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WORK PACKAGE 2

VISION CO-CREATION BASED ON TRANSNATIONAL COOPERATION

DELIVERABLE D2.4.3: Regional / local action plan of Brda / Nova Goriza (SI)

Version1
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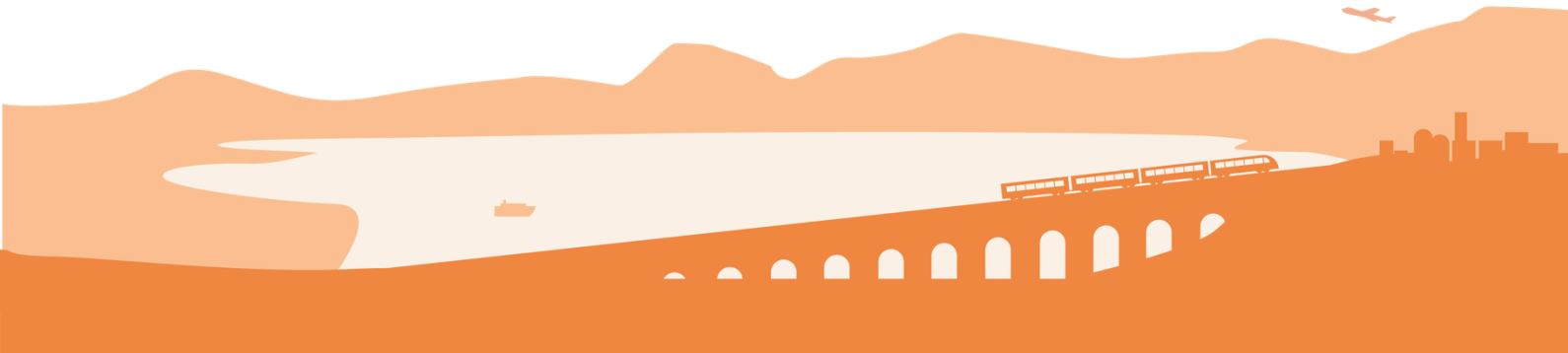

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1. DELIVERABLE 2.4.3 overview

PROJECT TITLE	streNgthening pUblic TranSport to enHance accEssibility in ruraL centraL Europe
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2. DELIVERABLE 2.4.3 description

Deliverable 2.4.3 describes the Action Plan for Brda / Nova Goriza with an extended introduction on the background, the vision and strategy.

3. DELIVERABLE 2.4.3: Regional / local action plan of Brda / Nova Goriza (SI)

Background

Area **of Goriška Brda and Nova Gorica** represents a functionally connected cross-border area between Slovenia and Italy, where mobility presents a key development challenge. Nova Gorica and Gorica form a common cross-border urban area, while Goriška Brda represents the countryside, as an important tourist, cultural, and agricultural hinterland for this area.

Nova Gorica acts as:

- an urban and employment center,
- a transport hub with railway and bus infrastructure.

Goriška Brda, on the other hand, represents:

- a tourist wine region,
- the rural hinterland of the city.

Mobility in this area is crucial for:

- daily migrations (work, school, services),
- tourist flows between Brda and the city,
- cross-border cooperation.

Mobility between the two areas today is heavily dependent on cars, as more than 90% of residents use their own car..

Despite the high degree of cross-border integration, significant challenges remain:

- poor connectivity of rural areas with urban transport hubs,
- high dependence on private cars,
- limited sustainable mobility options for tourists and residents.

The development of sustainable mobility in the region is taking place in the context of broader cross-border initiatives, especially within the framework of cooperation between Slovenian and Italian partners and EZTS GO / GECT GO, which connects two Slovenian and one Italian municipality.

This document presents a common vision for the development of sustainable mobility, based on connecting the countryside with the city, mobility strategies for the cross-border area, results from stakeholder workshops and pilot projects for sustainable mobility.

Public mobility in the Nova Gorica – Brda, Gorica – Collio, and Brda - Collio areas

On the Slovenian side, public transport in Brda is primarily based on **regional bus lines**, which connect larger settlements, such as Dobrovo and Šmartno, with the urban center of **Nova Gorica**, which represents the main transport hub in the region. From there, railway and bus connections are available to other Slovenian cities. However, the frequency of bus lines is relatively low, especially outside of peak hours and the tourist season.

On the Italian side, the Collio area is mainly connected via the cities of **Gorizia and Cormòns**, where regional bus lines and railway connections operate. Here too, public transport is primarily adapted to the daily migrations of the population and not necessarily to cross-border tourist or recreational travel.

Direct cross-border public transport connections between Brda and Collio are limited or practically non-existent. Passengers wishing to travel between the two areas by public transport usually have to change in **Nova Gorica - Gorizia**, which is the nearest cross-border urban zone with more developed transport infrastructure. As a result, journeys are often longer and less practical.

A marked cycling connection has been established between Brda and Nova Gorica via Italy: Dobrovo – Mossa – Gorizia – Nova Gorica.

