systems leads to high travel-to-work times for cross-border commuters using public transport and increases the risk of workers of being late if transportation is delayed; it also discourages workers from becoming employed on the other side of a border. Adverse effects also result from weak cross-border cooperation due to a lack of political will or commitment of strategic transport operators. This, for example, can increase the risk that a national rail operator stops a not profitable but locally/regionally important cross-border rail service without having previously discussed alternatives or compromise solutions with the concerned areas.

Although one may support the view that poorly developed cross-border public transport itself can be regarded as a compelling indicator of non-integration²⁸, it also appears from the above that negative direct effects and secondary effects generate together a wider adverse impact on cross-border integration.²⁹ This impact lowers not only the quality of life of citizens in cross-border regions³⁰, it also reduces the potential for achieving a more sustainable and socio-economically balanced development of cross-border regions. The significance of this impact depends on the specific circumstances in each border- and cross-border region, but it tends to be most pronounced in cross-border urban areas and European cross-border metropolitan regions where functional integration is driven by intense cross-border flows of goods,

²⁸ Winder/Krug/Meinhard (2001); Meinhard/Winder (2003)

²⁹ On the notion and concept of cross-border integration, see: pp.1-4 of Decoville, A. / Durand. F. / Sohn, Ch. / Walther, O. (2010), Spatial integration in European cross-border metropolitan regions: A comparative approach. CEPS/INSTEAD Working Paper No 2010-40, December 2010. Centre for Population, Poverty and Public Policy Studies (CEPS/INSTEAD), Differdange, 2010.

³⁰ I.e. hindered or strongly reduced cross-border personal mobility, additional cost or burden for travellers and commuters etc.

capital, information and workers. However, also rural and sparsely populated cross-border areas can be strongly affected. This is mainly due to their remoteness or state of isolation, which constitutes a significant mobility barrier making inhabitants of these areas comparatively more dependent on domestic and cross-border public transport services.

3.2 Effects and impact in the case of the Strasbourg-Kehl tramway line

The development of the Strasbourg-Kehl tramway line was hindered for a long time by legal obstacles caused by different security prescriptions and insurance problems. With the approaching opening of the new tramline, further difficulties emerged due to the fact that the entire public transportation system of the Land Baden-Württemberg has an integrated pricing system, which is not shared with the Strasbourg public transportation area.³¹

This non-coordination/non-integration was expected to complicate or even prevent the use of day tickets or weekly/monthly subscriptions on the new tramline and to create additional costs for passengers. The negative direct effect could be even more substantial if one considers that more than 60% of the estimated 12,000 daily passengers of the new cross-border tramline were expected to come from user groups that are still undecided as regards their switch to the new tram service (i.e. users of private cars and users of another cross-border rail connection).³² Problems emerging from the non-integration of tariff systems that negatively influence the decision of these user groups could therefore also put into question the initial profitability calculations for the tramline service as a whole and lead to a higher operating deficit to be shared by the involved partners. In practice, none of these effects has yet emerged as the tramway line is not yet in operation and also because a solution to pending problems was recently found in 2016.

³¹ p.11 in: MOT - Mission Opérationelle Transfrontalière (2015a), Building Legal Provisions to Overcome Obstacles to Cross-border Cooperation. Luxembourgish Presidency of the EU Council. 9th September 2015 ³² One part of the total tram passenger volume will be the current users of bus line 21, as this service is stopped once the tram starts operating (i.e. between 4,000 and 5,000 persons per day). A second part will come from persons who are currently using a rapid urban passenger train for crossing the border (Ortenau-S-Bahn) and who are expected to switch to the new tram service (i.e. 1,600 passengers per day). The third part will be private car users who are currently crossing the Europe Bridge each day for commuting or shopping (i.e. representing at least 6,000 persons per day). See: Kehl am Rhein, official website, ("Gute Gründe für die Tram"): http://www.kehl.de/stadt/tram/vorzuege.php

4 Solutions and good practice

Introduction of new cross-border public transport services or a further coordination / integration of existing local/regional services always takes place in a complex but highly border-specific context. Therefore, an EU-wide "one-size-fits-all solution" for eliminating legal and administrative obstacles in this field cannot exist (or be developed). What is needed instead at EU-level is a better consideration of the role of cross-border public transport in the context of relevant EU policies (especially Common Transport Policy; EU-legislation on services of general interest).

