

SLOVAKIA CATCHING-UP REGIONS

OVERVIEW REPORT



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1818 H Street NW
Washington DC 20433
Telephone: 202-473-1000
Internet: www.worldbank.org

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ACRONYMS AND ABBREVIATIONS

CBC	Cross-Border Cooperation	ISCO	International Standard Classification of Occupations
CEE	Central and Eastern European countries	IT	Information Technology
CURI	Catching-up Regions Initiative	MRC	Marginalized Roma Communities
DG REGIO	Directorate-General for Regional and Urban Policy	NP	National Park
DMO	Destination Management Organization	NUTS	Nomenclature of Territorial Units for Statistics
DMS	Destination Management System	OP	Operational Program
EC	European Commission	PMD	Property Management Department
EE	Energy Efficiency	PSK	Prešov Self-governing Region (Prešovský samosprávny kraj)
EMS	Energy Management System	PPS	Purchasing Power Standards
EPC	Energy Performance Contract	R&D	Research and Development
ERDF	European Regional Development Fund	RSDI	Regional Spatial Data Infrastructure
ESF	European Social Fund	SMEs	Small and Medium-Sized Enterprises
ESIF	European Structural and Investment Funds	SR	Slovak Republic
EU	European Union	TAIEX	Technical Assistance and Information Exchange Instrument of the European Commission
FDI	Foreign Direct Investment	TIC	Tourist Information Center
GDP	Gross Domestic Product	V4	Visegrad countries (Czech Republic, Hungary, Slovak Republic, Poland)
GIS	Geographic Information System	VET	Vocational Education and Training
GNI	Gross National Income	WB	World Bank
GRP	Gross Regional Product		
GVA	Gross Value Added		
ICT	Information and Communications Technology		
IROP	Integrated Regional Operational Program		
IS	Information System		

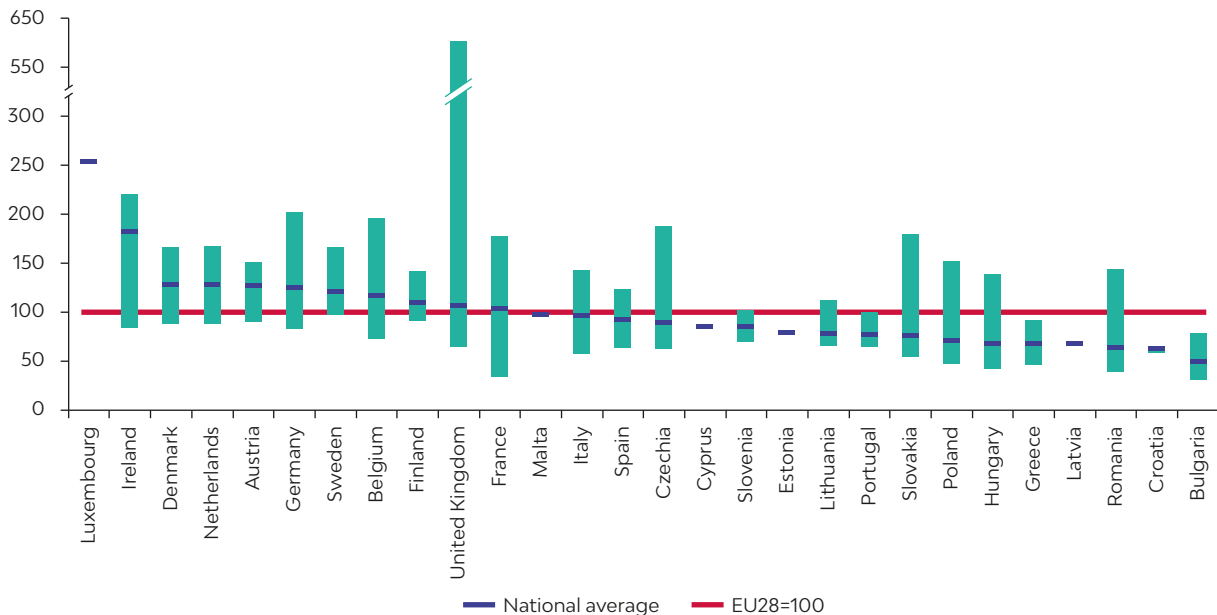
**OVERVIEW OF
THE CATCHING-UP REGIONS
INITIATIVE:
THE SLOVAK REPUBLIC**

BACKGROUND

The objective of the European Union (EU) Cohesion Policy is to narrow development gaps and reduce disparities between member countries and regions. To this extent, around €461 billion¹ of European Structural and Investment Funds (ESIF) for the programming period 2014–2020 have been allocated to help the EU regions become more competitive. However, not all the EU regions have been able to fully take advantage of the benefits of EU growth due to the effects of the 2008/2009 economic crisis, and due to a host of structural problems.