Furthermore, scattered settlement, hilly terrain, and low population density further complicate the organization of regular cross-border lines. Consequently, most residents and tourists use **a personal car or bicycle**, especially when visiting wine routes, tourist attractions, and recreational paths.

Occasionally, **seasonal or tourist services**, such as shuttle services or organized bus tours, but these do not represent a permanent solution for daily mobility. Therefore, improving cross-border connectivity with public transport remains an important development challenge for both regions, especially in the context of sustainable mobility, tourism, and cross-border cooperation.

Between Goriška Brda (Slovenia) and Collio (Italy, Friuli – Venezia Giulia) , there are several local road crossings, as the area represents an open cross-border wine-growing landscape. After Slovenia joined the Schengen Area, these crossingsi no longer haveborder controls, but they still function as important local transport connections between villages on both sides of the border. These crossings are oftgreat importance in the context of connecting Brda (SLO) – Collio (I).

Main road crossings between Goriška Brda and Collio

- The crossings are predominantly local roads, connecting vineyards, villages, and tourist routes.
- A large part of the traffic consists of **tourists (wine, gastronomy, cycling)** and **local residents**.
- Public transport between these crossings hardly exists, so most cross-border journeys are made by car or bicycle.
- Due to the open border, Brda and Collio are functionally almost a single cross-border tourist region.

Crossings between Goriška Brda and Collio (central part of the border)

These crossings connect wine-growing areas on both sides of the border and are most important for local traffic, tourism, and cycling routes.

Slovenia (Brda)	Italy (Collio)	Description
Neblo	**Vencò (Dolegna del Collio)**	One of the main local crossings in central Collio.
Vipolže	**Mossa**	Connection towards Gorizia.
Medana	**Dolegna del Collio**	A smaller local crossing through vineyards.
Plešivo	**Ceglo (San Floriano del Collio)**	An important connection between wine-growing areas.
Cerovo	**Giasbana (San Floriano del Collio)**	A local road towards Gorizia.
Hum (Kojsko)	**San Floriano del Collio**	Road towards Oslavija and Gorizia.

Crossings towards the south – territory Nova Gorica / Gorizia area

In the southern part of Brda, traffic is directed towards the urban area of Nova Gorica – Gorizia, where most cross-border traffic occurs.

Slovenia	Italy	Description
Rožna Dolina	**Casa Rossa (Gorizia)**	The most important urban crossing between Nova Gorica and Gorizia.
Solkan / Podsabotin	**Gorizia / Oslavia**	Local road along the Soča River.
Nova Gorica	**Gorizia**	Main intercity crossing.
Šempeter pri Gorici	**Gorizia - Sant'Andrea**	Urban connection for daily commuting.

These areas are part of a unified cross-border urban area Nova Gorica – Gorizia.

Connections from Collio to the south (Mossa, Cormòns)

From Collio, the route continues towards the interior of Friuli.

Collio	Continuation to the south
Cormòns	main road towards Mossa and Gradisca d'Isonzo
Dolegna del Collio	road towards Cormòns and further towards Udine
San Floriano del Collio	connection towards Gorizia and Mossa

These networks connect Brda with major transport corridors in Italy.

Existing bus lines Nova Gorica – Brda (timetable)

- Dobrovo - Dolnje Cerovo - Nova Gorica
- Dobrovo-Kojsko-Nova Gorica
- Dobrovo-Višnjevik-Dobrovo

- Kozana-Dobrovo-Kojsko-Nova Gorica
- Nova Gorica-Kojsko-Dobrovo
- Nova Gorica-Šmartno v Brdih
- Šmartno v Brdih-Nova Gorica
- Vipolže-Dobrovo-D.Cerovo-Nova Gorica

Summary of existing goals from national/regional/local government documents

1. Municipal Comprehensive Transport Strategy - OCPS Brda
   - improving accessibility of Brda
   - development of sustainable mobility
   - improvement of public transport
   - development of cycling connections.
2. Municipal Integrated Transport Strategy - OCPS Nova Gorica
   - reduction of motor traffic
   - development of sustainable public transport
   - promotion of active mobility
   - connecting the city with its hinterland.

The common direction of both strategies is the development:

- sustainable mobility
- multimodal transport solutions
- cross-border transport systemin the entire region, where existing routes and border crossings between the countries are located

Status quo mobility analysis

The analysis shows several key challenges:

- low frequency of public transport
- dispersed settlement in Brda
- poor accessibility of public transport
- lack of cycling infrastructure.

Approximately 25% of residents live outside the reach of public transport.

This causes:

- high dependence on cars
- mobility exclusion of the elderly and young
- traffic pressure due to tourism.

Cross-border mobility context

The cross-border area Nova Gorica-Gorica is one of the few examples **of a cross-border conurbation in Europe**, where daily flows of residents and visitors cross the state border.

The development of sustainable mobility in this area is also supported by initiatives:

- GO! 2025 – European Capital of Culture
- cross-border Interreg projects
- EZTS GO initiatives.

