ARL ACADEMY FOR TERRITORIAL DEVELOPMENT IN THE LEIBNIZ ASSOCIATION

Beate Caesar, Michael Heilmann, Jörg Saalbach, Werner Schreiner

Cross-border public transport – Continued barriers despite the EU

URN: https://nbn-resolving.org/urn:nbn:de:0156-40971356

Page 222 to 245

In: Pallagst, Karina; Hartz, Andrea; Caesar, Beate (Eds.) (2022): **Border Futures – Zukunft Grenze – Avenir Frontière. The future viability of cross-border cooperation.** Hanover. = Arbeitsberichte der ARL 33.

This paper is a translated version of the following publication: Caesar, Beate; Heilmann, Michael; Saalbach, Jörg; Schreiner, Werner (2018): Grenzüberschreitender Öffentlicher Verkehr – immer noch Barrieren trotz EU. In: Pallagst, Karina; Hartz, Andrea; Caesar, Beate (Hrsg.) (2018): Border Futures – Zukunft Grenze – Avenir Frontière. Zukunftsfähigkeit grenzüberschreitender Zusammenarbeit. Hannover, 207-231. = Arbeitsberichte der ARL 20.

The original version can be accessed here:
URN: https://nbn-resolving.org/urn:nbn:de:0156-4097135

Typesetting and layout: ProLinguo GmbH
Translation and proofreading: ProLinguo GmbH

Leibniz Association

Beate Caesar, Michael Heilmann, Jörg Saalbach, Werner Schreiner

CROSS-BORDER PUBLIC TRANSPORT – CONTINUED BARRIERS DESPITE THE EU*

Contents

1 Introduction
2 Significance and challenges of cross-border transport
2.1 Significance of cross-border transport
2.2 Challenges of cross-border transport
2.2.1 Legal and administrative challenges
2.2.2 Challenges in cross-border transport planning
2.2.3 Financial challenges
2.3 Challenges in cross-border public transport
3 Transport policy objectives and instruments at the EU level
4 Impact of the EU policy on strengthening regional and local cross-border transport
4.1 Cross-border rail transport between Palatinate and Alsace – Practical example from the special purpose association for public rail transport (ZSPNV) of Rhineland-Palatinate South (Upper Rhine North)
4.2 INTERREG IV A project: POS NORD (Greater Region)
4.3 Cross-border mobility strategy: Schéma stratégique de mobilité transfrontalière (SMOT)
5 Conclusions: Steering cross-border transport at the European level – Challenges and opportunities
References

Abstract
This paper addresses the extension of cross-border transport within the EU. Despite the longstanding efforts of transport and cohesion policies to improve cross-border transport, many border regions still face challenges related to transport infrastructure and local public transport; these are discussed in the first part of this paper. Transport policy goals and instruments on the EU level are then discussed and their impact is assessed using case studies in the border area. As EU policy and funding instruments are not particularly concrete or binding, there are still significant variations between the national policies of member states. Implementation requires strong political will and secure funding. As transport is an important foundation for other aspects of cross-border cooperation, sustained investment in this key area is required.

Keywords
Cross-border transport – EU policy – cohesion policy – transport policy – trans-European transport networks – European territorial cooperation

* This article was first published in 2018 and is based on data from 2017 and previous years. As such, the figures presented in this article do not reflect the latest efforts in the field of cross-border transport through transport and cohesion policy nor the most recent transport policy objectives and instruments at EU level.

1 Introduction

The creation of the European Single Market enabled the unrestricted mobility of people, goods, services and capital within the European Union and thus across the national borders of the member states (European Commission 2017). The 1985 Schengen Agreement facilitated these fundamental freedoms even further by abolishing border controls at national borders within the EU Schengen states. This occurred against the backdrop of the realisation of the European single market and served to support the economic and social cohesion of the EU and its integration. Despite efforts to dismantle national borders within the EU, today – 30 years later – the borders are still tangible. In early 2016, in the course of the refugee crisis, physical barriers were erected again at some internal European borders and controls reintroduced. European border regions are still often classified as disadvantaged areas entitled to special EU support. In addition, there are barriers to cross-border public transport across national borders (European Commission 2011a: 2).

This study will first briefly outline the importance of cross-border transport and the challenges that arise in border areas in connection with transport and mobility. The following section will examine the impact of EU policies on cross-border transport. This serves to present the current conditions in regard to transport/mobility for cross-border cooperation and to illustrate the changes that have occurred over time. To that end, the diversity of transport policy objectives and instruments at EU level are firstly identified and elucidated. To highlight the current and future conditions for cross-border cooperation in transport/mobility, the focal point here is the new 2014–2020 funding period. The concrete impact of EU policy on cross-border transport at regional and local level will then be analysed based on case studies from cross-border public rail transport, an EU-funded INTERREG project and a bilateral approach to cooperation. The interregional cooperation in the Rhine-Alpine corridor under the INTERREG project CODE24 and the European Grouping of Territorial Cooperation (EGTC) which resulted from this project is then discussed as a best practice example of sustainable transport development promoted by EU policy. The paper concludes with a discussion of the challenges and opportunities of managing cross-border transport at the European level.

2 Significance and challenges of cross-border transport

This paper describes the importance and challenges of transport at the internal European borders. The study refrains from describing the challenges at external European borders. Road, rail and water-based transport such as ferry connections all play a role in cross-border transport. Air traffic within cross-border regions is not particularly relevant due to the fairly small scale of border regions.

2.1 Significance of cross-border transport

A well-developed cross-border transport network plays an important role in increasing cross-border mobility and cooperation, as well as in eliminating barriers at the

border (*BMVBS* [Federal Ministry of Transport, Construction and Urban Development] 2011: 83). With good transport connections, services in border regions can complement each other, leading to reciprocal use (Spierings/van der Velde 2013: 4). In addition, the interconnection of transport systems, for example by bridges, has a distinct symbolic significance for overcoming national borders and the convergence of neighbouring regions (BMVBS 2011: 84). The different modes of transport are relevant not only for passenger transport, but also for the movement of goods within the EU (Peter 2015). Furthermore, good cross-border connections are very important for (cross-border) tourism. In many cases, the accessibility of tourist destinations by public transport is very poor (Grauvogel 2015). In areas with a high volume of commuters, such as the Greater Region, a well-developed infrastructure and cross-border public transport systems are very important to minimise congestion and pollution.

2.2 Challenges of cross-border transport

Border areas and transport across national borders present a wide range of challenges. There are often significant interactional flows of commuters within border areas (see the paper by Christian Wille and Ursula Roos in this volume). If the infrastructure is under-developed, traffic in the border area will quickly become congested. Poor public transport services in particular lead to an increase in private motor vehicle transport, which in turn has a negative impact on traffic flows on underdeveloped roads. In addition, there are also sparsely populated border areas whose public transport systems experience such low demand that it is difficult to maintain them or make them more appealing to users. Deficiencies in the physical infrastructure are easy for outsiders to identify. These include a lack of crossings at the border, such as bridges, cycling paths, roads and pedestrian paths. Organisational and financial aspects are still highly dependent on national regulations, and sometimes the border still persists as a clear demarcation in the consciousness of the border inhabitants (see contribution by Spellerberg/Schönwald/ Weber in this Volume).

Border regions are traditionally regarded as disadvantaged regions, as they lie on the periphery rather than in the centre of a country; this means that they are often not well connected to the rest of the country's infrastructure and therefore suffer from poor accessibility. After the opening of the internal European borders, many border regions were no longer on the periphery, but in the centre of Europe and able to benefit from their proximity to the border. The EU promotes cooperation between border regions and aims to improve the connectivity of these regions to the overall transport network so that they can mutually benefit from their proximity to the border. However, this is often not easy: despite ambitious objectives and efforts to create a well-functioning European transport network, there are still bottlenecks and inefficient cross-border traffic flows in most of the EU (European Commission 2011a: 2). Cross-border transport is often seen as lagging behind in the new member states in particular (Monti 2010: 65). This is indeed the case, although the EU has been stressing the importance of cross-border transport for some time now and is calling for the strengthening of infrastructure in border areas.

In addition to individual challenges caused by the different characteristics of the border regions, there are challenges in cross-border transport that apply to almost all border areas; these are described below.

