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**EUROPEAN RESEARCH PROJECT //**

# Collecting and analysing data for the post-27 INTERREG (Core-IB)

Slovakia-Austria

**Border profile**

March 2026



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## **Disclaimer**

This document is a final report.

The information contained herein is subject to change and does not commit the ESPON EGTC and the countries participating in the ESPON 2030 Cooperation Programme.

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# 1 Introduction

## 1.1 Context and objective of the border profile

The ESPON Core-IB project (Collecting and analysing data for the post-27 INTERREG) provides evidence-based, non-binding analytical work to support the next generation of Interreg programmes post-2027. By collecting and analysing harmonised territorial data, the project highlights key socio-economic characteristics, cross-border interactions, and governance structures. Its spatial focus covers 48 cross-border cooperation areas (40 land and 8 maritime), including all EU internal border regions and those bordering Liechtenstein, Switzerland, and Norway. The findings are analytical and informative; they do not create regulatory or policy obligations for Member States, the European Commission, or programme authorities. Each border profile serves as a comparable knowledge base for policymakers at EU, national, and regional levels, supporting dialogue and reflection rather than prescribing policy choices. The profiles aim to provide consistent, data-driven territorial evidence that can inform strategic discussions about future cross-border cooperation and contribute to the preparation of Interreg programmes post-2027.

The Core-IB border profiles are designed to support the upcoming steps in the Interreg programming process with analyses based on data that is available at the European scale, including ESPON, Eurostat, DG REGIO, JRC, and Interreg databases. Their main purpose is to ensure comparability of data analyses and to provide programme areas with access to recent harmonised data at high geographical resolution (NUTS3 level or finer). Member States may hold additional or more detailed data which can further enrich or contextualise the findings beyond the Core-IB project. These national sources are essential for refining and validating territorial evidence in policymaking processes, including additional regional, fine-scale information and insights from political processes related to prioritisation and objective setting. All border profiles follow a systematic and methodologically robust approach. They provide territorial evidence, structured along 6 thematic dimensions, offering insights into the geographic, economic, environmental, socio-economic, border security and governance characteristics of the border region. Quantitative data and qualitative analyses are combined to ensure meaningful insights into all 48 border areas. Due to methodological constraints and limited resources, local studies and national datasets falling outside the European data framework could not be included. Visualisations, such as maps and charts based on descriptive statistics, facilitate understanding and support evidence-based policymaking. The profiles analyse the border region as a whole at NUTS3 (2021) level (corresponding to the current Interreg VI-A programme area)<sup>1</sup> and position it within a broader European context. For comparative purposes, several reference categories are applied:

- › European averages (EU27 + Norway, Switzerland and Liechtenstein, depending on data availability)
- › National averages
- › National border region averages
- › Aggregated border region averages

To complement the quantitative evidence, the profiles also draw on strategic and qualitative sources, including:

- › Strategic documents from the Interreg Programme 2021-2027
- › Border Orientation Papers from the 2021-2027 programming period
- › Information from the keep.eu database on cross-border cooperation activities
- › Information from the Cohesion Open Data platform
- › Information from the b-solutions initiative
- › Information from recent ESPON Projects (i.e., CROSSGOV, House4All, PROFECY Update, CPS 2.0)

<sup>1</sup> As defined by Annex 1, Commission Implementing Decision (EU) 2022/74 of 17 January 2022, as amended by Commission Implementing Decision (EU) 2023/1638 of 14 August 2023 (OJ L204, 17.8.2023, p. 9): [https://eur-lex.europa.eu/eli/dec\\_impl/2022/75/oj/eng](https://eur-lex.europa.eu/eli/dec_impl/2022/75/oj/eng)

Within the ESPON framework, the CROSSGOV project (Governance mechanisms for cross-border functional areas) has been implemented in parallel to Core-IB. The CROSSGOV hub<sup>2</sup> provides a comprehensive platform for interactive data exploration, and selected data have been incorporated into this study.

Additional project-related information can be explored separately in the Core-IB **Final Report**. Further technical information on this border profile can be found in a separate **Technical Annex** providing an overview of data and methods.

## 1.2 Presentation of the border area

The Interreg VI-A border region ‘Slovakia–Austria’ covers the area between northern Austria and western Slovakia (see Figure 1.1). In Slovakia, the programme area includes most of the regions of Bratislava and Western Slovakia, comprising a total of 2 NUTS3 regions. In Austria, it covers parts of the federal states of Lower Austria, Burgenland, and Wien in eastern Austria, encompassing a total of 8 NUTS3 regions.

**Figure 1.1: Overview map**

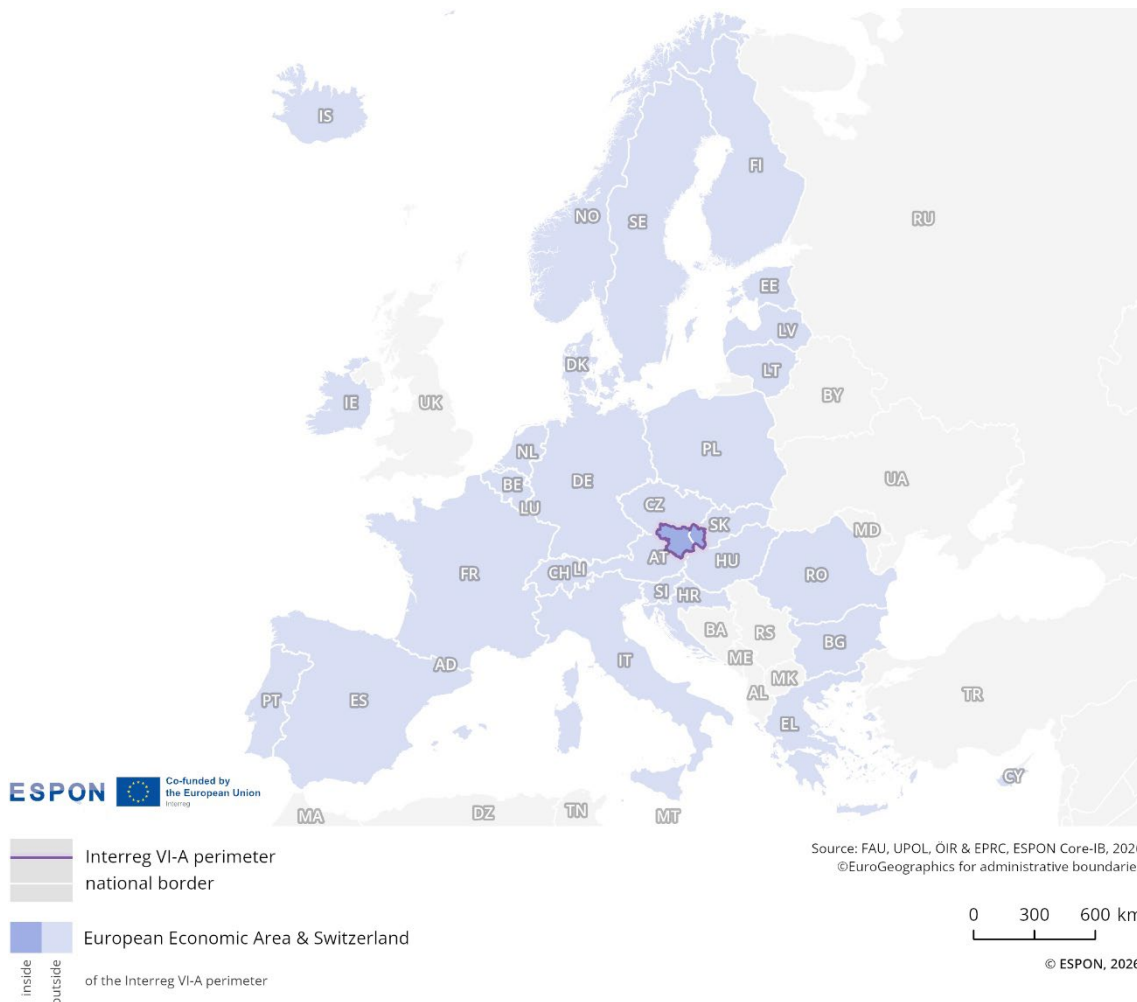
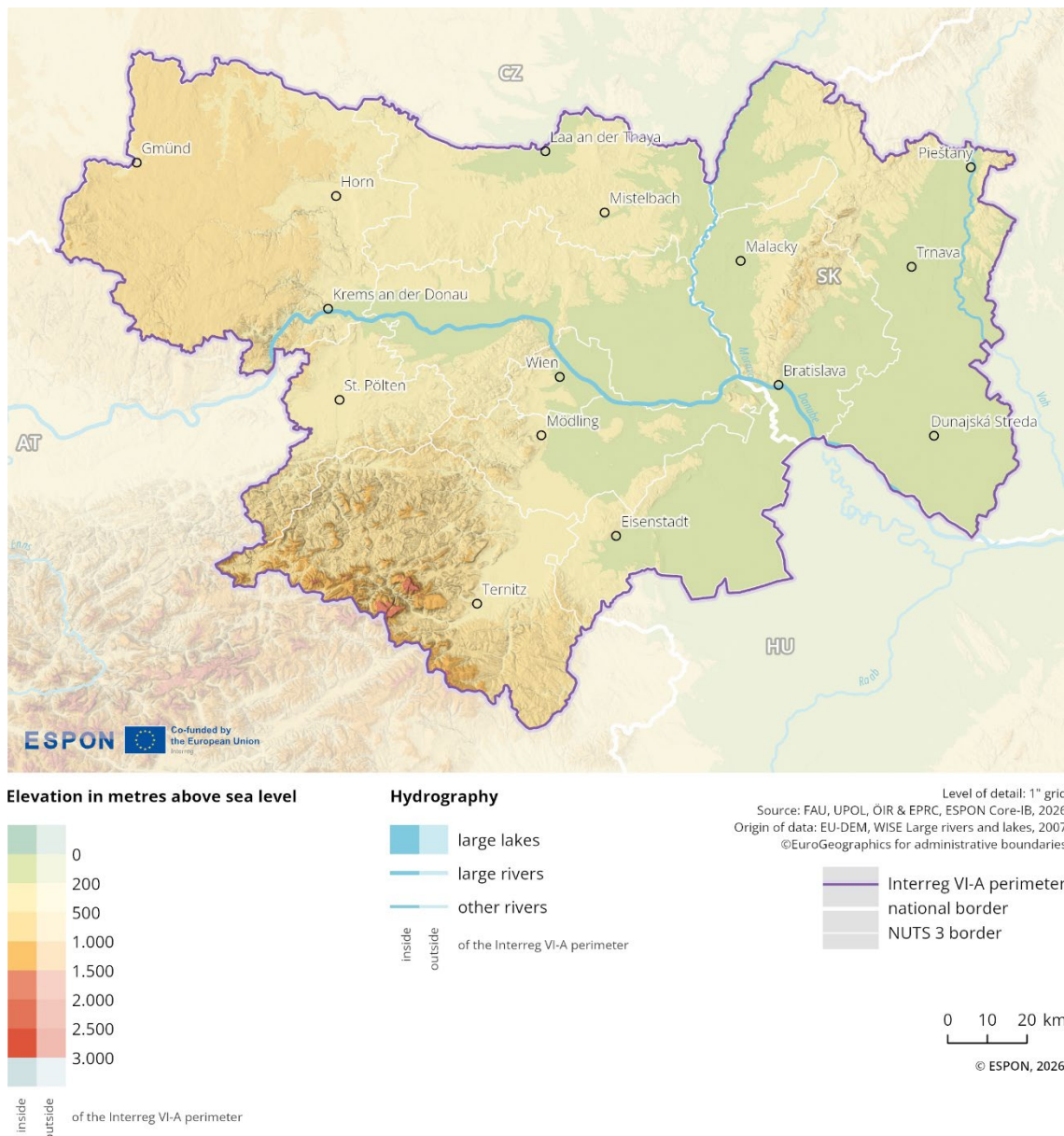


Figure 1.2 illustrates the region's geomorphological features and the perimeter of the current Interreg VI-A programme area. Spanning approximately 35,156 km<sup>2</sup>, the border area exhibits a high degree of

<sup>2</sup> ESPON CROSSGOV Hub: <https://gis-portal.espon.eu/arcgis/apps/experiencebuilder/experience/?id=27e3b86ef44441b08793a2239c370607>

heterogeneity. The map illustrates the topographical and functional differences, ranging from sub-areas of significant international importance to more peripheral regions.

**Figure 1.2: Geographical features and characteristics<sup>3</sup>**



The border region extends along the entire length of the Austrian–Slovakian border, largely following the course of the Morava/March River. It lies between the closely connected metropolitan areas of Wien and Bratislava, forming one of the most integrated cross-border urban agglomerations in Europe. The landscape transitions from relatively high terrain in the west and south to predominantly flat areas in the north and east.

Characteristic landscape features include the eastern foothills of the Alps in Lower Austria; the Carpathian Mountains in western Slovakia, including the Little Carpathians and the Pannonian Plain

<sup>3</sup> The selection of displayed settlements is based on factors such as size, administrative or cultural importance, transport links, regional coverage and cartographic clarity. This is part of a standard cartographic generalisation process with no pre-set thresholds, and the main aim is to provide orientation.

further east. Major river systems such as the Dunaj/Donau, the Morava/March and the Váh shape the region's hydrology and form natural corridors.

In addition to Wien and Bratislava, key towns in the programme area include Krems an der Donau, Horn, St. Pölten, Eisenstadt and Ternitz in Austria, and Trnava in Slovakia. The twin-city axis of Wien and Bratislava is a central feature of the programme area's functional geography, representing an important hub for transport, commerce, education, and culture.

The border area encompasses significant protected areas and Natura 2000 sites that help to protect floodplains, wetlands, and riparian forests. These areas are essential for biodiversity, flood protection, and recreation.

These geographical and ecological characteristics have a significant influence on land use, settlement patterns, economic structures, and cross-border interactions within the programme area.

## 2 Cross-border analysis

### 2.1 Territorial dimension

The territorial dimension refers to the spatial characteristics and dynamics of a border region. It specifically depicts how factors such as population density, demographic trends, changes in settlement areas and accessibility influence and reflect cross-border integration.

#### 2.1.1 Population and settlements

This sub-dimension illustrates the population characteristics and land use dynamics of the border region, based on analysed indicators. It examines population density, population development by age groups, and changes in settlement areas. The analysis highlights whether the border functions as a catalyst for integration or as a barrier. Comparisons with the respective countries and the EU average provide context for understanding the region's dynamics.

##### 2.1.1.1 Population density

###### Indicator description

Population density refers to the number of residents per km<sup>2</sup>. This indicator shows the number of inhabitants per square kilometre in a 1x1 km grid. It therefore provides information on the distribution and concentration of population across the region and allows to identify agglomerations of high density. In particular agglomerations at or close to the border area of key interest.

- **Source:** Eurostat
- **Temporal coverage:** 2021
- **Unit:** Inhabitants/km<sup>2</sup>

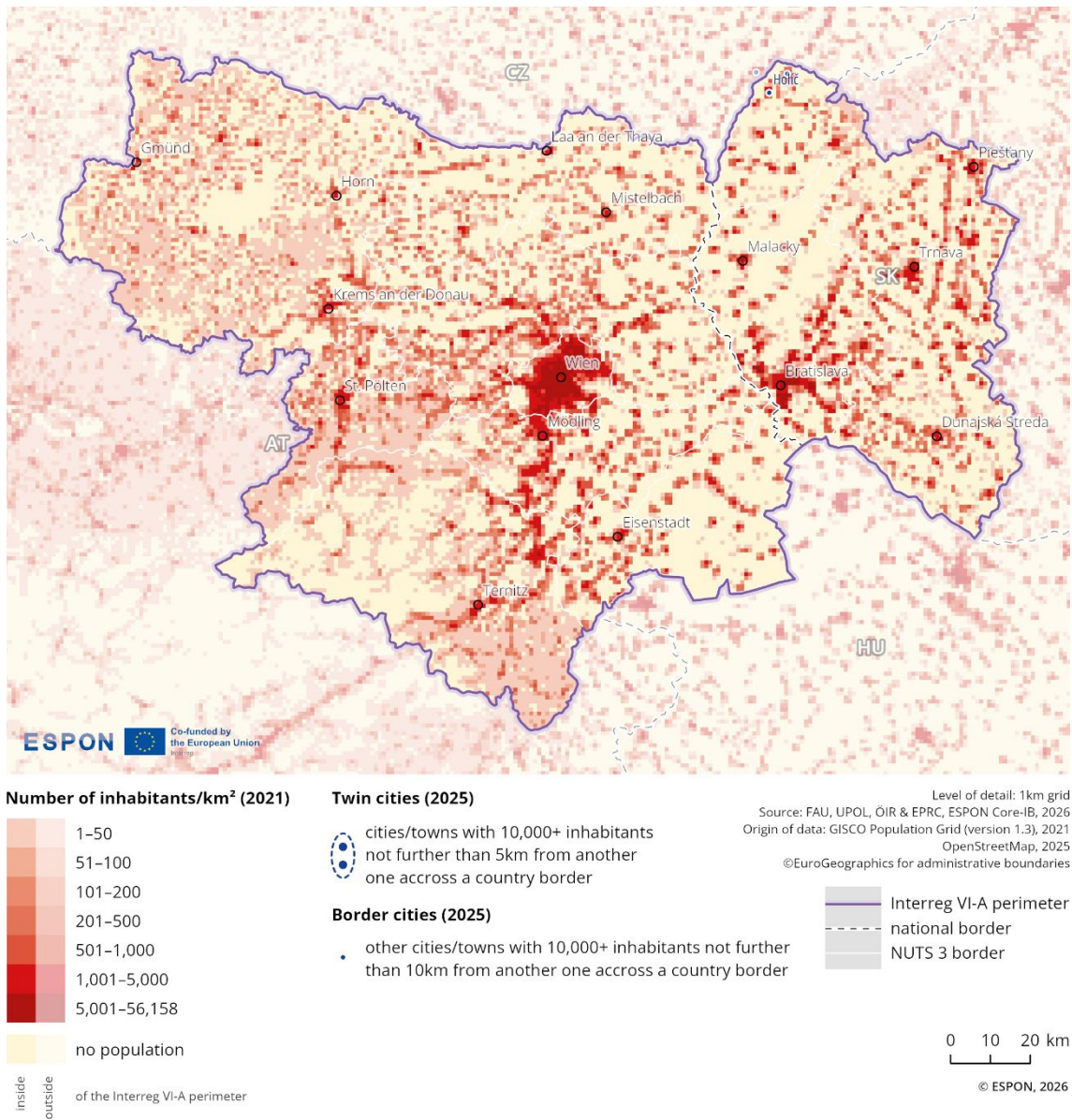
Please refer to the technical annex for more information.

The border region includes 5 urban centres with a population of over 30,000 inhabitants. Figure 2.1 shows that high population density is concentrated in 2 capitals: Wien, Austria (1.9 million inhabitants) and Bratislava, Slovakia (444,000 inhabitants). The suburb of Wien is wider and has a high population density. The population density is higher even in the western part of Austria, which is an agricultural region around the Dunaj/Donau River. Other medium-sized towns are Eisenstadt, St. Pölten (55,000 inhabitants), Ternitz and Krems an der Donau. In the Slovak part, the population is concentrated in the valley, where the mountainous and forested area of the Little Carpathians is located to the north. The eastern part of Slovakia's border region is more evenly populated, with numerous villages and the local centre of Trnava (66,000 inhabitants).

The population density in this whole cross-border region is 194 inhabitants/km<sup>2</sup>, which exceeds the EU average of 109 inhabitants/km<sup>2</sup> (according to EUROSTAT), and it also exceeds the aggregated average of all EU evaluated border regions, which is 125 inhabitants/km<sup>2</sup>.

The part of the cross-border region in Austria has an average population density of around 191 inhabitants/km<sup>2</sup>. It exceeds the national average population density in Austria (106 inhabitants/km<sup>2</sup>). The part of the cross-border region in Slovakia has an average population density of around 200 inhabitants/km<sup>2</sup>. It exceeds the national average population density in Slovakia (110 inhabitants/km<sup>2</sup>).

**Figure 2.1: Spatial patterns of population distribution**



### 2.1.1.2 Population development (by age groups)

#### Indicator description

Population development refers to the percentage change in population at regional level between 2014 and 2024. The data reflects on the total population, as well as on the age groups 0-14, 15-64 and 65+.

- **Source:** Annual Regional Database of the European Commission (ARDECO)
- **Temporal coverage:** 2014-2024
- **Unit:** Change in %

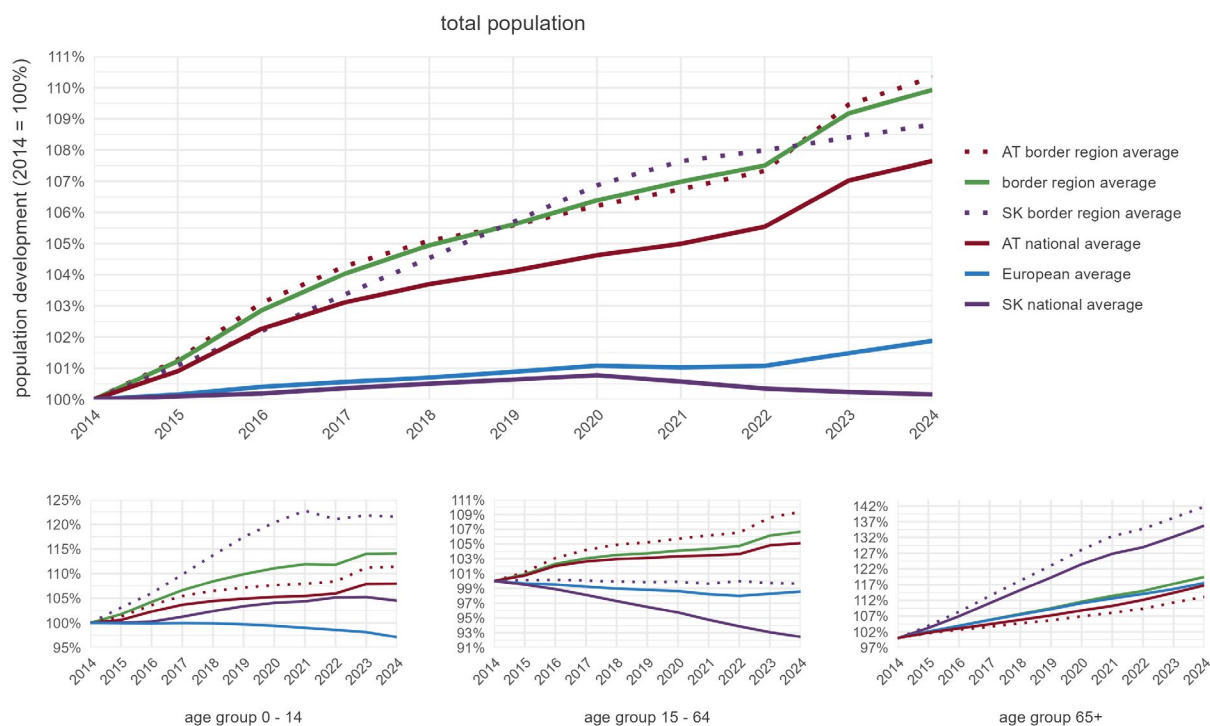
Please refer to the technical annex for more information.

Population in the Slovakia–Austria region in 2024 (Eurostat): 4.9 million inhabitants, of which:

- › 26.3% in the Slovak border territory (1.3 million inhabitants)
- › 73.7% in the Austrian border territory (3.6 million inhabitants)
- › Region within the border region with the highest population increase since 2014: Bratislavský kraj (SK010) at 15.0%

Figure 2.2 shows the population growth in the Slovakia–Austria region between 2014 and 2024. During this period, the region has experienced substantial growth of 9.9%, with the highest growth rate observed on the Slovak side.

**Figure 2.2: Population development (2014=100)**



Population growth across the border region is substantially above the European average (9.9% vs. 1.9%) and also substantially higher than the average development in all border regions (9.9% vs 1.5%).

While the Slovak border area shows considerably higher growth than the national average (8.8% vs. 0.2%), the Austrian border area also shows moderately higher growth than the national average (10.3% vs. 7.7%).

In terms of the development of individual age groups in the region, the population aged 0–14 experienced a notable increase of 14.1%, while the working-age population (15–64) showed a noticeable increase of 6.7%. The population aged 65 and over underwent a substantial increase of 19.4%.

### 2.1.1.3 Change in settlement areas

#### Indicator description

The indicator shows the relative change in settlement areas per LAU in the border region. It considers changes in land cover, from non-artificial areas (such as agricultural, forest and seminatural areas, wetlands and water bodies) to artificial areas (such as urban, industrial, construction sites) between 2012 and 2018. This indicator has to be viewed alongside population development in particular.

- **Source/method of retrieval:** The indicator is retrieved via processing of raster data from CORINE Land cover. The raster information is crossed with Local Administrative Units (LAU) to calculate a change in %.
- **Temporal coverage:** 2012-2018
- **Unit:** Change in %

Please refer to the technical annex for more information.

Figure 2.3 illustrates the change in settlement areas at municipal level between 2012 and 2018. Overall, the map shows similar patterns of change in settlement areas on both sides of the Slovak-Austrian border. Changes are evident in particular around the urban centres of St. Pölten, Wien, Eisenstadt, Trnava and Bratislava. Horn, Krems an der Donau, Ternitz and the city Bratislava show no significant changes during the observed time period. High growth in settlement areas is particularly evident along the Dunaj/Donau as well as around the cities Bratislava and Mistelbach. In close proximity to the national borders, the settlement area increases mainly along the Dunaj/Donau. On the Slovak side, this is true along the border especially around Bratislava.

**Figure 2.3: Settlement area dynamics**

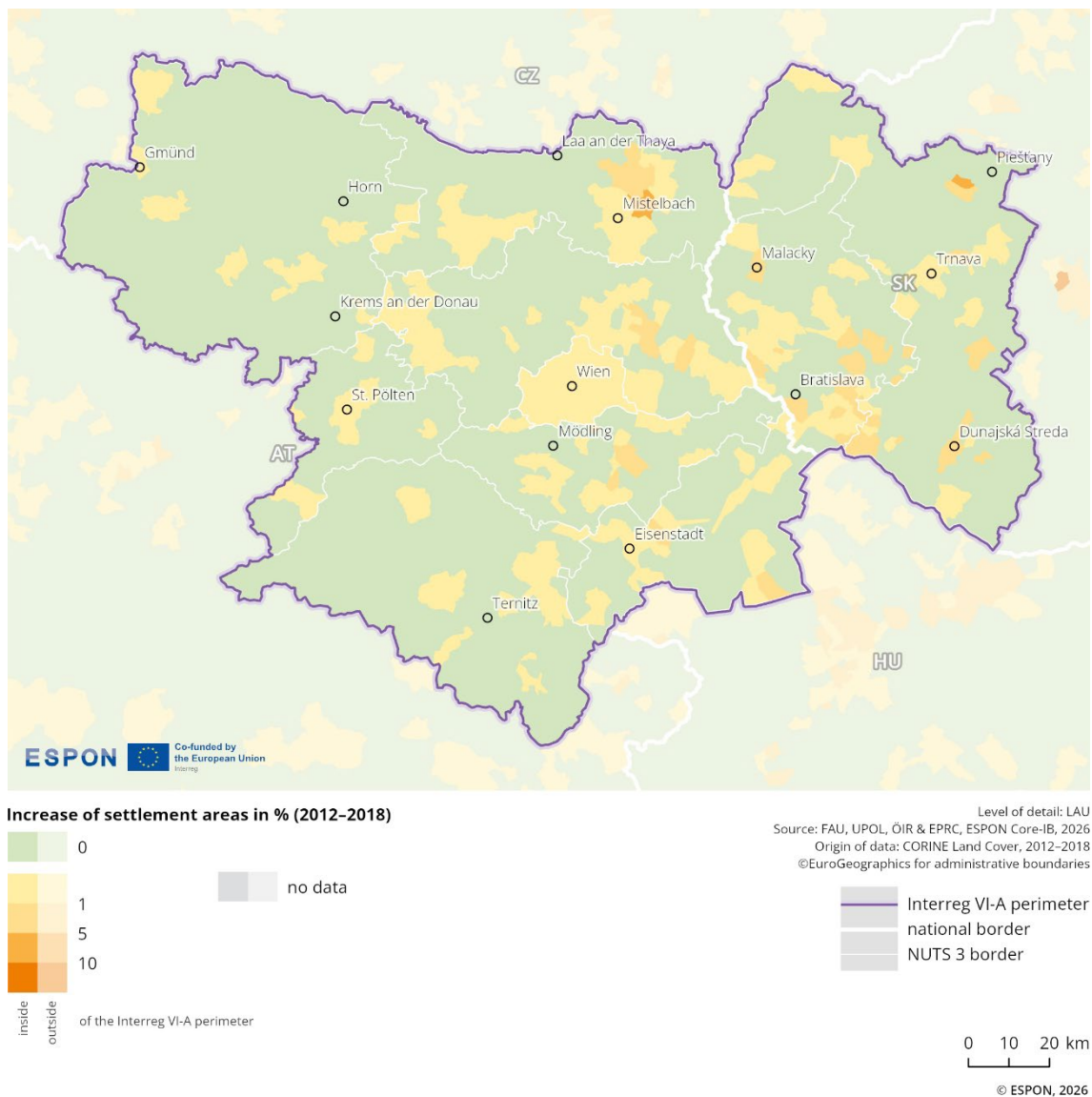
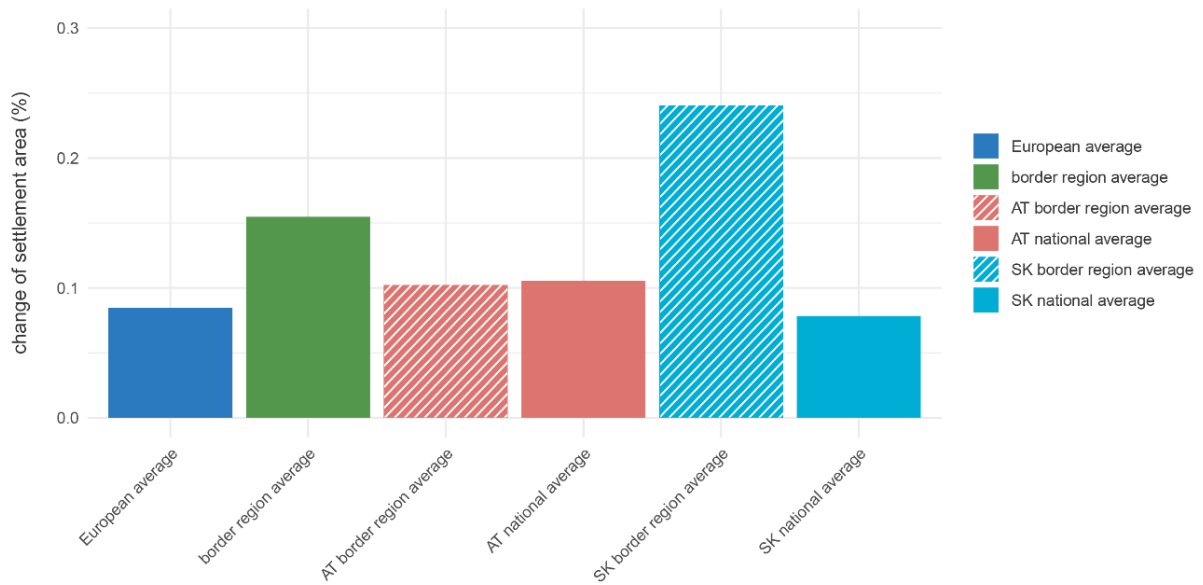


Figure 2.4 presents the change in settlement areas from a comparative perspective. The average for the Slovakia-Austria programme area is higher than the overall European average, which includes both EU member states and the EFTA countries Switzerland, Liechtenstein, and Norway. The Austrian national average is higher than the Slovak one. In contrast, the Slovak border-regional average is higher than the Austrian border-regional average. In addition, the Slovak border-regional average is significantly higher than the Slovak national average.