Legal and administrative obstacles for cross-border public transport are thus most successfully addressed by joint regional- or local-level solutions that are tailored to the specific context conditions and institutional-administrative settings at each EU border. It is obvious that their development and implementation cannot follow a general "blueprint" which identifies typical stakeholders, roles and relevant competences or specific activities and structuring measures that are most suited for achieving a positive outcome. Each solution needs to be developed and implemented by a borderspecific stakeholder combination. This may include public administrations from both sides of a border at different levels of government (state, regional, local) and also other types of actors that are able to address relevant existing problems and difficulties (e.g. public, semi-public or private transport operators, associative entities such as transport associations or passenger associations etc.). The specific types of actors and the overall number of actors to be involved in such solutions strongly depends on national specificities, as competences in the field of public transport and also budgetary capacities can be very different. A solution in one country may require the involvement of a large number of transport public authorities or transport operators, while in the neighbouring country it might be only one single authority with extensive competences and substantial budgetary resources.³³

In light of the above, a short overview on problem-solving approaches are provided, which are or can be applied by regional or local authorities at different internal EU-borders. Then, the recently found solution to the still pending problems of the Strasbourg-Kehl cross-border tramway line is analysed.

4.1 Overview on potential and actual regional or local solutions

The solutions for overcoming problems caused by legal and administrative obstacles in the field cross-border local public transport can take very different forms and vary with respect to the effort required. There are various solutions³⁴ that can be applied - individually or in combination - at internal EU-borders:

- An up-building of information capacities in a broader sense can help overcoming cooperation inertia and stimulate a widening and deepening of existing cooperation in the field of cross-border public transport. This can involve the creation of cross-border observatories which provide detailed knowledge on cross-border movements to better identify needs. Also, the direct participation of actual and potential users in defining needs can help improving the organisation of public transport services. Last but not least, it is important to ensure that users on both sides of a border are better informed about existing transport services, connections and fare structures.
- A "bridging" of problems, which cannot be solved at the local or regional levels³⁵ can be achieved by pragmatic solutions. A concrete example is the coordinated parallel tendering for establishing a direct cross-border rail service between

³³ MOT - Mission Opérationelle Transfrontalière (2016), Transport. http://www.espaces-transfrontaliers.org/en/resources/topics-of-cooperation/transports/transport/

³⁴ See: CONPASS (2002); Meinhard/Winder (2003); MOT (2016)

³⁵ E.g. changes of institutional competences or responsibilities, difficulties emerging from national legislation on various aspects which are relevant for public transport, etc.

Germany and the Czech Republic despite existing differences between national railway systems (see Box 4).

- The signing of cooperation agreements in the field of cross-border local public transport can be used for clarifying the roles of institutional key actors on both sides of a border and for harmonising their respective policy approaches.
- Local and regional authorities can use existing legal instruments for crossborder cooperation (i.e. EGTC36, bilateral or multilateral inter-state agreements) in order to establish a cross-border transport authority to jointly organise certain aspects of common interest or to directly run a cross-border transport service. A concrete example of a "light" cross-border transport organising authority can be found in the Geneva cross-border metropolitan area (see Box 4).
- A sophisticated solution is the development of a comprehensive and long-term oriented cross-border strategy for integrating public transport, which also addresses and removes persisting obstacles. Good examples can be found in the Euregio Maas-Rhein and the Geneva cross-border metropolitan area (see Box 4).