2.2.1 Legal and administrative challenges

European transport and cohesion policy consists entirely of framework directives and regulations for the member states. The member states and their respective levels are solely responsible for their implementation. As a result, the EU member states have very different transport laws based on different traditions and experiences (Giorgi/Pohoryles/Freudensprung et al. 1999: 7, 37). In addition, the implementation of (European) policies is often a matter of interpretation and can take different courses in practice; the original objectives of the policy strategies can change during implementation (Jann/Wegrich 2003: 89). Moreover, the precise implementation of EU transport policy is not monitored. These different national rules and regulations make cross-border cooperation more difficult (CONPASS Consortium 2002: 55 et seq.; Giorgi/Pohoryles/Freudensprung et al. 1999: 7), as can be seen in the differing legal frameworks for public transport across the EU member states, e.g. different national safety standards or licensing regimes. These differences may hinder cross-border operations by restricting or even prohibiting certain means of transport on the other side of the border. There can also be national differences in labour law, which raises questions about employees who are deployed across borders (CONPASS Consortium 2002: 55 et seq.). The fundamental problem is usually that the laws are only available in the national language and are therefore difficult to access and understand in the neighbouring country. As a result, legal disparities can create additional delays in the implementation of projects (ESPON 2004: 243; CONPASS Consortium 2002: 55 et seq.). It has also been observed that local levels of government are not heavily involved in EU policy unless the policy offers financial or other benefits (ESPON 2004: 267).

2.2.2 Challenges in cross-border transport planning

The joint development of cross-border infrastructure is difficult because it requires joint planning and coordination (see the paper by Karina Pallagst and Beate Caesar contribution in this volume), which requires more effort and more time. The involvement of authorities on both sides of the border can delay decision-making. This also means that implementation takes longer. The process is further prolonged if responsibility does not rest with the local authorities, but with higher levels of government/administration. This can lead to communication and coordination problems, because the decision-making processes are often structured in a fundamentally different way. In particular, the transport operators must be involved in the cooperation in compliance with EU regulations in order to ensure implementation (CONPASS Consortium 2002: 55 et seq..; Giorgi/Pohoryles/Freudensprung et al. 1999: 7). In addition, the needs of the cooperating partners are often focused only on national added value and not on the common border area (CONPASS Consortium 2002: 56 et seq.). This is often due to a lack of available data on cross-border transport flows and demand,

making it difficult to offer the appropriate services (Schreiner 2015). In addition, cross-border cooperation structures often have to be established first (CONPASS Consortium 2002: 56 et seq.). Finding partners for this is difficult if the relevant decision-makers are not known or are not keen to interact. Moreover, different planning traditions and processes can make collaboration more difficult. Cooperation is also complicated by different attitudes to current transport trends (Giorgi/Pohoryles/Freudensprung et al. 1999: 8 et seq.). Cooperation is difficult when fundamentally different or negative attitudes, including with regard to the neighbouring country, prevail (Giorgi/Pohoryles/Freudensprung et al. 1999: 8 et seq.). Regular contacts between decision-makers can create trust and increase the chance of projects being implemented, although this requires committed stakeholders. National systems which are incompatible in a technical sense are another challenge, as they increase the cost of cross-border infrastructure (Peter 2015).

2.2.3 Financial challenges

Funding a cross-border transport project is difficult. When demand in the border area is low, a high level of investment in infrastructure is called into question. In most cases, subsidies are made available nationally which may only be used on national territory. Therefore, binational funding requires special agreements and must comply with specific rules (CONPASS Consortium 2002: 55 et seq.). In order to avoid funding problems, large projects are often divided into several sub-projects, which are then carried out in the respective countries. This entails a risk that ideas and strategies, which were initially jointly developed, will not be (fully) implemented (Giorgi/Pohoryles/Freudensprung et al. 1999: 10).

While financial support for the implementation of European transport policy is available, in the past it focused – particularly in rail transport – on cross-border high-speed transport systems and not on cross-border local public transport, which is of much greater significance for internal mobility between two border regions (Schreiner 2015).

The EU level has no power to regulate the collection of taxes and charges uniformly across the EU (ESPON 2004: 53, 241). As a result, the pricing for the use of the infrastructure and services varies widely between the member states, and different strategies are pursued. For example, public transport is funded to minimise private transport, or motorway tolls are charged to finance road maintenance (Giorgi/Pohoryles/Freudensprung et al. 1999: 9 et seq.).

2.3 Challenges in cross-border public transport

Cross-border public transport services are often insufficient due to low demand, especially in structurally weak, sparsely populated areas. Many lines end at the national border and do not continue across the border. In addition, timetables on either side of the border may not be harmonised, meaning that changing for connections is inconvenient and wastes time. Because of the poor provision of cross-

border public transport services, public transport is not an appealing option for potential users, who prefer to use their own vehicles. In addition, switching between different modes of transport, such as the bus and train, may not be satisfactorily regulated, hence intermodal transport does not work well for users CONPASS Consortium 2002: 51 et seq.).

Due to the complexity resulting from different public transport systems, the lack of transparency in terms of timetables, destinations, ticket sales locations and ticket prices hinders accessibility as well. The information is not always provided in both/all languages of the border area, thus a lack of knowledge of the other language(s) is another barrier to using public transport. (CONPASS Consortium 2002: 49 et seq.).

With a common cross-border transport network, the question ultimately arises of the distribution of revenue between the various transport operators. Experience is lacking in this regard, and the lack of clarity can prevent the implementation of a common fare structure. In addition, due to different national currencies in European countries that are not part of the Eurozone, highly fluctuating exchange rates can also cause problems in setting ticket prices (CONPASS Consortium 2002: 59). The costs for a cross-border journey by public transport are higher than for a comparable national journey due to additional costs on both sides of the border and the attempt to cover the costs through increased revenue. Ticket choices are also often limited: for example, often only single tickets are available and no travelcards or monthly or annual tickets. Student or senior benefits are also rare.This precludes possible ticket discounts. While these aspects are intended to facilitate the sale of tickets and the distribution of revenue between different operators, it is not particularly user-friendly. When changing trains, a new ticket may have to be purchased (CONPASS Consortium 2002: 60 et seq.).

In summary, there are many barriers and challenges in cross-border public transport that make it difficult to jointly plan infrastructure and services and to operate them.

The next section describes the objectives and instruments for the transport sector at EU level.

3 Transport policy objectives and instruments at the EU level

In the 1957 treaty establishing the European Economic Community, the member states decided to create a common transport policy. This aimed to support the common single market, economic growth and the harmonious development of the EU area (European Coal and Steel Community Publications Service 1957: Article 2f). Today, the development of transport continues to be coordinated at European level: it falls within the remit of the European Commission's Directorate-General for Mobility and Transport. The objective is to develop a well-functioning, sustainable and environmentally friendly European transport network (Ruete 2010).

Initially, European transport policy focused on transport within and between member states. In 1970, a first law on financial support for transport infrastructures was

adopted, which was further developed in 1976 (Council of the European Community 1976). The first priority projects were defined in 1978 (Council of the European Community 1978), and the number of projects supported increased rapidly over the years. Ten years later, an action programme on transport infrastructure was launched with the aim of supporting the full realisation of the European single market (European Commission 1988).

A well-developed European transport network is seen as an essential prerequisite for the European single market, economic growth and European competitiveness (European Commission 2011a: 3). In order to ensure barrier-free, multimodal European transport, the Maastricht Treaty introduced the Trans-European Transport Networks as an EU policy area in 1992 (Treaty on European Union 1993: Article 129b(1)). The aim was to support the free movement of people, goods and services within the EU (Maastricht Treaty 1992: Article 129b(1)). Only road traffic was included in the initial deliberations and documents (Commission of the European Community 1993). The first legally binding directives of 1996 then took account of the other modes of transport (European Parliament and Council of the European Union 1996: Article 3(2)). These Directives have since been revised three times (2001/2004/2006) and amended in 2010 and 2013. Nowadays, the policies aim to improve interoperability between the different modes of transport and national networks. In addition, access to these networks for every European citizen is to be ensured (Maastricht Treaty 1992: Article 129b(1)).

