



CONNECT2CE

Pilot Action No. 4

Cross Border Public Service Obligation (PSO)

Executive Summary

Ungarn - Südburgenland - Graz

Version 1

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PP9 - Regional Management Burgenland





1. Introduction

As part of the CONNECT2CE project, 13 project partners are working to further develop cross-border public transport accessibility. The main goal of the project is to improve the public transport planning capacities of the responsible institutions, especially with regard to the accessibility of rural and cross-border areas to agglomerations where TEN-T transport hubs are located. In order to achieve this, a predefined pilot action has to be implemented by each of the 13 project partners. This project report describes Pilot Action No. 4, for which the Regional Management Burgenland GmbH is responsible. The content of Pilot Action No. 4 is the development of a public service obligation (PSO) or a transport service contract for cross-border bus traffic between Austria and Hungary (AT-HU).

Burgenland, together with Vienna, Bratislava, western Hungary and Styria, is part of a cross-border, functional region. The so-called SETA corridor (South-East-Transport-Axis) runs from north to south through the region and represents the backbone of public transport. As part of Pilot Action No.4, two new bus routes are being developed in order to strengthen the SETA corridor; this development is embedded in the strategic overall development concept for the further development of public transport in the Burgenland-West-Hungary region. The new bus lines will connect the city of Graz with the SETA corridor (Körmend and Szombathely) via the local centres of Southern Burgenland (Oberwart and Güssing). The following layouts are planned:

- 1. Graz Oberwart Szombathely (HU)
- 2. Graz Fürstenfeld Güssing Körmend (HU)

After clarification of the legal framework, a status analysis of existing traffic and commuter flows within the project area was carried out. Based on this, requirements for a suitable bus connection, including a potential estimate of the short, medium, and long-term expected passengers was defined. The passenger potential analysis is based on empirical values of an existing bus line from Southern Burgenland to Vienna (line G1), among other things. Subsequently, a feasibility study was conducted on a comparable system between the districts of Oberwart, Güssing and Jennersdorf, as well as the adjacent Hungarian region and Graz. Finally, an operational and financing concept was developed in close coordination with the relevant regional and sectoral stakeholders and is ready for implementation.

2. Framework, status analysis, potential estimation

As far as the legal framework is concerned, Regulation (EC) No 1370/2007 of the European Parliament and of the Council on public passenger transport services by rail and by road, also known as the PSO Regulation, is of particular relevance to this project. Based on this regulation or its national implementation, there is a European financing and remuneration system - Public Service Obligation (PSO) or Public Service Contract (PSC) - which, in a transparent, comparable and competitive way, regulates the services that are very important to the public interest despite the losses they incur. Three transnational tools help to implement the regulation of cross-border mobility projects. They concern the harmonization of timetables, multimodal integrated ticketing and tariff systems and passenger information systems.



There was a discussion between representatives of GySEV, CTI and the Ministry of Innovation and Technology regarding the importance of these transnational tools for the project, where some points concerning possible promoter, reconciliation of the schedule, and uniform tariff system could be clarified. As far as the latter is concerned, a possible introduction of an electronic ticket system and a corridor solution are envisaged.

The status analysis of existing traffic and commuter flows within the project area revealed that there are large regional disparities in the commuter balance in Southern Burgenland, in addition to a generally clear urban-rural divide in the project area. Especially in the southernmost districts of Burgenland, it shows that only the district capitals as well as Stegersbach and Pinkafeld are inbound commuter communities. All other communities are outbound commuter communities, and the further south a community is, the more the number of workers exceeds the number of jobs. Of the three districts of Southern Burgenland (Oberwart, Güssing and Jennersdorf), Oberwart in particular has many outbound commuters who work in Vienna. In general, many commuters from Southern Burgenland travel long distances to their workplace. In the case of the inbound commuters, however, a much smaller catchment area is usually recognizable. As far as the commuters from Southern Burgenland to Graz are concerned, most of them come from the district of Jennersdorf. Cross-border commuter flows have seen a large increase in commuters from Hungary to Southern Burgenland in recent years. The majority of this is attributable to the district of Oberwart and in particular, the district capital. Oberwart also has the largest number of training commuters whose training center is located in another federal state. The leader in training commuters to Graz (namely 48% of training commuters), however, is the district Jennersdorf.