Although its surface area of 49,035 square kilometers and its 5.4 million inhabitants make it a small country, the Slovak Republic is one of the countries with the highest regional disparity in the EU (see Figure 1). The Bratislava region, as measured by gross domestic product (GDP) per capita, was the eighth richest region in the EU in 2017. On the other hand, the Eastern Slovak Republic (nomenclature of territorial units for statistics [NUTS] II level), that includes the Košice and Prešov regions (NUTS III level), belongs to the poorest regions in the EU, reaching only 54% of the EU regional GDP per capita². The Slovak Republic's rapid economic growth in the last twenty years has not spilled over from Bratislava to the Prešov Region and other outlying regions.

FIGURE 1 Variation of regional GDP per capita within EU member states in 2017, in PPS, EU28 = 100



Source: Eurostat (2019).

To this end, Corina Crețu, the Commissioner for Regional Policy, along with the Task Force for Better Implementation, initiated the Catching-up Regions Initiative (CURI) to identify growth constraints in less developed regions, and provide targeted assistance and programs to foster growth. Thus, catching-up regions development support is offered to a broad range of stakeholders (regional and local administrations, educational institutions, business support institutions, small and medium enterprises (SMEs), entrepreneurs, investors, non-governmental organizations, and international financing institutions). It is meant to maximize the impact of regional investments.

Two types of catching-up regions were identified in the EU³:

- Low-growth regions, which cover the less developed and transition regions that did not converge to the EU average between the years 2000 and 2013, in member states with a GDP per capita (PPS) below the EU average in 2013. These include almost all the less developed and transition regions in Greece, Italy, Spain and Portugal
- Low-income regions, covering all the regions with a GDP per capita (PPS) below 50% of the EU average in 2013. This group covers the less developed regions of Bulgaria, Hungary, Poland, Romania, and also the Prešov region in the Slovak Republic

Poland and Romania were the first countries to pilot this initiative, and in Poland, the initiative was undertaken with the World Bank as a partner. The positive results of the work undertaken in the first phase of the Poland Catching-up Regions Initiative (2016–2018) prompted an extension of the collaboration in Poland, and in addition, a similar engagement with the Bank has commenced in the Slovak Republic. Moreover, the World Bank is using the ‘catching-up regions’ approach in its work throughout the world.

Following Poland and Romania, the Slovak Republic has officially launched the Catching-up Regions Initiative in January 2018 with the Prešov Self-governing Region. Partners implementing the Slovak Republic CURI include: the European Commission/Directorate-General for Regional and Urban Policy, the Deputy Prime Minister’s Office for Investments and Informatization of the Slovak Republic, the Prešov Self-governing Region Office, and the World Bank. The initiative provides tailored support to the Prešov Region, with a focus on boosting the impact of EU investments in the regions. The World Bank was asked to help coordinate the activities, and an administration agreement was signed in May 2018 between the European Union/Directorate-General for Regional and Urban Policy (EC/DG REGIO) and the World Bank.

Activities within the Slovak CURI in the Prešov Region focus on:

Activity 1: Improving Secondary Vocational Education

Activity 2: Enhancing Energy Efficiency of Public Buildings in the PSK

Activity 3: Enhancing Regional and Urban Management Capacity in the Prešov Region

- Establishing a Regional Spatial and Open Data Infrastructure in the Self-governing Region of Prešov
- Supporting the development of the endogenous potential of the PSK for tourism and regional development

WHY WAS THE SLOVAK REPUBLIC AND THE PREŠOV REGION CHOSEN?

The choice to focus on the Slovak Republic and the Prešov Region was quite purposeful: because of the wide-ranging development challenges they face, because of its remarkable development story, and because of several problems associated with the absorption of European Structural and Investment Funds. The Slovak economy took off in the early 1990s and continued its growth into the new millennium. In 2004, the Slovak Republic joined the EU, and in 2005, it officially became a high-income country, according to the Gross National Income per capita atlas method of the World Bank. As such, the Slovak Republic is one of the few countries that managed to overcome the ‘middle-income trap’ in recent decades and is one of the very few countries that has managed this transition well.