Box 4. Problem-solving approaches at selected internal EU borders³⁷

At the border between Germany (Saxony) and the Czech Republic, a German local public transport association (Zweckverband Oberlausitz-Niederschlesien, ZVON) has already acquired extensive experience with the Czech side in jointly tendering crossborder rail passenger transport services. Despite existing technical differences between the railway systems of both countries, ZVON has opted for a pragmatic solution to ensure the existence of a reasonably priced direct cross-border railway service. Although ZVON only tenders for services on the German side of the border, it has included in the tender an obligation for the service-awarded German railway operator to cooperate with the neighbouring Polish railway operator by making joint use of vehicles. The railway operator will be obliged to equip sufficient vehicles to operate on both sides of the border and to make sure that staff speaks both German and Polish. The neighbouring Polish Voivodship intends to include a similar provision in its domestic service provision contract, which will enable future direct connections.

In the Geneva cross-border metropolitan area (France-Switzerland), a Local Grouping for Cross-Border Cooperation (GLCT) "Cross-border Public Transport" was established in 2006 on the ground of the Karlsruhe interstate agreement on crossborder cooperation. The GLCT brings together French and Swiss transport organising authorities around the France-Vaud-Geneva conurbation to jointly manage cross-border bus lines (currently ten). The GLCT is a very light structure (one employee) which signs contracts with transport operators. It is the only example of a cross-border transport organising authority along a French border. Moreover, also a long-term cross-border scheme for organising public transport in the fields of train, tram and bus with a horizon up to 2030 was adopted in the crossborder metropolitan area.

The Euregio Maas Rhein (Belgium-Germany-Netherlands) started developing a farreaching and integrated system for cross-border public transport in 2003, when all parties responsible for public transport in the cross-border area founded the "Euregional platform for public transport" (i.e. Euregionale ÖV-Plattform). This platform decided to elaborate a "Euregional public transport plan" (i.e. Euregionaler Nahverkehrsplan, ENVP) in order to have a reliable basis for further cross-border network planning. Also an "immediate public transport programme" (i.e. ÖV-

³⁶ European Grouping of Territorial Cooperation (EGTC)

³⁷ See: INTER Regio-Rail (no date mentioned); MOT (2015b); Mobility euregio (2016)

Sofortprogramm) was established in 2003. All projects of the first programme phase could successfully be implemented. This involved, inter alia, the construction and planning of public transport infrastructure and also the realisation of extensive campaigns for informing customers and for selling cross-border public transport services. For realising the second phase of the public transport programme, partners have launched in 2009 the Interreg IVA project "M3" with the following main goals: (1) planning of further cross-border public transport connections for railway and bus, (2) reduction of persisting border-obstacles in the field of cross-border public transport by introducing standardised Euregional tariffs, (3) the achievement of clear improvements of marketing and customer-information at Euregional level, (4) the use of modern technologies in the field of ticketing and addressing customers and finally (5) improvement of local public transport services for all demand groups especially considering leisure time traffic.

The most important general lesson to be learnt from this short overview of solutions is that regions at the internal EU-borders have to develop intense cooperation in the field of cross-border public transport, which is also closely oriented at the specific development stage of each cross-border area.³⁸

This observation appears to be rather general at first sight, but it summarises the essence of a long list of recommendations and key success factors for the development of cross-border public transport services which are part of the still relevant toolbox that was developed by the CONPASS project.³⁹ The key messages of these recommendations on how to intensify cooperation (see Box 5) are presented below, both for individual development stages of cross-border public transport development and also across different development stages.

Box 5. CONPASS recommendations on cooperation⁴⁰

(1) Starting cross-border services (lowest development stage):

Focus on benefits for passengers. Establish good and trusting contacts. Avoid new and comprehensive institutional frameworks. Start with a "loose" working group. Start with low-cost solutions. Keep cross-border measures as simple as possible. Keep the fares simple. Think about additional demand to improve revenues.

(2) Coordinating cross-border services (medium development stage):

Focus first on measures which bring the biggest advantages to passengers. Continue and maintain good and trusting contacts. Consolidate your institutional cooperation. Give a binding character to your "loose" working group. Think of a self-binding (cross-border) master plan. Stick to low-cost solutions. Work on tariff measures.