The analysis of the existing transport offered showed that on the route between Oberwart and Graz via Hartberg, there are already suitable commuter connections including some express bus lines, especially for the section between Hartberg and Graz. Between Güssing and Graz (via Fürstenfeld and Stegersbach, respectively) the travel time for commuters by bus is still around two hours, which is why the existing lines are currently underused. From Jennersdorf to Graz via Fehring, on the other hand, there is a highly functional railway connection - between Graz and Fehring, the line is served by the Styrian S-Bahn line S3, which has had very strong growth since its introduction. There is also a cross-border rail connection to Szentgotthárd via the S3 line, from which there are also connections to Hungarian trains. Thus, the Styrian Eastern Railway and the GYSEV on the Hungarian side already offer a connection between Graz and Szombathely via Jennersdorf, Szentgotthárd and Körmend. However, cross-border bus connections are only available for school traffic.

When estimating the passenger potential, the first step was to build on the existing data for the G1 line between Southern Burgenland and Vienna. This bus line offers a wide range of public transport with up to 23 pairs of coaches. The G1 line is used by many Southern Burgenlanders due to the numerous courses tailored to the commuters, the high quality of service of the busses, the fast connections via the motorway and the terminus in the center of Vienna. The evaluation of the available data, taking into account the modal split of the commuter trips, results in a public transport share of 15% between Vienna and Southern Burgenland for this route.

Based on a cross-border public transport concept (part of the cross-border mobility project for the region Burgenland - Western Hungary "GreMo-Pannonia", Transport & Media Consulting, 2012), which calculated for Burgenland that 17 % of all professional journeys were made by public transport, a potential public transport share of 17 % in the project area is also targeted for this project.



In order to be able to quantify the passenger potential in the project area in more detail, the commuter flows were mainly displayed along two axes:

- Axis 1: Szombathely Oberwart Hartberg Graz
- Axis 2: Körmend Güssing Fürstenfeld Graz

Approximately 1,800 people from Hungary currently commute to work in the Oberwart district along axis 1. Assuming a public transport potential of about 17% in daily commuter traffic, up to 300 of these commuters from the Hungarian border region could use an effective bus service. Along the axis Oberwart - Szombathely the public transport potential is approx. 110 to 120 persons. From Oberwart to Styria, there is a high passenger potential, especially on the route to Hartberg. With an assumed public transport potential of 17%, the result is a public transport potential of 70 passengers to Hartberg and about 50 passengers to Graz. Starting from Hartberg or Hartberg Umgebung, both the passenger potential in the direction of Graz and that to the east, in the district of Oberwart, are of interest. This shows that the city of Hartberg is much more attractive to inbound commuters from Oberwart than vice versa. The number of commuters - and thus the public transport potential in the direction of Graz - is comparable with the estimates from Oberwart with approx. 50-55 persons.

On Axis 2, about 713 people from Hungary currently commute to the Güssing district. Passenger potential in commuter traffic on the Körmend - Güssing section is therefore around 30 people, assuming a public transport share of 17%. About the same number of people, namely about 250, commute from the district of Güssing to Fürstenfeld and Graz respectively, whereby a high proportion of the commuters to Fürstenfeld comes mainly from the nearby communities of Kukmirn and Burgauberg-Neudauberg. This area should be served by means of small-scale public transport systems instead. In the direction of Graz, the Güssing district has a public transport potential of approx. 50 people. Starting from Fürstenfeld, the passenger potential in the direction of Graz (about 79 persons) must especially be taken into account.

3. Feasibility study

After completing the assessment of demand, the next step was the preparation of possible timetables. As the analysis showed, the existing route guidance is quite good within Austria, but there is a lack of cross-border connections. Therefore, the timetable development optimizes the existing offer and supplements the necessary extensions of the existing lines with the cross-border aspect. Cost estimates were also made for all axes and variants. The calculation of the costs was based on the expected kilometers to be traveled based on the expanded timetables. Depending on the annual operating days and a price of \leqslant 3.00 per kilometer, this results in the anticipated costs per year.