In recent years, the Slovak Republic has been among the fastest-growing European Union economies. In just two decades (1995–2015), average GDP growth of 3.9% has brought the Slovak Republic’s GDP per capita from 40% of the EU-15 average to 70%. This impressive catchup was fueled by foreign direct investments, most of which went into automotive and electronics manufacturing. Although

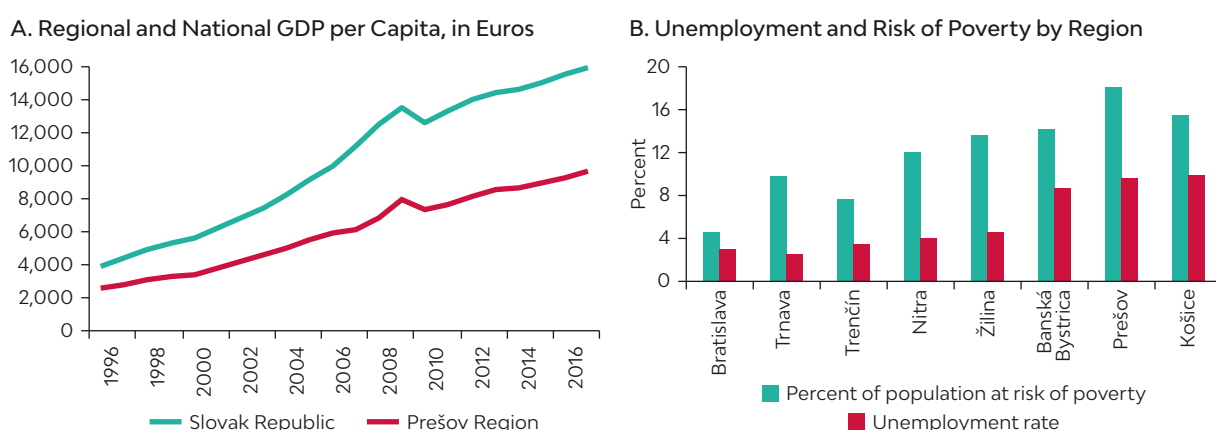
this growth helped improve the well-being of the population, it has not been inclusive, has exacerbated social divides, and has exposed structural problems. Concurrently, the Slovak Republic illustrates the difference between national convergence and subnational divergence. The Bratislava Region has more than double the GDP per capita than Trnava, the next most developed region in the Slovak Republic, and more than quadruple that of the Prešov Region. In recent years, these gaps have been widening rapidly. In fact, for the last 20 years there has been no sign of regional convergence to the country's GDP per capita.

In recent years, from a drop in the pace of conversion to the EU average, it appears that the Slovak Republic needs a new growth impetus, which may have to come from outside the capital. Slower growth, modest foreign direct investment (FDI) inflows, and rising wages, all suggest that the Slovak Republic cannot expect the same growth model to be effective in the future. To create new growth opportunities, major structural problems need to be addressed, and that will be impossible without unlocking the economic potential of outlying regions and their people.

With regards to the performance of the Prešov Region, there are several reasons why its economy lacks dynamism. Incomplete industrial transformation of the local economy that requires new tradable specializations and changes in the business environment, a weak innovation ecosystem, the low quality of governance, and the weak, minimal ability to absorb EU funds, labor-force skill gaps, as well as, out-migration and de-urbanization—are all key obstacles to faster economic growth in the region.

The social development challenges of the region can mostly be linked to difficulties in integrating the Roma population. While the gap between the economies of the Prešov and other non-capital regions in the Slovak Republic is not that large, on social indicators, the region is further behind. Unemployment is the second highest regional rate in the country, and more than half of those unemployed have not had a job for over a year. Poverty is a real risk for 18% of the population, more than anywhere else in the country. These outcomes are readily linked to the poor integration of the Roma, while the Prešov Region hosts the second largest Roma population in the Slovak Republic, it is also more geographically concentrated than in other Slovak regions. Inclusion of the Roma is complicated. While much is already being done in this area, progress will require a determined long-term effort and new innovative approaches.