The current 2013 Directives were adopted in response to the White Paper 'Roadmap to a Single European Transport Area – Towards a Competitive and Resource Efficient Transport System' (European Commission 2011b). It proposed to develop the core network, consisting of the main transport corridors, as a priority. This aims to increase and concentrate investments in European transport infrastructure in order to achieve the objectives of the Europe 2020 Strategy and to fully realise the European single market (European Commission 2011a: 1 et seq.).

In addition to these objectives, which focus on the implementation of a European transport network, a wide range of other transport-related issues are addressed at EU level, including energy consumption in passenger transport, the provision of European flight navigation services, working conditions in the interoperable cross-border service sector, intermodal charging stations, etc.

Other EU policies and documents also have a strong impact on European transport development. The Europe 2020 Strategy, for example, calls on EU member states to actively contribute to the implementation of infrastructure projects that support the efficiency of the core network (European Commission 2010: 19 et seq.). The spatially-relevant documents of the 1999 European Spatial Development Perspective (ESDP) prepared by the Informal Council of National Ministers for Spatial Planning of the Member States and the two Territorial Agendas (TA 2007 and 2011) also deal with European transport policy and confirm their importance for the future of the EU (Informal Council of Ministers responsible for Spatial Planning 1999: 27 et seq., 2007: 4 et seq., 2011: 8 et seq.). Cohesion policy also addresses the development of transport infrastructure as an important issue; it aims to achieve the economic, social and

territorial cohesion of the member states. To this end, it also supports transport investment (European Union 2006: Article 3).

Because European transport development is a key issue for the EU, it provides various funding opportunities for this:

> Cohesion Fund

> European Regional Development Fund (ERDF)

> TEN-T programme (until 2013)

> Marco Polo programme (until 2013)

} Since 2014, merged into the 'Connecting Europe Facility'

> 7th research framework programme (until 2013), since 2014: 'Horizon 2020'

The Horizon 2020 programme funds research projects in the field of transport under the title 'Smart, green and integrated transport' (European Commission 2014c).

In the 2007–2013 EU funding period, both the cohesion policy, in the form of European Territorial Cooperation (ETC), and the transport policy within the framework of the Trans-European Transport Networks made the development of cross-border transport a priority. Improved cross-border transport should contribute to the full realisation of the European single market, increased competitiveness and increased accessibility and networking between member states in both policy areas. The TEN-T policy focused on supporting cross-border infrastructure in the TEN-T network and was thus also supported by the ETC. In addition, the expansion of secondary networks and transport corridors within transnational cooperation was supported in ETC projects (Caesar 2015: 5 et seq.).

The European Commission explains the continuing problems in cross-border transport as being caused by a lack of coordination between member states and the lack of a common financial framework (European Commission 2011a: 3). The new EU funding period (2014–2020) aims to address the problems. Compared to the previous funding period, EU provisions have been revised and efforts have been made to better interconnect the funding programmes and to clarify their content in order to better improve EU-wide transport in the long term. In particular, support for cross-border transport is to be increased.

Transport policy provides for the further development of the transport network. To this end, the aforementioned new guidelines for the Trans-European Transport Networks were created, which provide for a new financial instrument, the Connecting Europe Facility. Funding has been tripled, and the funding budgets for the Marco Polo programme and the TEN-T programme have been merged (European Commission 2014b: 2). In this context, newly introduced results indicators seek to better measure the impact of projects (European Parliament and Council of the European Union 2013b: Article 4). In addition, a two-level structure consisting of a core and an overall network was introduced (European Parliament and Council of the

European Union 2013a: Article 6). The European core network, consisting of multimodal transport corridors, is to be implemented by 2030. This core network consists of the most strategically relevant routes and will focus on major bottlenecks, multimodal hubs and cross-border connections. The rest of Europe's transport infrastructure is to be adapted to EU guidelines, and the overall network is to completed by 2050 (European Commission 2011a: 3). In addition, the new TEN-T legislation strengthened, elucidated and detailed a number of issues.

The transition to the 2014–2020 funding period has also been used to adapt the **cohesion policy** and the guidelines for European Territorial Cooperation. All new EU documents have a stronger focus on specific priority issues, with the aim of concentrating financial support and achieving clearer results. In addition, EU policies have been designed to meet the objectives of the Europe 2020 Strategy by 2020 (European Commission 2014a). The new rules for the cohesion policy include a common strategic approach in which thematic priorities have been defined that apply to all funds (European Parliament and Council of the European Union 2013d: Article 9). They also defined how the cohesion policy is to be coordinated with other European policies and funding instruments in order to avoid parallel structures (European Parliament and Council of the European Union 2013d: Appendix I, point 4). The Cohesion Fund and the ERDF continue to support transport projects, but some of the benchmarks have been stipulated in more detail. The share of the Cohesion Fund reserved for TEN-T priority projects has been clearly defined as of the new funding period. The rest of the money can be used to support other transport projects in the EU (European Parliament and Council of the European Union 2013e: Article 3 et seq.). In the case of the ERDF, the priorities have been formulated a bit more precisely and are therefore somewhat more detailed than those of the Cohesion Fund. As with the Connecting Europe fund, results indicators have been defined for the ERDF in order to better measure project results (European Parliament and Council of the European Union 2013c: Article 5).

In promoting cross-border transport, EU policy documents on ETC and TEN-T provide for the coordination of the two policy areas. This serves to contribute to the achievement of the Europe 2020 Strategy (European Commission 2010). The Europe 2020 Strategy acts as a catalyst that streamlines the objectives of both policies in cross-border transport. Common objectives of promoting cross-border transport projects include reducing carbon emissions, contributing to sustainable transport and further European integration. In addition, an integrated European transport system is to be established. The ETC policy focuses its resources primarily on the overall network, thereby also promoting secondary and tertiary transport networks. TEN-T supports both levels – the core network and the overall network – but for now, the primary focus is to expand the core network. ETC, on the other hand, aims to improve overall accessibility in the EU and has a stronger planning background; for example, projects aimed at improving the cross-border planning process for cross-border transport infrastructures and services can be funded (Caesar 2015: 9 et seq.).

To outline the impact of EU policy on cross-border transport at the regional and local level, the following section presents experiences and results in the Greater Region and the Upper Rhine research area.

4 Impact of the EU policy on strengthening regional and local cross-border transport

As the EU has oriented some of its policies towards financial support for cross-border transport projects, as described above, this section will examine the actual impact of the EU on cross-border transport at the regional and local level using case studies. Cross-border rail transport between Palatinate and Alsace is described, followed by the EU-funded POS NORD INTERREG project and the binational cross-border cooperation strategy *Schéma stratégique de mobilité transfrontaliére*, which is being implemented without EU funding.

4.1 Cross-border rail transport between Palatinate and Alsace – Practical example from the special purpose association for public rail transport (ZSPNV) Rhineland-Palatinate South (Upper Rhine North)[1]

Preliminary remarks

In 2007, and thus at the beginning of the Upper Rhine INTERREG IV programme, the special purpose association REGIO PAMINA organised a forum in Haguenau to address the challenges of cross-border public transport in the PAMINA area. Since then, the INTERREG IV programme has put several million euros towards transport projects in areas further south along the Upper Rhine, while the situation with cross-border rail transport in the REGIO PAMINA Eurodistrict stagnates. The challenges, problems and potential solutions to improve cross-border public transport which were discussed at the time in Haguenau remain largely unchanged today, on the threshold of the successor programme INTERREG V.

Although various measures to upgrade and increase the appeal of rail lines and railway stations have been implemented in recent months, particularly in Alsace and Rhineland-Palatinate, the quality and quantity of cross-border connections have hardly changed.

This can generally be explained by the fact that different priorities have been set for the further development of rail transport on both sides of the border. While in Rhineland-Palatinate the emphasis is on coordinating service timetables in the form of the 'Rhineland-Palatinate Timetable', the priority in Alsace is on commuter traffic and the connection with the TGV. This makes it more difficult to achieve compatibility between the systems and coordinated improvements in cross-border transport.

Review: Decommissioning and revival

Between 1970 and 1980, cross-border rail services between Palatinate and Alsace were closed down. The infrastructure of the routes was neglected; road-based replacement measures faced a lack of demand (long journey times, too many changeovers).