In general, the programme area shows a dynamic settlement development. The need for an integrated approach to spatial development is obvious. Spatial development has to balance the various demands on land use (e.g., residential, commercial, tourism, transport, agriculture, and nature conservation), and this requires ongoing coordination and exchange, also across the border.

**Figure 2.4: Change in settlement areas (2012-2018) (comparison)**



### 2.1.2 Accessibility of the border area

This sub-dimension illustrates the functional travel connections that already exist in the border region. It examines average cross-border travel times for different modes of transport and cross-border catchment areas based on mobility flows. It also considers travel times to and from border crossings. The analysis shows whether mobility flows are integrated between border regions or if the border hampers mobility.

#### 2.1.2.1 Comparative quality of selected cross-border connections

##### Indicator description

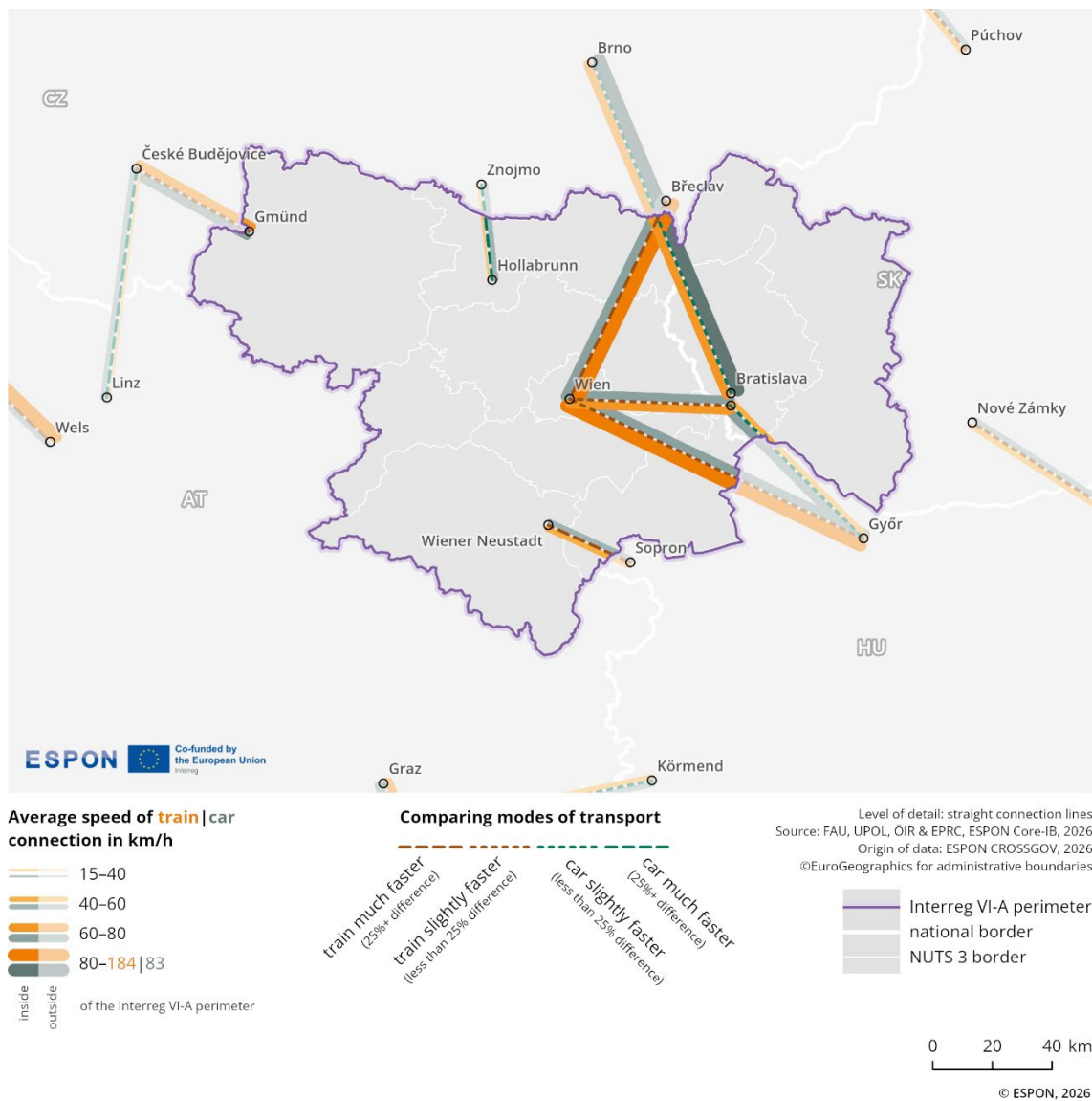
The indicator presents a comparative perspective for different modes of transport (public and private) and their average travel speed (so-called space-time-lines). As such it helps to understand and interpret accessibility patterns along the border and highlights the comparative quality of selected cross-border connections.

- **Source/method of retrieval:** Average number and speed of rail connections/ferries, average speed of car connections between selected cities and towns in border regions using Rail Travel Sites, Google Maps, luftlinie.org, Direct Ferries, local ferry companies
- **Temporal coverage:** 2025 (first quarter)
- **Unit:** km/h

Please refer to the technical annex for more information.

Cross-border accessibility shapes cross-border interactions. Figure 2.5 illustrates this using a "space-time-line" map, which shows parts of a European overview of car and train travel times in the Slovakia-Austria border region. This visualisation enables an assessment of transport quality by highlighting differences between public (train) and private (car) transport modes.

**Figure 2.5: Comparative quality of selected cross-border connections**



The selection of cities and connections covered is based on a set of criteria applied throughout Europe within the ESPON CROSSGOV project<sup>4</sup>. These criteria include the presence of a railway station, population size, distance to the border, node hub and functionality. The thickness of the lines (orange for trains, grey for cars) indicates the average speed of connections in km/h, with thicker lines representing faster connections. Dotted lines in-between reflect the indexed ratio between train and car speeds. A brown colour scale (values below 100) denotes that trains are faster than cars along the specific route, while a green scale (values above 100) indicates the opposite.

The selected connection within the programme area is Wien-Bratislava. For this route, the train connection outperforms car travel in terms of speed. Notably, the Wien-Bratislava connection also offers a fast car option. Besides Wien-Bratislava, several comparably fast connections of relevance for the region towards Győr (HU) or Břeclav (CZ) exist.

<sup>4</sup> ESPON CROSSGOV Atlas, see Storymap on 'Space-time-lines': <https://gis-portal.espon.eu/arcgis/apps/storymaps/collections/345c978adf784ad-fac30c16b90219d35?item=4>

### 2.1.2.2 Cross-border catchment area based on mobility flows

#### Indicator description

This indicator measures the movement of people across borders. The density of cross-border movements by Twitter/X users is displayed on a grid cell covering an area of 20x20 km. The indicator does not differentiate between reasons for movement.

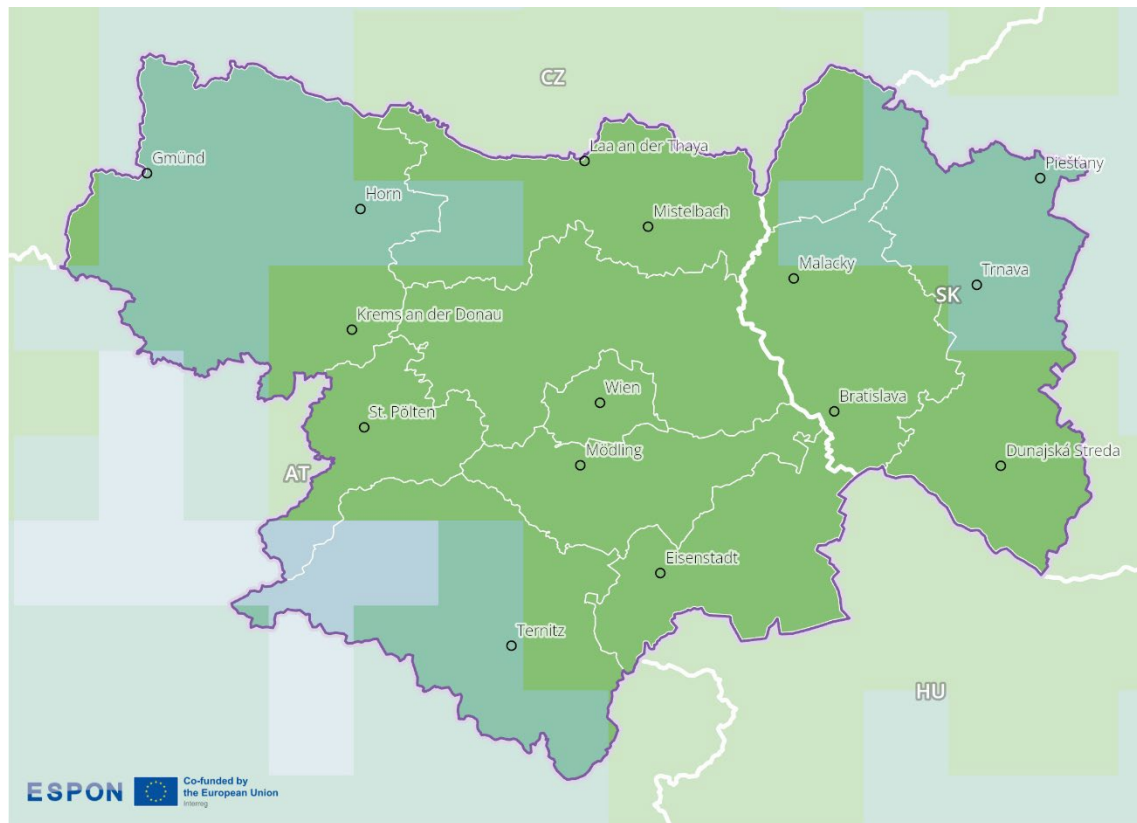
- **Source/method of retrieval:** The indicator is calculated based on Twitter (currently X) data. The digital footprint of individual users provides information about physical mobility flows and is used to calculate cross-border catchment areas of different intensity.
- **Temporal coverage:** 2013-2023
- **Unit:** n/a

Please refer to the technical annex for more information.

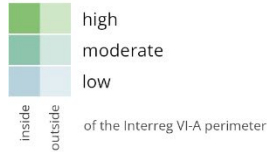
Figure 2.6 shows the cross-border catchment area in the border region based on mobility flows from 2013 to 2023, highlighting estimated cross-border mobility intensity across 3 different quartiles. The first quartile represents the 25% highest mobility intensity shown in dark green, the second quartile represents 25-50% coloured in green-blue, and the third quartile represents 50-75% in light blue.

The intensity of cross-border mobility of people within this cross-border region is relatively homogeneous. The highest mobility intensity is recorded across a large portion of the region's territory. Moderate mobility intensity is observed in 3 areas of the region: in the west around the city of Horn, in the east near the city of Trnava, and in the southern part of the region near the city of Ternitz. A smaller area of low intensity is located south of the city of St. Pölten.

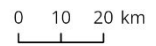
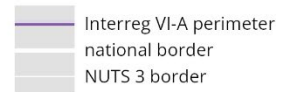
**Figure 2.6: Cross-border mobility intensity**



**Estimated cross-border mobility intensity (2013-2023)**



Level of detail: 20km aggregated grid  
 Source: FAU, UPOL, OIR & EPRC, ESPON Core-IB, 2026  
 Origin of data: ESPON CROSSGOV, 2026  
 ©EuroGeographics for administrative boundaries



© ESPON, 2026

### 2.1.2.3 Cross-border travel-time accessibility

#### Indicator description

The indicator shows the time it takes to travel from any location within a region to the next border crossing, using grid data and subsequent categorisations into accessibility groups of 30, 60 and 90 minutes. It reflects the accessibility in cross-border areas, considering road transport. The indicator can describe the quality and speed of road connections and thus spatial reach of the cross-border services.

- **Source/method of retrieval:** Based on the OpenStreetMap road network, the travel time to the border is calculated for a grid of the border area. Based on this, areas are calculated within which border crossings can be reached below thresholds of 30, 60 and 90 minutes. As additional visual element, key services pharmacies, doctors, hospitals and shops (retrieved from the ESPON PROFECY project) are displayed and categorised into the accessibility groups.
- **Temporal coverage:** 2025 (first quarter, for accessibility data), 2021 (for service facility data)
- **Unit:** Minutes

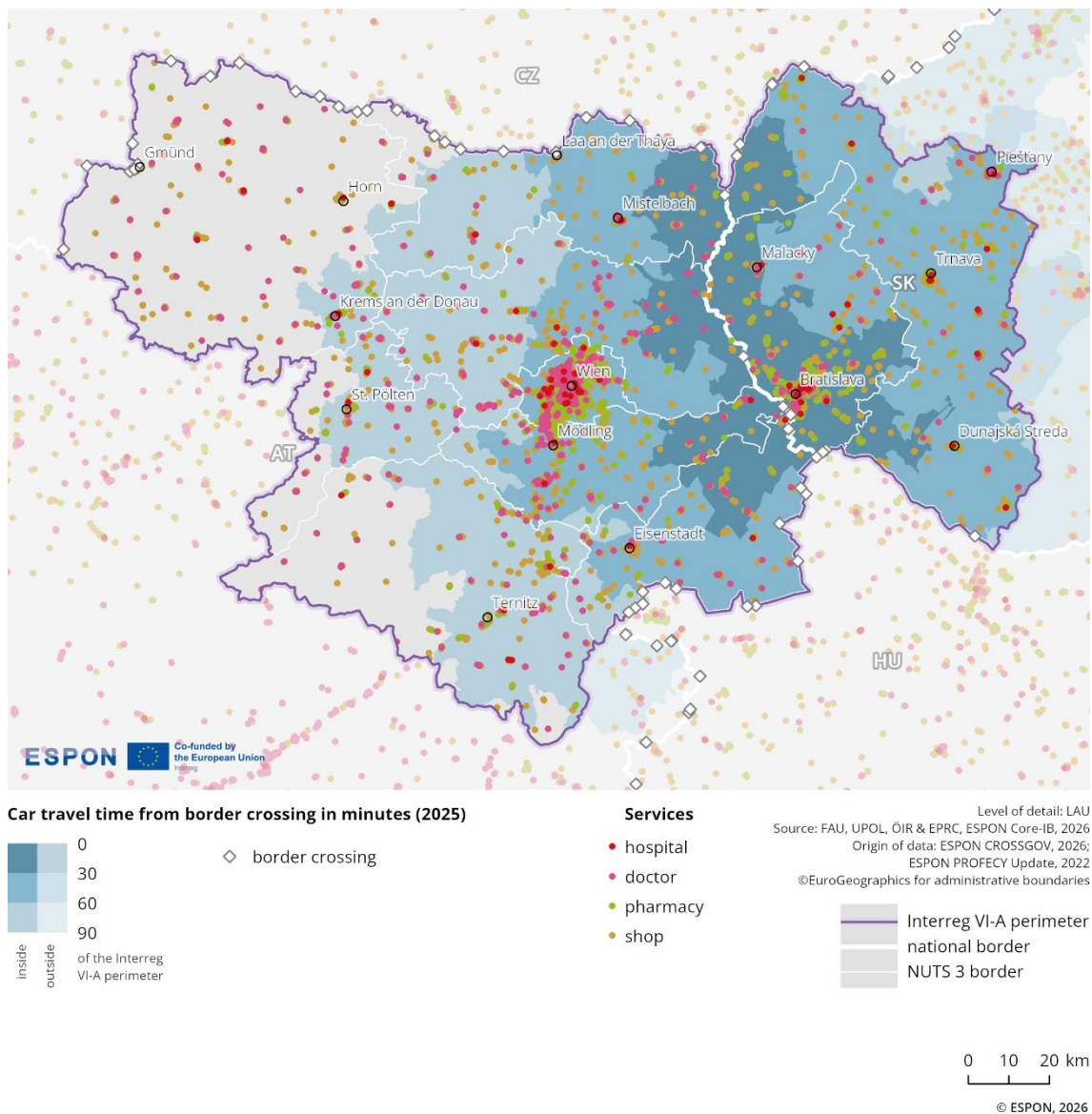
Please refer to the technical annex for more information.

Figure 2.7 illustrates cross-border travel time accessibility in the Interreg area, showing the time distance from the national border in 2025. The legend indicates 3 travel time categories in minutes (30, 60, 90) represented by different shades of blue. In addition, it marks the location of services, including hospitals, doctors (general practitioners), pharmacies, and shops (supermarkets and convenient stores), with distinct coloured symbols.

The map shows that along the entire cross-border, the travel accessibility for all regions is under 30 minutes without any interruption. The band below 60 minutes is wider on both sides of the border than the band below 30 minutes. It covers most of the Slovak side of the band below 60 minutes. More distant parts of Austria are accessible in over 90 minutes. Cross-border areas have good road network accessibility.

The main centre of services, including shops, hospitals, doctors, and pharmacies, is located near the Slovak border in the capital city of Bratislava, which is within a 30-minute travel time from the border. The capital city of Wien in Austria, a major centre of services, is located within a 60-minute travel time category from the border. Other services are distributed homogeneously throughout the border territory.

**Figure 2.7: Travel-time accessibility from border crossings**



### 2.1.3 Key messages on the territorial dimension

The territorial structure of the cross-border region is shaped by geographic features such as (smaller) mountain ranges, rivers and in particular the presence of 2 capital cities. The Dunaj/Donau and Morava/March rivers create natural corridors but also barriers in the border region, exerting significant influence on infrastructures. The combination of plains and hilly terrain leads to a variety of settlement structures most notably including 2 major agglomerations but also a large number of smaller, rural towns located within farmlands.

The region's key determinant for development is the Wien–Bratislava axis representing one of Europe's most integrated cross-border metropolitan areas. The 2 capitals connected to a network of smaller and medium-sized cities, such as St. Pölten, Eisenstadt and Trnava, which structure the wider functional region. Compared to many other border areas, settlement density in general is high, with figures above national averages in the whole programme area. Furthermore, demographic development is quite dynamic, with the cross-border region as a whole growing faster than European and national averages. However, the capital effect is mainly driving this trend, as this growth is particularly dependent on the

growth of Wien and Bratislava. In terms of age structure, both younger and older age cohorts outside of working age are growing in number throughout the border region.

Accessibility is a major strength of the cross-border area in the European comparison. Road connections are well developed, and the short distance between Wien and Bratislava means that travelling by car or train is faster and connections are more frequent than in most other cross-border regions. Service accessibility is also high, with both capitals acting as hubs for healthcare, education, and culture. While Bratislava is adjacent to the border and thus highly accessible, Wien is located within 60 minutes driving time for the border and thus slightly less accessible.

## 2.2 Economic dimension

The economic dimension includes analyses of gross domestic product, labour market conditions, competitiveness, and key infrastructure and housing indicators. The aim is to illustrate the impact of the border on economic performance, whether it acts as a barrier or a bridge, and the extent to which integration is supported by labour mobility, remote working, and infrastructure connectivity.

### 2.2.1 Gross Domestic Product

This sub-dimension illustrates the economic situation of the border region by analysing gross domestic product (GDP). It shows economic development within the border region and how this has changed over time. Comparisons with the respective countries and the EU average provide important context for understanding the region's dynamics.

#### 2.2.1.1 Gross domestic product per capita at current market prices

##### Indicator description

The indicator shows the regional GDP/capita in current prices and its development over the past years. It highlights structural differences and similarities between the border region and the respective national figures as well as the European average. Furthermore, it highlights patterns within the border region, although has to be interpreted with care in the case of a strong presence of commuters.

- **Source:** Eurostat, Annual Regional Database of the European Commission (ARDECO)
- **Temporal coverage:** 2010-2023
- **Unit:** Euro per capita

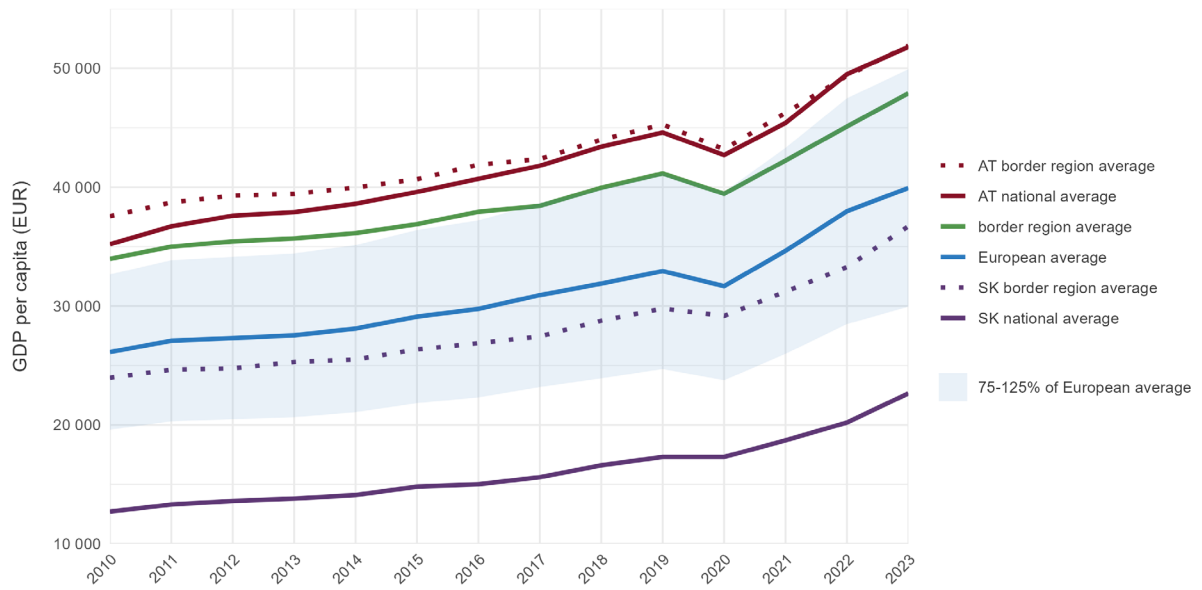
Please refer to the technical annex for more information.

The programme area shows a GDP/capita value of 125.7% of the EU average in 2022 and 127.6% of the average in European border regions in general. The analysed area marks a 24.8% increase of GDP per capita in the cross-border region between 2014 and 2022<sup>5</sup>. This corresponds to a 10.9 percentage points lower increase of GDP per capita in the cross-border region compared to the EU average. Furthermore, this corresponds to 10.4 percentage points lower increase of GDP per capita in the cross-border region compared to the average of European border regions. The Slovak border region is close to the EU average in terms of GDP per capita, which is notable 64.6% higher than the Slovak national average. The Austrian border region on the other hand has a very similar GDP per capita to the national

<sup>5</sup> Percentage changes are calculated using Eurostat data to ensure harmonised statistics from official sources. The latest year for which full coverage of all European regions is available on Eurostat is 2022. For visualisation purposes, ARDECO data has been used to enable longer time series to be visualised by filling the official dataset's existing gaps with model-based estimates. Therefore, slight deviations between the calculation and visualisation are possible.

average. For both the Austrian and Slovak border region the growth rate since 2014 has been below the EU average.

**Figure 2.8: Gross domestic product at current market prices (per capita)**



## 2.2.2 Labour market and commuting

This sub-dimension highlights the existing and potential functional links within the labour market of the border region. It examines the employment situation and commuting patterns, as well as the role of telework agreements, and considers developments over time based on analysed indicators. The analysis identifies factors that facilitate or hamper cross-border labour market integration.<sup>6</sup>

### 2.2.2.1 Share of employment

#### Indicator description

This indicator shows the share of employees in the population aged 15 to 64. Although it does not fully capture entrepreneurs, marginal employees, or civil servants, this is an important statistic for understanding general labour market patterns. It covers 2 aspects: first, high values can result from a high proportion of the resident population being employed. Second, high values can result from a high number of incoming commuters (from other NUTS3 regions within the country or from neighbouring countries). The same arguments apply to low values: they may indicate low levels of employment, or they may result from high shares of outgoing commuters. Values of more than 100% are possible, since the number of incoming commuters can exceed the number of inhabitants aged 15 to 64 (including both domestic and cross-border commuters).

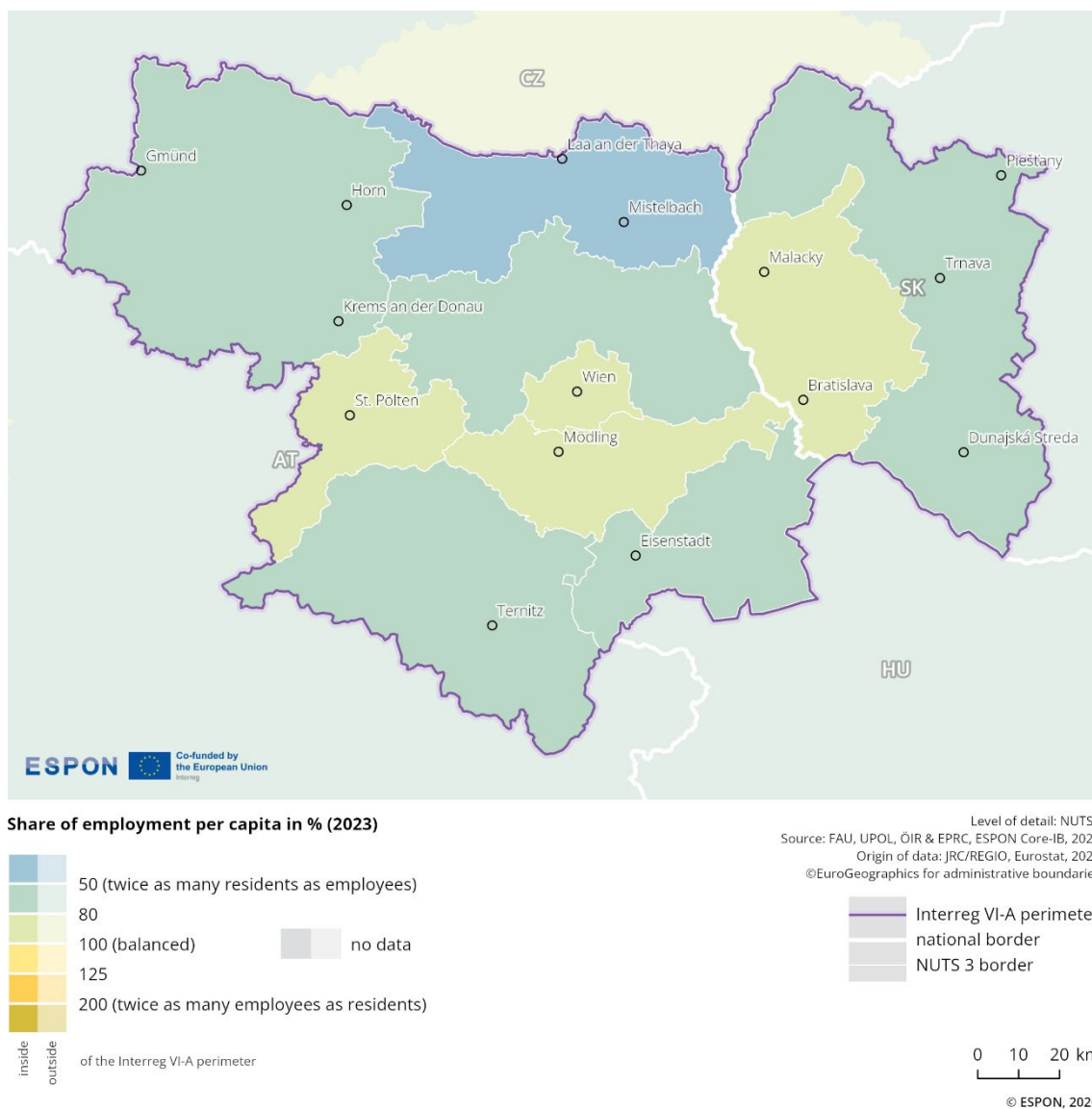
- **Source:** Eurostat, Annual Regional Database of the European Commission (ARDECO)
- **Temporal coverage:** 2014-2023
- **Unit:** Share in %

Please refer to the technical annex for more information.