FIGURE 2 Selected indicators for Prešov, other regions, and the Slovak Republic as a whole

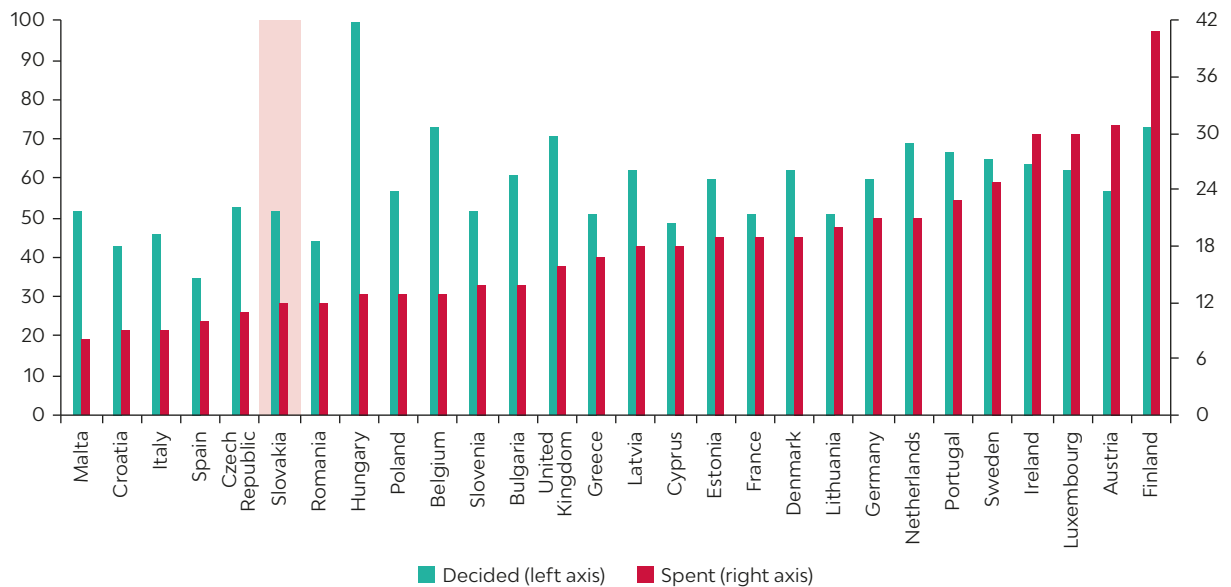


Source: Data from the Statistical Office of the Slovak Republic, 2018.

When it comes to the absorption of EU funds, the Slovak Republic and the Prešov Region are not very good performers. Since its EU accession in 2004, the Slovak Republic has been one of the main beneficiaries of the EU Cohesion Policy. The Slovak Republic can benefit from ESIF funding in the third rank, in terms of aid intensity (EU allocation/number of inhabitants), of €15.3 billion, an average of €2,829 per person, from the EU budget in the period of 2014–2020. The EU-28 average is €896, and the highest (€3,389) is in Estonia, followed by Lithuania. The ESIF allocation represents approximately 70% of the public investment in the Slovak Republic⁴.

When discussing possible catching-up regions initiative engagement in the Slovak Republic, at yearend 2017, the Slovak Republic's absorption of ESIF funds was quite low, just 12% of the ESIF allocation. Only five other EU members spent less. The highest ESIF spending was by Finland (41% of the total allocation), Austria (31%), and Ireland and Luxemburg (both 30%). At the other end of the rank, Malta (8%), Croatia and Italy (both 9%) spent the least. Overall absorption of the allocated ESIF for the period 2014–2020 in the Slovak Republic is very small so far. As of June 30, 2018, when the Slovak CUR1 implementation started, the Slovak Republic has spent €2.14 billion of the ESIF, representing 13.82% of the total allocation.

FIGURE 3 Use of ESIF funding by member states, percent of planned spending



Source: Data from the EC – ESIF Open Data Portal <https://cohesiondata.ec.europa.eu/> (2018, data refresh by Aug 9, 2018).

The Prešov Region is among the main recipients of EU funds in the Slovak Republic, but it is also not very efficient in absorbing the funding. In the 2007–2013 programming period, the region ranked third in total volume of disbursed EU funding. It received 14.5% of the national total, behind the Žilina Region (central Slovak Republic) and the Trenčín Region (western). Their share was lower than in the previous programming period (16.1% in 2004–2006). Given its size, and its catching-up status, the region could have absorbed substantially more funds. In fact, the largest number of project proposals, for the second largest volume of funding, came from institutions based in the Prešov Region. But Prešov was the second worst region in securing funding, relative to the original proposals, and it was below the national average in the use of the funding it did receive. If there is no change to the current situation, emerging data for the 2014–2020 EU funding period, suggests that Prešov is going to benefit less than its neighbors. To become more efficient in absorbing EU funding, the Prešov Region will have to build up the capacity of its regional and local self-governments, as well as other public institutions.