1 The following discussion was prepared by Werner Schreiner and is largely based on his presentation at the meeting of the EURODISTRICT Transport Committee on 18 July 2014. Michael Heilmann also contributed his experience to the text.

The rail connection was revived in the wake of the planning for the Rhineland-Palatinate Timetable, namely on 1 March 1997 on the Winden–Wissembourg route and in December 2002 on the Wörth–Lauterbourg route, after having initially been set up as an excursion route in 1999.

The revived Winden–Wissembourg route is served daily. As a result, in September 1999 the Alsace region and SNCF decided to resume public rail transport between Wissembourg and Haguenau, which had been suspended at weekends. Public acceptance of the transport services on the German side has been positive and constant for years.

The cross-border fares of the Rhine-Neckar Transport Association *(Verkehrsverbund Rhein-Neckar, VRN)* and the Karlsruhe Transport Association *(Karlsruher Verkehrsverbund, KVV)* are valid up to Wissembourg and Lauterbourg stations.

The Rhineland-Palatinate Timetable's excursion service includes cross-border trips from Mainz (Elsass Express) and Koblenz (Weinstraße Express), which also create added value for cycling tours in the region. These 'excursion trains' to Wissembourg run on Sundays and public holidays from May to October. In addition, an 'excursion train' has been running for several years now on Saturdays and Sundays (all year round) from Neustadt via Wissembourg to Strasbourg. This train connection is currently operated with SNCF railcars. ZSPNV Rhineland-Palatinate South pays an annual fee for this service. The train is in high demand, depending on the tourist season and weather conditions.

In 2005, a fare agreement was concluded between the Alsace region and the VRN with the intention to create a range of special fares for the VRN lines and railway lines in the *département Bas-Rhin*: the 'Ticketplus Alsace' and the 'Alsace-Rhine-Neckar Pass'. The fares are valid on weekends and public holidays, the Ticketplus Alsace only for certain user or fare groups (e.g. holders of a Job Ticket [for commuters] or discount cards for seniors over 60, etc.). Their user numbers also show the varying use of public transport services among the population.

The creation of a fare scale for user groups (similar to the VRN) from the area of the KVV has to date found no support from the Alsace region (reference has been made to the establishment of a comprehensive strategy for the Alsace area). The comprehensive strategy has since been rejected by the Alsatian side, and work is now underway on individual solutions. Similarly, there is still no cross-border solution for transporting bicycles. The partners from Baden are in favour of the project and are prepared to bear the balancing payments for the fares, similar as with the VRN. As of 1 December 2016, a solution was found for the KVV, which is analogous to the solution for the VRN.

Rail transport task areas

> Rail transport and tourism: Cross-border rail transport in the North Alsace-Palatinate area has so far mainly served tourist demand. The area between Neustadt an der Weinstraße and Haguenau/Niederbronn-les-Bains, with particular

regard to the Palatinate Forest / Vosges du Nord cross-border biosphere reserve, forms a unit for tourist purposes and is therefore to be developed as a common transport area through an attractive range of coordinated, cross-border transport services. In this context, the accessibility of Strasbourg as a tourist centre and the rail links between the twin towns of Haguenau and Landau deserve particular attention.

> Rail transport and the labour market: At present, cross-border rail transport plays a minor role in vocational education and labour mobility; cross-border commuter transport largely takes other forms (private motor vehicles, carpooling, company bus services). In the context of the current initiatives to promote the cross-border training and labour market, cross-border public rail transport should be improved for commuters in the future as an alternative to private motor vehicle transport. In this sense, public transport supports training and employment policy measures.

> Feeder function for long-distance transport: The improvement of cross-border rail links is also interesting and important from the point of view of links to railway hubs outside the REGIO PAMINA Eurodistrict, for example connecting to long-distance or high-speed trains at Strasbourg Central Station in the direction of the Rhine/Rhone or for reaching the new fast connections to Paris.

Reasons for the stagnation in recent years

The reasons for the stagnation in rail transport in recent years are manifold:

> High costs for the equipment and retrofitting of the control and safety technology of the trains. Costs of approx. €1 million/locomotive are to be expected. The expansion of the French and German rail infrastructure was postponed due to the lack of a comprehensive strategy for services and infrastructure expansion.

> Thus far there are no funding opportunities at EU level for these investments.

> Currently, there are only just over a dozen railcars that are used daily in cross-border transport between Offenburg, Strasbourg and Saarbrücken and on weekends as part of the excursion train from Neustadt to Strasbourg (via Wissembourg) and back. Since these railcars have only a small capacity of about 80 seats, expensive multiple traction units are required. The increased demand for intra-Alsatian routes will affect the Strasbourg–Saarbrücken route as of December 2016 in the sense that direct cross-border train services will be abandoned and changeover connections will be established.

> Different service philosophies: in Germany according to timetables, in France a focus on commuter transport on the secondary routes or on the TGV for the Strasbourg–Wissembourg route, which has been connecting Strasbourg with Paris since July 2016; since autumn 2016, the travel time on this route has been reduced to 1 hour 48 minutes. At the border stations of Wissembourg and Lauterbourg, these systems are often not compatible with the Rhineland-Palatinate Timetable, so that there are numerous poor connections with long waiting

times or, in the worst case, an 'on-demand departure' in Lauterbourg – partly corrected as of 11 December 2016.

> User-friendliness in regard to customer information and ticket sales must be improved. When cross-border passenger transport ceased to be provided by state rail operators, their consistent fare regime was also withdrawn. While it was still possible in 1968/69 to buy both a train ticket from Neustadt/Weinstraße to London (outbound via Brussels and Ostend, return via Calais and Metz) as well as direct train tickets from Neustadt to neighbouring Alsace without any problems, today it is only possible to buy some cross-border tickets on the internet from different train operators or to involve a travel agency. Even in areas close to the border, ticket machines only offer limited options with complicated routes – which are therefore more expensive – to travellers wishing to purchase cross-border tickets. Improvements are urgently required in this regard.

> Increasing competition from long-distance buses: Deutsche Bahn, for example, is not averse to providing competition with its own Mannheim–Strasbourg rail service by offering an InterCity bus service at a bargain rate of €9.

The EU's impact on cross-border rail transport

The EU's impact on cross-border rail transport in recent years has largely been characterised by the fact that the focus has generally been on a few long-distance transport projects, e.g. the extension of the Frankfurt–Mannheim–Saarbrücken–Paris line following the La Rochelle Agreement of 22 May 1992 between Germany and France (Federal Republic of Germany 1992). In fact, the development of public rail transport has not been supported by the EU in recent years as there have been no suitable funding programmes. The launch of INTERREG V offers the opportunity for the first time to improve cross-border public rail transport by investing in infrastructure or locomotives.

In general, however, the possibilities for achieving significant improvements in European border transport in the foreseeable future are limited by the fact that in recent decades a broad range of conditions have been created which make it considerably more difficult to operate rail transport seamlessly across borders, e.g. different train control systems that are not mutually compatible. Moreover, the rules and regulations of the national railway companies have tended to become rather more disparate instead of converging, especially in the last 20 years.

In the coming years, therefore, countless small and even tiny steps will have to be taken to enable public rail transport to achieve a significant share of the cross-border modal split and to raise awareness about these services among the population.

Conclusions, future tasks and next projects

In order to increase the acceptance of cross-border local public transport, a number of steps are required:

> Improvements to connections in the transport services in Wissembourg and Lauterbourg are urgently needed. In order to be able to compete with private

transport, it is important to create transport services that are as seamless as possible.

> Along with improvements to the services offered, the fares (price/ticket sales/marketing) must be improved. From the customer's point of view, it would be helpful if tickets for cross-border transport could be booked for both transnational long-distance transport and, in particular, for regional cross-border rail services, such as between Neustadt/Weinstraße and Strasbourg via Lauterbourg.

> To improve customer information, the direct trains between Strasbourg–Haguenau and Neustadt/Weinstraße and in the opposite direction should also be displayed on the platforms.

> The data exchange between EFA Baden-Württemberg, VRN, Alsace and the other timetable information systems of the transport associations in the Trinational Metropolitan Region should be improved, and the timetable information should be harmonised (routes, connection times, language selection).