Goriška Brda are significantly included in this cross-border system due to:

- tourist connection with the Italianarea Collio,
- the proximity of the urban transport hub Nova Gorica-Gorica.

Therefore, improving sustainable mobility between Brda and the cross-border urban area Nova Gorica and Gorica is of key importance for regional development.

Description of the Status quo PTSQC analysis

Public Transport Services and Regional Context

The following public transport services are identified in Slovenia: international and interregional train services (EC, IC, MV), slower regional train services, express bus services, and other bus services. Nova Gorica appears on the Italian-oriented corridor, emphasizing its importance as a cross-border gateway.

Pilot Area and Transport Station Distribution

The geographical scope of the study is the **surroundings of Nova Gorica along the Italian-Slovenian border**. The station distribution map reveals a strong contrast between the urban center and rural hinterland [Figure 1].

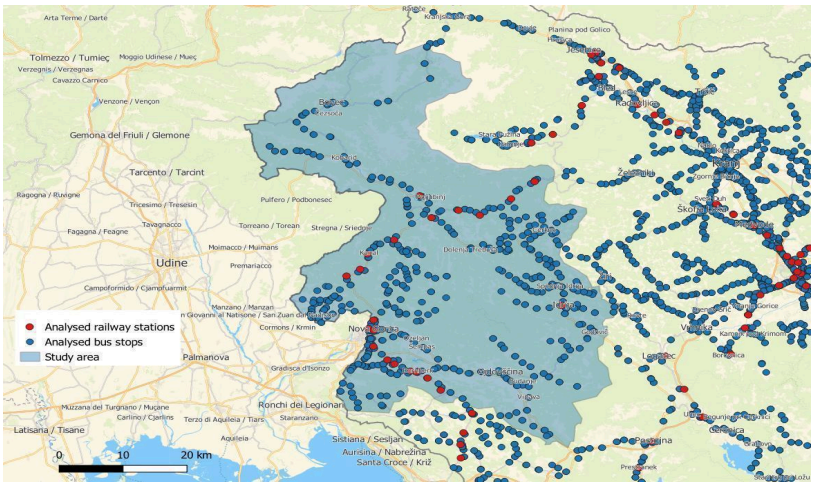

Figure 1. PT stops in the pilot area (PP7) based on GTFS sources

Within this region only two transport modes are relevant: **regional train and bus services**. The map shows that rail stations lie along a linear east–west axis following the cross-border corridor, while bus stops are scattered with lower density outside the city.

The border setting is clearly emphasized by the location map, which shows continuous urban fabric across the frontier between Nova Gorica and Gorizia, but a less unified transport system.

Population Distribution in the Pilot Area

Based on our investigations, the population map [Figure 18] shows **a corridor-and-nodes settlement structure**: higher-accessibility categories concentrate around the major towns and along the main valley/road alignments, while the broader rural/mountainous hinterland is characterized by lower categories and gaps, reflected in the extensive light-blue background.

Higher accessibility classes (A and B) are assigned only to **central Nova Gorica**. The population distribution map displays these categories as a compact zone around the railway station and city core. This also includes the inner areas of the municipalities of Tolmin, Idrija, and Ajdovščina, among others, indicating that these are additional significant municipalities in the pilot area. Most surrounding settlements fall into **lower accessibility categories (E-G)** due to infrequent rural bus services. Isochrone visualization confirms that public transport coverage drops rapidly beyond city boundaries, reinforcing an urban–rural accessibility divide.

In terms of totals, the legend indicates that the population is heavily weighted toward mid categories: **E: 18,226 and F: 16,197** are the largest groups; followed by **D: 14,449, G: 13,887, and C: 11,350**; while the highest-accessibility classes are comparatively small: **A: 7,036 and B: 5,444.** Additionally, a substantial number of residents fall **"Without categorization" (31,411),** which is significant compared with any single category and implies that a large share of the region's population lives outside the mapped/assigned PTSQC catchments (or in areas where the categorization is not available).

Interpreting these values, the region does not exhibit a large "A/B-dominant" urban core typical of dense metropolitan systems. Instead, the distribution suggests that many residents live in moderately accessible contexts (D–F), consistent with polycentric settlements and dispersed villages. The relatively high figures in E/F/G also imply that improving accessibility may depend less on intensifying already-strong "A zones" and more on strengthening service frequency and connectivity along the main settlement corridors and between secondary centers – where the bulk of the population is actually located.