Figure 2.9 illustrates the share of employment per capita in the population aged 15 to 64 in 2023. The data are categorised into ranges from below 50% (twice as many residents aged 15 to 64 as employees) to above 200% (twice as many employees as residents aged 15 to 64), with 100% representing a balanced ratio. Blue or green-coloured regions indicate more residents aged 15 to 64 than employees, while yellow regions indicate more employees than residents aged 15 to 64.

<sup>6</sup> See also: European Commission 2024: Cross-Border Regional Labour Market Analysis, <https://op.europa.eu/s/AazM>

**Figure 2.9: Employment share<sup>7</sup>**



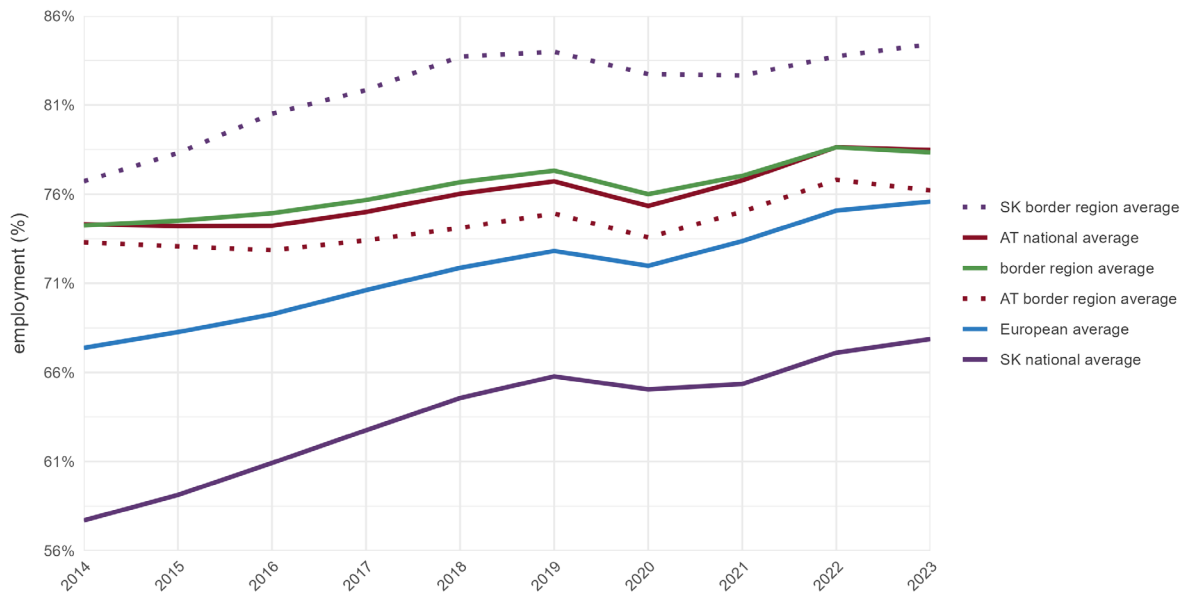
The share of employment in this border region is rather stable, with the average for the entire region at 78.3% in 2023, representing an increase of 4.1 percentage points since 2014. The share of employment values is mostly within the range of 50% to 80% across much of the region. Around the cities of St. Pölten, Wien, south of Wien, and near Bratislava, the values range between 80% and 100%. East of the city of Horn, the share of employment is low (up to 50%). When comparing the share of employment in this border region with different averages, the following can be observed (see Figure 2.10):

- › Compared to the European average, the border regional average is higher by 2.8 percentage points; in 2014, the difference was 6.9 percentage points.
- › Compared to national averages, values are lower by 0.1 percentage points in Austria and higher by 10.5 percentage points in Slovakia; in 2014, the difference compared to Austria was similar, and compared to Slovakia, it was +16.6 percentage points.

<sup>7</sup> Note: In this map, 'residents' refers to the population aged 15 to 64.

- › The Austrian border area reaches values 2.3 percentage points lower than the Austrian national average, while the Slovak border area exceeds the Slovak national average by 16.5 percentage points; both differences have gradually decreased since 2014.
- › Compared to the average of all cross-border regions, values are higher, although the difference has decreased from 7.95 to 3.89 percentage points since 2014.

**Figure 2.10: Employment share over time (comparison)**



### 2.2.2.2 Share of working-age population

#### Indicator description

This indicator shows the share of people aged 15 to 64 in the total population, reflecting the potential working-age population. The population counted includes all residents who live in the country permanently, excluding foreign students and military personnel. Using the 15–64 age range is a standard European statistical proxy, since differences in retirement age or labour participation across countries cannot be captured systematically. It allows for regional differentiation of potential workforce throughout the border region.

- **Source:** Eurostat, Annual Regional Database of the European Commission (ARDECO)
- **Temporal coverage:** 2014-2023
- **Unit:** Share in %

Please refer to the technical annex for more information.

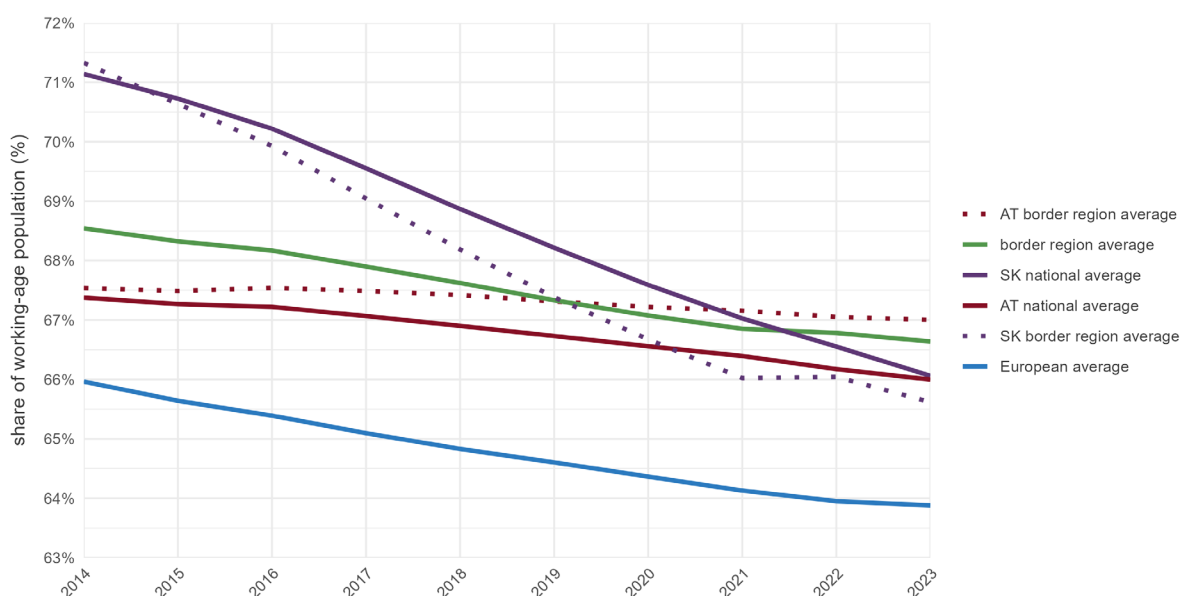
Figure 2.11 illustrates the evolution of the share of the working-age population in the Slovakia–Austria cross-border region between 2014 and 2023. In 2023, the programme area shows an average working-age population share of 66.6%, compared to the European average of 63.9% and 63.7% for the average of all cross-border regions.

The share of the working-age population in the whole cross-border region is very similar to the Austrian border average (67.0%), and slightly higher than the Slovak border average (65.6%). Compared to national levels, it is also slightly higher than both the Austrian national average (66.0%) and the Slovak national average (66.1%).

The region experienced a moderate 1.9 percentage point decrease in the share of the working-age population between 2014 (68.5%) and 2023 (66.6%). This decline is similar to the European average, which dropped by 2.1 percentage points in the same period. While all areas in the region show a declining trend, the rate of decline has been more pronounced in the Slovak parts (-5.7 percentage points at the border and -5.0 percentage points at the national level) than in the Austrian parts, where the decrease was very slight (-0.5 percentage points at the border and -1.4 percentage points at the national level).

The Slovakia–Austria cross-border region experienced a moderate overall decline in the share of the working-age population between 2014 and 2023. In 2023, the region remained slightly above both the European and cross-border averages, with a notably steeper decline on the Slovak side.

**Figure 2.11: Share of working-age population over time (comparison)**



### 2.2.2.3 Employment by sector

#### Indicator description

The indicator differentiates the number of jobs in a region by sector. This indicator focuses on workplace-based employment, providing insight into the employment landscape of a region. The dataset can be disaggregated according to “10-sector” NACE (Nomenclature statistique des activités économiques dans la Communauté européenne) classifications, allowing for detailed analysis of employment distribution across various industries.

- **Source:** Eurostat, Annual Regional Database of the European Commission (ARDECO)
- **Temporal coverage:** 2014-2023
- **Unit:** Share in %

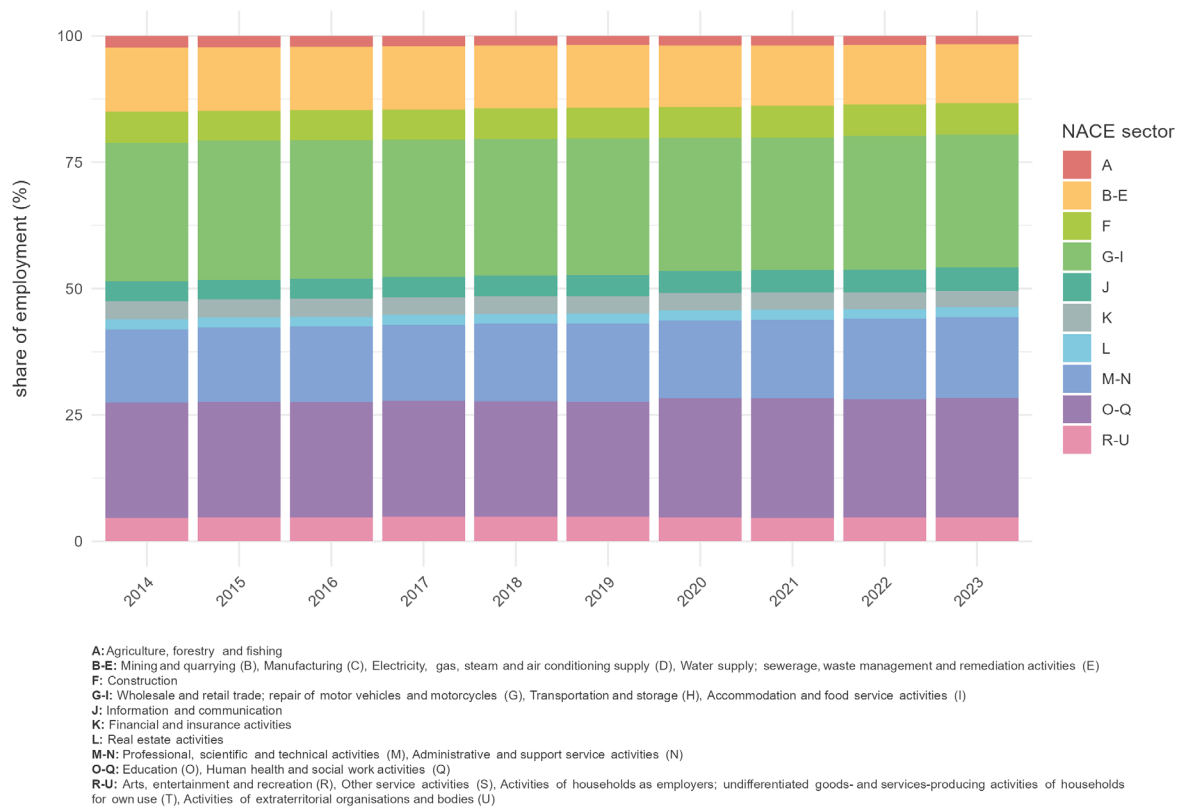
Please refer to the technical annex for more information.

Figure 2.12 illustrates the relative number of jobs in the border area differentiated by sectors. It shows where jobs are located (not where employed persons live). This workplace-based indicator offers insight into the employment structure of a region.

The dataset uses a '10-sector' classification based on NACE categories. The sectoral breakdown is as follows:

- › A: Agriculture, forestry and fishing
- › B-E: Mining and quarrying (B), Manufacturing (C), Electricity, gas, steam and air conditioning supply (D), Water supply; sewerage, waste management and remediation activities (E)
- › F: Construction
- › G-I: Wholesale and retail trade; repair of motor vehicles and motorcycles (G), Transportation and storage (H), Accommodation and food service activities (I)
- › J: Information and communication
- › K: Financial and insurance activities
- › L: Real estate activities
- › M-N: Professional, scientific and technical activities (M), Administrative and support service activities (N)
- › O-Q: Education (O), Human health and social work activities (Q)
- › R-U: Arts, entertainment and recreation (R), Other service activities (S), Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use (T), Activities of extraterritorial organisations and bodies (U)

**Figure 2.12: Employment by sector (comparison)**



Between 2014 and 2023, the relative number of jobs in the different sectors remains fairly stable. There is a slight decline in the share of employment in agriculture, forestry and fishing (A) and Mining and quarrying (B), Manufacturing (C), Electricity, gas, steam and air conditioning supply (D), Water supply; sewerage, waste management and remediation activities (E). Conversely, there is a modest increase in the number of jobs in Professional, scientific and technical activities (M) and Administrative and support service activities (N).

Over the entire period, the sectors with the highest share of jobs are 'G-I' (Wholesale and retail trade, repair of motor vehicles and motorcycles, Transportation and storage, Accommodation and food service activities), 'M-N' (Professional, scientific and technical activities, Administrative and support service activities) and 'O-Q' (Education, Human health and social work activities).

## 2.2.2.4 Outgoing cross-border commuters

### Indicator description

The indicator shows outgoing cross-border commuting dynamics at NUTS3 level. Even though no origin-destination information can be provided, it is assumed that commuters primarily travel across the nearest border. Spatial, economic and population arguments are combined to calculate the number of outgoing cross-border commuters.

- **Source/method of retrieval:** Eurostat/LFS data on outgoing commuters currently available on NUTS2 level has been regionalised for NUTS3 by means of weighting by border length, NUTS3 population-weighted centroid distance to border, population per NUTS3 region (15–64 years old) and real compensation per employee
- **Temporal coverage:** 2015-2023
- **Unit:** Share in %

Please refer to the technical annex for more information.

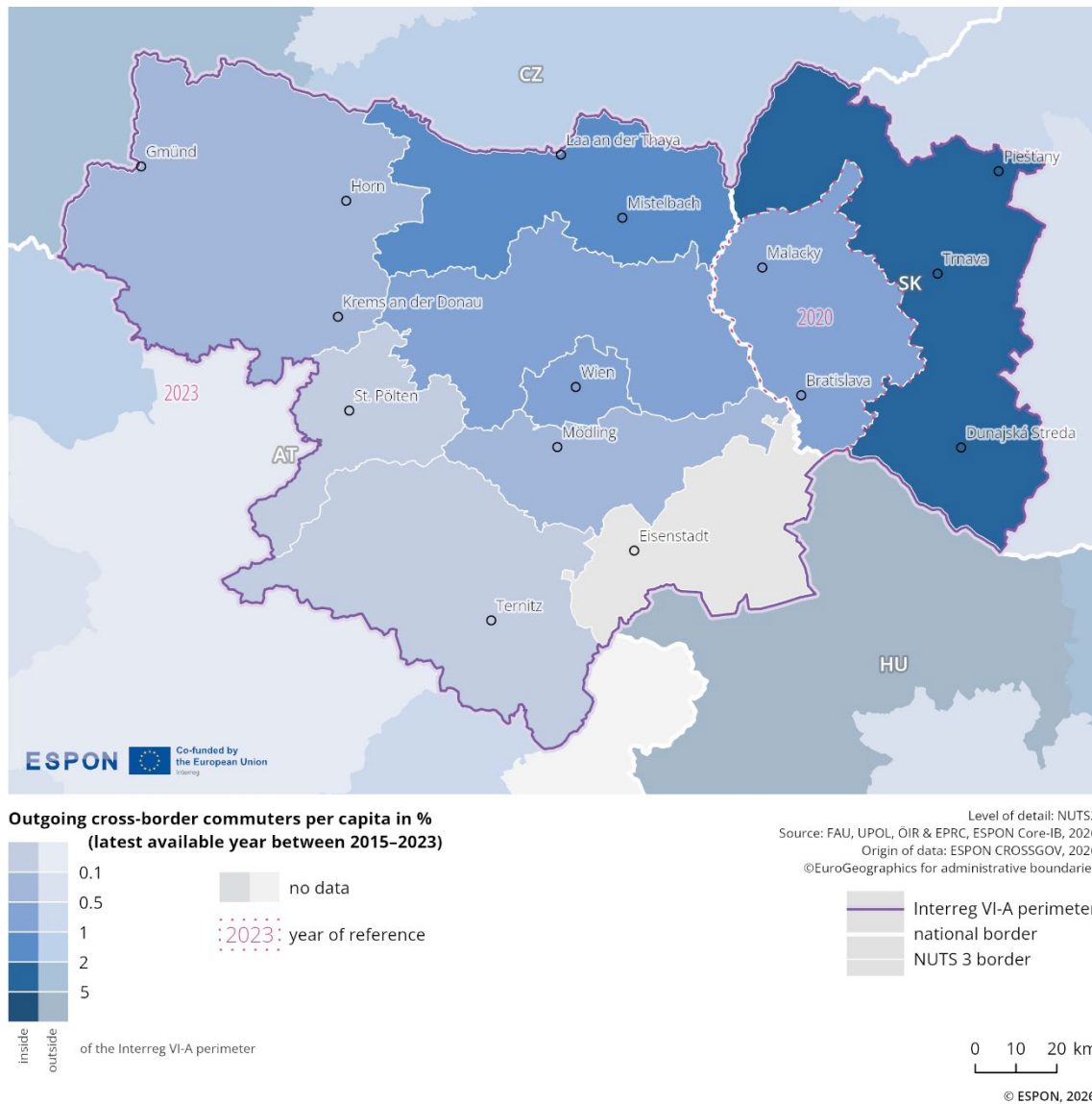
Commuting is one of the most relevant cross-border flows to identify functional linkages. Figure 2.13 illustrates the share of outgoing commuters per capita for each NUTS3 region (more concretely speaking the share of outgoing commuters among the residential population of the age group 15-64 years old, resembling the potential labour force). Origin-destination information cannot be provided, but the share of outgoing commuters in regions close to the border indicates the relevance of commuting. It highlights functional relations in the labour market within the cross-border region.

The share of cross-border commuters visualised is based on the most recent available year of data. It shows relatively strong and fairly evenly distributed cross-border commuting activity in areas directly adjacent to the border on both the Austrian and Slovakian sides.

Particularly notable "outgoing hotspots" include the Austrian region of Weinviertel and the Slovakian region of Trnavský kraj<sup>8</sup>. These NUTS3 regions show elevated shares of outgoing cross-border commuters per capita. However, due to the adjacent other bordering countries (Hungary and Czechia), the indicator does not imply necessarily high share of cross-border commuters of all those regions with Austria or Slovakia.

<sup>8</sup> See Eurostat Statistical Atlas for NUTS3 (2021) regions: <https://ec.europa.eu/statistical-atlas/viewer/?config=typologies.json&ch=NUTS&mids=BKGCNT.NUTS2021L3.CNTOVL&o=1.1.0.7&center=49.69576,14.33324&lcis=NUTS2021L3&>

**Figure 2.13: Outgoing cross-border commuting patterns**



### 2.2.2.5 Cross-border telework agreements

#### Indicator description

The indicator shows what kind of legal framework for cross-border telework is enacted.

- **Source/method of retrieval:** The indicator is based on information about the legal framework for social security regarding cross-border teleworking, categorised by border pair.
- **Temporal coverage:** Status as of March 2025
- **Unit:** n/a

Please refer to the technical annex for more information.

The 2 countries involved in the programme are signatories of the 2023 Framework Agreement on Cross-Border Telework. Under this agreement, cross-border workers can telework from their country of residence for up to 50% of their total working time without affecting their social security affiliation.

### 2.2.3 Competitiveness

This sub-dimension illustrates the competitiveness of the border region by analysing the main industry sectors that contribute to its economic development. It assesses gross value added (GVA) at basic prices by sector, as well as nominal compensation per hour worked, in order to understand productivity levels and sectoral strengths.

#### 2.2.3.1 Gross value added at basic prices by sector

##### Indicator description

The indicator shows the gross value added (GVA), which is a measure of the contribution of a country or region to the economy. Regional GVA represents the value generated by all units involved in the production of goods and services within a specific area. This indicator can be disaggregated by industry and service sector, allowing for a detailed analysis of economic contributions across different fields. Additionally, the sum of GVA across all industries or sectors, combined with taxes on products and minus subsidies on products, yields the gross domestic product (GDP) of the region. The dataset is available in "10-sector" NACE classifications, facilitating comprehensive evaluations of the regional economy.

- **Source:** Annual Regional Database of the European Commission (ARDECO)
- **Temporal coverage:** 2014-2023
- **Unit:** Million purchasing power standards (PPS)

Please refer to the technical annex for more information.

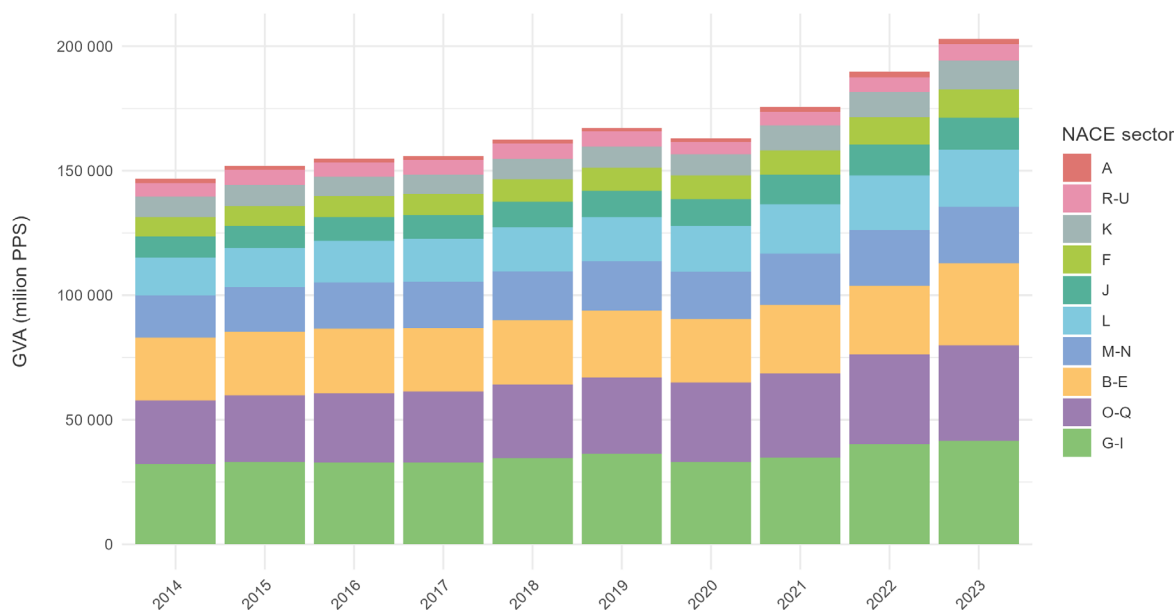
Figure 2.14 visualises gross value added (GVA), which is an important indicator of economic activity. GVA measures the value created by all economic activities involved in producing goods and services in a specific area. It is differentiated by sectors to provide detailed insights into the economic contributions of different fields.

The dataset uses a '10-sector' classification based on NACE categories. The sectoral breakdown is as follows:

- › A: Agriculture, forestry and fishing
- › B-E: Mining and quarrying (B), Manufacturing (C), Electricity, gas, steam and air conditioning supply (D), Water supply; sewerage, waste management and remediation activities (E)
- › F: Construction
- › G-I: Wholesale and retail trade; repair of motor vehicles and motorcycles (G), Transportation and storage (H), Accommodation and food service activities (I)
- › J: Information and communication
- › K: Financial and insurance activities
- › L: Real estate activities
- › M-N: Professional, scientific and technical activities (M), Administrative and support service activities (N)
- › O-Q: Education (O), Human health and social work activities (Q)
- › R-U: Arts, entertainment and recreation (R), Other service activities (S), Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use (T), Activities of extraterritorial organisations and bodies (U)

Between 2014 and 2023, the GVA in the border area of Slovakia-Austria increased from 146,713 million purchasing power standards (PPS) to 202,954 million PPS — a growth of 38%. Sector groups B–E, G–I, and O–Q together make up over half of the total GVA, highlighting their significant contribution to the regional economy within the border area. The sector groups G–I contributed the largest share, with a total of 41,643 million PPS in 2023. This underlines the significance of sectors such as Wholesale and retail trade; repair of motor vehicles and motorcycles (G), Transportation and storage (H), Accommodation and food service activities (I) in the Slovakia-Austria border region.

**Figure 2.14: Gross value added at basic prices by sector (comparison)**



A: Agriculture, forestry and fishing  
 B-E: Mining and quarrying (B), Manufacturing (C), Electricity, gas, steam and air conditioning supply (D), Water supply; sewerage, waste management and remediation activities (E)  
 F: Construction  
 G-I: Wholesale and retail trade; repair of motor vehicles and motorcycles (G), Transportation and storage (H), Accommodation and food service activities (I)  
 J: Information and communication  
 K: Financial and insurance activities  
 L: Real estate activities  
 M-N: Professional, scientific and technical activities (M), Administrative and support service activities (N)  
 O-Q: Education (O), Human health and social work activities (Q)  
 R-U: Arts, entertainment and recreation (R), Other service activities (S), Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use (T), Activities of extraterritorial organisations and bodies (U)

### 2.2.3.2 Nominal compensation per hour worked

#### Indicator description

The indicator shows the average income paid for each hour worked, known as compensation per hour worked. This measure is calculated by dividing the “compensation of employees at current prices” by the total number of “hours worked (employees).” Employees, in this context, are defined as individuals engaged by contract in productive activities for a resident unit, receiving remuneration irrespective of their place of residence. The total hours worked is considered the most appropriate measure of labour input, representing the aggregate number of hours actually worked by employees. This indicator provides valuable insights into labour productivity and wage dynamics within the economy.

- **Source:** Annual Regional Database of the European Commission (ARDECO)
- **Temporal coverage:** 2023 (missing data from 2023 in Switzerland were supplemented by values from 2022)
- **Unit:** Euro

Please refer to the technical annex for more information.