> To fund the high level of investment in locomotives, a funding outlook is needed: the Upper Rhine INTERREG V programme was launched at the end of 2014. Rail transport projects contribute to programme objective no. 7 ('Limiting the increase in cross-border motorised transport through the development of less polluting modes of transport in the Upper Rhine region', INTERREG V A Upper Rhine 2014: 60) and thus are in principle eligible for funding.

> An equally sensible use of these EU funds could be to support the development of railway infrastructure in the border region. For example, the Neustadt–Wissembourg route currently suffers from the disadvantage that from the French border, the speed must be reduced from 100 km/h to 80 km/h and then very quickly down to 30 km/h; this adds approximately 2 to 3 minutes to the travel time in each direction. If that could be rectified, the trilateral connection Karlsruhe–Winden–Wissembourg could be made even more stable, and the changeover connections in Wissembourg could then be improved.

> In order to improve the highly unsatisfactory connections between DB Regio and SNCF trains in Lauterbourg today, discussions are currently underway between the Commissioner for Cross-border Affairs of the State of Rhineland-Palatinate, Werner Schreiner, the ZSPNV Rhineland-Palatinate South, the Alsace region and the French railway operator, SNCF. The aim is to be able to offer direct connections for the Wörth–Strasbourg link on weekends as of December 2016. This project must be accompanied by a range of fares offered by the Karlsruhe Transport Association and the Alsace/SNCF region. This was effected in an analogous way with VRN from 1 December 2016.

All of this will only be possible if there is a firm political resolve on both sides to improve cross-border rail transport and to fund the necessary investments. It should be in the interest of all transport policy and cross-border stakeholders to use EU funds to improve cross-border rail transport throughout the Upper Rhine region (and

not only in the southern Upper Rhine region, as in the past) by programming an INTERREG V project at an early stage. The challenges in the south and north vary in substance but not in their significance for the areas concerned.

4.2 INTERREG IV A project: POS NORD (Greater Region)

The German-French INTERREG project, 'POS NORD – Optimisation of the cross-border Baudrecourt–Saarbrücken–Kaiserslautern–Mannheim section of route no. 4 of the Trans-European Transport Networks and Corridor C06 of the RailNet Europe Network', which was funded between 2011 and 2014 in the Greater Region cross-border cooperation area, involved the expansion of the high-speed public rail network between Baudrecourt on the French side and Mannheim on the German side, the POS[2]-Northern branch (INTERREG IV A Greater Region 2017). The section is part of the Atlantic TEN-T core network corridor, which extends from Mannheim/Strasbourg via Paris to Le Havre, or via Bordeaux to the western part of the Iberian Peninsula.

Trains have not yet been able to achieve full speed on the line between Paris and Frankfurt via Kaiserslautern, as the expansion provided for under the current Federal Transport Infrastructure Plan has not yet been fully implemented. There are concerns that once the southern branch via Strasbourg has been completed, the travel time between Frankfurt and Paris will be shorter than via the northern branch (cf. Fig. 1). Hence, the German and French project partners were to agree on a joint list of priorities to decide which sections in the POS NORD high-speed rail network via Karlsruhe should be prioritised for expansion. The expansion of the most important sections were then to be implemented with national funding (INTERREG IV A Greater Region).

German-French cooperation on this section of the route has been in place since 1992. In 1992, the Treaty of La Rochelle between the German Federal Minister of Transport and the French Minister for Infrastructure, Housing Development and Transport established joint development objectives for cross-border high-speed rail transport. The links between the two national rail networks were to be improved, and it was decided to jointly expand various routes, including the connection between Frankfurt (Main) and Paris. To this end, specific construction measures were defined on the German and French sides, which were to be implemented by the respective national levels (Federal Republic of Germany 1992).

In the Baudrecourt Declaration of 2009, the Moselle *département* and the federal states of Rhineland-Palatinate and Saarland took a position on the rail link between Mannheim and Paris and called on both the German and French governments and the railway companies to support it. Their statement describes the inadequate development of the northern branch and draws attention to the structural and economic disadvantage compared to the southern branch between Paris and Strasbourg. It also called for investment in rail transport to connect more than just the start and end points; instead, the expansion was also to focus on improving the connections

2 POS stands for Paris – Eastern France – Southwest Germany.

for the cities and regions along the route. The regions therefore first called on the national tiers to invest in the expansion of the route between Homburg and Kaiserslautern and between Baudrecourt and Forbach, as provided for in the La Rochelle agreement and which has not yet been implemented. The French and German railway operators are asked to align the national systems and to ensure a high-quality rail service in the long term. A cross-border marketing plan for this section of the route will also be developed. Finally, the need for good communication between the two national levels and infrastructure managers to ensure the coordinated development of the line is emphasised (Department of Moselle/Federal State of Rhineland-Palatinate/Federal State of Saarland 2009).

The aim of the collaboration is to concentrate on the competitive expansion of the northern branch of the POS network compared to the well-developed southern branch via Strasbourg (see Fig. 1). To this end, a Steering Committee called 'POS NORD Working Group' was set up, consisting of the regional and national representatives of the two countries, as well as a grouping of regional chambers of commerce and industry and national railway companies. The latter is supported by a technical working group *(SMA und Partner AG 2014a: 1 et seq.)*.

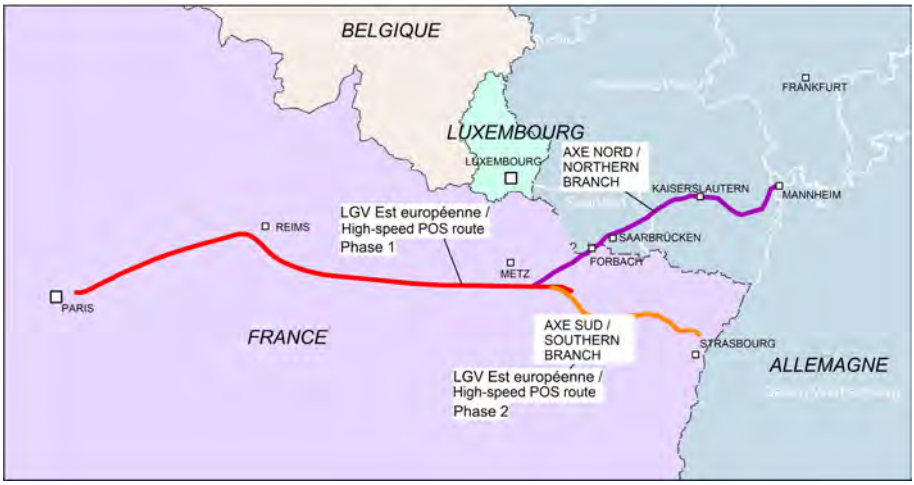


Fig. 1: Paris–Eastern France–Southwest Germany connection Southern and northern branch / Source: The authors, Kaiserslautern 2017, based on SMA und Partner AG 2014b

The Steering Committee commissioned an investigation into the possible acceleration of trains on the northern branch, which was then processed and financed as part of the INTERREG project. The aim was to ensure the long-term competitiveness of the railway link. As part of strategic planning, a timetable was drawn up, based on the objectives of the transport operators, which was then used to determine the infrastructure investment which would be needed to make these services possible. The planning process was meant to ensure that accelerated services fitted into the existing local public transport connections and would not contribute to their deterioration *(SMA und Partner AG 2014a: 1 et seq.)*.

In the course of the study, differences between the two national systems had to be taken into account. These include differences in the way connections are scheduled, whereby the 'zero symmetry' instrument[3] had to be used forcoordination. At the same time, different standards apply to the design of rail routes, such as the specification of maximum speeds *(SMA und Partner AG 2014b: 16 et seq.)*.

In the course of the study, differences between the two national systems had to be taken into account. These include differences in the way connections are scheduled, whereby the 'zero symmetry' instrument had to be used forcoordination. At the same time, different standards apply to the design of rail routes, such as the specification of maximum speeds *(SMA und Partner AG 2014b: 16 et seq.)*.