(3) Integrating cross-border services (highest development stage):

Find a nucleus for closer formal cooperation. Set up an integrated cross-border master plan. Don't try to integrate everything. Use standardised exchange formats.

(4) General hints (all development stages):

Reach common sense and interest. Don't wait for a change in legal framework conditions. Test small scale improvements (trial-and-error principle). Domestic solutions may not work on an international / cross-border basis. Avoid a fixation on your domestic public transport system. Share your experiences with other actors.

³⁸ Some cross-border areas have already long-standing traditions in providing cross-border public transport services, while others are just under way to build up comprehensive and solid local and regional cross-border connections or services.

³⁹ CONPASS (2002), Cross-border Public Transport Toolbox. Concepts, ideas and support for improvements. Aachen/Rome/Leuven, June 2002, Pp. 161-194 (toolbox part 4)

⁴⁰ See: CONPASS (2002), Meinhard / Winder (2003)

Developing joint solutions for overcoming obstacles that hamper further cross-border integration of neighbouring public transport services or the development of new cross-border transport services will in the medium to long-term be an important task at many internal EU borders. These activities are needed for creating the conditions that allow existing or emerging European cross-border metropolitan regions to further strengthen their economic attractiveness and to fully unfold their development potentials, and also for realising in practice a more sustainable approach to mobility and territorial development in cross-border regions that is in line with the EU's long-term vision for 2050 of "living well within the limits of the planet".

4.2 Solution adopted for the cross-border tramway line Strasbourg-Kehl

The responsible urban authorities in Strasbourg and Kehl have recently adopted a tailor-made solution, which ensures that the cross-border tramway will not be affected by problems linked to the non-coordination of domestic fare systems for public transport.

It was decided that a common zonal tariff is introduced for the cross-border tramway line only. This decision keeps the fare system simple for passengers and thereby follows an overall effectiveness and efficiency rationale that is the basis of various forms of tariff cooperation (i.e. single tariff; through tariff; common zonal tariff). To establish the common zonal tariff for the cross-border tramway line Strasbourg-Kehl, authorities decided to renounce the cooperation with the traditional public transport operator company on the German side (TGO – Tarifverbund Ortenau GmbH). This was mainly because the governance structure of TGO (with district representatives sitting at the board) and a long-standing tariff agreement with the government of the Land Baden-Württemberg revealed too many asymmetries in the tariff models and approaches during the negotiations with the French counterparts.

Following this, a more flexible solution was developed on the German side which consists of shifting the former transport service unit of the municipal administration of Kehl into a newly created and small local transport authority that will only be responsible for the management of cross-border tramway line operations on the German side. This solution generated only little indirect costs for the municipality of Kehl, mainly originating from the statutory change of the city's technical service unit into a local operating authority with a dedicated legal status. As a result, the cross-border tramway line Strasbourg-Kehl is now managed by the Strasbourg public transport operator CTS through a specific contractual agreement concluded with the small local transport authority that was created by the City of Kehl for this specific function only.

List of references

Actieteam Economie en Arbeid – Ministerie van Binnenlandse Zaken en Koninkrijksrelaties (2015), Overzicht belemmeringen en oplossingen grensarbeid (op basis van inbreng van o.a. EUREGIO's, GROS, Kleefse agenda, position paper VNG, regionale plannen). Versie 1-9-2015.

Baden online website, Tram Kehl, http://www.bo.de/dossiers/tram-kehl (accessed in November 2016)

Barth, E. (2014), How international borders affect local public transport: analyses and evaluations of cross-border agglomerations in Switzerland, France and Germany. Thesis submitted to attain the degree of doctor of sciences of ETH ZURICH. Zürich, 2014.