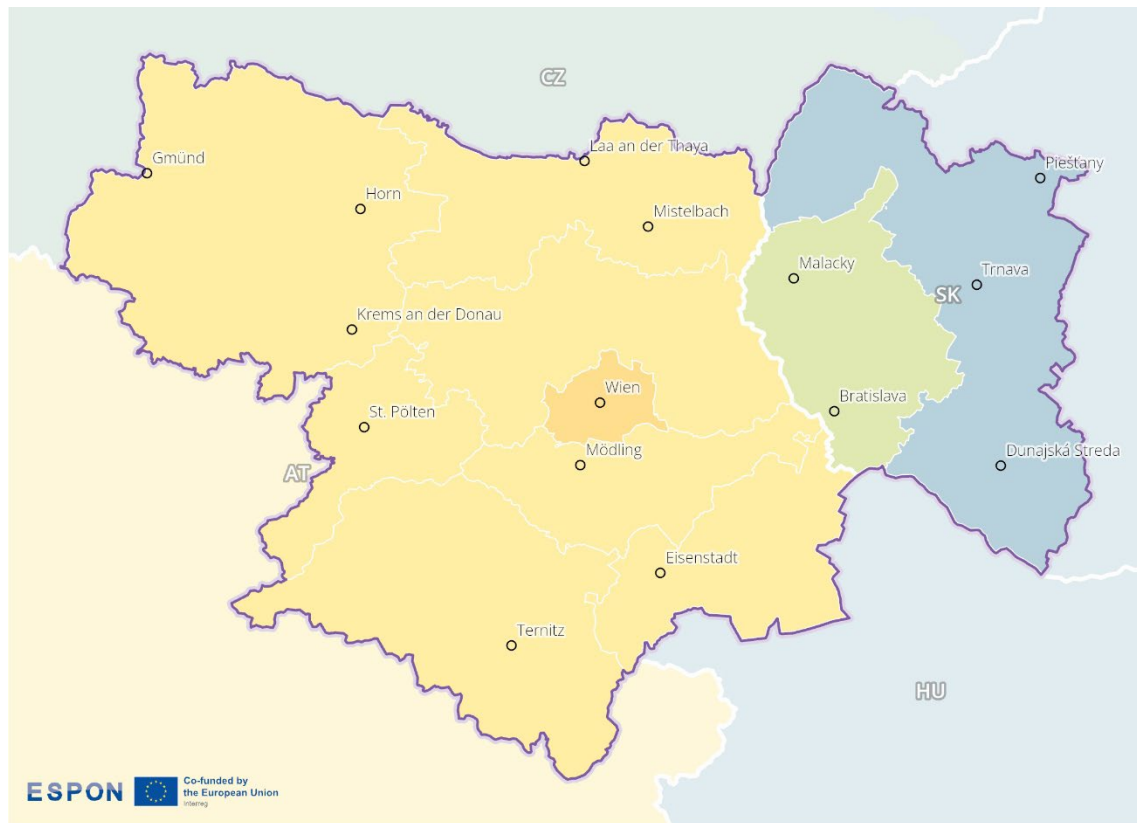
Figure 2.15 shows the average values for the 'compensation per hour worked'. This indicator is calculated by dividing the total compensation of employees (at current prices) by the total number of hours worked by those employees. In this context, 'employees' are defined as individuals engaged by contract in productive activities. The data is available for the place of work, regardless of the place of residence. Total hours worked represent the actual number of hours worked by employees and are considered the most accurate measure of labour input.

In 2023, nominal compensation per hour worked in the Slovakia–Austria border region appears to be quite unevenly distributed. In Austria, the average hourly income is €37.90. Wien (€42.20) reports a slightly higher value. In Slovakia the average hourly income is €15.30 which is significantly lower than in Austria. The Slovak NUTS3 regions Bratislavský kraj (€21.50) shows higher values than the national average while Trnavský kraj (€14.30) shows lower values than the national average.<sup>9</sup>

Cross-border wage differences can encourage labour migration from lower-wage areas to more economically prosperous neighbouring regions, creating both opportunities and challenges for local labour markets and social systems.

<sup>9</sup> See Eurostat Statistical Atlas for NUTS3 (2021) regions: <https://ec.europa.eu/statistical-atlas/viewer/?config=typologies.json&ch=NUTS&mids=BKGCNT.NUTS2021L3.CNTOVL&o=1.1.0.7&center=49.69576,14.33324&lcis=NUTS2021L3&>

**Figure 2.15: Average income per hour**



**Average income per hour worked in euros (2023)**



## 2.2.4 Infrastructure and housing

This sub-dimension shows the impact of the border on infrastructure and housing in the region. It assesses housing prices and average internet speed in order to identify cross-border effects, including potential price spillovers and disparities. The analysis reveals whether infrastructure and housing markets facilitate integration or expose structural challenges that are specific to the border area.

### 2.2.4.1 Advertised sales prices

#### Indicator description

The indicator shows the advertised sales price per square meter for houses/appartements as retrieved from commercial real estate websites at national level. In the cross-border region, local differences between average sales prices are highlighted and the “cutting” effect of the border and its influence on price levels is visualised.

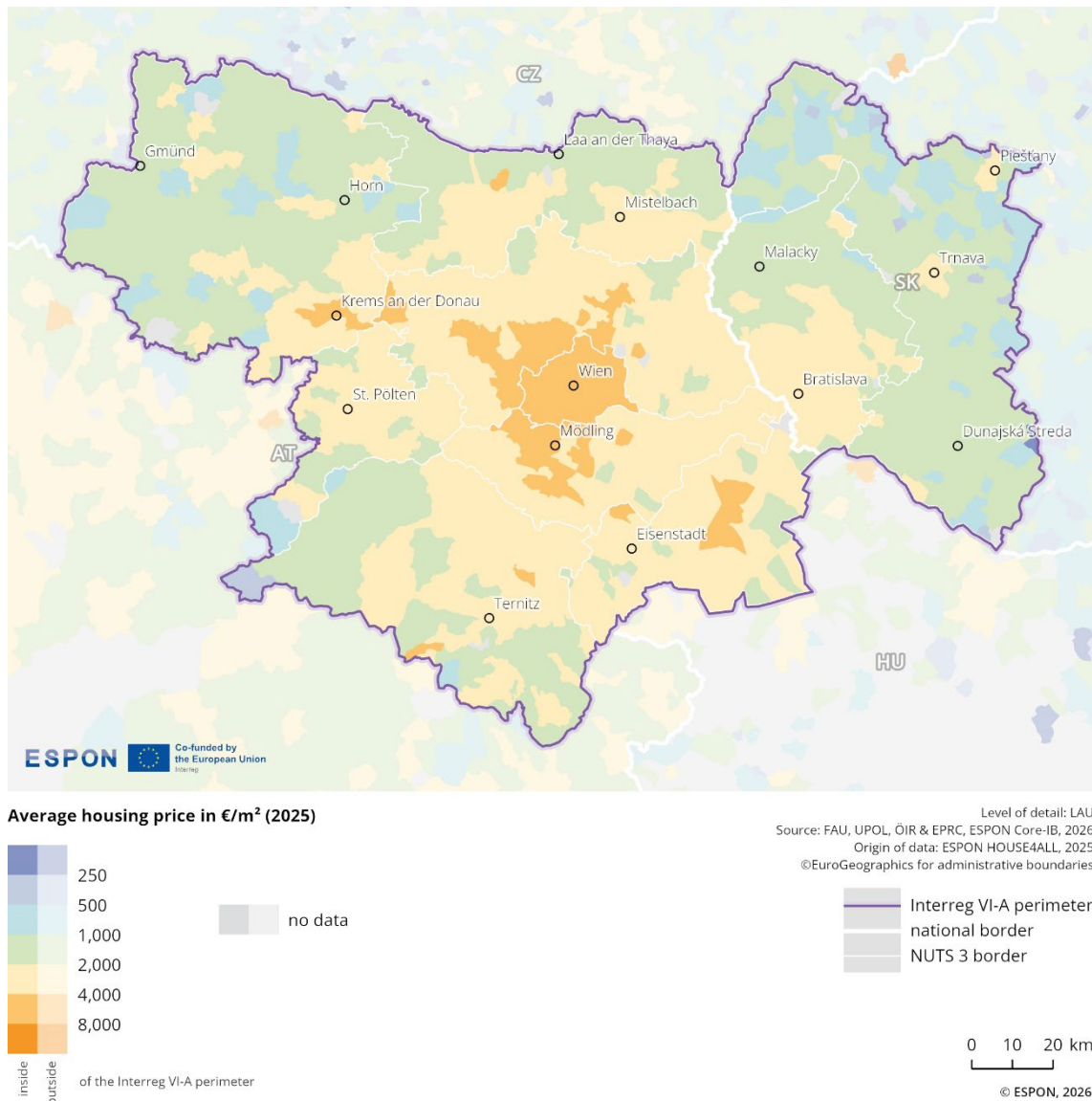
- **Source/method of retrieval:** Processed ESPON House4all data. The original data is collected via web-scraping of national listing websites over a one-year period.
- **Temporal coverage:** 2024/2025
- **Unit:** Average price per square meter (€/m<sup>2</sup>)

Please refer to the technical annex for more information.

Figure 2.16 illustrates the advertised sales price of housing in 2025 across the border region. The data are categorised into ranges of average housing price per square metre, from below 250 €/m<sup>2</sup> up to more than 8,000 €/m<sup>2</sup>, shown in colours ranging from purple and blue to green, yellow and orange.

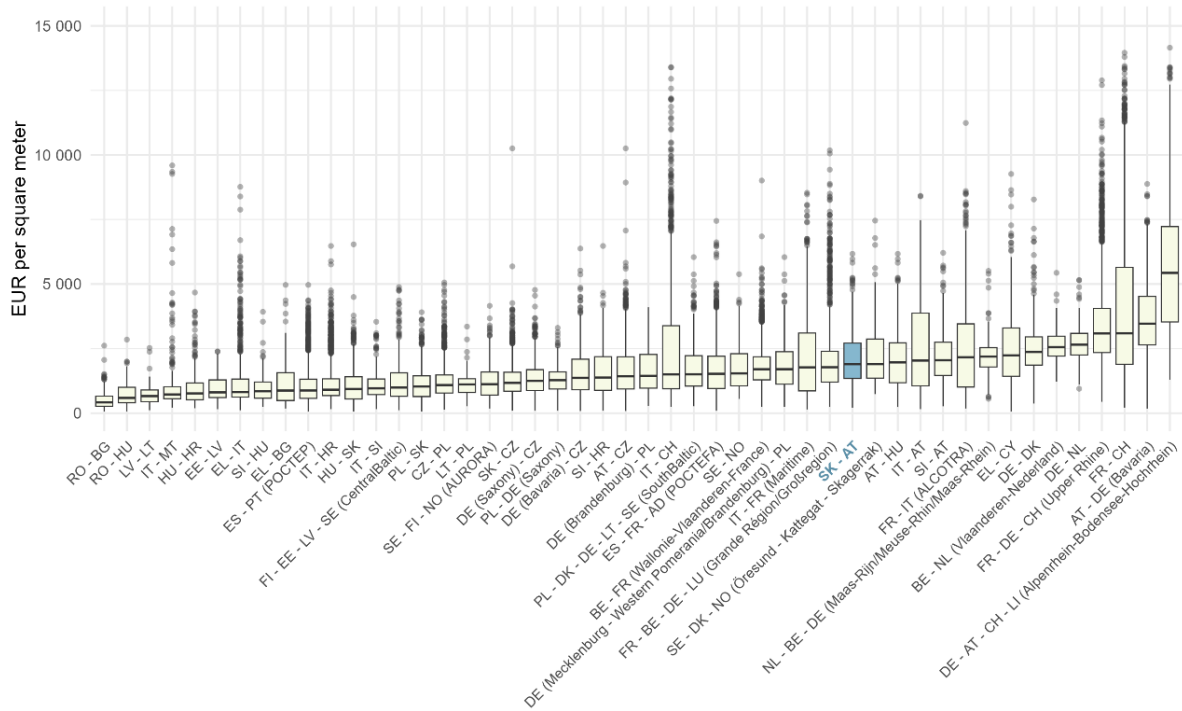
The map shows that average prices in Austria show a concentrically arranged pattern around the capital, Wien, where the average sales price ranges from 4,000 to 8,000€/m<sup>2</sup>. Further away from Wien, prices fall across the 4,000 range to levels of 2,000 or 1,000€/m<sup>2</sup>, especially in the western part. The 3,000€/m<sup>2</sup> price level extends from Austria into the Slovak part of the belt, heading in the direction of Wien, and encompasses Bratislava and its surroundings. Further east of Bratislava, the price drops to below 1,000€/m<sup>2</sup>. The border does not form a significant divide, but there is a difference between the cross-border regions.

**Figure 2.16: Advertised housing prices**



The Austrian part of the border region records an average advertised residential sales price of approximately €2,506 per square metre, while the Slovak part shows a lower average price of about €1,425 per square metre. Overall, the average advertised sales price across the entire border region is estimated at €2,096 per square metre. This level is broadly comparable to the average for all EU-evaluated border regions (€1,900 per square metre) and remains below the European average of approximately €5,600 per square metre.

**Figure 2.17: Advertised housing prices (comparison)**



### 2.2.4.2 Average internet speed

#### Indicator description

The indicator shows the population weighted average internet speed available at municipal level. It highlights differences in the “digital preparedness”. In border regions, this indicator is particularly relevant for identifying digital infrastructure gaps that may hamper balanced development and cross-border integration.

- **Source/method of retrieval:** Processing of data provided by Speedtest by Ookla Global Fixed and Mobile Network Performance Maps, based on Ookla’s analysis of Speedtest Intelligence data.
- **Temporal coverage:** 2022
- **Unit:** Download speed in Mbps

Please refer to the technical annex for more information.

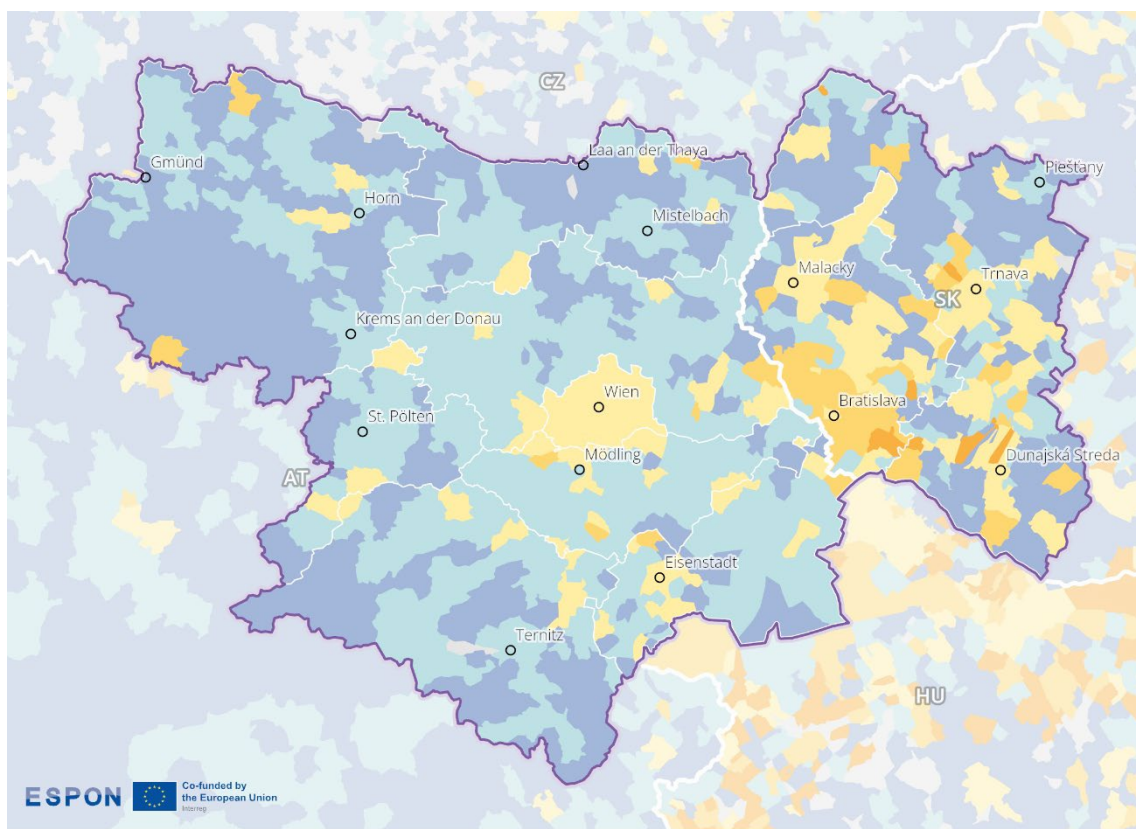
Digitalisation is a highly relevant issue in European border regions, with the overarching objective of ensuring appropriate digital access. It is widely recognised as a key precondition for successful regional and economic development. A major challenge in this process is preventing ‘digital divides’— i.e., avoiding significant disparities in economic, social, and spatial terms.

Average internet speed is a telling indicator of such disparities, highlighting differences in ‘digital preparedness’ at the local level. Figure 2.18 shows the average download speed at the municipality level. The colour scheme ranges from dark blue (very slow speeds) to orange (very fast speeds). The

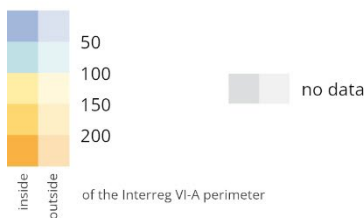
data, prepared by OBC Transeuropa for EDJNet, is based on Speedtest Intelligence data from Speedtest/Ookla's Global Fixed and Mobile Network Performance Maps for the first quarter of 2022. The average download speeds are expressed in megabits per second (Mbps), not to be confused with megabytes per second (MBps).

Figure 2.18 reveals significant differences between urban and rural areas, with values ranging from under 50 Mbps to over 200 Mbps. Cities such as Bratislava, Trnava, Wien, and Eisenstadt report relatively high average speeds, while the surrounding areas tend to have significantly lower values. This may be due to the greater return on investment typically associated with digital infrastructure projects in urban areas compared to rural ones. However, not all urban areas in this border region have high download speeds, for example, Horn, Krems an der Donau, St. Pölten, and Ternitz do not stand out in this regard. In the analysed regions of Slovakia, the average internet speed is higher than in analysed Austrian regions.

**Figure 2.18: Average internet download speed**



**Average internet speed in Mbps (2022)**



Level of detail: LAU  
 Source: FAU, UPOL, ÖIR & EPRC, ESPON Core-IB, 2026  
 Origin of data: Orinaldo Gjergji, European Data Journalism Network, 2022  
 ©EuroGeographics for administrative boundaries



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### 2.2.5 Key messages on the economic dimension

The border region has a mixed economy, characterised by strong interconnections in some fields (e.g. commuting) and clear disparities (e.g. income). The cities of Wien and Bratislava represent powerful economic hubs, which attract commuters from the same country and from the neighbouring countries, including Slovakia, especially in the case of Wien.

Overall, productivity levels and wages are higher on the Austrian side but are aligning more closely with national averages. Slovak regions in the border area on the other hand show considerably higher values than the respective national averages. Sectoral structures in this regard reveal complementarities, with services, logistics and trade dominating in both capital regions, with a further significant role played by manufacturing and construction in the regions. Overall, the output of the economy in the whole cross-border region has increased in line with other border regions in central Europe over the past 10 years.

The considerable wage differences notably drive a strong commuting dynamic, however not only from Slovakia to Austria but partially also from Austria to Slovakia (and Czechia) especially in the northern part of the programme. This might be further supported by the framework agreement on telework which is in place between the 2 countries. The generally well-developed digital infrastructure supports this; however, in particular Slovak municipalities often record faster internet speeds. This might generate the potential of counterbalancing the trend of cross-border commuting to Austria.

The asymmetries in the labour market and the corresponding population dynamics are further reflected in the housing market in particular. Property prices in the whole regions are considered as high with a peak in Wien (and suburbs), and while Bratislava still shows price levels below Wien, it is by far the highest level within Slovakia. The corridor between the 2 capitals likewise sees elevated prices in comparison to the surrounding areas.

Overall, the border region represents a strongly integrated economic space supported by 2 capitals. There is a considerable functional area created in the axis between the two, however physical connectivity in parts of the border area remains low due to natural barriers.

## 2.3 Green dimension

The green dimension highlights the environmental characteristics, vulnerabilities and sustainability-related interactions within the border region. The analysis provides insight into the environmental interdependence of border regions. Additionally, the spatial distribution of renewable and conventional energy infrastructure, alongside indicators of resources and the circular economy, reveals whether the border facilitates collaborative transitions towards sustainability.

### 2.3.1 Nature protection and pollution

This sub-dimension investigates cross-border functional links in protected areas and areas affected by air and water pollution. It analyses the presence of protected areas in order to identify cross-border ecological links and conservation efforts. It also highlights the extent to which air and water pollution affects people living in border regions.

### 2.3.1.1 Protected areas

#### Indicator description

The indicator shows the presence and territorial coverage of protected areas based on the combination of 3 data sources, i.e., Nationally designated areas, Natura 2000 Network and Emerald Network.

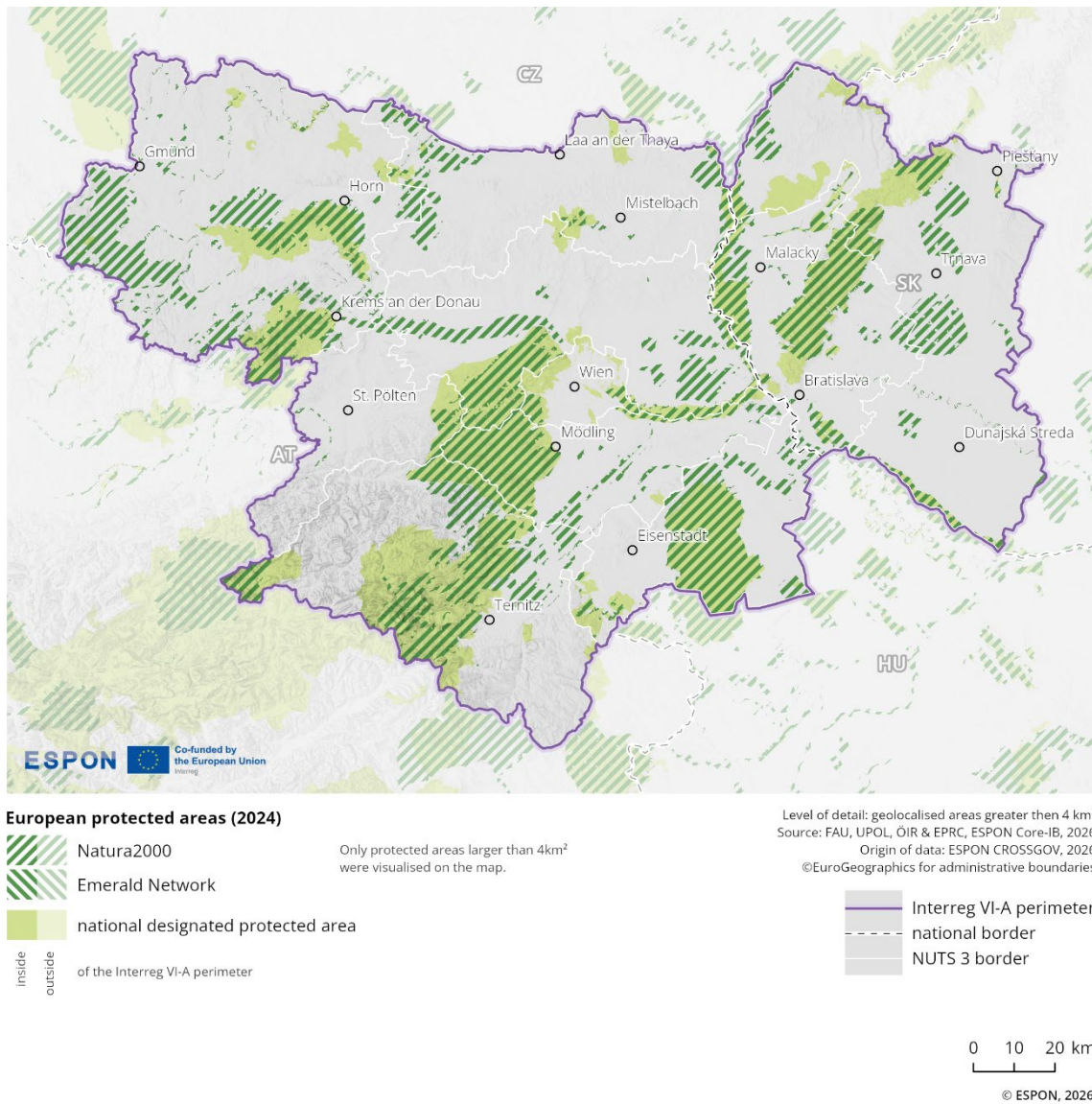
- **Source/method of retrieval:** The indicator represents a combination of nationally designated areas, Natura 2000 and Emerald network provided by EEA (European Environment Agency) Geospatial data catalogue.
- **Temporal coverage:** 2024
- **Unit:** n/a

Please refer to the technical annex for more information.

Figure 2.19 illustrates the distribution of protected areas in 2024 across the border region. The data differentiate between Natura 2000 sites, the Emerald Network, and nationally designated protected areas, with only protected areas larger than 4 km<sup>2</sup> displayed.

Protected areas within the Interreg region along the Austria–Slovakia border are widely distributed, in particular at the immediate border where strong cross-border connectivity can be identified. Larger contiguous zones are also concentrated near Ternitz, Eisenstadt, and Trnava. Strong overlaps between Natura 2000 and national designations are visible throughout, especially in the Wien basin and along the border between Austria and Slovakia. Several areas form continuous protected zones across borders, while other regions, particularly around Krems and der Donau and Bratislava, show more fragmented patterns. The northern and north-western parts of the region also feature scattered, smaller protected patches.

**Figure 2.19: Nature protected areas**



### 2.3.1.2 Air pollution

#### Indicator description

The indicator shows the air pollution from fine particulates (PM<sub>2.5</sub>) at NUTS3 level. The data shows the population-weighted average air pollution level (µg/m<sup>3</sup>), providing an indication of the extent to which the regional population is affected by air pollution.

- **Source/method of retrieval:** Processing and analysis of European Environment Agency data
- **Temporal coverage:** 2022
- **Unit:** Population weighted average of µg/m<sup>3</sup>

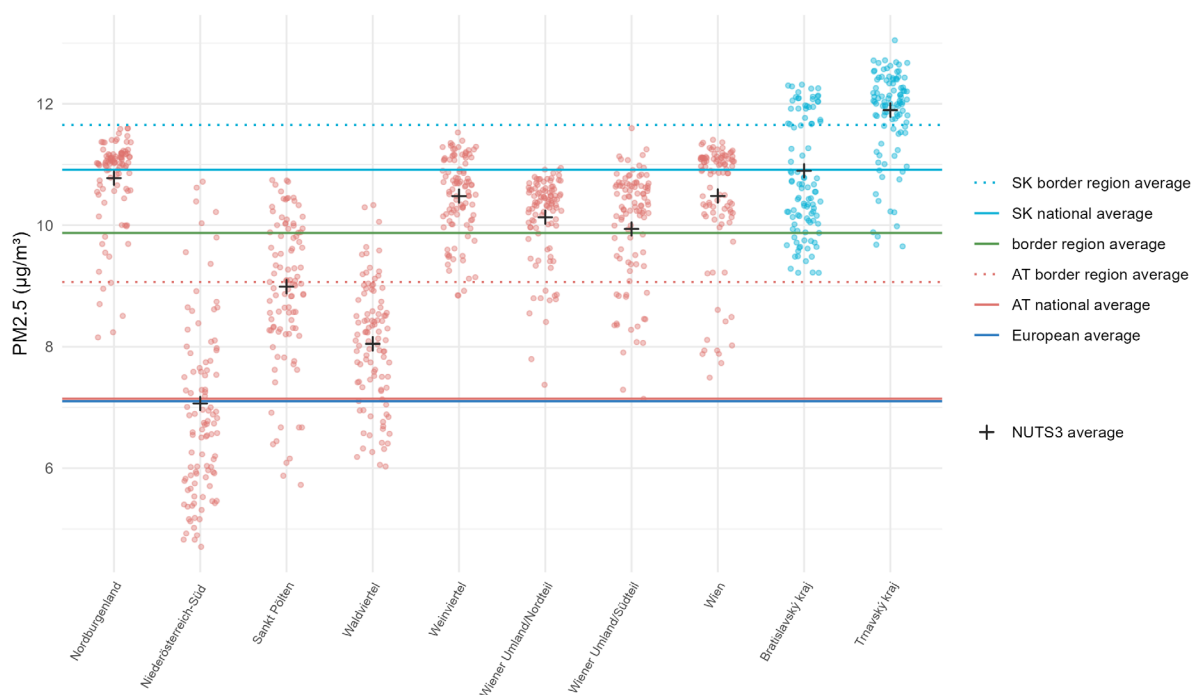
Please refer to the technical annex for more information.

Figure 2.20 illustrates PM2.5 concentrations (in  $\mu\text{g}/\text{m}^3$ ) across NUTS3 regions in Slovakia and Austria. Each small dot represents an individual measurement, while the black crosses indicate the average PM2.5 concentration for each NUTS3 region<sup>10</sup>. The regions are aligned along the x-axis, with Austrian regions on the left (in red) and Slovak regions on the right (in blue).

PM2.5 values in both countries span a wide range. Overall, Slovakia shows a higher national average PM2.5 level than Austria. The national average in Slovakia is lower than the average in its border region, a pattern that also appears in the Austrian data.

The European average is almost aligned with the Austrian national average. Accordingly, the Slovak values lie significantly above the European average. The cross-border region average is located above the European average and lies between the Slovak and Austrian border region averages.

**Figure 2.20: Air pollution**



<sup>10</sup> See Eurostat Statistical Atlas for NUTS3 (2021) regions: <https://ec.europa.eu/statistical-atlas/viewer/?config=typologies.json&ch=NUTS&mids=BKGCNT.NUTS2021L3.CNTOVL&o=1.1.0.7&center=49.69576,14.33324&lcis=NUTS2021L3&>

### 2.3.1.3 Water pollution

#### Indicator description

The indicator shows the ecological status or potential for coastal and river water bodies. It is based on an assessment of biological, hydro-morphological, chemical and physico-chemical quality elements.