According to Eilers, if the best variant of the POS-NORD route extension identified in the process were to be implemented, the project would be of great importance for improved cross-border transport in this region, as the route would remain competitive. In addition, the planning was designed to maintain the existing local public transport system and thus ensure the accessibility of the region.[4]

From the point of view of the Rhineland-Palatinate South special purpose association for public rail transport, however, the implementation of this project was deemed to be irresponsible, since approximately €1 billion would be spent to gain a few minutes of travel time for four pairs of ICE train daily. The expenditure was deemed to be disproportionate to the gain. In addition, years of construction work would be required, which would significantly impede regional transport, as is the case with the current construction measures to increase the speed to 200 km/h in certain sections.

In the cross-border project, the EU's impact was marginal, with the exception of the financial support from INTERREG funds. Without EU financial support, the study and the project would probably not have been possible due to the high costs. The EU does not prescribe the substantive development of the INTERREG projects; the local stakeholders concerned plan the further development of the route. In the case of INTERREG projects, a status meeting is held once a year, attended by a representative of the European Commission. However, no technical coordination takes place in these meetings, but financial aspects and marketing measures are discussed as a matter of priority. The INTERREG programme secretariat in the Greater Region has also had no technical influence. Once the project application has been approved, the actual project proceeds purely on a binational level, in this case with the participants of the Steering Committee, without EU intervention on particular issues.[5]

The concentration on this cross-border section has not resulted from the fact that it is part of the Trans-European Core Network Corridors within the European transport policy; it is rather based on a much longer-standing binational agreement between France and Germany, as described above. The actual expansion of the routes is carried

3 Here, a joint symmetry strategy was created for coordination purposes in order to establish the connections.

4 Telephone interview with Wolfgang Eilers on 1 April 2015 and 22 April 2015.

5 Telephone interview with Wolfgang Eilers on 1 April 2015 and 22 April 2015.

out by the individual member states and the infrastructure managers. In Germany, decisions about infrastructure investments are made at the federal level. The federal states of Saarland and Rhineland-Palatinate have already reported that the Federal Transport Infrastructure Plan has been implemented. On the French side, however, the implementation of the planned route has not yet been registered with a corresponding programme, so it is questionable whether the project will be implemented at all in the absence of political support.[6] It is also worth noting that there are now fewer direct connections between Mannheim and Paris than before the introduction of high-speed trains. On the routes to France, the stops for both Neustadt on the Weinstraße (junction on the Rhineland-Palatinate Timetable) and Homburg/Saar were removed from the network. The city of Metz is easily accessible by train from Rhineland-Palatinate.

This cross-border transport project, which was funded by European Territorial Cooperation, shows that the EU's influence is rather minor. Financial support plays a certain role, but the EU did not mandate any elements of the substance of the project after it was approved. EU transport policy also does not play an important role, as the core network corridors have been defined on the basis of existing transport axes. Thus far, this has not produced a strong stimulus for cross-border transport.

Another example of the impact of EU policy on cross-border transport is the INTERREG IV B CODE24 project as part of the Trans-European Rhine-Alpine Corridor, described in more detail in section 4.3. The project partners want to continue their involvement after the end of the project and founded an EGTC for this purpose in 2015. In this INTERREG project, too, the EU has not exercised any substantive influence. As in all cooperation areas, the programme secretariat (in this case the INTERREG B North-West Europe Cooperation Area), which is managed by the participating member states themselves, defines the priorities in an operational programme. The priorities then serve as the criteria for the approval of the project. Although the operational programme must be examined and confirmed by the European Commission, it cannot be described as the EU's programme since it is based on the cooperation area's own needs. Accordingly, the impact of the EU on the selection and content of projects is fairly marginal.

4.3 Cross-border mobility strategy: *Schéma stratégique de mobilité transfrontalière* (SMOT)

In 2009, a cross-border mobility strategy entitled *Schéma stratégique de mobilité transfrontalière* (SMOT) was elaborated as part of a collaboration between the Lorraine region and Luxembourg. The aim of this strategy is to make cross-border transport more sustainable by increasing the use of public transport and car-sharing (Luxembourg Ministry of Sustainability and Infrastructures 2009: 36). The leading players in the elaboration of the strategy were the Regional Council of the Lorraine Region and the Luxembourg Ministry of Transport (*Ministère du Développement durable et des Infrastructures du Grand Duché de Luxembourg* [Luxembourg Ministry of Sustainability and Infrastructures] 2009: 1).

6 Telephone interview with Wolfgang Eilers on 1 April 2015 and 22 April 2015.

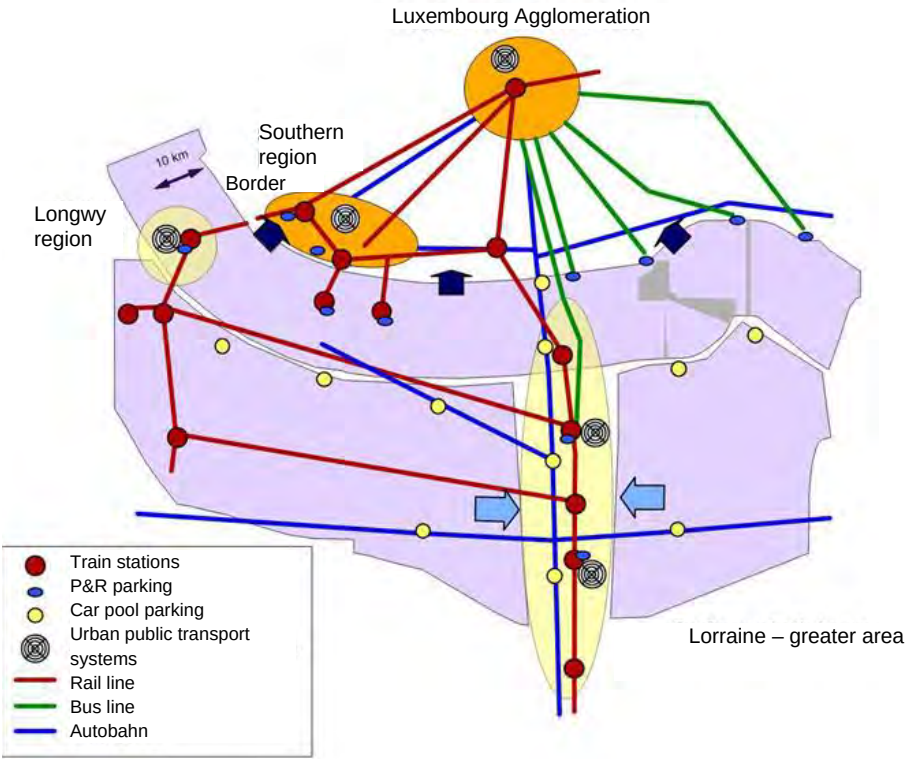


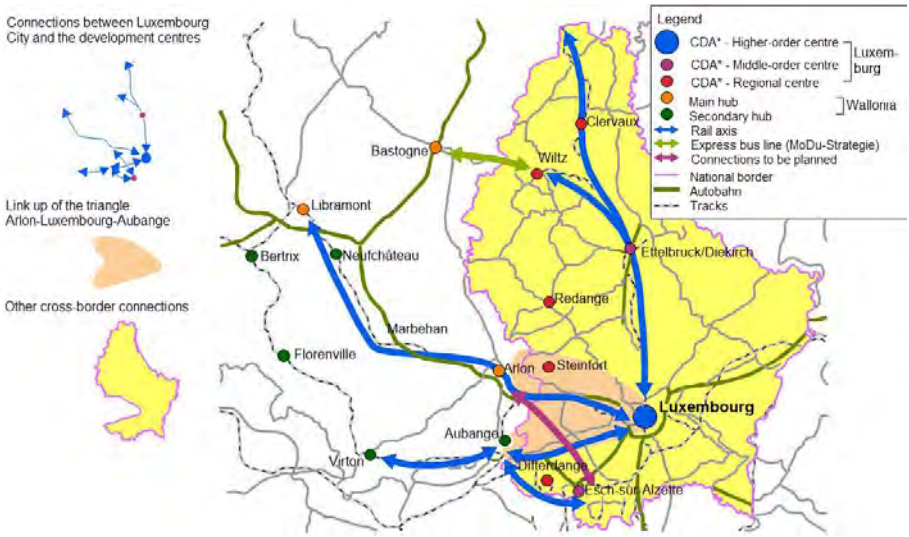
Fig. 2: Excerpt from the Luxembourg-Lorraine SMOT strategy / Source: The authors, Kaiserslautern 2017, based on the Ministry of Sustainable Development and Infrastructures of the Grand-Duchy of Luxembourg 2009.