3.1. Axis 1: Timetabling, cost estimate and financing

For each axis, several variants were developed. The target variant for Axis 1 was designed in a meeting between representatives of the Styrian Transport Association (Verkehrsverbund Steiermark) and the federal state of Styria as well as representatives of the state of Burgenland. It envisages that the route be-



tween Hartberg and Gleisdorf in Styria will continue along the B 54 and not the motorway, but the number of stops served will be significantly reduced and limited to the two park-and-ride facilities in Kaindorf and Großpesendorf. This will significantly accelerate the route compared to the existing connection while maintaining a good operating quality for Styrian commuters. There are also improvements for cross-border traffic and commuters from Southern Burgenland: not only are Szombathely and Oberwart connected at hourly intervals during peak hours, but thanks to a loop and an additional city line, the town of Oberwart is also served by public transport.

Essentially, this variant provides three express buses between Oberwart, Hartberg and Graz in the morning and evening peak hours. A max. travel time of 90 minutes and commuter-friendly arrival times in Graz between 6:30 and 8:00 were defined. On the basis of the aforementioned objectives (course guidance via B 54, stops in Hartberg and P & R facilities) there are three express courses in both the morning and evening peak hours (departing at 5:00, 6:00 and 6:30 from Oberwart). The return trips from Graz take place in the evening peak hours at 15:30, 16:30, 17:30 and 19:00 (to Hartberg). Due to the noted brisk (commuter) traffic between Oberwart and Hartberg, it is proposed to supplement the express lines with existing line 310 and to operate this as a shuttle line between these two cities throughout the day.

In view of the fact that there is no meaningful data on existing commuter flows between Hungary and Graz, the development of the connection to Hungary focused on an effective link between Szombathely and Oberwart. There is a connection to Graz scheduled as a transfer connection with the express bus. The estimated driving time of this connection is 2h 20 min. In contrast, there is already the possibility of a rail connection between Szombathely and Graz in 2h 47min with a 22 minutes stay in Szentgotthárd. From a planning point of view, therefore, an acceleration of the Graz - Szombathely railway line should be preferred as the future public transport axis between these two cities.

According to the objectives of the transnational tools, the timetable development took into account both the future timetable concept at Szombathely station (interval knot at minute '30) and the existing bus line along which a future cross-border line could be run without additional concessions. The line 6690 - operated by the bus company ÈNYKK Zrt. - runs a tight schedule between the bus station Szombathely and the municipality Bucsu, directly on the Austro-Hungarian border.

A counter-current city bus line could supplement the timetable, which also accesses the most important destinations in the municipality of Oberwart. As a result, a combined urban and regional transport for the greater area Oberwart - Szombathely with connection to the express bus line Oberwart - Hartberg - Graz could be created with relatively little effort.

As regards the operating and financing concept of this coordinated variant, it is envisioned that in the course of the re-tendering of the VOR and the Styrian Transport Association (Steirischer Verkehrsverbund) new express courses between Hartberg and Graz on the B 54 should be commissioned and that the frequency of the existing line 310 between Hartberg and Oberwart should be increased to fixed intervals. In addition, as part of a cross-border PSO, a scheduled route between Oberwart and Szombathely is to be established on the basis of the existing lines 7910 (Südburg) and 6690 (ÉNYKK Zrt.). The cost statement is based on the kilometer costs estimated for Austria. The commission should take place until the establishment of a cross-border transport network by the VOR and be offset to the responsible Hungarian authority.



The operation of this variant costs an assumed kilometer rate of \in 3.00 and a daily operation rate between Monday and Friday (during work days) of \in 1,590,000 annually, of which the share for the municipality Oberwart would be \in 60,000.