- **Source/method of retrieval:** Processing and analysis of European Environment Agency data
- **Temporal coverage:** 2022 (supplemented by 2016 data)
- **Unit:** n/a

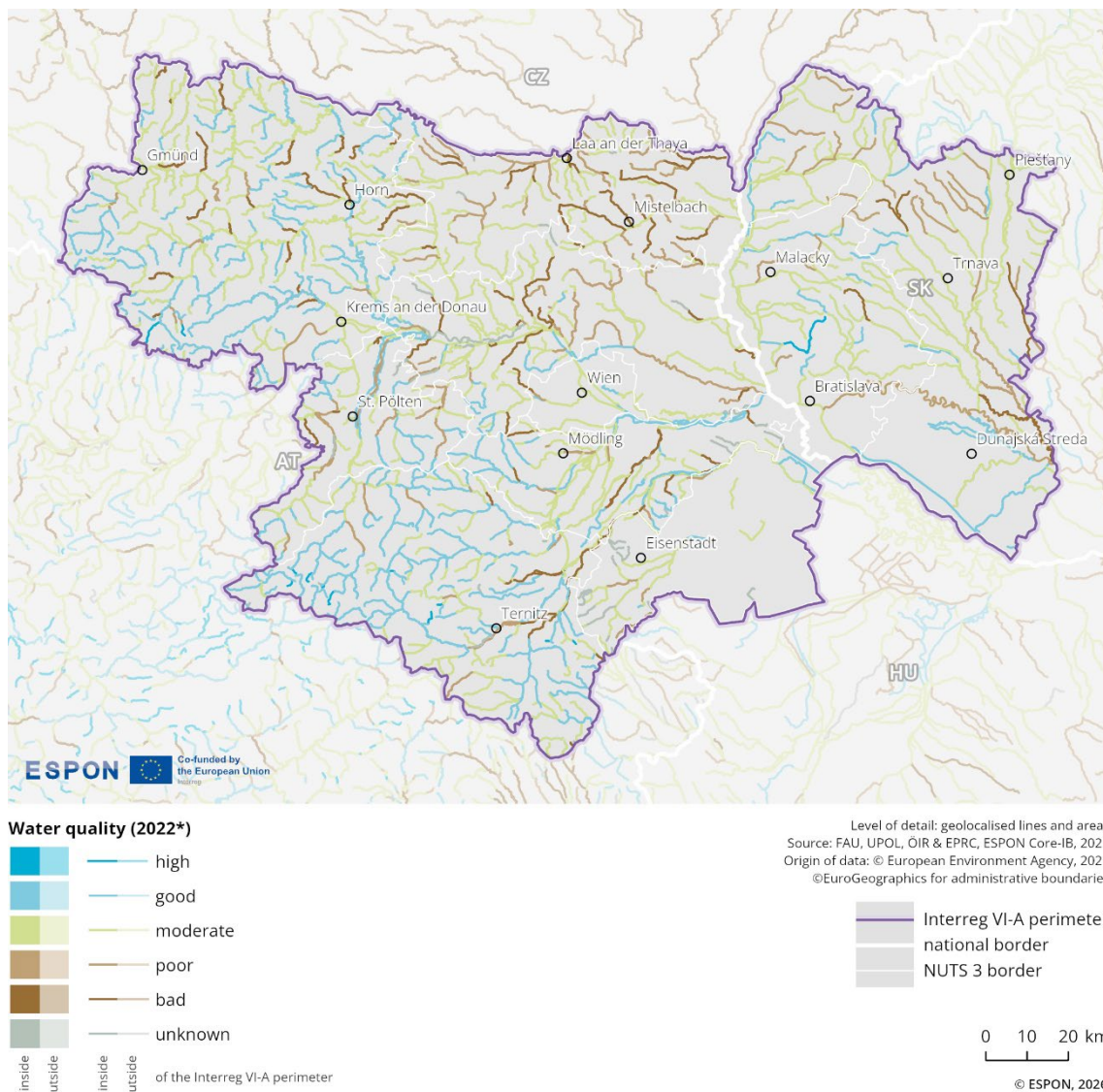
Please refer to the technical annex for more information.

Figure 2.21 illustrates water pollution levels in the Austria-Slovakia Interreg region in 2022. Water quality is represented using 6 colour-coded categories, ranging from "bad" to "high", including an "unknown" category<sup>11</sup>.

In the Austrian part of the Interreg region, rivers in the west and centre are mainly rated as "moderate" or "good". To the east, particularly north of Wien, more rivers are classified as "poor" or "bad". In the Slovak part of the Interreg region, rivers around Bratislava and further east are mostly rated as "moderate" or "poor". Only a few stretches reach the "good" or "high" categories."

<sup>11</sup> For more information see the Water Framework Directive Reporting Guidance (2022): [https://cdr.eionet.europa.eu/help/WFD/WFD\\_715\\_2022](https://cdr.eionet.europa.eu/help/WFD/WFD_715_2022)

**Figure 2.21: Water quality patterns**



## 2.3.2 Climate risks and resilience

This sub-dimension examines cross-border functional links relating to climate risks and resilience. It analyses exposure to natural hazards such as landslides, earthquakes, droughts and floods in order to identify vulnerabilities and risks.<sup>12</sup>

### 2.3.2.1 Natural hazard risks

#### Indicator description

The indicator shows the risk the border region is facing in relation to natural hazards (floods, droughts, landslides and earthquakes). The map highlights potential cross-border affectedness and allows to judge the relative relevance of each risk for the cross-border region.

- **Source/method of retrieval:** The indicator is based on geodata from the Disaster Management Risk Knowledge Centre/JRC. It provides the likelihood of specific natural hazard events at grid level.
- **Temporal coverage:** 2024
- **Unit:** n/a

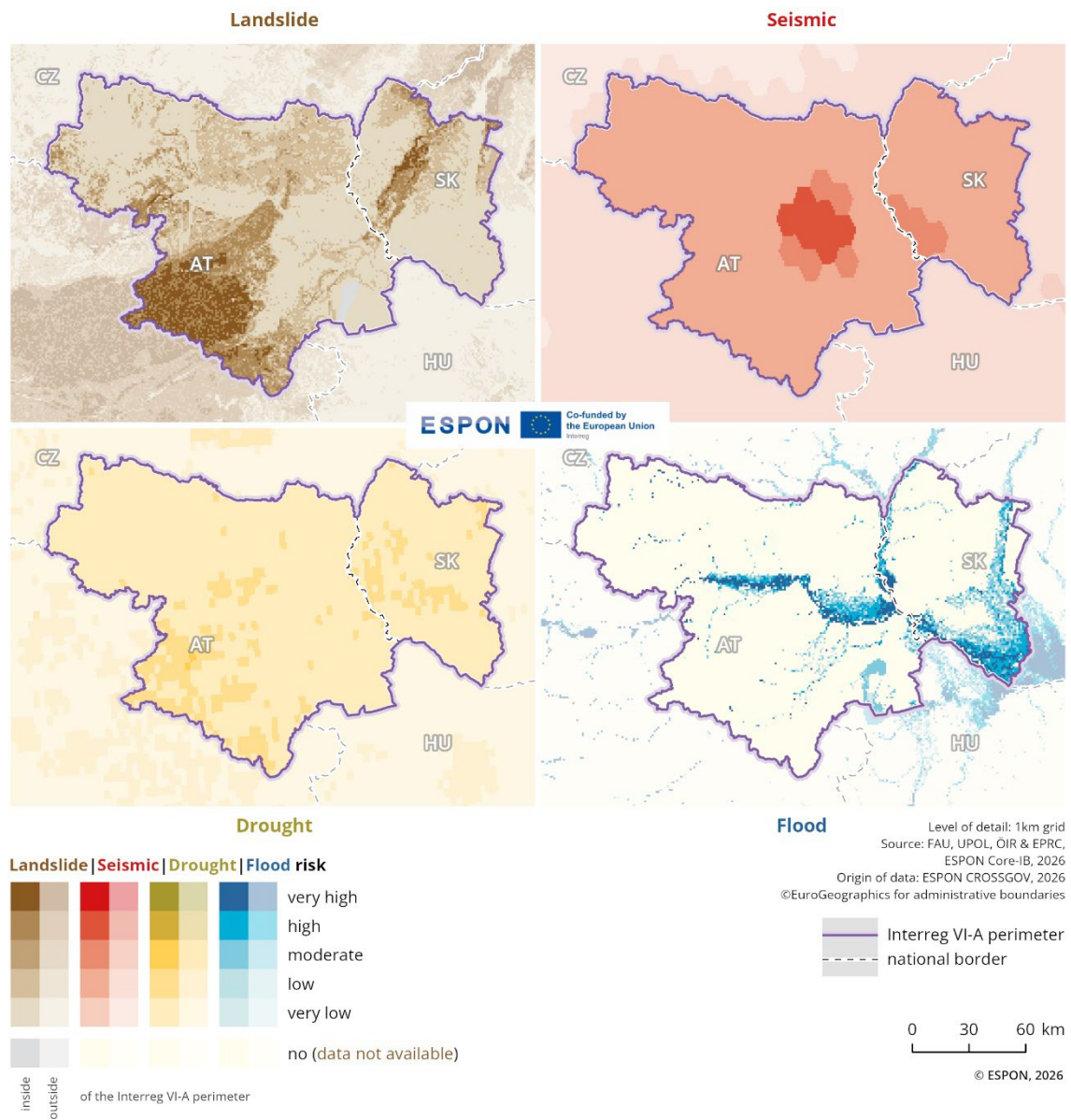
Please refer to the technical annex for more information.

Figure 2.22 illustrates the spatial distribution of natural hazards in the Slovakia-Austria region, highlighting areas where risks are shared across national boundaries and where risks are not necessarily cross-border relevant.

The Dunaj/Donau poses a very high risk of flooding and flows through the entire region in a west-east direction. Coming from the North and functioning as a natural border the Morava/March River also has a (very) high risk of flooding surrounding areas. Lastly, on the Slovak side of the border the Little Dunaj/Donau and the Vah River pose further risk for flooding. Seismic activities are comparably high in the Wien basin, a densely populated area, but otherwise low. Landslides are common in the outlets of the Alps in the west and the outlets of the Carpathians in the east. Both areas do not span across the border. The risk of drought is (very) low in all parts across region.

<sup>12</sup> See also: European Commission 2024: Strengthening the Resilience of EU Border Regions, [https://ec.europa.eu/regional\\_policy/sources/studies/KN-02-24-586-2A-N.pdf](https://ec.europa.eu/regional_policy/sources/studies/KN-02-24-586-2A-N.pdf)

**Figure 2.22: Natural hazard risks**



### 2.3.3 (Renewable) Energy and energy infrastructure

This sub-dimension assesses cross-border functional links in energy supply and infrastructure, focusing on existing connections and missing links. The distribution of power lines, energy infrastructure and power stations is analysed to identify supply patterns and potential integration gaps. The analysis reveals whether the border facilitates energy cooperation and connectivity, or if infrastructural differences create barriers.<sup>13</sup>

#### 2.3.3.1 Power lines and energy infrastructure

##### Indicator description

The indicator shows the distribution of power lines and energy infrastructures in the cross-border region. The geodata highlights the existing links and gaps in the cross-border interconnections of the energy transmission network.

- **Source/method of retrieval:** Geodata on high-voltage energy infrastructure (100 kV and above) has been collected and processed from OpenStreetMap.
- **Temporal coverage:** 2025
- **Unit:** kV

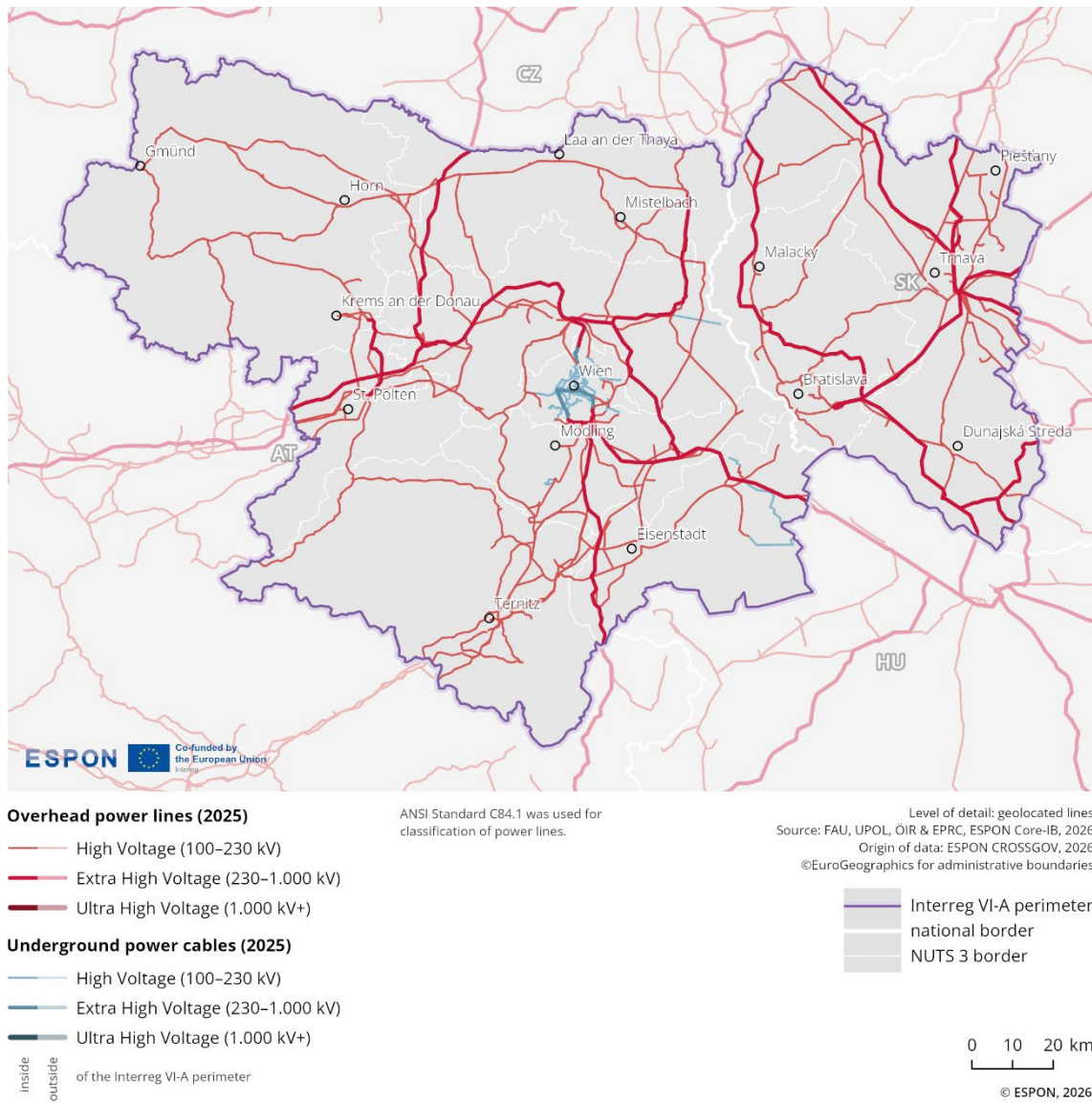
Please refer to the technical annex for more information.

Figure 2.23 illustrates the distribution of power lines and cables in 2025 across the border region. The data distinguish between overhead and underground power lines, further classified into high-voltage (100-230 kV), extra high-voltage (230-1,000 kV), and ultra-high voltage (above 1,000 kV).

The cross-border region of Slovakia-Austria shows very dense high- and extra high-voltage transmission infrastructure, which is due to the fact that in both countries major (and largest) cities are located in this area. Although there is no direct cross-border connection via extra high voltage lines, this type of connection is very extensive on both sides. In Wien (Austria), there is also a dense network of underground cables carrying various voltages. On the Slovak side, the key facility is a substation and the branching of extra high-voltage lines near the city of Trnava, where the high-capacity Bohunice nuclear power plant is located too. Both countries also feature a relatively dense and complementary network of high-voltage lines.

<sup>13</sup> See also: European Commission 2025: Handbook on Cross-border Energy Communities, [https://ec.europa.eu/regional\\_policy/sources/studies/2025/Handbook\\_on\\_Cross-border\\_Energy\\_Communities.pdf](https://ec.europa.eu/regional_policy/sources/studies/2025/Handbook_on_Cross-border_Energy_Communities.pdf)

**Figure 2.23: High-voltage transmission infrastructure**



### 2.3.3.2 Power stations

#### Indicator description

The indicator shows the location of power stations by type and energy production levels (coal, gas and oil, nuclear, hydro). It can indicate differences and complementarities in the national energy supply systems as well as highlight potential supply-demand links when viewed in conjunction with power lines infrastructure.

- **Source:** OpenStreetMap, Global Energy Monitor, JRC Hydro-power plants database
- **Temporal coverage:** 2025
- **Unit:** MW

Please refer to the technical annex for more information.

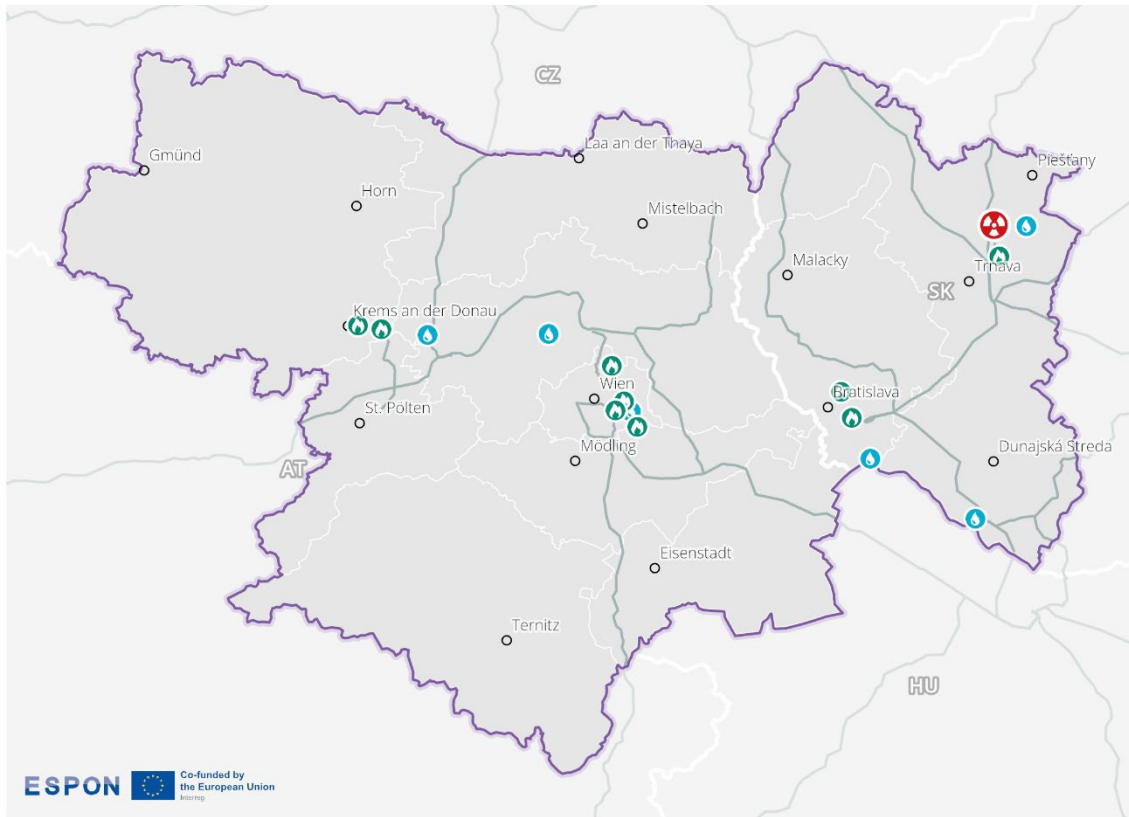
In the Slovakia-Austria cross-border region, in total, there are 16 power stations/plants locations, while the majority is represented by gas and oil power stations (see Table 1).

**Table 1: Number and type of power stations**

Power stations/plants	Less than 1GW	1GW and up
Nuclear	/	1
Coal	/	/
Gas and oil	9	/
Hydro	6	/

3 gas and oil stations are located in Slovakia, with one of the power plants operating multiple facilities (southeast of Bratislava) (see Figure 2.24). The remaining 6 different locations are in Austria, one of which, like in Slovakia, has multiple sites. Both countries operate 3 hydroelectric power stations on their territory. In the cross-border region, there is one nuclear power plant located in Slovakia near the city of Trnava. No coal power plant is present in the whole region.

**Figure 2.24: Power stations infrastructure**



**ESPON** Co-funded by the European Union Interreg

**Power stations (2025)**

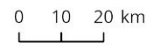
- nuclear
  - coal
  - gas and oil (greater than 20MW)
  - hydro (greater than 20MW)
- $\geq 1GW$   
 $< 1GW$

**Power lines and cables (2025)**

- $\geq 230kV$   
 inside  
 outside  
 of the Interreg VI-A perimeter

Level of detail: geolocalised point and linear features  
 Source: FAU, UPOL, OIR & EPRC, ESPON Core-IB, 2026  
 Origin of data: ESPON CROSSGOV, 2026  
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- Interreg VI-A perimeter
- national border
- NUTS 3 border



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### 2.3.4 Resources and circular economy

This sub-dimension focuses on resource use patterns in the border region and their implications for circular economy practices. It analyses resource productivity and waste generation in order to evaluate the efficiency and sustainability of resource utilisation across the border.

#### 2.3.4.1 Resource productivity

##### Indicator description

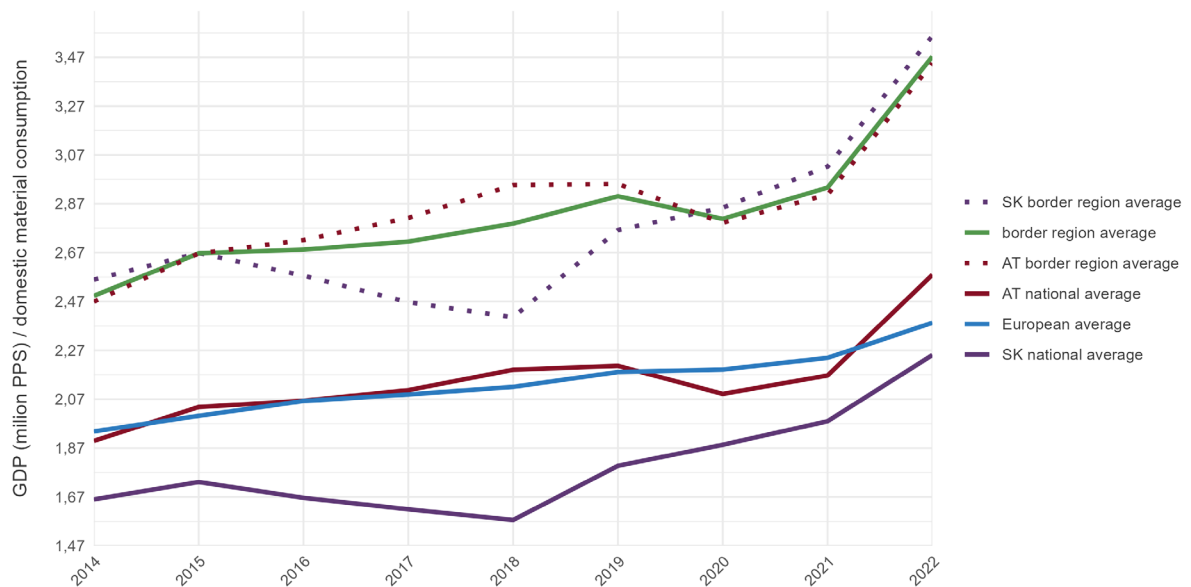
The indicator shows the economic value generated per unit of material consumed for each region within the cross-border area. Developments over time provide insights if the decoupling of productivity from resource use is progressing on regional level.

- **Source/method of retrieval:** Processing of Eurostat and ESPON CIRCTER (Circular Economy and Territorial Consequences) Update data
- **Temporal coverage:** 2014-2022
- **Unit:** PPS/tons

Please refer to the technical annex for more information.

Figure 2.25 illustrates the development of GDP per unit of domestic material consumption in million PPS/DMC (purchasing power standards per domestic material consumption) between 2014 and 2022. The data compare the national averages, the averages of their respective border regions, and the overall border regional average with the European average.

**Figure 2.25: Resource productivity**



The Austrian national average shows an upward trend during the observed period, with a slight decline in 2020. After that, it increases sharply again, reaching an overall value of around 2.57 million PPS/DMC in 2022. The Austrian border region average follows a similar pattern, but at significantly higher levels.

The Slovak national average remains below the Austrian national average, showing a consistently increasing trend, except for a slight decline between 2015 and 2018. The Slovak border region average follows a similar trend, but at a notably higher level.

The European average lies significantly above the Slovak national average but is closely aligned with the Austrian national average and lower than the border region average.

The border region average represents the combined average of the Austrian and Slovak border region values, reaching approximately 3.47 million PPS/DMC in 2022. While the Slovak and Austrian border region averages are relatively aligned during the periods 2014–2015 and 2020–2022, they diverge significantly between 2015 and 2019.

### 2.3.4.2 Generation of waste per GDP

#### Indicator description

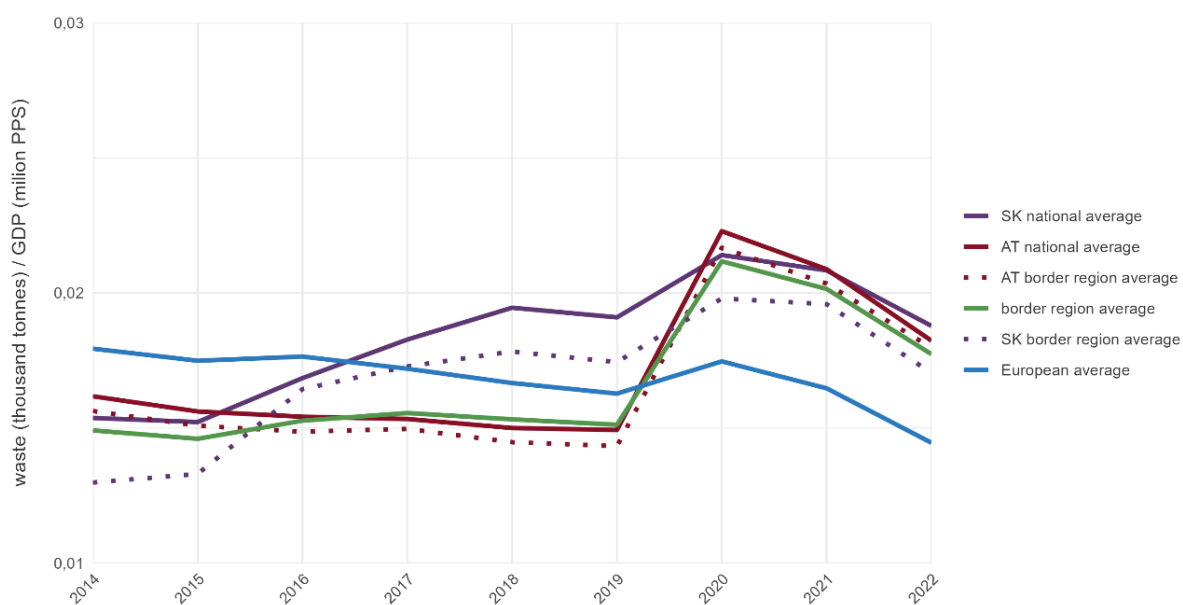
The indicator shows the regional distribution of waste creation in relation to the GDP development. Comparing waste generated to GDP reflects the waste intensity of the economy and provides a measure of “eco-efficiency”. Observation of its change from year to year permits to assess whether the economy is able to produce more wealth while at same time generating less waste.

- **Source/method of retrieval:** Processing of Eurostat and ESPON CIRCTER Update data
- **Temporal coverage:** 2014-2022
- **Unit:** Tons/PPS

Please refer to the technical annex for more information.

Figure 2.26 illustrates the trend in waste generation relative to economic output, measured in tonnes of waste per million PPS (Purchasing Power Standard) of GDP from 2014 to 2022 in Slovakia, Austria and their Interreg border region.

**Figure 2.26: Waste generation per GDP**



The Slovak national average of waste to GDP ratio steadily increases over time until 2020, after which it declines, reaching approximately 0.018 tonnes of waste to GDP ratio in 2022. The average for the Slovak border region follows a similar trend, consistently remaining slightly below the national average. For the period 2015-2019, the Austrian national and border region averages are at a lower level than the Slovak values until 2019, when both experience a sharp increase to over 0.02 tonnes of waste to GDP ratio. Afterwards, both Austrian values decline again and nearly align with the Slovak values.

The European average gradually decreases from around 0.018 in 2014 to approximately 0.015 in 2022. Slovakia's national and border region values remain below the European average until 2016; thereafter, they are higher. Austria's national and border region values are below the EU average until 2019 but rise significantly above it from 2020 onwards.

The combined border region average remains at around 0.015 tonnes of waste per GDP until 2019, then rises sharply in 2020, followed by a slight decline to approximately 0.017 tonnes of waste per million PPS in 2022. Over the observed period, the border region average is closely aligned with the Austrian border region average. It remains below the European average until 2019, after which it rises above it.

### 2.3.5 Key messages on the green dimension

The cross-border region shows strong ecological continuity and faces shared environmental challenges for many aspects assessed. It is characterised by strong ecological interdependence, exposure to some shared climate risks and on the other hand very weak interlinkage in terms of energy networks. The Dunaj/Donau and Morava/March rivers create an extensive cross-border ecological network comprising Natura 2000 and nationally designated areas. This creates a shared biodiversity corridor along the rivers, although partially fragmented in the more urbanised zones near Wien and Bratislava. The shared ecological corridors however naturally also create a shared hazard via flooding. Extensive floodplains are present in the programme area, however with multiple protection measures in place due to the capital region's needs. Other risks are less relevant from a cross-border perspective.