This collaboration was conceived in view of the large number of people commuting from Lorraine to Luxembourg: in 2007, 65,000 residents of Lorraine commuted daily to their workplace in Luxembourg, with an increasing trend. 84% of these commuters use their own car for the journey – or at least for most of it. Just under 16% of commuters use public transport to get to work due to poor connections and uncoordinated timetables. The high volume of commuter traffic increases congestion on the roads (Government of the Grand-Duchy of Luxembourg 2009: 10, 27 et seq.).

The SMOT strategy defines joint action strategies for cross-border mobility and concrete actions which are to be implemented. Among other things, a time-based ticket has been introduced for the entire regional public transport system in Lorraine. It is also planned to set up one joint or two compatible ticketing systems between Lorraine and Luxembourg. In order to enhance the appeal of public transport, the frequency of cross-border train connections is also to be increased and new lines are to be established. In addition, a website is to be launched to improve the coordination of car-sharing between Lorraine and Luxembourg, and park-and-ride carparks are to be created. Other objectives with longer time horizons are the purchase of new train components, a further increase in railway capacity, the creation of new stops and

parking spaces in more peripheral areas, and the use of new cross-border bus routes to complement train connections and ensure that peripheral regions are linked to the network. Public transport is to be expanded in a structured manner to enable it to compete with private motor vehicle transport and to minimise pollution (Government of the Grand-Duchy of Luxembourg 2009). The link between these measures is shown schematically in Figure 2.

Two other SMOT strategies are now on the list: between Luxembourg and Wallonia, and between Saarland, Rhineland-Palatinate and Luxembourg. The aim is to develop strategies for the further development of cross-border public transport and to implement joint objectives (Saarland Federal State Parliament *[Landtag des Saarlandes]* 2014: 3).



CDA stands for Centre de développement et d'attraction (Centre for Development and Attraction).

Fig. 3: Excerpt from the Luxembourg-Wallonia SMOT strategy: Visualisation of the challenges / Source: The authors, Kaiserslautern 2017, based on Portail Wallonie 2015.

In Belgium, the decision to create a SMOT strategy was taken at the beginning of 2013 (Ministry of Sustainable Development and Infrastructures of the Grand-Duchy of Luxembourg 2013); it was completed in mid-2015. In both cases, the SMOT also aims to address the increased and projected further increase of the number of commuters between countries and to promote sustainable transport development based on collective passenger transport. Figure 3 shows the main challenges in cross-border transport between Luxembourg and Wallonia, for which different measures need to be taken. These measures have been bundled into a catalogue and will in future be implemented in action packages by the regions and coordinated across borders (*Portail Wallonie* 2015). These SMOT strategies were not developed with EU support, but on the basis of the bilateral political interests of representatives of the border regions or the states concerned.

The conclusion critically reflects on the planning of cross-border transport at European level and contrasts the advantages and disadvantages.

5 Conclusions: Steering cross-border transport at the European level – Challenges and opportunities

Looking at the various cross-border transport projects, it is clear that transport development and demand are strongly linked to other issues of cross-border cooperation. There is a strong connection, for example, between the cross-border labour market (see the paper by Patrice Harster and Frédéric Siebenhaar in this volume) and commuters (see the paper by Christian Wille and Ursula Roos in this volume). This is particularly clear in the creation of the SMOT: in order to achieve sustainable, environmentally friendly cross-border mobility, public transport needs to be expanded, especially in busy border infrastructures. A good cross-border connection for providing public services is also an advantage, especially in relation to local services (see the paper by Kirsten Mangels and Julia Wohland in this volume). There is also a link with tourism (see the paper by Franz Schafranski in this volume); the rail lines between Palatinate and Alsace, for example, offer special excursion services on weekends. Such transport services linked to tourist destinations can ensure the continuity and development of cross-border mobility. Transport infrastructure therefore acts, so to speak, as a cross-border link between different action areas and is thus of great importance.

At the EU level, cross-border transport holds an important position: in the cohesion policy and transport policy, it has been repeatedly pointed out for years that cross-border transport needs to be developed and promoted. Money will be made available for this purpose. The funding guidelines for the Trans-European Transport Networks and European Territorial Cooperation make it possible to promote cross-border transport projects in the current funding period. The TEN-T funds give priority to supporting cross-border areas of the core network, and the ETC can also support border projects at a lower level. However, the EU documents remain relatively vague and leave it to the member states to decide which projects and priorities are ultimately chosen. The regulations thus have little reach and there is hardly any concrete governance at EU level.

However, it might be useful to manage cross-border transport at a higher level in order to ensure the transition of infrastructures between cooperation areas and to adopt some basic rules. At the EU level, it is also possible, at least in theory, to coordinate the various EU policies, but implementation at lower levels of administration is not assured. It would therefore be useful to establish a monitoring and evaluation procedure at EU level to review progress in the development of cross-border transport, as well as the implementation of EU policy documents and their coordination. However, a real review would be difficult because the assessment would probably be based on descriptions in project reports and not on the reality in the border area.

Apart from establishing the basic requirements and funding, the EU level has little impact on INTERREG projects. There are no concrete specifications for project content. This aspect is negotiated solely by the member states in the respective operational programmes, although they are based on the loose EU requirements. However, funding is a crucial issue in cross-border transport, as the examples described in this paper show. Without EU support, the implementation of projects is usually not guaranteed. In addition to the promotion of the road and rail network, there is a strong need for action in the area of cross-border public transport, which could be given greater support by the EU. The example of the SMOT shows that projects can also work without EU funds. However, it must be noted that the SMOT is merely a plan that formulates joint objectives – there is no guarantee that the objectives will eventually be implemented. At the very least, bilateral agreement on certain priorities is an important start and demonstrates strong political will. The INTERREG project POS NORD has relied on EU funds to draw up the plan, but the implementation is still uncertain on both sides of the border. This shows that political will is a crucial factor in the development of cross-border transport alongside the availability of financial resources. Depending on the national administrative structure, the member states or regional and local institutions or a combination of these stakeholders decide on the implementation of cross-border transport projects, which does not make it any easier to coordinate the plans across borders. Through their policies, the EU institutions are trying to reconcile and combine the interests and objectives of the member states and the European regions, and thus to connect transport infrastructures – which is no easy task.

References

BMVBS – German Federal Ministry of Transport, Construction and Urban Development (Ed.) (2011): Metropolitane Grenzregionen. Final Report of the Model Project on Spatial Planning (MORO) 'Überregionale Partnerschaften in grenzüberschreitenden Verflechtungsräumen'. Berlin.

Federal Republic of Germany (Ed.) (1992): Bekanntmachung der Vereinbarung zwischen dem Bundesminister für Verkehr der Bundesrepublik Deutschland und dem Minister für Verkehr der Französischen Republik über die Schnellbahnverbindung Paris-Ostfrankreich-Südwestdeutschland vom 2. Oktober 1992. Bonn.

Caesar, B. (2015): The Impact of European Territorial Cooperation and Trans-European Transport Network Policies on Cross-Border Transport. Conference Proceedings of the AESOP-Annual Congress 2015. Prague.

CONPASS Consortium (Ed.) (2002): Toolbox on Cross-border Public Transport: Concepts, ideas and support for improvements.
http://docplayer.net/1248386-Cross-border-public-transport-14-aachen-bushof-toolbox-concepts-ideas-and-support-for-improvements-june-2002.html (16 April 2021).

Department of Moselle; Federal State of Rhineland-Palatinate; Federal State of Saarland (Eds.) (2009): Erklärung von Baudrecourt am 20. April 2009 in Baudrecourt. Baudrecourt.

ESPON – European Spatial Planning Observation Network (Ed.) (2004): ESPON 2.1.1: Territorial Impact of EU Transport and TEN Policies.
http://www.espon.eu/export/sites/default/Documents/Projects/ESPON2006Projects/PolicyImpactProjects/TransportPolicyImpact/fr-2.1.1_revised.pdf (06 September 2014).