Based on the assumption that the costs for bus services in Austria and Hungary are borne only by the respective local authority, a cost key based on the mileage in the two countries was calculated for the Szombathely - Oberwart connection. According to this, the costs incurred in Austria amount to about €390,000 per year and those incurred in Hungary to about €240,000. It should be mentioned that the planned connection on the Hungarian side is essentially integrated into the already existing traffic of the line 6690, whereby the described sum for Hungary would represent minimal additional costs.

On the route Oberwart - Hartberg a higher utility value for Burgenland was assumed for the additional bus services on the basis of the mutual commuter relations between the districts Oberwart and Hartberg. Accordingly, the total annual cost of approximately € 345,000 for this section could be divided between the two federal states in a ratio of 40% (Styria) to 60% (Burgenland).

For the section Hartberg - Graz a utility ratio of 60:40 in favor of the province of Styria is assumed compared to Burgenland. On the one hand, this is justified by the fact that considerably more commuters from Styria use the new bus offerings, while on the other hand there is already an extensive array of bus services for Styrian commuters from the region; the current planning primarily represents an effective planned route for commuters from Burgenland.

3.2. Axis 2: Timetabling, cost estimate and financing

For the target variant of the second axis, the following parameters have been taken into account for the preparation of the timetable: on the route Güssing - Fürstenfeld - Graz there should be three connections at morning rush hour with arrivals in Graz at 6:30, 7:30 and 8:00. The travel time between Güssing and Graz should be about 90 minutes and about 55 minutes between Fürstenfeld and Graz. The bus route runs from Güssing via Heiligenkreuz and Rudersdorf to the planned P & R facility Fürstenfeld Interspar. From there, the bus continues on the A 2 from the interchange Ilz. In addition, there will be three evening connections between 16:30 and 18:30 on the Graz - Fürstenfeld - Güssing line. Furthermore, a regional bus connection between Körmend - Güssing - Fürstenfeld is being developped with a total of 13 connections (both directions). At Körmend station, an interval knot is set up at minute '00. Therefore, the arrival of the busses should take place at approx. minute '55 and the departure between the minutes '05 and '10.

The coordinated version stipulates that in the course of the re-tendering of the VOR and the Styrian Transport Association (Steirischer Verkehrsbund), new express courses between Fürstenfeld and Graz via the A 2 (junction Ilz) should be commissioned and that frequency of the existing regional busses between Fürstenfeld and Güssing over Heiligenkreuz should be increased to a regular interval timetable. In addition, the regional bus line between Fürstenfeld and Güssing is to be extended via Heiligenkreuz to Körmend as part of a cross-border PSO. For this purpose, both on the Austrian and on the Hungarian side, the issue of a motorized vehicle license by the authority is required. The arrangement could take place until the establishment of a cross-border transport network by the VOR and the cost could be shared with



the responsible Hungarian authority. The cost statement is based on the kilometer costs estimated for Austria.

The operation of this variant costs € 958,875 per annum, with an assumed kilometer rate of € 3.00 with daily operation between Monday and Friday (during working days), divided into the participating countries or transport associations.

In accordance with the procedure for Axis 1, bus services in Austria and Hungary are only allocated to the respective local authority, resulting in an annual cost of approximately \in 166,500.00 for the Körmend - Güssing connection to Burgenland and approximately \in 213,000.00 for Hungary.

For the connection Güssing - Fürstenfeld, a significant overflow of persons commuting towards Styria was ascertained for the additional bus services on the basis of the mutual commuter relations between the districts Güssing and Fürstenfeld; therefore, a higher utility value was assumed for Burgenland. Accordingly, the total annual cost of approximately € 521,400 for this section could be divided between the two federal states in a ratio of 90% (Burgenland) to 10% (Styria).

For the section Fürstenfeld - Graz, an equivalent utility ratio of 50:50 between the two federal states is assumed. This can be explained on the one hand by the relatively small number of commuters from Burgenland who can claim these benefits, compared to commuters from Styria. On the other hand, the system brings a clear additional benefit to the current bus service for those commuters from Styria who live in the greater Fürstenfeld area and who currently reach Graz faster from the Ilz interchange via the motorway.