In terms of resource productivity, there is a very close link in trends between all regions involved, both in terms of development as well as in terms of current status. Both countries' regions considerably exceed national averages and are on a very similar positive development trajectory. Likewise, all regions are on a similar, but negative development trajectory when it comes to waste intensity, having seen a considerable rise since 2019 and still exceeding pre-pandemic levels in 2022.

On the other hand, several indicators show clear contrasts between the regions involved at country level. The Slovakian border region's averages exceed national averages in most of these indicators, as well as in comparison to the whole border region averages, such as air pollution and resource productivity. This only holds true for a small number of Austrian regions. Furthermore, in terms of energy infrastructure, albeit being very dense in the cross-border region overall, there is no cross-border connectivity at all implemented. This despite the fact that several major power plants (Hydropower and Nuclear power) are present within the region.

## 2.4 Socio-economic dimension

The socio-economic dimension examines patterns of social integration, tourism, and access to public services in the border region. It identifies how socio-cultural links, visitor flows and essential services influence development in the cross-border area. By examining interpersonal interactions via social media, language similarities, tourism intensity, and the accessibility of facilities such as secondary schools, grocery shops, hospitals, doctors, pharmacies and cinemas this dimension highlights both functional integration and potential socio-spatial differences.

### 2.4.1 Social integration

This sub-dimension evaluates the level of social integration in the border region by identifying areas with low or high cross-border interactions. It analyses cross-border connectivity in social media and language similarities across and along national borders to evaluate the potential for cultural and social integration.

#### 2.4.1.1 Cross-border connectivity in social media

##### Indicator description

The indicator refers to the existing connections between users of META social media (in particular Facebook) across the border. It aims at giving an overview of the degree of personal connectivity between inhabitants of the border area. Even though not all these internet connections will relate to real communication exchanges but sometimes just “following” content from other users, they give an overview of interpersonal and cultural knowledge of the social media landscape from across the border.

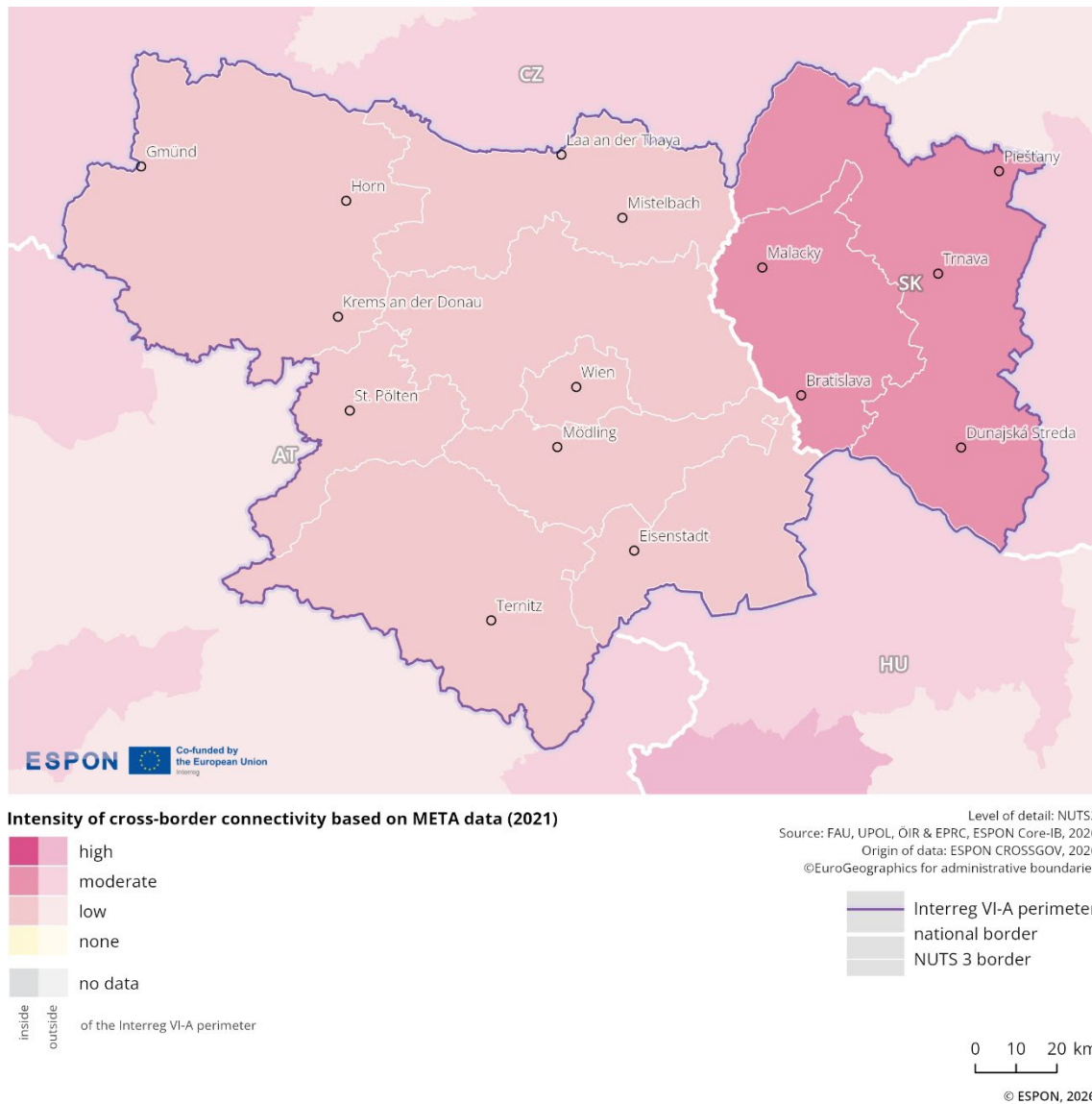
- **Source/method of retrieval:** Processing Facebook data on existing connections across the border (data for Good Meta)
- **Temporal coverage:** 2021
- **Unit:** n/a

Please refer to the technical annex for more information.

Figure 2.27 illustrates the spatial distribution of social interactions based on Facebook information in the border area. The different shades of pink indicate varying intensities of interaction, ranging from low to high, with darker tones representing stronger intensity of social cross-border interaction.

The intensity of cross-border connectivity on social media among residents of this border region is heterogeneous; therefore, due to differing levels of intensity on both sides of the border, clear asymmetries between the countries are evident. On the Austrian side of the region, low values are recorded across all areas (including cities such as Horn, St. Pölten, Wien, Ternitz, and Eisenstadt), whereas on the Slovak side, interaction intensity is at a moderate level (around Bratislava and Trnava).

**Figure 2.27: Cross-border connectivity in social media**



### 2.4.1.2 Language similarities along national borders

#### Indicator description

The indicator specifies whether the language is the same across the border, whether the respective national languages have commonalities, whether while different, there are local linguistic commonalities, and whether the language is different.

- **Source/method of retrieval:** ESPON cross-border public services (CPS) 2.0 database along border segments
- **Temporal coverage:** 2022
- **Unit:** n/a

Please refer to the technical annex for more information.

2 different languages characterise the border region, with no similarities and no widespread knowledge of the neighbouring regions language recorded.

## 2.4.2 Tourism

This sub-dimension identifies key tourism hotspots in the border region to highlight tourism dynamics. It analyses the number of nights spent in tourist accommodation establishments in order to evaluate the attractiveness of, and developments in, the tourism sector. Comparisons with the respective countries and the EU average provide context for understanding the region's dynamics.

### 2.4.2.1 Nights spent at tourist accommodation establishments

#### Indicator description

The indicator shows the number of nights a guest or tourist actually spends in a tourist accommodation establishment or non-rented accommodation (overnight stays). This may reveal the tourism attractiveness of a region and shed light on the role of tourism in the local economy, i.e., tourists/guests staying overnight may spend more in the region than one-day visitors.

- **Source:** Eurostat
- **Temporal coverage:** 2020-2023
- **Unit:** Nights per capita

Please refer to the technical annex for more information.

The spatial distribution of overnight stays highlights the importance of key tourist destinations in border areas. Tourism contributes significantly to regional income, infrastructure development and employment, and thereby supports regional prosperity. At the same time, it affects environmental and living conditions, which may reduce local acceptance despite its economic benefits. This is in particular the case in places of overtourism, seasonal pressures, and increasing land-use conflicts.

Figure 2.28 shows the number of overnight stays per capita at tourist accommodation establishments in 2023. It includes hotels, holiday and other short-stay accommodation, as well as campsites, caravan and trailer parks. The map uses a colour gradient, with darker shades indicating a higher number of nights spent per capita in 2023. It also shows the cumulative number of overnight stays from 2020 to 2023.

In 2023, some Austrian NUTS3 regions exceed 5 nights per capita in 2023, including Waldviertel, Wien, Wiener Umland/Südteil and Nordburgenland<sup>14</sup>. Amongst other things, the UNESCO cultural heritage site Palace and Gardens of Schönbrunn in Wien attract a large number of tourists. On the Slovak side, the per capita figures are generally below Austrian values. In terms of total overnight stays over the 3-year period, the leading tourism regions are located in Wien (approx. 16 million) and Bratislavský kraj (approx. 2.5 million).

<sup>14</sup> See Eurostat Statistical Atlas for NUTS3 (2021) regions: <https://ec.europa.eu/statistical-atlas/viewer/?config=typologies.json&ch=NUTS&mids=BKGCNT.NUTS2021L3.CNTOVL&o=1.1.0.7&center=49.69576,14.33324&lcis=NUTS2021L3&>

**Figure 2.28: Overnight stays in tourism**

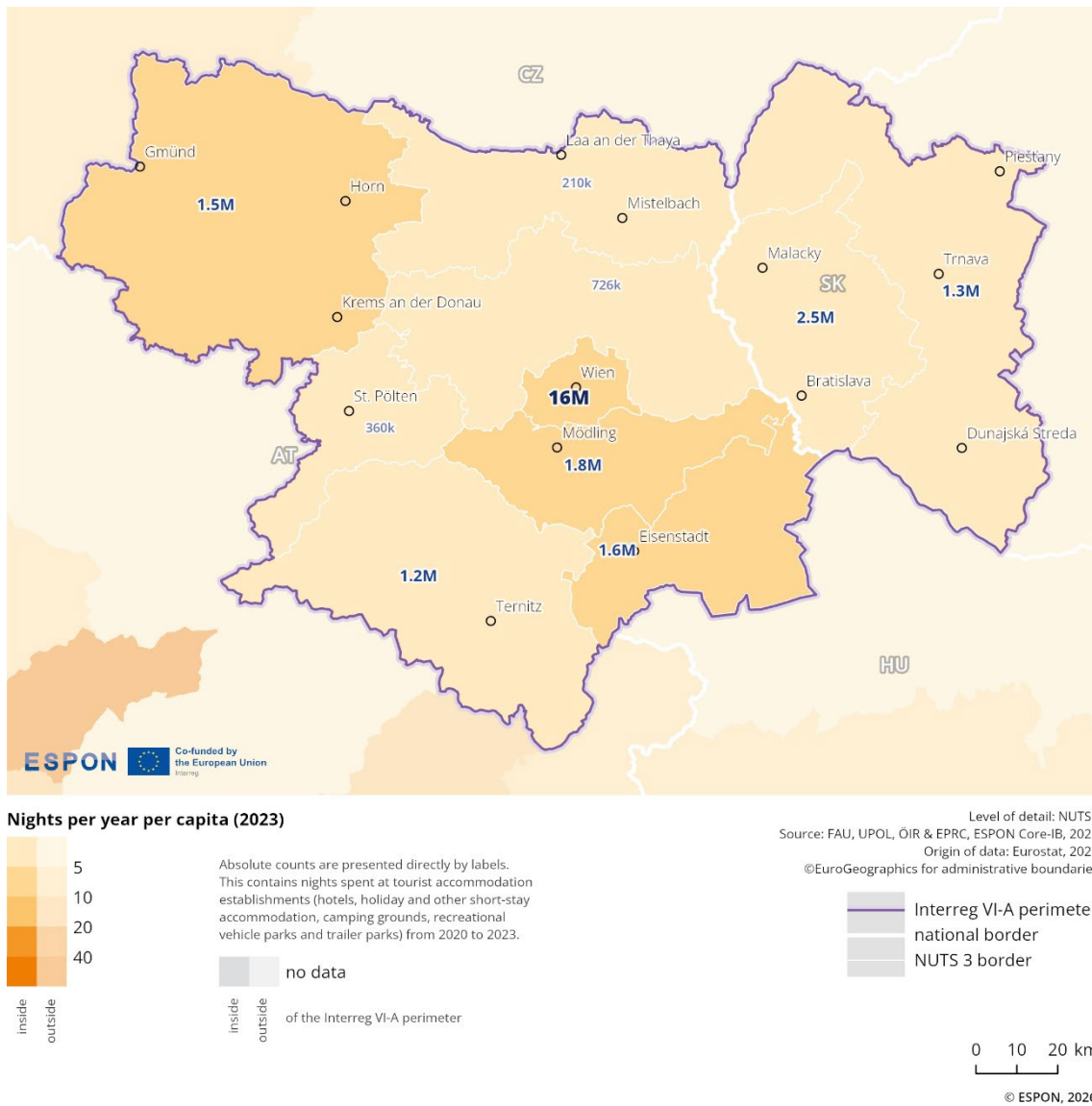
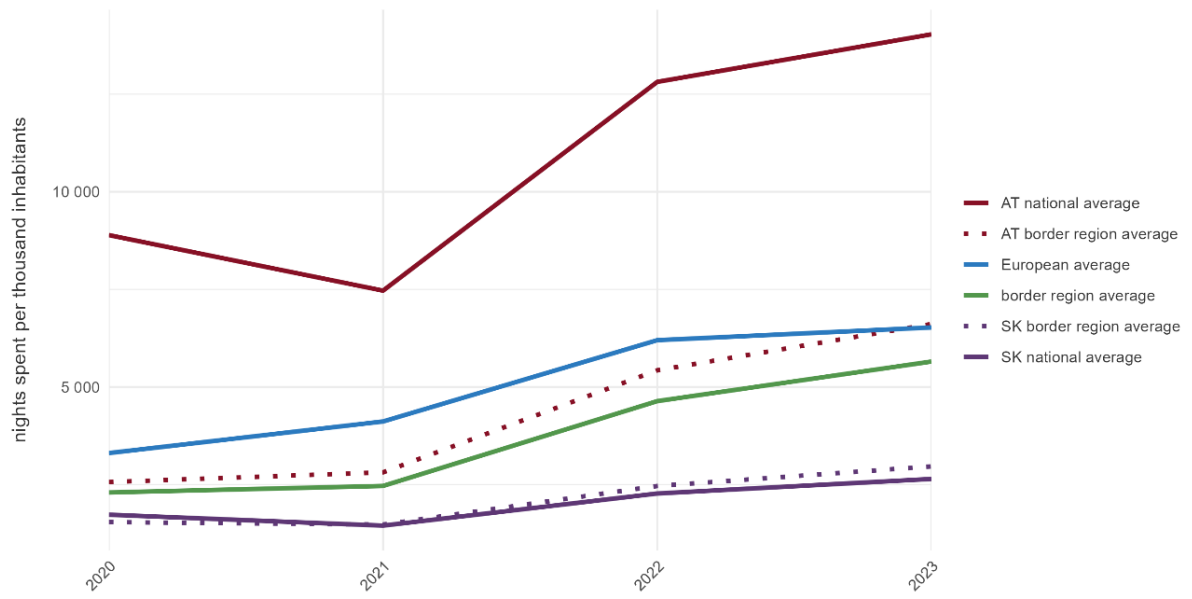


Figure 2.29 illustrates the development of nights spent at tourist establishments per thousand inhabitants from 2020 to 2023. Over the entire period, the average for the Slovakia-Austria programme area is lower than the overall European average, which includes EU member states and the EFTA countries Iceland, Liechtenstein, Switzerland and Norway. While the border regional average in Austria is significantly lower than the national average for all 4 years, the Slovakian border regional average is quite similar to the respective national average. Additionally, the regional average for the Austrian border area is somewhat higher than that for the Slovakian throughout the given period.

Touristic patterns have a series of implications for spatial development on either side of the border. Transport infrastructure has to consider peak volumes and balancing recreating activities with socio-cultural as well as environmental heritage can be a challenge.

**Figure 2.29: Overnight stays in tourism (comparison)**



### 2.4.3 Services of general interest

This sub-dimension looks at how accessible services of general interest (SGIs) are in the border region, identifying areas that are well-served and those that are more difficult to access. It analyses access to essential services such as secondary schools, grocery shops, hospitals, doctors, pharmacies and cinemas.

#### 2.4.3.1 Accessibility to services of general interest

##### Indicator description

The indicator shows, for the below listed facilities and services, the average driving time to the nearest facility of a series of services of general interest.

- **Source/method of retrieval:** Processing and analysis of standardised travel-time accessibility to secondary schools, grocery shops, hospitals, doctors, pharmacies and cinemas available in the ESPON PROFECY Update (2022)
- **Temporal coverage:** 2021
- **Unit:** Minutes (in 2.5 x 2.5 km grid)

Please refer to the technical annex for more information.

Figures 2.30 to 2.35 visualise average car travel times to services of general interest within the programme area. The maps display accessibility to:

- › Secondary schools (Figure 2.30)
- › Grocery shops (Figure 2.31)
- › Hospitals (Figure 2.32)
- › Doctors (Figure 2.33)
- › Pharmacies (Figure 2.34)
- › Cinemas (Figure 2.35)

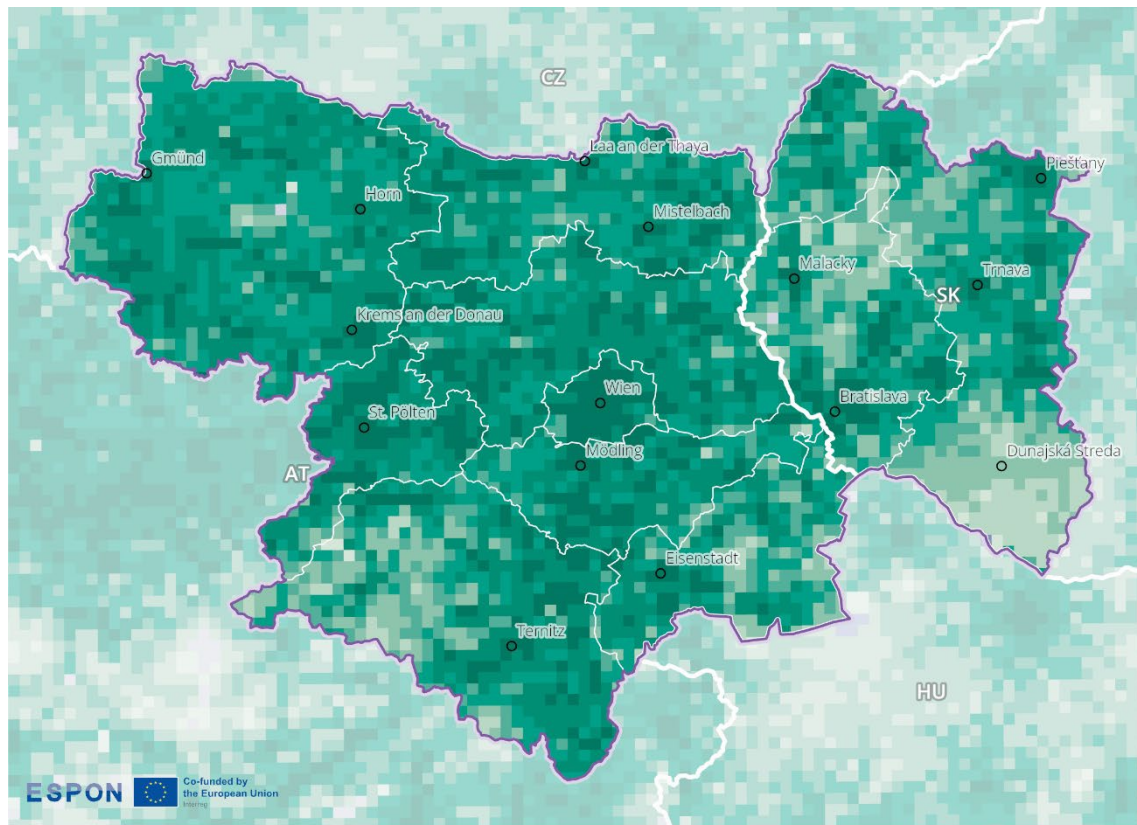
These indicators show how long, on average, it takes to reach the nearest facility by car. The data comes from the ESPON PROFECY Update project (2022) and is visualised based on a 2.5-kilometer grid.

In the Slovakia–Austria border area, essential services such as hospitals, doctors, pharmacies, schools, and grocery shops are mostly evenly distributed across both countries, with only a few areas in western Slovakia and south-western Austria experiencing longer travel times. Travel times of more than one hour are rare and occur primarily for hospitals.

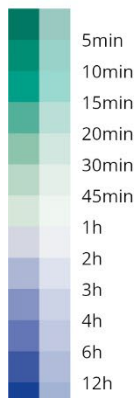
Near the national border, travel times to hospitals tend to be somewhat longer in Austria, while travel times to doctors and schools are longer in northern Slovakia.

Hospitals are mainly located in cities and more densely populated areas, leading to an urban–rural gradient with shorter travel times near urban centres and longer times in rural or remote areas. The same is true for cinemas as a cultural service.

**Figure 2.30: Travel time to secondary schools**



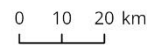
**Car travel time to the nearest secondary school (2021)**



inside  
outside  
of the Interreg VI-A perimeter

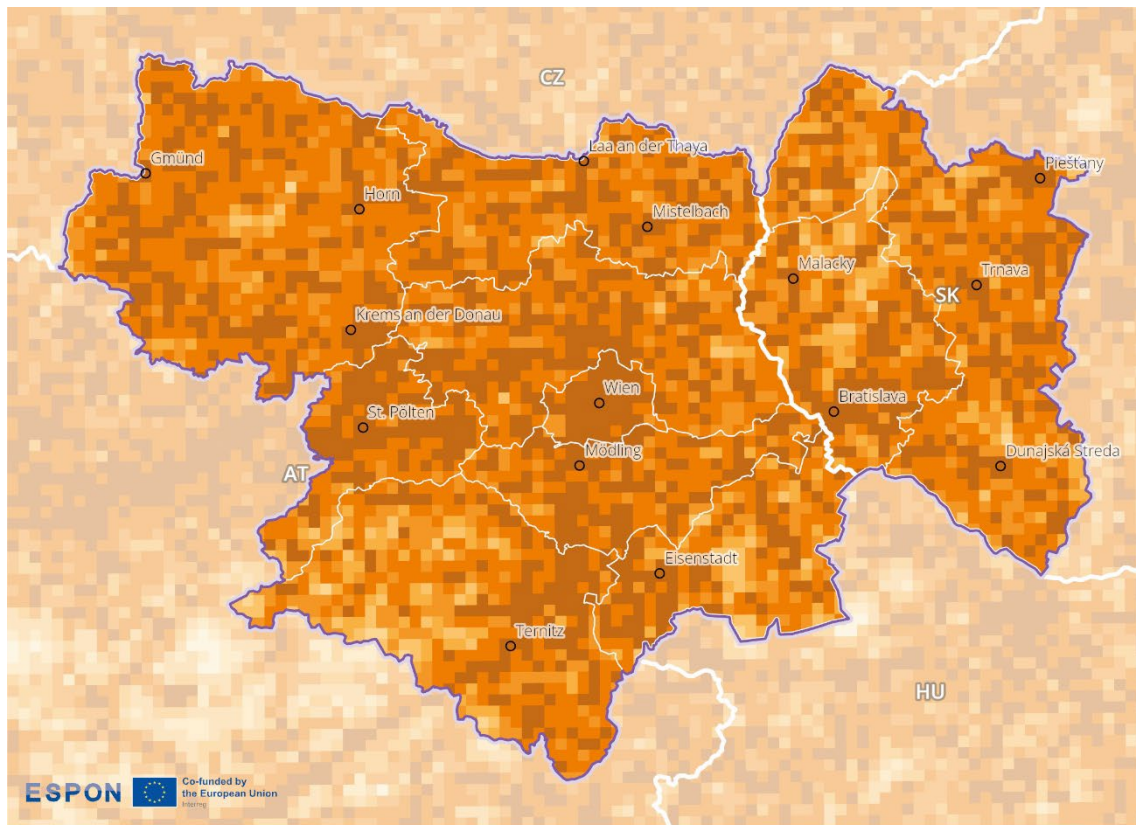
Level of detail: 2.5km grid  
Source: FAU, UPOL, OIR & EPRC, ESPON Core-IB, 2026  
Origin of data: ESPON PROCECY Update, 2022  
©EuroGeographics for administrative boundaries

Interreg VI-A perimeter  
national border  
NUTS 3 border

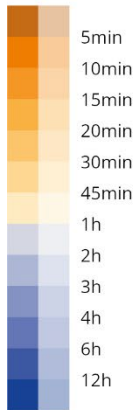


© ESPON, 2026

**Figure 2.31: Travel time to grocery shops**



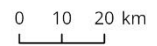
**Car travel time to the nearest shop (2021)**



inside  
outside  
of the Interreg VI-A perimeter

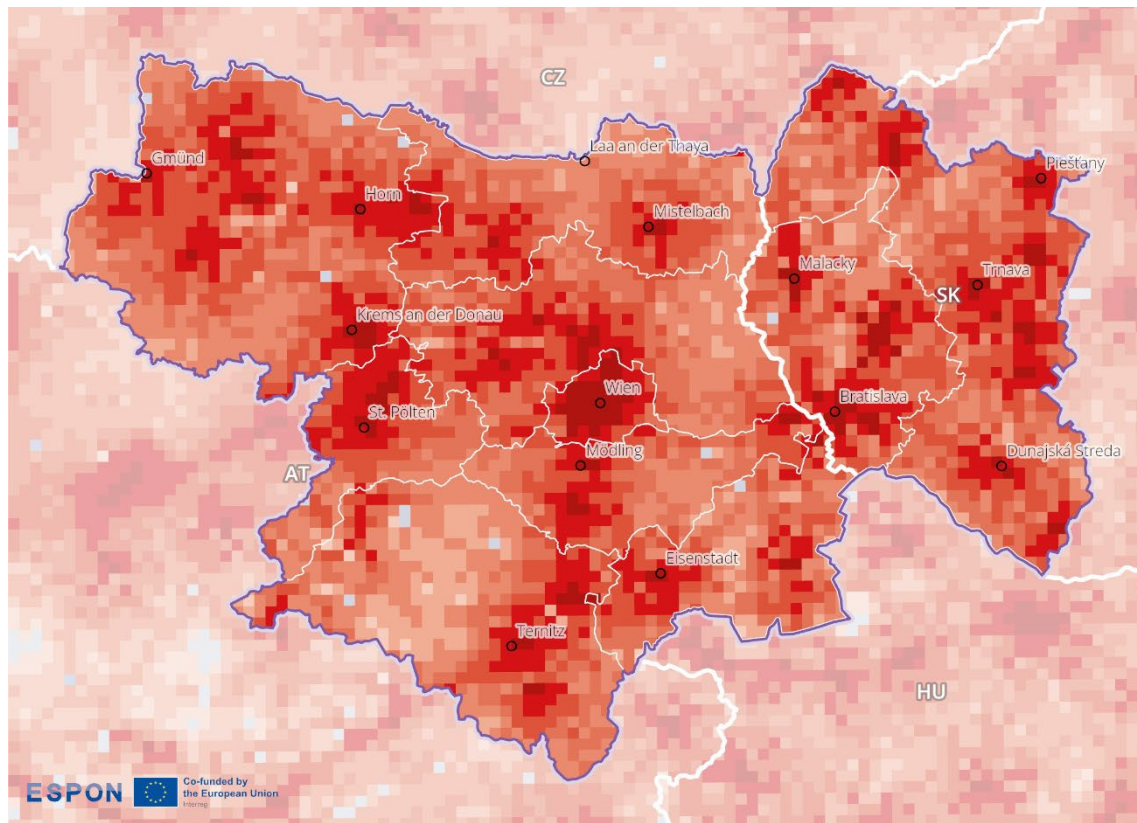
Level of detail: 2.5km grid  
Source: FAU, UPOL, OIR & EPRC, ESPON Core-IB, 2026  
Origin of data: ESPON PROCECY Update, 2022  
©EuroGeographics for administrative boundaries