European Commission (Ed.) (1988): Proposal for a Council Regulation for an Action Programme in the Field of Transport Infrastructure with a View to the Completion of an Integrated Transport Market in 1992. Brussels.

European Commission (Ed.) (2010): Europe 2020: A strategy for smart, sustainable and inclusive growth: Communication from the Commission. Luxembourg.

European Commission (Ed.) (2011a): Communication from the Commission to the European Palament, the Council, the European Court of Justice, the Court of Auditors, the European Investment Bank, the European Economic and Social Committee and to the Committee of Regions – A growth package for integrated European infrastructures. Brussels.
European Commission (Ed.) (2011b): White Paper – Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system. Brussels.
European Commission (Ed.) (2014a): A new Cohesion Policy for jobs and growth in Europe. http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/general/general_en.pdf (24 March 2017).
European Commission (Ed.) (2014b): Communication from the Commission Building the Transport Core Network: Core Network Corridors and Connecting Europe Facility. Brussels.
European Commission (Ed.) (2014c): Horizon 2020 – The EU Framework Programme for Research and Innovation: Smart, Green and Integrated Transport. http://ec.europa.eu/programmes/horizon2020/en/h2020-section/smart-green-and-integrated-transport (09 September 2014).
European Commission (Ed.) (2017): The European Single Market. https://ec.europa.eu/growth/single-market_en (24 March 2017).
Grauvogel, B. (2015): Grenzregionen – Innovatoren für die Regionalentwicklung? Discussion at the Planners' Forum of the ARL Regional Working Group Hesse, Rhineland-Palatinate, Saarland. 9 October 2015. Mannheim.
Giorgi, L.; Pohoryles, R. J.; Freudensprung, P.; Olivier-Trigalo, M.; Rui, S.; Risser, R.; Adam, B.; Brown, M.; Milner, S.; Jansen, G. D.; Schulte, U.; Grüner, J. (1999): Final Report Tenassess: Policy Assessment of Ten and Common Transport Policy. Project funded by the European Commission under the transport RTD Programme of the 4th Framework Programme. Vienna.
Informal Council of Ministers responsible for Spatial Planning (1999): EUREK – Europäisches Raumentwicklungskonzept – Auf dem Wege zu einer räumlich ausgewogenen und nachhaltigen Entwicklung der Europäischen Union. Luxembourg.
Informal Council of Ministers responsible for Spatial Planning (2007): Territoriale Agenda der Europäischen Union 2020. Leipzig.
Informal Council of Ministers responsible for Spatial Planning (2011): Territorial Agenda of the European Union 2020. Gödöllő.
INTERREG IV A Greater Region (Ed.) (2017): INTERREG IV A Großregion: POS NORD. http://www.interreg-4agr.eu/admin/upload/pdf/projet-51-cwfagl408.pdf (24 March 2017).
INTERREG V A Upper Rhine (Ed.) (2014): Operationelles Programm – (Frankreich – Deutschland – Schweiz). Approved Version of 5 December 2014. http://www.regbas.ch/de/assets/File/downloads/OP_INTERREG_Oberrhein_2014-2020.pdf (15 August 2017).
Jann, W.; Wegrich, K. (2003): Phasenmodelle und Politikprozesse: Der Policy Cycle. In: Schuber, K.; Bandelow, N. C. (Eds.): Lehrbuch der Politikfeldanalyse. Oldenbourg, 75-103.
Commission of the European Communities (Ed.) (1993): Trans-European Networks – Towards a Master Plan for the Road Network and Road Traffic. Luxembourg.
Saarland Federal State Parliament (Ed.) (2014): Antwort zu der Anfrage des Abgeordneten Hubert Ulrich (B90/Grüne) betr.: Mobilitätskonzept für das Saarland und die Region. Document 15/808. Saarbrücken.
Ministry of Sustainable Development and Infrastructures of the Grand-Duchy of Luxembourg (Ed.) (2009): Schéma stratégique de la Mobilité Transfrontalière Lorraine-Luxembourg, Phase 2: nouvelles orientations à court, moyen et long terme. http://www.mt.public.lu/presse/actualite/2009/01/08_SMOT/pdf_SMOT_phase_2.pdf (25 February 2016).
Ministry of Sustainable Development and Infrastructures of the Grand-Duchy of Luxembourg (Ed.) (2013): Signature du protocole d'accord d'un Schéma stratégique de mobilité transfrontalière (SMOT) entre le Luxembourg et la Wallonie. http://www.mt.public.lu/presse/communiques/2013/01/22_smot/index.html (25 February 2016).
Luxembourgian Ministry of Sustainable Development and Infrastructures (2009): Schéma Stratégique de Mobilité Transfrontalière Luxembourg-Lorraine. http://www.mt.public.lu/presse/actualite/2009/01/08_SMOT/ (28 May 2015).
Monti, M. (2010): A new Strategy for the Single Market – At the Service of Europe's Economy and Society: Report to the President of the European Commission José Manuel Barroso. Brussels.

Peter, C. (2015): Grenzregionen – Innovatoren für die Regionalentwicklung? Discussion at the Planners' Forum of the ARL Regional Working Group Hesse, Rhineland-Palatinate, Saarland. 9 October 2015. Mannheim.
Portail Wallonie (2015): Schéma stratégique de mobilité transfrontalière Luxembourg – Wallonie. Final Dossier.
http://mobilite.wallonie.be/files/Outils/Plans%20de%20mobilit%C3%A9/transfrontalier/smot/SMOT_20150615_Dossier%20final.pdf (25 February 2016).
Government of the Grand-Duchy of Luxembourg (Ed.) (2009): SMOT – un nouveau schéma stratégique de mobilité transfrontalière qui facilite la mobilité des frontaliers entre la Lorraine et le Luxembourg.
http://www.gouvernement.lu/743066/08-lux-smot (28 May 2015).
Ruete, M. (2010): Mission of the Directorate-General for Mobility and Transport.
http://ec.europa.eu/dgs/transport/doc/2010_05_move_mission_statements.pdf (14 May 2014).
Schreiner, W. (2015): Grenzregionen – Innovatoren für die Regionalentwicklung? Discussion at the Planners' Forum of the ARL Regional Working Group Hesse, Rhineland-Palatinate, Saarland. 9 October 2015. Mannheim.
SMA und Partner AG (Ed.) (2014a): Angebots- und Infrastrukturstudie zur Verbesserung des Angebots im Korridor Mannheim – Saarbrücken – Baudrecourt (POS Nord). Summary. Zurich.
SMA und Partner AG (2014b): Angebots- und Infrastrukturstudie zur Verbesserung des Angebots im Korridor Mannheim – Saarbrücken – Baudrecourt (POS Nord). Final Report. Zurich.
Spierings, B.; van der Velde, M. (2013): Cross-Border Mobility, Unfamilarity and Development Policy in Europe. In: European Planning Studies 21 (1), 1-4.

The authors

Dipl.-Ing. Beate Caesar (*b. 1987*) *is a researcher in the field of International Planning Systems in the Department of Spatial and Environmental Planning at the TU Kaiserslautern. In 2018 she obtained her PhD with her thesis on 'The Influence of Trans-European Transport Networks and European Territorial Cooperation on Cross-Border Transport". Her research interests include Cross-border spatial planning, transport and planning culture. She is a member of the Hesse/Rhineland-Palatinate/Saarland Regional Working Group as well as of the 'Junges Forum' (forum for young professionals) of the ARL and the UniGR Center for Border Studies.*

Michael Heilmann (*b. 1970*) *is the Director of the Special Purpose Association for Local Public Transport in Rhineland-Palatinate South, Kaiserslautern.*

Dipl.-Geogr. Jörg Saalbach (*b. 1953*) *is the Director of the Interregional Alliance for the Rhine-Alpine Corridor EGTC. He is an expert on European and cross-border issues at the Rhine-Neckar regional association in Mannheim (Verband Region Rhein-Neckar, Mannheim).*

Werner Schreiner (*b. 1947*) *is the Minister-President's Commissioner for Cross-border Cooperation of the Federal State of Rhineland-Palatinate and long-time Chairman of the Committee of Experts on Public Transport for the Transport Working Group of the Upper Rhine Transport Conference.*