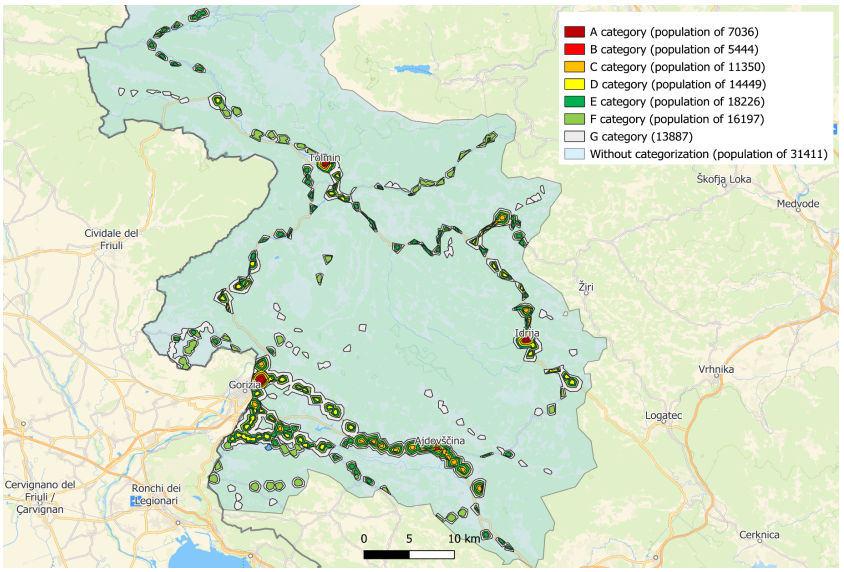

Figure 2. Population distribution of the pilot area (PP7) based on PTSQC categories

Overlay analysis demonstrates that

- in categories A-C relatively low population density can be found;
- in categories D-G, the population is distributed in almost equal proportions.
- **25% of the population lives outside the proximity of relevant public transport stations.** The fact that a substantial share of the population lives outside the proximity of public transport stations may have social and mobility implications, including higher reliance on private cars and reduced accessibility for transport-dependent groups.

Population Density and Public Transport Access

The population density map shows concentrations in Nova Gorica–Gorizia conurbation at the western edge of the study-area boundary and in some secondary settlements, while rural population distribution is sparse.

Isochrones (A–G) coalesce over the urban core and the Soča/Vipava belts, mirroring the densest cells and implying elevated accessibility where demographic mass is greatest; conversely, isochrone traces disaggregate into small islands over hill terrain, consistent with sparse occupancy and longer travel times. Namely, along the Soča (Isonzo) and towards Ajdovščina in the Vipava valleys, chains of medium-to-dark cells outline linear settlement corridors aligned with river morphology and transport infrastructure. Secondary — enclave-like — concentrations at Bovec, Tolmin, Kanal ob Soči, Vipava, and Idrija appear as compact, yet discontinuous patches embedded within a low-density rural matrix. Across the pre-Alpine ridges and karst plateaus, the density field fragments abruptly along ridgelines and slope breaks, indicating strong topographic control on settlement continuity.

In contrast, considering only the A-B isochrones, they affect almost exclusively the innermost parts of the settlements already mentioned (Nova Gorica, Ajdovščina, Idrija, and Tolmin).

Overlay analysis indicates that most of the population within Nova Gorica benefits from categories A–C, while a significant portion of rural residents remain in zones with poor accessibility.

Recommendations for areas in the pilot area to be developed with public transport

1. *areas with high population density but not falling into categories A or B: northern Nova Gorica (Solkan), Šempeter pri Gorici, eastern Ajdovščina (Šturje) and Bovec*
2. *areas where population density is also higher than average but does not fall into any of categories A-G: there are no such uncovered areas in the pilot area*

Vision & strategy

Local/regional Vision & principles

The regional vision aims to create an integrated, accessible, and sustainable **cross-border public transport system** connecting Western Slovenia and the Friuli Venezia Giulia region, including the areas of Nova Gorica, Brda, Gorizia, and Cormons.

The vision focuses on improving cross-border connectivity, reducing dependency on private cars, and strengthening territorial cohesion across national borders. It seeks to better connect urban centres, rural areas, and tourist destinations on both sides of the border.

This approach supports inclusive mobility, enhances quality of life for residents, and promotes sustainable tourism and environmental responsibility in the cross-border area.

A. Strategic Objectives

- Improve **cross-border accessibility** and availability of public transport services
- Strengthen connectivity between Nova Gorica, Brda, Gorizia, Cormons, and the wider regions
- Reduce reliance on private car use, especially for cross-border commuting
- Support sustainable cross-border tourism mobility
- Enhance integration and coordination of transport systems between Slovenia and Italy
- Contribute to climate goals through reduced transport-related emissions

B. Principles

The development of the cross-border mobility system is guided by the following principles:

- **Sustainability** – promoting low-emission transport solutions across borders
- **Accessibility** – ensuring equal access to services in both countries
- **Safety** – providing safe and reliable cross-border mobility
- **Resilience** – ensuring adaptability to future challenges
- **Inclusiveness** – addressing the needs of residents, commuters, and tourists in the cross-border area
- **Integration** – improving coordination between national and regional transport systems

C. Targets and KPIs

Objective 1: Improve cross-border access to public transport

- Increase in cross-border public transport ridership
- Modal share of public transport in cross-border trips (%)
- Number of cross-border connections/services

Objective 2: Reduce environmental impact of transport

- Reduction in CO_2 emissions in the cross-border area
- Air quality indicators (e.g. NO_2, PM levels)