Interreg VI-A perimeter  
national border  
NUTS 3 border

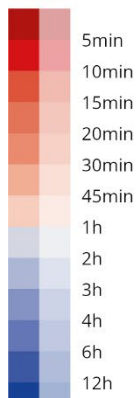


© ESPON, 2026

**Figure 2.32: Travel time to hospitals**



**Car travel time to the nearest hospital (2021)**



inside  
outside  
of the Interreg VI-A perimeter

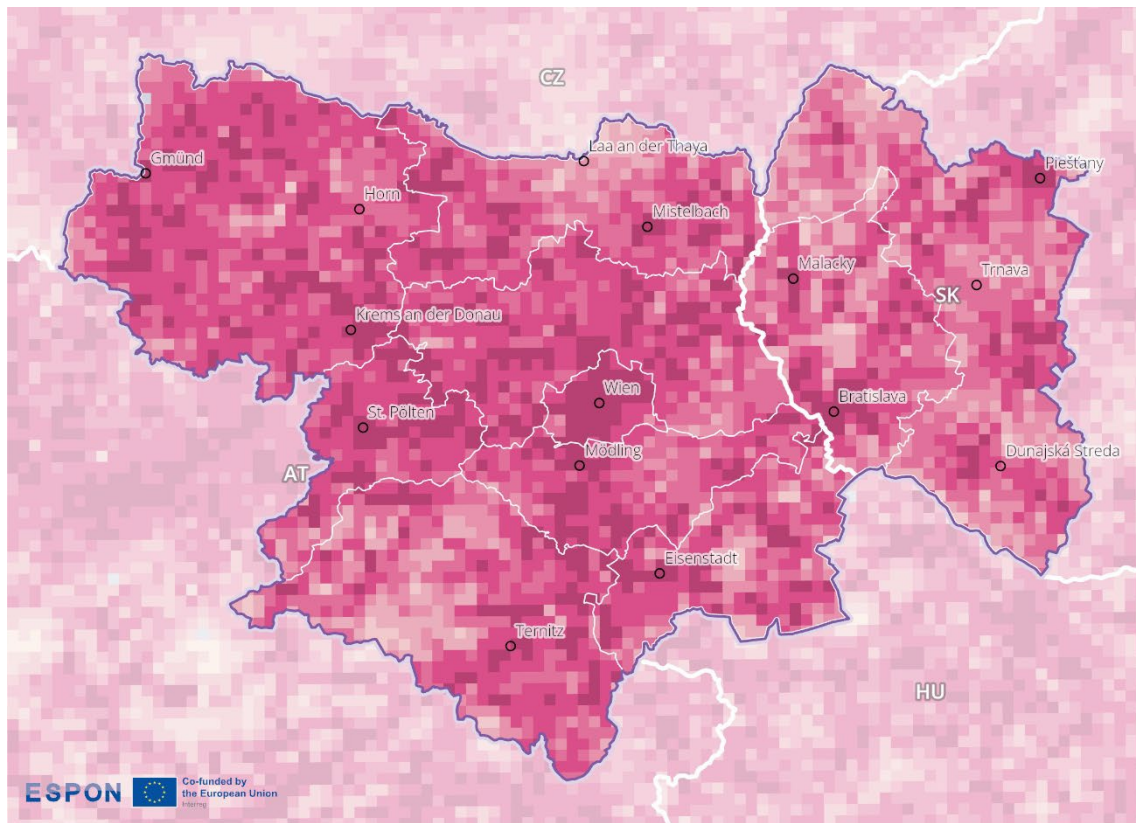
Level of detail: 2.5km grid  
Source: FAU, UPOL, OIR & EPRC, ESPON Core-IB, 2026  
Origin of data: ESPON PROCECY Update, 2022  
©EuroGeographics for administrative boundaries

Interreg VI-A perimeter  
national border  
NUTS 3 border

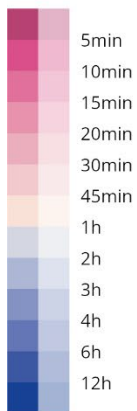


© ESPON, 2026

**Figure 2.33: Travel time to doctors**



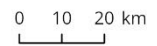
**Car travel time to the nearest doctor (2021)**



inside  
outside  
of the Interreg VI-A perimeter

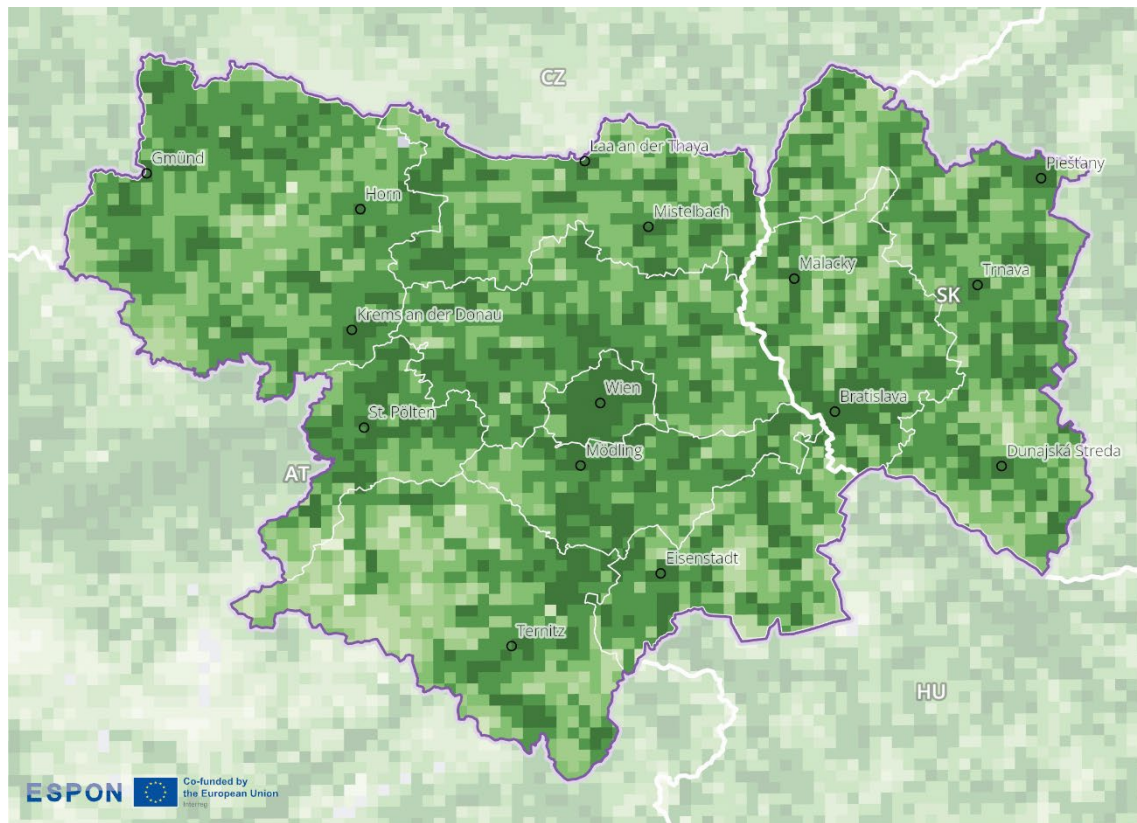
Level of detail: 2.5km grid  
Source: FAU, UPOL, OIR & EPRC, ESPON Core-IB, 2026  
Origin of data: ESPON PROFCY Update, 2022  
©EuroGeographics for administrative boundaries

Interreg VI-A perimeter  
national border  
NUTS 3 border

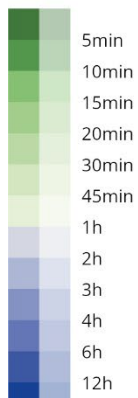


© ESPON, 2026

**Figure 2.34: Travel time to pharmacies**



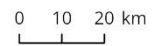
**Car travel time to the nearest pharmacy (2021)**



inside  
outside  
of the Interreg VI-A perimeter

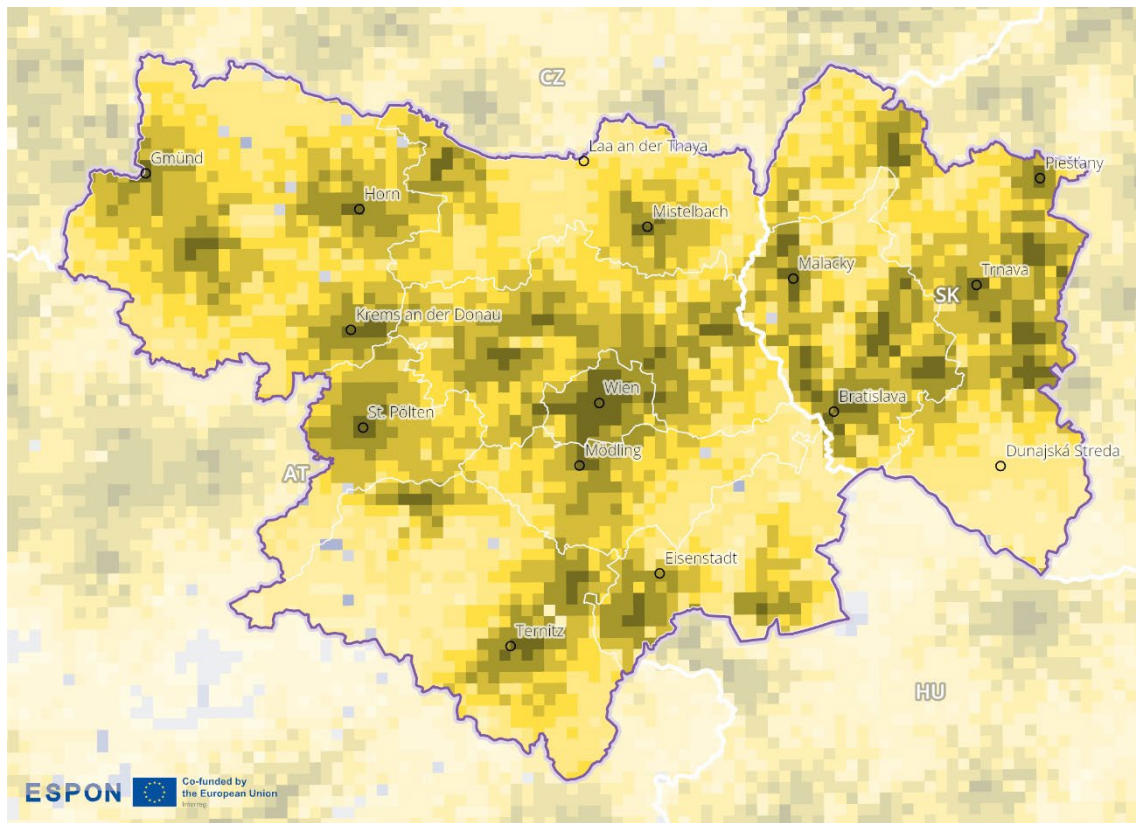
Level of detail: 2.5km grid  
Source: FAU, UPOL, OIR & EPRC, ESPON Core-IB, 2026  
Origin of data: ESPON PROCECY Update, 2022  
©EuroGeographics for administrative boundaries

Interreg VI-A perimeter  
national border  
NUTS 3 border

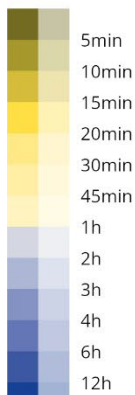


© ESPON, 2026

**Figure 2.35: Travel time to cinemas**



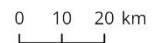
**Car travel time to the nearest cinema (2021)**



inside  
outside  
of the Interreg VI-A perimeter

Level of detail: 2.5km grid  
Source: FAU, UPOL, OIR & EPRC, ESPON Core-IB, 2026  
Origin of data: ESPON PROCECY Update, 2022  
©EuroGeographics for administrative boundaries

Interreg VI-A perimeter  
national border  
NUTS 3 border



© ESPON, 2026

#### 2.4.4 Key messages on the socio-economic dimension

Social and cultural interaction in the cross-border region shows some particular divergences and persisting barriers. Although the Wien–Bratislava corridor is one of the better-connected cross-border zones in Europe, social interaction remains uneven at comparably low levels. Regions in Slovakia, particularly those around Bratislava, exhibit higher levels of cross-border social media connections, whereas regions in Austria demonstrate much lower levels of activity. A major obstacle is most likely the lack of a common language in comparison to other border regions in Europe.

Tourism is a shared relevant sector for the whole cross-border region, but it is also distributed unevenly. While Wien stands out as the border areas most attractive destination, with millions of overnight stays each year, Bratislava is a popular but considerably smaller destination. Austrian regions such as Nordburgenland and Waldviertel also experience higher tourism intensity.

Services of general interest are generally well accessible across the region, also linked to the proximity of 2 capital cities. Hospitals, pharmacies, schools and shops are widely accessible, with only a few more peripheral areas experiencing longer travel times in particular to hospitals. Overall, there is a slightly lower accessibility for most services except for shops in Slovakian regions.

## 2.5 Border security and safety

This dimension shows the security and safety conditions in border regions. It analyses the number of days on which border control is temporarily reintroduced at internal borders, using this as an indicator of security concerns and restrictions on cross-border movement.

### 2.5.1 Temporary reintroduction of border controls at internal borders

#### Indicator description

The indicator shows the number of days of temporary reintroduction of border control at internal borders, including the official reasons behind. The reintroduction of border control at the internal borders must be applied as a last resort measure, in exceptional situations, and must respect the principle of proportionality. The scope and duration of reintroduced border control should be restricted to the bare minimum needed to respond to the threat in question.

- **Source/method of retrieval:** Processing and analysis data of European Commission information pursuant to Article 25 and 28 et seq. of the Schengen Borders Code
- **Temporal coverage:** 2006-2025 (cut-off: 08 May 2025, in order to allow data treatment before work package completion)
- **Unit:** Days per year

Please refer to the technical annex for more information.

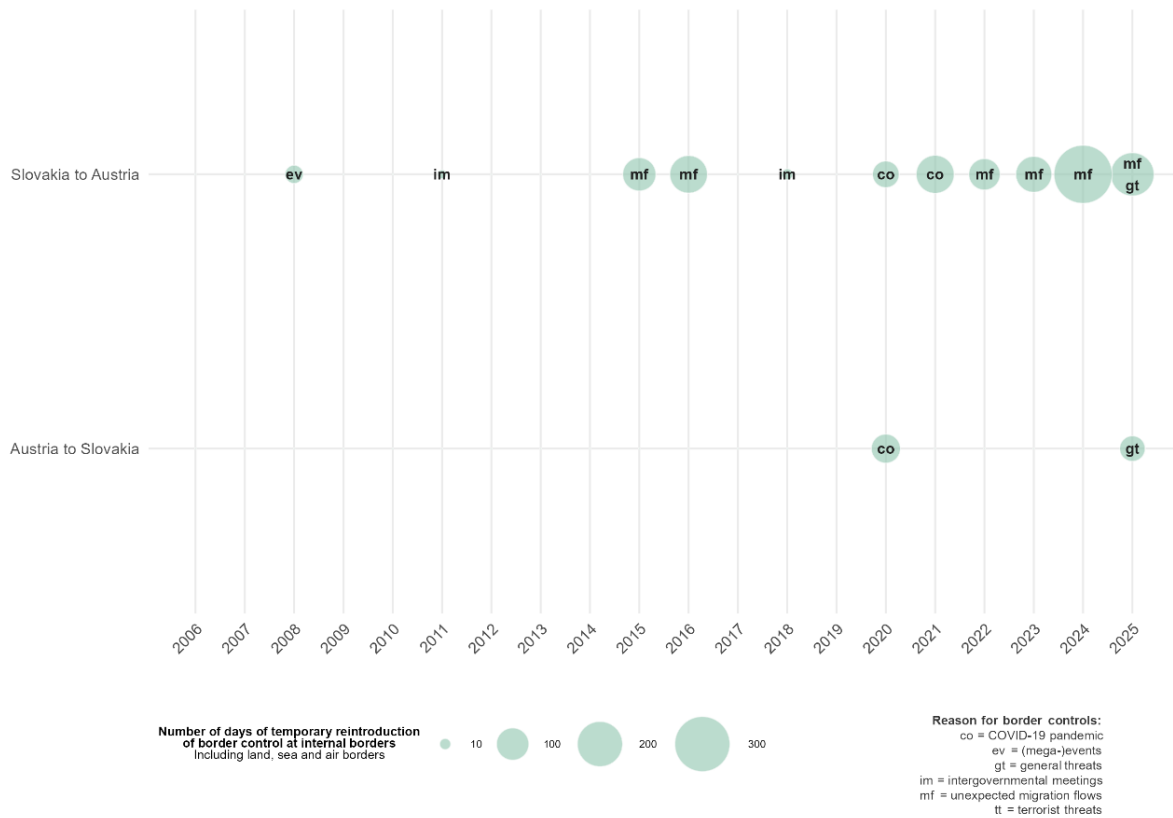
Figure 2.36 illustrates the number of days during which temporary border controls were reintroduced at internal borders within the Schengen Area. Each bubble represents a specific year with bubble sizes indicating the number of days the respective border was under control. The categories of reasons for reintroducing controls include:

- > co – COVID-19 pandemic
- > ev – (Mega-)events
- > gt – General threats
- > im – Intergovernmental meetings
- > mf – Unexpected migration flows
- > tt – Terrorist threats

The data spans from 2006 to 2025 (cut-off: 08 May 2025) and is based on notifications from the European Commission information pursuant to Article 25 and 28 et seq. of the Schengen Borders Code. In line with Schengen rules, the reintroduction of controls is to be used only as a last resort, for exceptional circumstances, and with strict adherence to the principle of proportionality—both in duration and scope.

Austria had already been part of the Schengen Area by 2006, while Slovakia joined in 2007.

**Figure 2.36: Temporary reintroduction of border controls**



ESPON Co-funded by the European Union

© FAU, UPOL, ÖIR & EPRC, ESPON Core-IB, 2026; Origin of data: European Commission, own calculations, 2025

The Slovakia–Austria border area is characterised by an asymmetric pattern:

- › Crossing the border from Slovakia to Austria: Temporary border controls occurred in 11 of 20 years, mainly tied to migration influx (2015–2025), but also to specific events like the EURO 2008, World Economic Forum 2011 and COVID-19 (2020).
- › Crossing the border from Austria to Slovakia: Temporary border controls in 2 out of 20 years due to COVID-19 (2020) and an outbreak of foot and mouth disease (2025).

From a comparative perspective, Austria has implemented controls for significantly more days than Slovakia, indicating an unequal impact on cross-border movement in one direction. These controls tend to have a tangible effect on the smooth functioning of cross-border flows, especially commuting and logistics, as they introduce delays and unpredictability.

### 2.5.2 Key messages on the border security dimension

The security dimension illustrates how national security measures can affect a highly integrated cross-border area. Both countries have temporarily reintroduced border controls over the past 2 decades, but the intensity and duration differ considerably. Austria has applied controls much more frequently, often in response to migration pressures, or major international events, while Slovakia has done so only on 2 occasions, linked to the pandemic or specific crises. Besides the frequency, also the duration of border controls was considerably longer for Austrian-introduced measures.

These asymmetries create uneven impacts on mobility, especially linked to the already uneven commuting flows. The Wien–Bratislava corridor depends on smooth flows of commuters and freight, and even short-term controls generate delays and uncertainty. Given the high level of cross-border commuting from Slovakia into Austria, these disruptions considerably worse for Slovak regions.

## 2.6 Governance dimension

This section covers the cross-border governance of the cross-border region between Slovakia and Austria. Following the opening of borders between the 2 countries in 1989, territorial cooperation has been pursued. Based on the Community Initiative Programme Interreg II-A and in coordination with PHARE CBC, cross-border cooperation was initiated and intensified on the basis of already existing contacts and a structural framework was created within which activities could be coordinated. The cross-border region is part of EU Strategy for the Dunaj/Donau Region (Danube Strategy). The border area has 10 risk and crisis management agreements in place.

### 2.6.1 Cross-border cooperation

This sub-dimension identifies the extent of cross-border cooperation in the border region. It illustrates areas of high cooperation intensity and identifies functional links in governance structures across borders. It also identifies areas with high awareness of obstacles and the willingness and support services to overcome them, as well as areas where Interreg cooperation intensity is already strong.

#### 2.6.1.1 Cross-border governance structures

##### Indicator description

The indicator shows active institutionalised cooperation that act as cross-border entities. It includes cooperation formats such as Eurocities, Euroregions, EGTC, cross-border associations, cross-border councils, etc.

- **Source/method of retrieval:** Localisation and categorising of cross-border cooperation formats (Eurocities, Euroregions, EGTC, cross-border associations, cross-border councils, conferences, working communities), based on desktop research.
- **Temporal coverage:** Status as of October 2025
- **Unit:** n/a

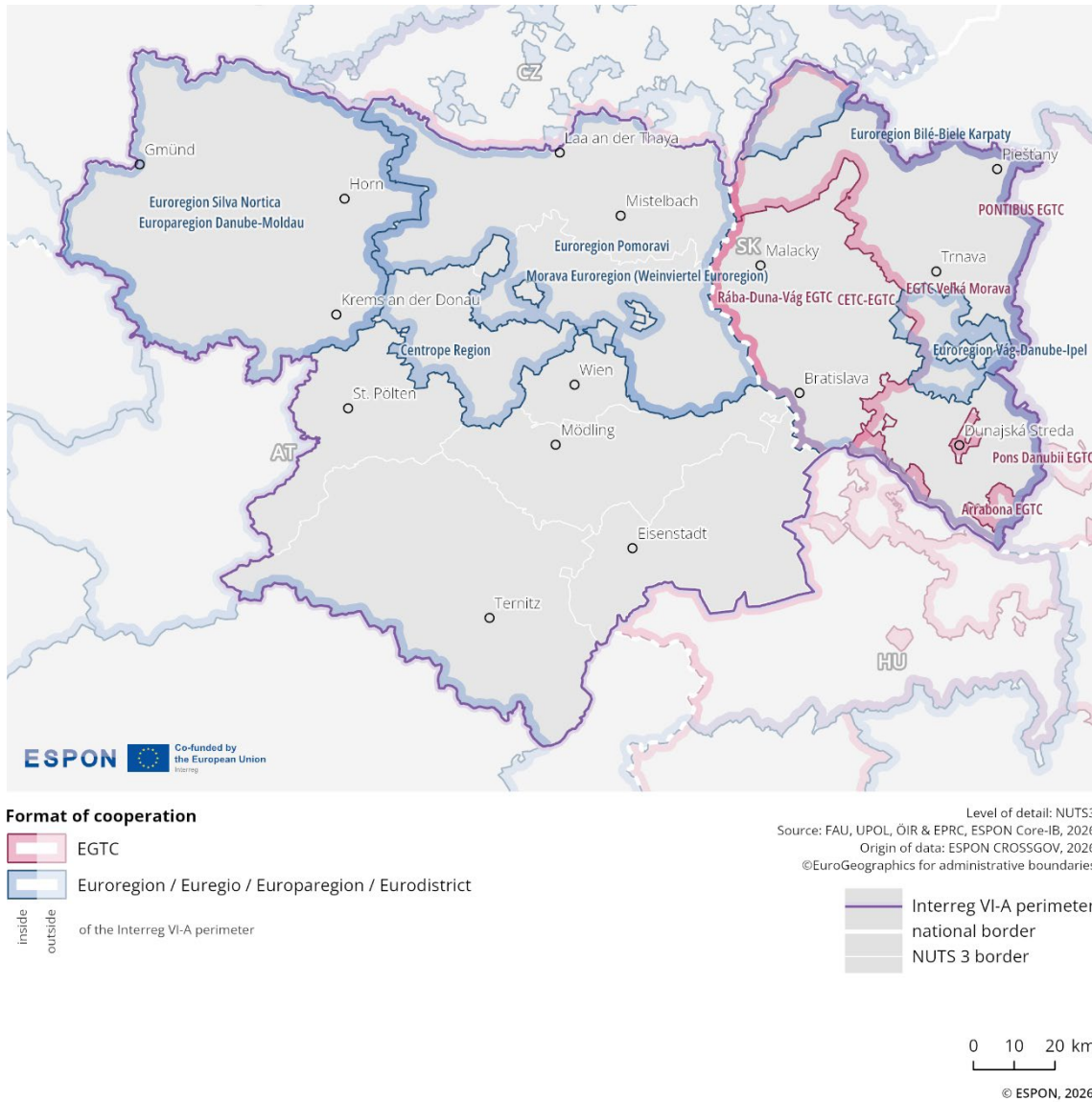
Please refer to the technical annex for more information.

Figure 2.37 shows the different types of institutionalised cooperation. These governance structures either function as cross-border entities or bring together stakeholders from the cross-border region around shared topics. The governance structures covered include Eurocities, Euroregions, European Groupings of Territorial Cooperation (EGTCs), cross-border associations and councils. Project-based cooperation is not included.

The coloured markings on the map indicate different types of institutionalisations: EGTCs are shown in red, Eurocities in yellow, Euroregions/Euregios/Europaregions/Eurodistricts in blue, and other formats in grey.

The multi-level governance structure in this programme area displays broad spatial coverage along the borders. Overall, the region exhibits a high level of institutionalised cross-border cooperation. The most prevalent formats are those at the Euroregional level and EGTCs. However, some EGTCs cooperation areas may not be directly relevant for both sides of the border area, such as Arrabona EGTC, which focuses on the development of the Danube Valley area between Hungary and Slovakia.

**Figure 2.37: Cross-border governance structures**



### 2.6.1.2 Cross-border public services

#### Indicator description

The indicator shows different services specialised on cross-border challenges and development potential, including their domain of operation. As a specific form of services of general interest, cross-border public services (CPS) address joint problems or development potentials of border regions that are located on different sides of one or more national borders.

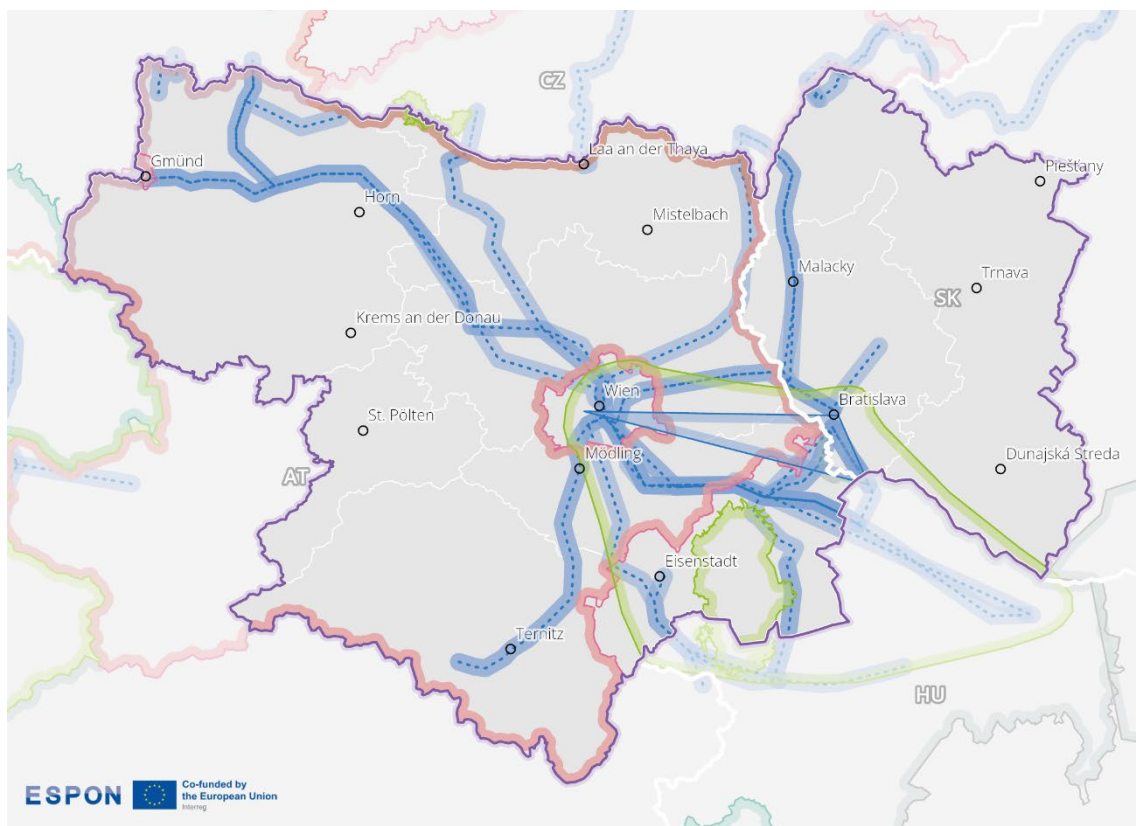
- **Source:** ESPON cross-border public services (CPS) 2.0 database
- **Temporal coverage:** 2022
- **Unit:** n/a

Please refer to the technical annex for more information.

Figure 2.38 depicts the geographical extent of cross-border public services in the border area in 2022. Different thematic areas are represented by distinct symbols and colours, indicating services such as disaster management, health care, transportation, education, environment, energy, job placement, and culture. The visualisation highlights where these services operate across the national boundary.

Cross-border public services in the Slovakia-Austria border region are dense and cover in particular transportation, disaster management and environment & water related aspects. Transportation services form the backbone, extending from Wien to Bratislava, Eisenstadt, Ternitz, and further into Hungary, Czech Republic and Slovakia. These routes are reinforced by disaster management services in the Wien metropolitan area and across the Austria-Slovakia-Hungary borders. Clusters of environment & water related services are forming a corridor surrounding Wien, Bratislava and southern Burgenland, as well as a more distinct Cluster next to Eisenstadt. Overall, cross-border public services radiate from Wien and Bratislava and span in all directions, forming a rather integrated cross-border urban region.

**Figure 2.38: Cross-border public services**



**Geographical extent of cross-border public service themes (2022)**

areal	linear	character of the service
		Disaster management
		Health care
		Transportation
		Tourism & information
		Education & research
		Environment & water
		Heating & energy
		Job placement
		Culture

Cross-border public services covering more than one theme have been assigned only to one. Furthermore, some polygons have been excluded because they were only approximately and not accurately spatially defined.

Level of detail: geolocalised lines and areas  
 Source: FAU, UPOL, OIR & EPRC, ESPON Core-IB, 2026  
 Origin of data: ESPON CPS, 2022  
 ©EuroGeographics for administrative boundaries

- Interreg VI-A perimeter
- national border
- NUTS 3 border



© ESPON, 2026

### 2.6.1.3 Perceived cross-border obstacles in b-solutions

#### Indicator description

The indicator shows cases of legal or administrative obstacles selected in the framework of the b-solutions initiative. This indicator lists the number, location and nature of suggested solution of cases in the b-solutions initiative, including the topic and parties involved.