Bas-Rhin department official website, Avis et conclusions motive relative à la déclaration d'utilité publique concernant le projet d'extension de la ligne D du tramway vers Kehl, http://www.bas-rhin.gouv.fr/content/download/7053/47861/file/Avis+et+conclusions+motiv%C3%A9s.pdf (accessed in November 2016)

Bundesministerium des Innern / EURO-Institut Kehl-Strasbourg (2014), Grenzüberschreitende Zusammenarbeit mit deutscher Beteiligung. Ein Erfahrungsaustausch. Dokumentation der Veranstaltungen 2012 und 2013 in der Vertretung des Landes Baden-Württemberg, Berlin.

CONPASS (2002), Cross-border Public Transport Toolbox. Concepts, ideas and support for improvements. Aachen/Rome/Leuven, June 2002. http://www.ivv-aachen.de/fileadmin/content_images/projekte/Conpass/print/print.htm (accessed in November 2016)

Copenhagen Post (2015), Øresund train tickets - most expensive in Europe, http://cphpost.dk/news/business/oresund-train-tickets-most-expensive-in-europe.html (accessed in November 2016)

Council of Europe (2011), Preparation of the conference on removing obstacles and promoting good practices on cross-border cooperation. Replies to the questionnaire. Secretariat Memorandum prepared by the Directorate General of Democracy and Political Affairs Directorate of Democratic Institutions. Strasbourg, 16 May 2011

Dörry, S. / Decoville, A. (2012), Transportation policy networks in cross-border regions. First results from a social network analysis in Luxembourg and the Greater Region. CEPS/INSTEAD Working Paper No. 2012-22, April 2012. Centre for Population, Poverty and Public Policy Studies (CEPS/INSTEAD), Differdange, 2012.

Decoville, A. / Durand. F. / Sohn, Ch. / Walther, O. (2010), Spatial integration in European cross-border metropolitan regions: A comparative approach. CEPS/INSTEAD Working Paper No 2010-40, December 2010. Centre for Population, Poverty and Public Policy Studies (CEPS/INSTEAD), Differdange, 2010.

European Commission (2011 a), White Paper. Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system. COM (2011) 144 final. Brussels, 28.3.2011.

European Commission (2011 b), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A Quality Framework for Services of General Interest in Europe. COM (2011) 900 final. Brussels, 20.12.2011

European Commission, DG Regio (2015), Information campaign on Public Consultation as part of the CB Review, roundtable about border obstacles in SK/HU Region. Mission Report (Zsolt Szokolai), Directorate D - Unit D2. 6/10/2015.

ESPON (2012), Ulysses - Using applied research results from ESPON as a yardstick for cross-border spatial development planning. Targeted Analysis 2013/2/10. Scientific Report for the Final Report. Multi-Thematic Territorial Analysis of the Upper Rhine Trinational Metropolitan Region. Version 30/07/2012.

European Union (2009), Regulation (EC) No 1073/2009 of the European Parliament and of the Council of 21 October 2009 on common rules for access to the international market for coach and bus services, and amending Regulation (EC) No 561/2006, Official Journal of the European Union, 14.11.2009.

Eurodistrict Strasbourg-Ortenau official website: http://www.eurodistrict.eu/(accessed in November 2016)

Gabrovec, M. (2013), Open borders with uncoordinated public transport: The case of the Slovenian-Italian Border. In: European Journal of Geography, Volume 4, Number 4, December 2013.

INTERACT (2015), Expert assignment to deliver a Scoping Study on European Territorial Cooperation. A thematic analysis of territorial developments and Interreg / ETC Investments in the period 1990-2013. Volume 1b. Final Version. Vyborg, January 2015.

INTERREG III A Oberrhein Mitte-Süd / Regio PAMINA (no date mentioned), INTERREG - Der Oberrhein wächst zusammen: mit jedem Projekt. Liste der durch die EU-Gemeinschaftsinitiative kofinanzierten Projekte. INTERREG I, II und III A am Oberrhein zwischen 1990 und 2005. Anhang.