Objective 3: Support sustainable cross-border tourism

- Share of tourists using public transport across the border
- Reduction in seasonal cross-border traffic congestion

Objective 4: Strengthen cross-border connectivity

4. Travel time improvements between key destinations (e.g. Nova Gorica–Gorizia–Cormons–Brda)
5. Frequency and coordination of cross-border services
6. Level of timetable integration between operators

As a local vision through the workshops we defined that by 2035, the Brda area – Nova Gorica - Gorica (IT) – Collio - Brda will develop **a sustainable cross-border mobility system (connecting loop)**, which:

- will connect rural and urban areas
- enables sustainable tourism
- will improve accessibility for residents
- will reduce transport emissions
- supports cross-border cooperation.

The vision is based on three key pillars:

- **a sustainable mobility corridor**

Brda – Gorica (IT) - Nova Gorica and Brda - Collio

- **local mobility hubs (mobility hubs)**

Šmartno mobility hub as the first mobility hub model in the area

- **a cross-border network of cycling routes**

Brda – Collio (IT) – Nova Gorica.

Measurable targets & KPIs

Measured KPIs are structured into several categories: mobility, environment, users, economics, and system management. Estimated values reflect the situation in 2035.

1. Mobility KPIs (accessibility and usage)

KPI	Target value
share of residents with access to public transport < 1 km	≥ 30% of Brda residents
frequency of the cross-border line Brda-Collio	3× per day (7h-18h)
number of mobility hubs in the region	≥ 5

2. System usage

KPI	Target value
daily number of passengers on the cross-border line	80-120
annual number of passengers	30,000-40,000
average occupancy of minibus	≥ 30 %
system usage on demand (DRT)	≥ 20 rides / day

3. Reduction of car traffic

KPI	Target value
reduction in individual car journeys	−10%
CO_2 emissions reduced	−150 tons / year
share of electric vehicles in the system	≥ 20 %

4.sustainable mobility

KPI	Target value
number of e-bike rentals per year	≥ 10,000
share of trips made by e-bike	≥ 15 %
number of charging points for e-vehicles	≥ 10

5.Touristsčnot KPI - Brda and Collio are distinctly tourist regions.

KPI	Target value
share of tourists using public transport	≥ 5 %
number of tourist passengers on shuttle line	≥ 20,000 / year
increase in visits without a car	+15 %

6.Scost ečfficiency

KPI	Target value
operating cost per passenger	≤ 3 €
cost per km	≤ 1 €
share of revenue from tickets	≥ 30 %

7.Local economic impact

KPI	Target value
increase in tourist spending	+5-10 %
number of businesses included in the system	≥ 20
number of new jobs	≥ 10

8.KPI for Šmartno Mobility Hub

- hub usageča

KPI	Target value
daily hub users	≥ 200
parked bicycles per day	≥ 50
e-bike station usage	≥ 30 rentals / day

multimodality

KPI	Target value
share of transfers (bus - e-bike)	≥ 25 %
share of transfers (bus - DRT)	≥ 15 %

8.Social KPI

KPI	Target value
user satisfaction	≥ 85 %
accessibility for seniors	≥ 90 % of stations
number of social users (seniors, students)	≥ 25 %

9. Digital KPI

KPI	Target value
mobile app usage	≥ 60 % of users
schedule punctuality	≥ 95 %
real-time info coverage	100 stations

10.KPI for pilot project Mobility HUB Šmartno

KPI	Target
pilot line Brda-Collio	operational
DRT testing	≥ 5,000 rides
mobility hub usage	≥ 50,000 users
travel habits analysis	completed

Preferred scenario

Preferred scenario for the development of the Brda – Collio mobility system

Most suitable scenario for mobility development in the area of **Goriška Brda and Collio** is based on the establishment of **an integrated, sustainable, and cross-border coordinated mobility system**, which connects different modes of transport and enables efficient accessibility for both residents and visitors. The system combines **public transport, cycling infrastructure, mobility hubs, and tourist mobility services**, thereby enabling multimodal mobility in rural and tourist areas.

In this system, the **cross-border urban area of Nova Gorica – Gorica** plays a key role, representing the central regional transport hub with access to rail and regional bus connections, and wider transport network in two countries, Slovenia and Italy. On the other hand **Goriška Brda and Collio** represent an important cross-border tourist destination with a distinct vineyard landscape, numerous cultural attractions, and recreational activities. Due to dispersed settlement and limited public transport frequency, mobility in this area is currently heavily dependent on personal cars.

The desired scenario therefore envisages **gradual development of a sustainable mobility system**, which will improve the accessibility of the area and simultaneously reduce traffic and environmental burdens.

The first key element of the scenario is **improving transport connections between Brda and the cross-border urban area of Nova Gorica – Gorica, and between Brda and Collio**. This includes the establishment of more frequent and new bus connections and the introduction of cross-border shuttle lines connecting the main settlements in Brda (e.g., Šmartno, Dobrovo) with Italian settlements in Collio (e.g., Mossa, Dolegna del Collio, Cormòns). Such a connection allows access to the regional bus and rail network and improves cross-border mobility for residents and tourists.