- **Source/method of retrieval:** Processing and analysis of the b-solutions initiative data
- **Temporal coverage:** 2018-2025 (first quarter)
- **Unit:** n/a

Please refer to the technical annex for more information.

The b-solutions initiative is a European Union project that supports the resolution of legal, operational and administrative cross-border obstacles. It offers funding for pilot actions and legal expert advice in border regions. A high level of cross-border integration often reveals strong barriers of cross-border functioning. In order to exploit the cross-border potentials, these obstacles have to be overcome or at least addressed. Both the number of reported obstacles and the general interest in solutions serve as important indicators of cross-border interaction.

As part of the ESPON CROSSGOV project, all b-solutions initiatives were analysed to deepen the understanding of the thematic focus of the perceived cross-border obstacles across different border regions and the suggested solution, in particular from the European perspective.

In the border area of Slovakia–Austria, one b-solution pilot action was identified. This initiative focuses on promoting bilingualism in the Tri-Border Region of Austria, Hungary, and Slovakia, involving youth mobility, multilingualism, and enhancements to the education system. The application for this pilot was submitted by public/public-equivalent bodies.

In this border area, in the field of multilingualism, issues relate to the need for effective communication and cooperation among youth across the 3 countries involved. Governance and institutional cooperation concern the implementation of educational initiatives that foster bilingualism and the development of curricula that support multilingual education. There are challenges regarding the integration of language learning into educational systems, which can affect students' mobility and opportunities in the region.

The solutions proposed in the pilot action are predominantly operational in nature. For example, the bilingualism initiative includes proposals for conducting a legal analysis, regional analysis, and surveys to assess the current state of language education and identify best practices. These operational measures aim to provide a comprehensive understanding of the linguistic dynamics in the Tri-Border Region, thereby facilitating improved educational programmes that promote multilingualism among youth. By addressing these issues, the initiative seeks to enhance cross-border cooperation and strengthen the ties among the communities in Austria, Hungary, and Slovakia.

#### 2.6.1.4 Institutionalised advice centres for cross-border issues

##### Indicator description

The indicator shows where institutionalised advice centres on cross-border issues are located, including their thematic focus and geographical perimeter.

- **Source/method of retrieval:** Localisation and thematic focus of advice centres for cross-border issues are identified via desktop research.
- **Temporal coverage:** Status as of February 2025
- **Unit:** n/a

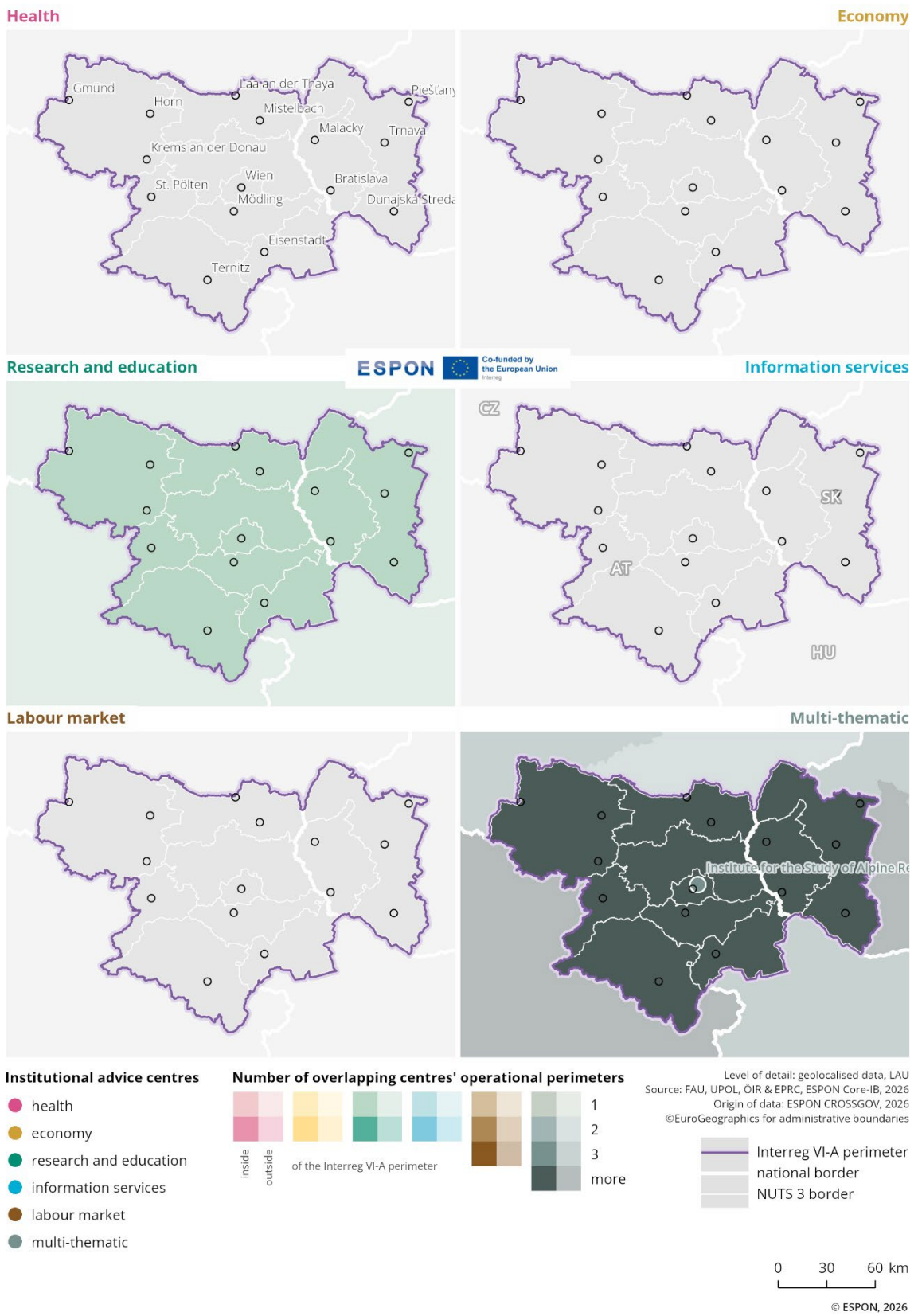
Please refer to the technical annex for more information.

Figure 2.39 shows the locations and types of institutionalised advice centres, along with their operational domains, in the cross-border Interreg region between Slovakia and Austria. These centres throughout Europe provide support in various fields such as health, economy, research & education, information services, the labour market, and multi-thematic issues. The operational domains of these centres are also indicated by coloured shading on the map. The more intense the colour, the stronger the influence of that specific domain in the corresponding area.

Based on the location of its seat, there is only one multi-thematic institutionalised advice centre located in the central of the Austrian part of the Interreg region, called the Institute for the Study of Alpine Regions and Mountain Areas (EURAC Research). There are no other institutionalised advice centres shown on the map outside of the Interreg region.

However, centres with multi-thematic, as well as research and education operational domains are present in the cross-border area and, are evenly represented in both countries.

**Figure 2.39: Institutionalised cross-border advice centres**



## 2.6.2 Outline of Interreg activities

The following section outlines the key Interreg activities in the 2021-2027 programming period. The aspects included concern the development opportunities and challenges identified (see Table 2), the budget available and split of allocation (Figure 2.40), overlapping Interreg programmes and the key aspects drawn from the programme.

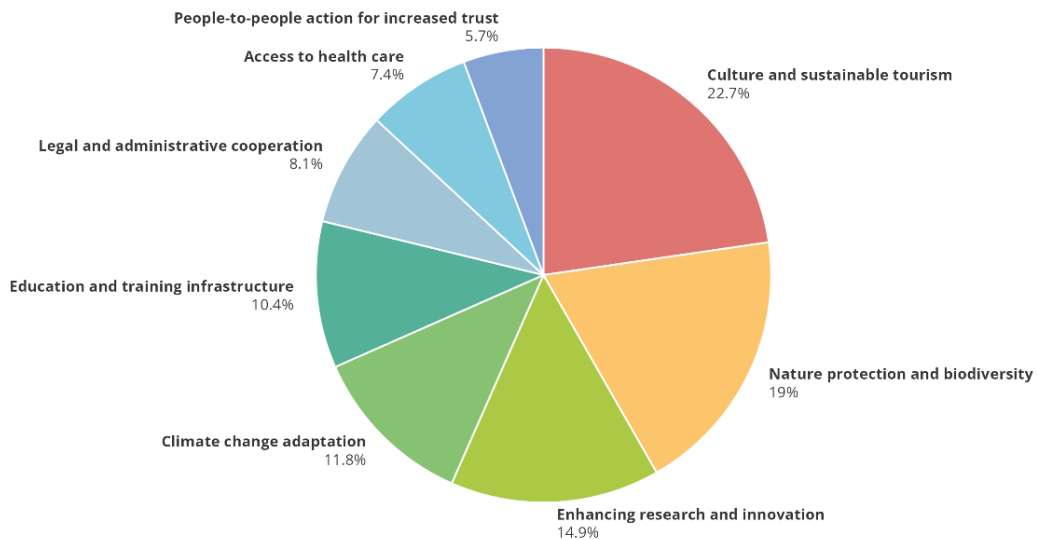
**Table 2: Interreg VI (2021-2027): Opportunities and challenges**

Topic	Key development opportunities and challenges identified for Interreg 2021-27
<b>Spatial/territorial development</b>	<ul style="list-style-type: none"> <li>▪ Opportunities arising from the Twin City concept (Wien - Bratislava)</li> </ul>
<b>Economic structure</b>	<ul style="list-style-type: none"> <li>▪ Potential for growth in SMEs by promoting cross-border cooperation and increase internationalisation of enterprises; promote digitalisation in the business sector on both sides of the border and foster SMEs access to R&amp;D&amp;I</li> </ul>
<b>Climate</b>	<ul style="list-style-type: none"> <li>▪ Green infrastructure between the growth poles of the Twin Cities</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>▪ The Austrian-Slovak border region is strongly dominated by a river system.</li> <li>▪ The Dunaj/Donau is of great economic importance to both countries, especially in the fields of freight transport, hydropower, industrial and residential water supplies, irrigation and fishing.</li> <li>▪ Therefore, water management remains a common issue with respect to climate change and risk management.</li> <li>▪ Biodiversity and reduced environmental pollution</li> </ul>
<b>Research and innovation</b>	<ul style="list-style-type: none"> <li>▪ Strength of the 2 capitals Wien-Bratislava on ‘Professional, scientific and technical activities’ provides good opportunities for entrepreneurship and innovation and cross-border cooperation.</li> </ul>
<b>Tourism</b>	<ul style="list-style-type: none"> <li>▪ There is a lack of cross-border destination management and marketing of tourist products (gastro tourism and wine production) which should be addressed through cooperation among actors on both sides of the border.</li> </ul>
<b>Transport</b>	<ul style="list-style-type: none"> <li>▪ On public transport and sustainable mobility, local and regional accessibility shows significant gaps across border.</li> </ul>

Topic	Key development opportunities and challenges identified for Interreg 2021-27
Population	<ul style="list-style-type: none"> <li>Asymmetries on cross-border labour markets, especially in labour productivity, labour market efficiency and wages</li> </ul>
Public services	<ul style="list-style-type: none"> <li>Importance of sufficient health infrastructure, as well as of the cross-border cooperation in case of emergencies.</li> </ul>

**Total Budget:** EUR 69,870,300.99

**Figure 2.40: Split of Interreg allocation**



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Table 3 shows the number of Interreg 2021-2027 cross-border and transnational programmes which share at least one NUTS3 region with the border area. Each programme has its own distinct rationale, value and territorial focus. However, for the purposes of, for example, planning and capitalisation activities it is potentially helpful for programmes and programme stakeholders to be aware of and connected to other Interreg programmes with which they share a direct territorial link<sup>15</sup>. The 4 Interreg

<sup>15</sup> It is noted that synergies and links with a wide range of other territorial cooperation and sectoral programmes and initiatives are also valuable and this is reflected in the wider analyses presented in this border profile, but not specifically covered in this table.

C programmes Interreg ESPON, Interact, Interreg Europe and URBACT cover the whole EU territory and provide a range of joint services and initiatives.

**Table 3: Shared geographies with other cross-border and transnational programmes**

Interreg A (cross-border)	Interreg B (transnational)
6	3

### Key aspects

- › A particular focus is the on smart and sustainable growth in the border region contributing to smart specialisation and cross-border research, driven by initiatives in the twin-capital region of Wien and Bratislava.
- › Some territories within the programme area are also covered by the 2021-27 Interreg-A Austria-Czechia, Hungary-Slovakia, Slovakia-Czechia, Austria-Hungary, Italy-Slovenia, Italy-Austria, and Interreg-B Central Europe, Alpine Space, and Danube Programmes.

### 2.6.2.1 Interreg cooperation

#### Indicator description

Based on the keep.eu database, this indicator illustrates the network density of Interreg V-A (2014–2020). It is derived from the geographical location of all partners within a project consortium and reflects the intensity of cooperation between them. For the analysis, project networks were visualised by drawing lines between the locations of partners within a consortium. These connections were subsequently aggregated and spatially abstracted by calculating line density using GIS software. Dark red areas indicate a high density of connections between project partners, while yellow areas represent a lower density of cooperation links.

An additional element in this section is the development of project partner numbers between Interreg IV-A (2007–2013) and Interreg V-A (2014–2020), based on data from the keep.eu database. The datasets were cleaned to remove duplicates, using the partner names as reported in keep.eu. For both programming periods, keep.eu indicates a high level of data completeness<sup>16</sup>. Nevertheless, this development should be interpreted as indicative, as variations in partner name reporting and general limitations regarding the representativeness of the dataset affect the robustness of the results.

- **Source/method of retrieval:** Processing and analysis of the keep.eu database
- **Temporal coverage:** 2007-2013 (Interreg IV-A), 2014-2020 (Interreg V-A)
- **Unit:** n/a

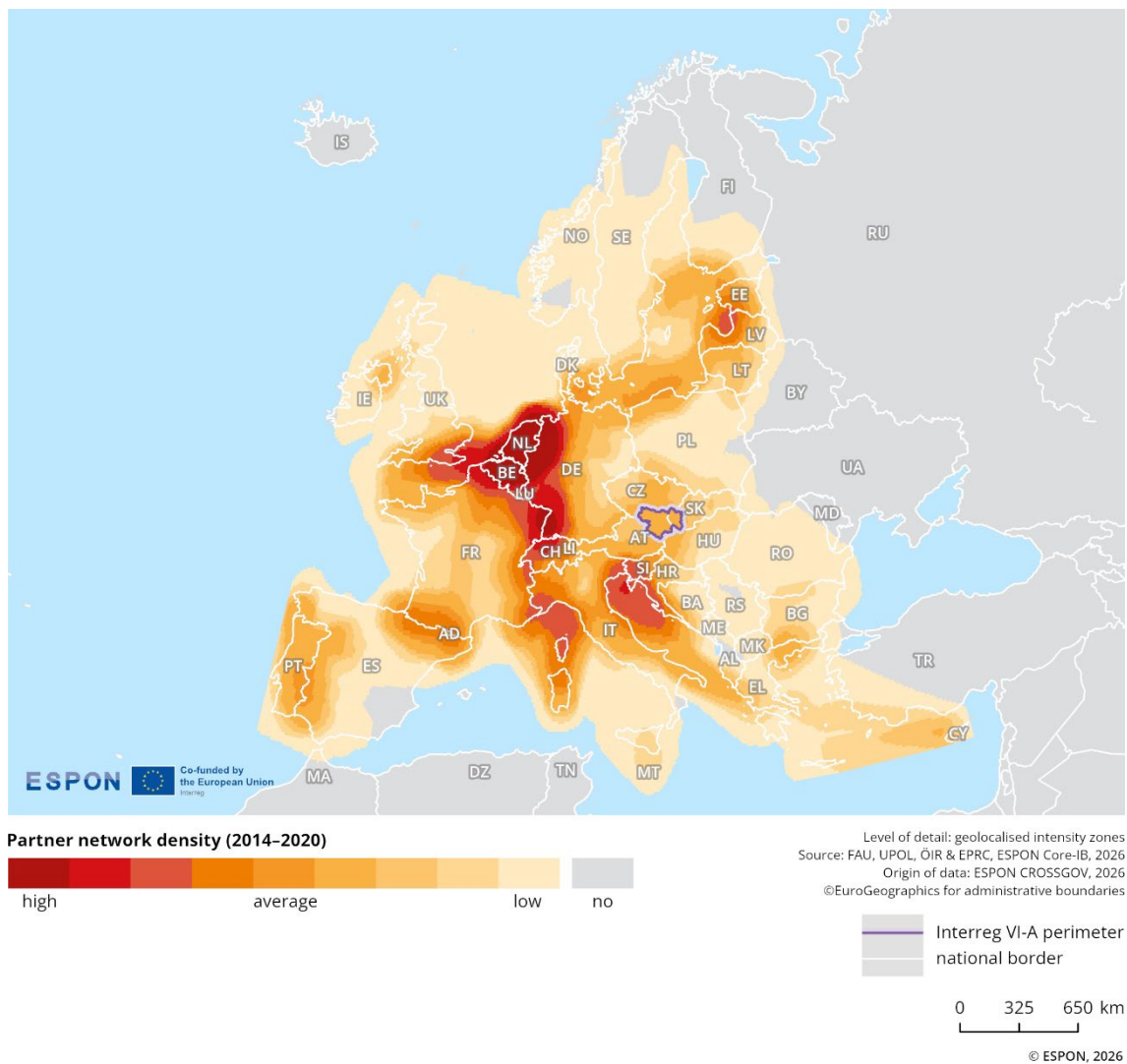
Please refer to the technical annex for more information.

Cooperation activities and networks are among the most meaningful types of information for delineating cross-border functional areas. As such, the indicator on cooperation through Interreg can help to identify networks among cross-border actors and highlight the density of cooperation in specific border segments.

<sup>16</sup> see [Keep.eu representativeness: Interreg, Interreg-IPA and ENI cross-border](#)

Figure 2.41 shows the density of Interreg V-A (2014–2020) partner networks. The indicator includes the location of, and links between, Interreg project partners within a project consortium. From a European perspective, partner network density in the Slovakia-Austria border area appears quite evenly spread. No specific border segments within the programme area show significantly higher or lower network levels than others. Overall, the partner network density in this border area is close to the European average. Based on the keep.eu database and excluding duplicates, the number of project partners decreased from 230 in Interreg IV-A (2007–2013) to 137 in Interreg V-A (2014–2020), a decrease of about 40%. It is important that these changes are considered in the context of factors such as change in programme budgets between 2007-2013 and 2014-2020, emphasis on targeting impact, and numbers of strategic projects.

**Figure 2.41: Interreg V-A partner network density**



### 2.6.3 Key messages on the governance dimension

The Slovakia–Austria cross-border region has a long tradition of cooperation that was reinforced after 1989 and is formalised through Interreg programmes, the EU Strategy for the Danube Region and other cooperation formats such as the Euroregion. Nevertheless, the formalised cooperation structures are limited in number and regional coverage.

Cross-border public services are particularly well developed in the 2 wider metropolitan areas of Wien and Bratislava. Transport is the most widely operated public service across borders, not only within this

corridor but throughout the programme area. In addition, services in the environmental management and disaster response fields are implemented.

In terms of addressing administrative obstacles, only one b-solutions initiative has been implemented here, focusing on bilingualism and youth mobility in the tri-border area with Hungary. Furthermore, a single institutionalised cross-border advice centre is present in the area, which focuses on the alpine regions and is of limited relevance to the border with Slovakia. Given that the area is interlinked in multiple dimensions, this could indicate considerable gaps in systematically addressing cross-border issues.

Interreg activities have played a crucial role in addressing this point and sustaining cooperation, focusing strongly on natural and cultural aspects. However, maintaining partner networks seems to be challenging: the number of project partners has fallen significantly between programming periods, with few project partners being active in 2 consecutive periods.

### 3 Summary and key observations

To support the strategic dialogue on cross-border cooperation beyond 2027, this territorial analysis provides harmonised and comparable information. Its data-driven evidence helps to inform the future direction of cross-border cooperation by facilitating alignment with EU priorities and the evolving regulatory framework. The Core-IB border profiles adopt a harmonised methodology and provide programme areas with access to recent European data. As this approach comes along with limitations, member states may hold additional or more detailed data which can further enrich or contextualise the findings beyond the Core-IB project (see final report and technical annex of this project). These national sources are essential for refining and validating territorial evidence in policymaking processes, including: a) regional, fine-scale data and b) insights from political processes related to prioritisation and objective setting. The study's findings are analytical and are intended to support reflection and discussion. They do not create regulatory or policy obligations for Member States, the European Commission, or programme authorities.

Table 4 provides 2 types of information. Firstly, it summarises the key analytical findings for the border region, as discussed earlier in this profile. Secondly, it suggests policy options based on the analytical findings. These options are intended to provide a practical and informative basis for the strategic dialogue among programme bodies, managing authorities and the European Commission.

Generally speaking, the aim of cohesion policy is to promote harmonious territorial development (also) across borders. The objective is to mitigate the impact of borders and achieve 360° functionality, thereby enhancing the quality of life and fostering prosperous development on both sides of the border. The upcoming Interreg period offers an opportunity to address these objectives and potentials through targeted cooperation projects.

**Table 4: Evidence-based conclusions**

Territorial dimension	
<b>Key analytical findings</b>	<ul style="list-style-type: none"> <li>• Main determining factor for development is the presence of 2 capital regions within the programme area;</li> <li>• Settlement structures outside of the capital region are not country-specific but follow the different topographical features of the flatland and hilly terrain;</li> <li>• 2 main rivers (Dunaj/Donau and Morava/March) create both barrier effects for crossing the border but form also natural corridors along the border;</li> <li>• Connectivity along the Wien-Bratislava axis is well developed, in particular by car. Connectivity outside of this axis is partially hindered by natural barriers.</li> </ul>

<b>Territorial dimension</b>	
<b>Policy options</b>	<p><b>Population and settlement related aspects</b></p> <ul style="list-style-type: none"> <li>• A relevant policy option is to address the risk of increasing spatial disparities by ensuring that growth driven by the Wien–Bratislava metropolitan axis does not disadvantage smaller towns within and beyond the programme area;</li> <li>• The strong growth in population both younger and older age groups can be addressed from a territorial perspective through coordinated local settlement development approaches, with particular attention to areas outside the capital regions;</li> <li>• A focus therefore could be on coordinated land-use development in the functionally connected cross-border area.</li> </ul> <p><b>Accessibility related aspects</b></p> <ul style="list-style-type: none"> <li>• Addressing public transport and sustainable mobility options beyond the main axis, complementing the already strong road connectivity is relevant if settlement development outside of the capital regions should be supported;</li> <li>• Cooperation projects could focus on the development of cross-border solutions to mitigate barrier effects created by major rivers, while preserving their ecological functions.</li> </ul> <p><b>Cross-cutting aspects</b></p> <ul style="list-style-type: none"> <li>• The generally strong accessibility across the border area can be used to improve functional connectivity in other dimensions, including labour markets, service provision and economic interaction;</li> <li>• A focus could be on complementary measures and strategies to be developed to spatially balance the strong capital-city effect in the border region.</li> </ul>

<b>Economic dimension</b>	
<b>Key analytical findings</b>	<ul style="list-style-type: none"> <li>• The border region shows mixed economic structures, which are comparable throughout the cross-border region with the capital regions acting as the regional (and national) growth hubs;</li> <li>• Partially driven by the notable wage differences, cross-border commuting is considerably stronger from Slovakia to Austria, however in the northern part of the border area, out-commuting from Austria is also quite pronounced;</li> <li>• Digital infrastructure throughout the border region is well developed, with (rural) Slovakian regions particularly well connected by comparison to the average of the region.</li> </ul>
<b>Policy options</b>	<p><b>Competitiveness related aspects</b></p> <ul style="list-style-type: none"> <li>• A focus could be on strengthening smaller cities and peripheral parts of the cross-border region in relation to the strong position of the capital regions through territorially targeted projects;</li> <li>• Functional labour market integration to reduce one-sided dependencies could be addressed again through territorially targeted support.</li> </ul> <p><b>Digital and economic transformation aspects</b></p> <ul style="list-style-type: none"> <li>• The comparatively strong digital connectivity, particularly in Slovak regions, can be better utilised to foster cross-border business cooperation and remote working opportunities;</li> <li>• Digitalisation can be used as a tool to improve the competitiveness of smaller towns and rural areas within the cross-border economic area.</li> </ul> <p><b>Cross-cutting aspect</b></p> <ul style="list-style-type: none"> <li>• The strong digital infrastructure could be strategically addressed to support more balanced territorial development across the border region, as it follows patterns contrary to other economic aspects.</li> </ul>

<b>Green dimension</b>	
<b>Key analytical findings</b>	<ul style="list-style-type: none"> <li>• The 2 main rivers form a comprehensive ecological network and support cross-border connectivity. The strong protection regimes put in place ensure long-term stability of the network;</li> <li>• Besides an ecological network, the rivers naturally also create a shared cross-border flood risk. The potential of upstream actors in Austria to negatively influence downstream regions in Slovakia is particularly relevant for cross-border relations;</li> <li>• Energy infrastructure is developed exclusively from a national perspective. There is no cross-border connectivity at all, while in general the networks are well developed and even containing several major power plants.</li> </ul>
<b>Policy options</b>	<p><b>Nature protection and resilience related aspects</b></p> <ul style="list-style-type: none"> <li>• The gaps in cross-border ecological networks can be systematically addressed via coordinated environmental governance and joint management projects, however do require some action outside of the scope of the Interreg programme;</li> <li>• Cross-border cooperation projects could focus on the common flood risks along the Donau/Duna and Morava/March rivers, taking into account upstream-downstream interdependencies.</li> </ul> <p><b>Renewable energy and circular economy related aspects</b></p> <ul style="list-style-type: none"> <li>• The gaps in cross-border grid connectivity can be addressed to strengthen energy networks across the border area;</li> <li>• The relatively high and converging levels of resource productivity can be translated into concrete cross-border approaches and joint actions.</li> </ul> <p><b>Cross-cutting aspect</b></p> <ul style="list-style-type: none"> <li>• Common environmental challenges can be used as a driver for deeper cross-border cooperation and long-term sustainability.</li> </ul>

<b>Socio-economic dimension</b>	
<b>Key analytical findings</b>	<ul style="list-style-type: none"> <li>• Despite strong physical connectivity, (digital) social interactions remain at comparably low levels, in particular from Austria to Slovakia;</li> <li>• Tourism is relevant for the region, however quite concentrated with Wien receiving more tourists than all other regions included combined;</li> <li>• Service accessibility is generally good, clearly linked to the capital regions being located within 30 (Bratislava) or 60 (Wien) minutes from the border. Hospitals are less accessible in peripheral regions, but no country-level pattern is visible in this regard.</li> </ul>
<b>Policy options</b>	<p><b>Social integration and cross-border interaction</b></p> <ul style="list-style-type: none"> <li>• The high levels of physical and digital connectivity can be addressed to strengthen cross-border exchange and interaction;</li> <li>• A focus could be on education and youth mobility as key drivers of cross-border integration, particularly in light of the above-average growth in younger cohorts.</li> </ul> <p><b>Tourism and services</b></p> <ul style="list-style-type: none"> <li>• A more balanced distribution of tourism across the programme area could be promoted in line with objectives for balanced territorial development;</li> <li>• Cooperation projects could focus on complementary cross-border tourism approaches, including cultural and nature-based tourism, without increasing pressure on the already high-intensity tourism areas;</li> <li>• The remaining accessibility gaps to services of general interest outside the main corridor, particularly in peripheral areas and with regard to healthcare could be addressed, in particular through mobility and accessibility actions.</li> </ul> <p><b>Cross-cutting aspect</b></p> <ul style="list-style-type: none"> <li>• Strategy development, pilot projects and knowledge exchange can explore the potentials of smaller towns and cities in service provision and tourism to support balanced territorial and economic development.</li> </ul>

<b>Border security and safety dimension</b>	
<b>Key analytical findings</b>	<ul style="list-style-type: none"> <li>• Border controls are uneven, with Austria implementing them far more often and far more frequently than Slovakia;</li> <li>• Especially due to integrated commuting patterns, border controls pose a considerably barrier and disproportionately affect Slovakia.</li> </ul>
<b>Policy options</b>	<p><b>Cross-cutting aspects</b></p> <ul style="list-style-type: none"> <li>• The impacts of border controls on cross-border commuting and logistics can be mitigated through coordinated and institutionalised cross-border policy dialogue;</li> <li>• The mitigation of border control effects can form part of cross-border cooperation projects in various sectors. Economic networks, transport infrastructure initiatives and tourism-related actions can incorporate considerations related to the impacts of border controls.</li> </ul>

<b>Governance dimension</b>	
<b>Key analytical findings</b>	<ul style="list-style-type: none"> <li>• Formalised cooperation has a longstanding tradition, but structures are limited in number and regional coverage;</li> <li>• Cross-border public transport services are well developed throughout the programme area. Other cross-border public services are concentrated on the Wien-Bratislava axis.</li> </ul>
<b>Policy options</b>	<p><b>Cross-cutting aspect</b></p> <ul style="list-style-type: none"> <li>• The exploration of new governance approaches to support coordinated action in environmental management, cross-border commuting and labour markets.</li> </ul>



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#### Disclaimer

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