INTERREG II official website, INTERREG II Oberrhein Mitte-Süd: Streckenverlauf einer Strassenbahnlinie Strasbourg/Kehl, http://www.interreg-oberrhein.eu/projet/streckenverlauf-einer-strassenbahnlinie-strasbourgkehl/ (accessed in November 2016)

INTER Regio-Rail (no date mentioned), Removing Barriers to Regional Rail Transport. Results and conclusions. Project finance by the CENTRAL EUROPE Programme and cofinanced by the ERDF.

Kehl am Rhein official website, http://www.kehl.de/stadt/index.php (accessed in November 2016)

Latvian Ministry for Environmental Protection and Regional Development (2014), Report on the progress of the joint co-operation activities agreed by the intergovernmental commission's joint sessions in 2013/2014.

Meinhard, D. / Winder, A. (2003), How to Improve Cross-border Public Transport? Association for European Transport, 2003. AET Papers Repository. http://abstracts.aetransport.org/paper/index/id/1599/confid/9 (accessed in November 2016)

Mobility-euregio (2016), Idea and Information, http://mobility-euregio.com/en/about-us/idea-information/ (accessed in November 2016)

MOT - Mission Opérationelle Transfrontalière (2015a), Building Legal Provisions to Overcome Obstacles to Cross-border Cooperation. Luxembourgish Presidency of the EU Council. 9th September 2015.

MOT - Mission Opérationelle Transfrontalière (2015b), Processus d'actualisation des travaux du Groupe de travail parlementaire franco-belge et suites à donner. Annexes au rapport final.

MOT - Mission Opérationelle Transfrontalière (2015c), Processus d'actualisation des travaux du Groupe de travail parlementaire franco-belge et suites à donner. Rapport final.

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MOT - Mission Opérationelle Transfrontalière (2016), Transport. http://www.espaces-transfrontaliers.org/en/resources/topics-of-cooperation/transports/transport/ (accessed in November 2016)

Panteia (2010), INTERREG III Community Initiative (2000-2006). Ex-Post Evaluation. Final Report. May 2010, Zoetermeer.

Strasbourg.eu official website, Délibération au Conseil de Communauté du vendredi 15 avril 2011 Approbation des propositions programmatiques et fonctionnelles du schéma directeur deux Rives,

http://media.strasbourg.eu/alfresco/d/a/workspace/SpacesStore/991b0157-fa29-45a2-91aa-416f800573a8/delib_schema-dir_2rives110415.pdf (accessed in November 2016)Winder, A. / Krug, S. / Meinhard, D. (2001), Cross-border public transport in Europe: overcoming the barriers. Association for European Transport (AET), 2001.

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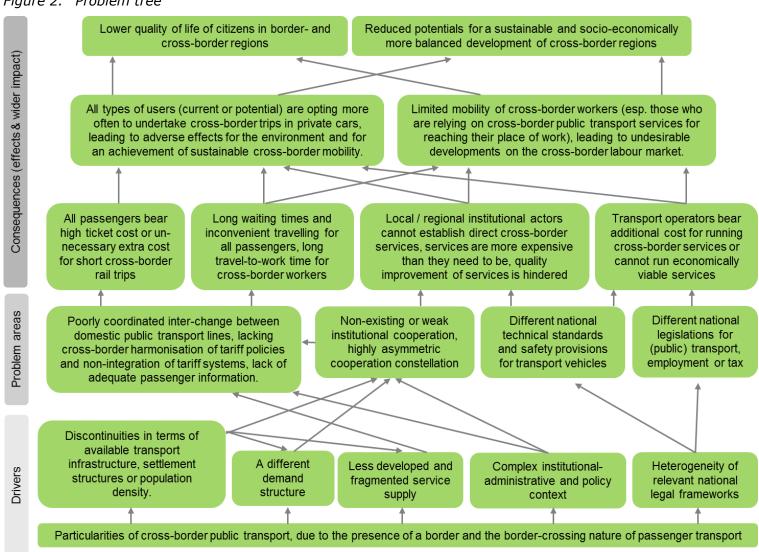
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Annex

Figure 2. Problem tree



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