The second important element of the scenario is the **development of sustainable tourist mobility services**, which support the tourist character of the area. This includes the introduction of electric bike rental systems, tourist shuttle services along wine routes, and the integration of cycling paths between Brda and Collio. Such services allow visitors to explore the region without using a car and contribute to the development of sustainable tourism.

The third key element of the scenario is the **establishment of a network of multimodal mobility hubs**. These hubs represent points of transfer between different forms of mobility and include public

transport infrastructure, bicycle parking, e-bike rentals, charging stations for electric vehicles, and tourist information points. The central mobility hub in Brda is planned forchargingŠmartno **Šmartno**, which, due to its geographical location and tourist role, represents the natural center of the area. Additional hubs would be located in **Dobrovo, Vipolže, and on the cross-border side in Mossa/Lucinico, Dolegna del Collio, and Cormòns**, while **Nova Gorica - Gorica** acts as the main cross-border regional hub.

Such an integrated mobility system enables better connectivity between the rural tourist area and the urban transport network, promotes sustainable forms of mobility, and contributes to greater accessibility, economic development, and quality of life in the cross-border Brda – Collio region.

Šmartno mobility HUB – pilot hub

The importance of the mobility hub Šmartno as a pilot project

The mobility hub **Šmartno** represents a key pilot case for the introduction of a modern multimodal mobility hub in the cross-border region of **Brda - Collio**. Due to its location in the central part of Goriška Brda and its immediate proximity to the Slovenian-Italian border, Šmartno has great potential to become the **central point for connecting different forms of mobility** in the rural and tourist area.

The establishment of a mobility hub in Šmartno represents the first concrete step towards creating an integrated mobility system in this rural area. The hub is designed as a **multimodal transfer point**, where regional and cross-border bus transport, local "last-mile" mobility services, cycling mobility, and tourist mobility services connect. This positions Šmartno as the central element of a new mobility network connecting Brda, Collio, and the cross-border urban area **Nova Gorica - Gorica**.

Šmartno as the central mobility hub

Within the proposed system, Šmartno has several functions. The first and most important is the role of **the main transfer hub for bus lines**, connecting Brda with surrounding regional centers. The proposed lines meet at this point:

- Šmartno – Cormòns – Gorica
- Šmartno – Dobrovo – Vipolže – Mossa – Gorica
- Šmartno – Dobrovo – Neblo – Corno di Rosazzo
- Šmartno – Kojsko – Hum – Solkan – Nova Gorica

Because of this, the timetable can be based on the so-calledcalled **pulse system**, where buses meet in Šmartno within a specific time window. Passengers can transfer between lines in one place, which significantly improves the accessibility of the entire area.

Hub for "last-mile" mobility

Šmartno also plays an important role as a **hub for the last mile** to other settlements in Brda. Due to the dispersed settlement of many villages (Vedrijan, Višnjevik, Krasno,..) a classic bus system cannot

effectively cover the entire area. Therefore, the mobility hub enables the integration of additional forms of mobility, such as:

- on-demand transport (DRT – demand response transport minibuses),
- electric bike rental,
- local tourist shuttle services,
- micromobility (bicycles, e-bikes, scooters).

This establishes Šmartno as a **point of distributed mobility** for the wider Brda area.

Integration of cycling mobility

An important function of the hub is also to promote **combined mobility bicycle + public transport**. Residents of surrounding villages can reach Šmartno by their own bicycle or by public electric bicycle and continue their journey by bus towards Nova Gorica, Gorica, or Collio. For this purpose, infrastructure is planned in the hub, such as:

- secure bicycle parking,
- charging stations for electric bicycles,
- bicycle service station,
- connection to cycling paths.

Such a system enables greater accessibility of public transport even for residents of smaller villages that are far from main bus corridors.

Accelerating the establishment of new bus lines

The establishment of a mobility hub in Šmartno will significantly contribute to the faster introduction of new bus lines. This will be possible primarily due to several key steps.

The first step is the **establishment of the physical hub infrastructure**, which allows for organized bus stops, transfers between lines, and integration with other forms of mobility. This creates the operational conditions for introducing new lines.

The second step is the **organization of timetables based on the pulse hub principle**. Since all lines meet in Šmartno, operators can more easily plan synchronized arrivals and departures, which increases system efficiency and reduces operational costs.

The third step is **testing and optimizing lines through a pilot project**. As a pilot hub, Šmartno will enable the collection of data on travel habits, bus occupancy, and the use of various mobility services. Based on this data, frequencies and routes can be gradually adjusted.

The fourth step is **establishing cross-border cooperation between operators** on the Slovenian and Italian sides. As the hub connects Brda with Collio and the urban area of Gorizia, it can serve as a platform for coordination between carriers and local authorities.

Demonstration pilot for the wider region

As the first such project in the Brda and Collio area, the mobility hub in Šmartno also has an important **demonstration role**. Successful implementation can become a model for further development of similar hubs in other settlements, such as Dobrovo, Vipolže, Neblo, or on the Italian side in Mossi, Cormòns and Corno di Rosazzo.

In this way, Šmartno represents not only local infrastructure but also **a pilot model of integrated sustainable mobility** for the entire cross-border region of Brda – Collio.

Action plan

Operational proposal for scenario 4 lines pilot Brda. It is designed to connect to existing and new local and regional timetables: on the Slovenian side to the strengthened connection Nova Gorica–Dobrovo, to the cross-border city bus Nova Gorica–Gorizia, and on the Italian side to frequent regional trains Cormòns–Gorizia Centrale and the APT/TPL FVG network. The existing cross-border city line between Nova Gorica and Gorizia runs very frequently, even approximately every half hour for most of the day according to published timetables, while trains between Cormòns and Gorizia run approximately 22–23 times daily; this is a good enough "backbone" to organize new lines based on coordinated transfers.

Operative network

It is proposed to implement an hourly pulse system with a common transfer window in Šmartno and secondary transfer windows in Cormòns, Gorizia and Nova Gorica. This means:

- departures from Šmartno generally between :00 and :10
- arrivals in Šmartno generally between :50 and :55
- v Cormòns arrival 5–10 minutes before the train towards Gorizia/Udine and departure 5–10 minutes after the train arrives
- v Gorizia connection to the cross-border city line towards Nova Gorica
- v Nova Gorica connection to city and regional lines, and to the cross-border line towards Gorizia

This design is simple for the user and cheaper for the operator.

L1: Šmartno – Dobrovo – Plešivo – Cormòns – Gorizia

Line function: main cross-border backbone for Brda's access to the railway, Gorizia, and the Italian regional network. It is intended for daily commuters, students, tourists, and transfers to the train in Cormòns. Since trains between Cormòns and Gorizia run frequently throughout the day, it makes sense for this line to act as a "feeder" to the railway, while also having some journeys extended to Gorizia.

Proposed route:

Šmartno – Dobrovo – Plešivo – Cormòns station – Mossa – Gorizia FS / center

Proposed frequency:

- weekdays 6:00–9:00: every 60 min
- weekdays 9:00–18:00: every 60 min
- weekdays 18:00–20:00: every 120 min
- Saturdays: every 120 min
- Sundays and holidays (in season): every 120 min, off-season 3–4 pairs of trips

Recommended pulse:

- departure from Šmartno at :05
- arrival in Cormòns around :35
- arrival in Gorizia around :55
- return from Gorizia at :05
- from **Cormòns** at **:25**
- arrival in Šmartno around :55

This means in Cormòns approximately 5–10 minutes for transfer to the train and in Gorizia connection to the city/cross-border system. The cross-border city connection Nova Gorica–Gorizia is already very frequent today, so Gorizia is suitable as a secondary hub.

Integration with hubs:

- Šmartno: main transfer hub for all four lines
- Dobrovo: transfer to local/school routes and tourist services
- Cormòns: train station, APT/TPL FVG buses
- Gorizia: connection to Gorizia FS, city and cross-border bus to Nova Gorica.

L2: Šmartno – Dobrovo – Vipolže – Mossa – Gorizia

Line function: southern cross-border corridor for daily migration, access to Gorizia without a detour via Cormòns, and a strong tourist line for Vipolže and the southern part of Brda. As Gorizia is an important urban hub and has a frequent cross-border bus connection with Nova Gorica, this line is particularly suitable for users targeting services, schools, the hospital, or transfers to the urban network.

Proposed route:

Šmartno – Dobrovo – Vipolže – Mossa – Gorizia FS / center

Proposed frequency:

- weekdays 6:00–9:00: every 60 min
- weekdays 9:00–15:00: every 120 min
- weekdays 15:00–19:00: every 60 min
- Saturdays: every 120 min
- Sundays/holidays (tourist season): every 120 min

Recommended pulse:

- departure from Šmartno at :35
- arrival in Gorizia around :10 the following hour
- return from Gorizia at :20
- arrival in Šmartno around :55

This means that L2 is staggered with respect to L1, and together they create a denser offering from Šmartno towards Italy, without both lines running simultaneously. In Gorizia, it is then possible to transfer to the cross-border city line towards Nova Gorica, which runs frequently throughout the day.

Integration with hubs:

- Šmartno: main hub
- Dobrovo: municipal and service center
- Vipolže: tourist hub, Vila Vipolže, sports park, e-bike, info point
- Mossa: Italian local transfer hub
- Gorica: regional cross-border hub with connection to Nova Gorica.

L3: Šmartno – Dobrovo – Neblo – Corno di Rosazzo

Line function: eastern cross-border corridor for Collio orientale and access to Corno di Rosazzo, which functions as a local employment and service center and is suitable for connecting to the wider FVG network. This line is less of a "commuter" line than L1 and L2, therefore it makes sense as a somewhat less frequent, but stable line, particularly important for tourist and local routes. APT/TPL FVG has an extensive extra-urban network in the Gorizia and Bassa Friulana areas, so Corno di Rosazzo makes sense as a secondary Italian hub.

Proposed route:

Šmartno – Dobrovo – Neblo – Dolegna / border area – Corno di Rosazzo

Proposed frequency:

- weekdays 6:30–9:30: every 120 min
- weekdays 9:30–18:30: every 120 min
- Saturdays: every 120 min
- Sundays/holidays (season): 4–5 pairs of trips

Recommended pulse:

- departure from Šmartno at :20 on even hours
- arrival in Corno di Rosazzo around :55
- return from Corno at :05 on odd hours
- arrival in Šmartno around :40

As the line is less frequent, it must be particularly visible in the app and at hubs, and coordinated with local Italian buses.

Integration with hubs:

- Šmartno
- Dobrovo
- Neblo as a border hub for e-bikes and tourist crossings
- Corno di Rosazzo as an Italian local hub for bus connections and wider distribution.

L4: reinforced line Šmartno - Kojsko - Hum - Solkan - Nova Gorica

Line function: basic Slovenian radial line from Brda to the regional center. This is the most important "daily" line, as it connects Brda with the Nova Gorica bus station, city transport, and indirectly with Gorica. Improvements to the Nova Gorica-Dobrovo connections already exist on this axis, so it makes sense to reinforce this direction into a clear, frequently running corridor. Nova Gorica has a city bus system, and the cross-border city line to Gorica is frequent.

Proposed route:

Šmartno - Kojsko - Hum - Solkan - Nova Gorica AP

Proposed frequency:

- weekdays 5:30-9:00: every 30 min
- weekdays 9:00-15:00: every 60 min
- weekdays 15:00-19:00: every 30 min
- weekdays 19:00-21:00: every 120 min
- Saturdays: every 60 min
- Sundays/holidays: every 120 min, in season every 60-120 min

Recommended pulse:

- from Šmartno at :00 and :30 at the end
- arrival in Nova Gorica at approximately :35 and :05
- returns from Nova Gorica at :10 and :40

Thus, in Nova Gorica, transfers to local transport and to the cross-border bus towards Gorica are possible, which runs frequently in the published timetables, even every 30 minutes.

Integration with hubs:

- Šmartno: main hub
- Hum: northern Brda micro-hub
- Nova Gorica: main Slovenian regional hub
- indirect integration via the cross-border city line with Gorica/Gorizio.

Recommendation for a frequency matrix by line

Line	Route	Morning	Daytime	Evening	Weekend
L1	Šmartno-Dobrovo-Plešivo-Cormòns-Gorica	60 min	60 min	120 min	120 min
L2	Šmartno-Dobrovo-Vipolže-Mossa-Gorica	60 min	120 min	60 min	120 min
L3	Šmartno-Dobrovo-Neblo-Corno di Rosazzo	120 min	120 min	120 min	120 min / seasonal

L4	Šmartno-Kojsko-Hum-Solkan-Nova Gorica	30 min	60 min	120 min	60-120 min

With this combinationo we obtain:

- a strong line towards Nova Gorica
- two useful cross-border lines towards Gorica
- one development/tourist line towards Corno di Rosazzo
- a good connection to the train in Cormòns.

Role of mobility hub Šmartno

Slovenian side

Šmartno must be the main intermodal hub: platform for all 4 lines, digital info, bike parking, e-bike charging stations, P+R, micro-logistics, tourist information.

Dobrovo should be a secondary hub: transfers between L1/L2/L3, school routes, info point, bike storage.

Vipolže should be a tourist and sports hub: e-bike, shuttle stop, tourist interpretation.

Hum should be the northern micro-hub on L4.

Neblo should be the cross-border micro-hub for L1/L3 and cycling connections.

This distribution is consistent with the fact that Brda is sparsely populated and needs more small transfer points, not just one central terminal.

Italian side

Cormòns is the main Italian multimodal hub due to the train station and regional connections.

Corno di Rosazzo should function as a local distribution hub for the eastern part of the system.

Mossa should be the southern micro-hub on line L2.

Gorica/Gorizia is the main cross-border urban hub with a connection to Nova Gorica and national systems. APT/TPL FVG covers the extra-urban network of Gorizia and Bassa Friulana, so operational integration on the Italian side is feasible primarily through Cormòns, Gorizia, and Corno.

What do we want to achieve with such a scenario

1. unified pulse timetable in Šmartno,
2. common information system Slovenia-Italy for the area Nova Gorica – Brda – Collio - Gorica,
3. common ticket or at least interoperable validation,
4. visible connection to the train in Cormòns,
5. seasonal reinforcement for tourism.

Since Nova Gorica-Gorizia and Cormòns-Gorizia already have a relatively good basic offer today, the greatest effect is achieved precisely with a good “feeder” system from Brda.