During the 2014–2020 programming period, there was a shift in focus away from hard infrastructure assets toward addressing systemic aspects of competitiveness, innovation, and entrepreneurship. This shift acknowledges that, while it is critical to consolidate the progress made, it is equally important to ensure that the Cohesion Policy achieves a better leverage effect than in other EU member countries (for example, Greece, Portugal, Spain, and Italy). These countries invested heavily in connective, and other infrastructure, yet did not significantly improve the quality of their human capital resources and business environment. The objective of the policy change is also to identify ways in which the Slovak Republic could soon compete with the top-performing economies in the world. Compared to the 2007–2013 period, the new period has a stronger focus on helping vulnerable groups to access the labor market. Several operational programs (OPs) are not only supporting job creation but are also paying special attention to the employment of youth, low-skilled, and long-term unemployed people, including the Roma community.

The Slovak Government and the European Commission were particularly interested to find ways to improve the performance of the catching-up regions, to identify ways to spur growth and innovation in their economies, and to improve the effectiveness of the EU funds spending, at the national, as well as, at the regional levels. Consequently, in January 2018, they officially launched the Catching-up Regions Initiative together with the Prešov Self-governing Region in the Slovak Republic.

WHY WAS THE WORLD BANK SELECTED TO PROVIDE TECHNICAL ASSISTANCE?

The European Commission and the World Bank share a long-standing partnership for development, ranging from the joint financing of infrastructure projects, to the provision of technical assistance to EU and non-EU countries. The EC considered the World Bank to be capable of bringing its technical and operational expertise, as well as its convening power and role as an honest broker, to address some of the constraints facing the catching-up regions. It was assumed that by combining its operational expertise with its global knowledge, the World Bank would support the achievement of strategic development outcomes and help respond to key development challenges.

In turn, the World Bank sees the EC, not only as a strategic development partner, but also as an invaluable source of knowledge about properly tailoring development solutions. The EC is arguably one of the most efficient development institutions in the world, and is, to a large extent, responsible for helping several of its member countries to overcome the middle-income trap and become high-income economies. Such is the case for the countries that joined the EU in 2004, including the Slovak Republic. This is one of the reasons why the World Bank has dubbed the EU the “Convergence Machine”⁵. The World Bank is looking to learn relevant and applicable lessons from the EC’s activities for its other client countries.

For the Slovak Catching-up Regions Initiative, four teams working together, mobilized both international and local experts, to properly respond to the variety and complexity of the issues to be addressed in the Prešov Region. A core coordination team has been set up, and includes staff in the Bank’s Paris, Warsaw, and Sofia offices, as well as a small local coordination team in Prešov (since the Bank doesn’t currently have an office in the Slovak Republic), to ensure efficient and expedient communication between the teams on the ground, the regional and national stakeholders, the project’s leadership, and the European Commission’s team.

SCOPE OF THE WORK AND THE INITIATIVE IMPLEMENTATION

For the first phase of the Catching-up Regions Initiative in the Slovak Republic, the activities were selected using an action plan prepared by the Prešov Self-governing Region, targeting big themes identified in the Slovak Republic Country Report 2018 and the Slovak Republic Country Specific Recommendations⁶, namely: improve the quality of education, increase energy efficiency, enhance employment opportunities, and reduce the number of people living in poverty or social exclusion.

The Prešov Self-governing Region was engaged early on, to determine what concrete actions to focus on. It was important to identify activities with potential tangible impacts, which could be realistically implemented within the one-year initiative duration. After the list of actions was completed, a number of meetings were organized with all the relevant stakeholders (the regional government, the Deputy Prime Minister’s Office for Investments and Informatization of the Slovak Republic, the European Commission, and the World Bank) to prioritize the actions’ list and identify the distinct actions the Slovak CUR1 would focus on. Once these key actions were identified, further discussions helped identify detailed subactions and the final scope of the work. Subsequently, the PSK prepared a detailed action plan and analytical sheets. The challenges that were addressed within the first year in the Prešov Region, and where the multi-disciplinary focus of the activities and work teams are:

- Aligning the supply of secondary vocational school education with the requirements of the labor market
- Increasing the energy efficiency of public buildings and the self-sufficiency of the PSK for energy management
- Enhancing capacities to create and coordinate the development of the region and its urban and regional management, by establishing a Regional Spatial and Open Data Infrastructure (RSDI), and supporting the development of the endogenous potential of the PSK for tourism and regional development (with a focus on the Snina District)

Thus the Slovak Republic Catching-up Regions Initiative covered a wide gamut of development challenges. Building upon experience from the Catching-up Regions Initiative in Poland, it was determined that without both strong on the ground and overall technical coordination, it would be difficult to bring such a diverse developmental program to a successful finish. For that reason, a strong coordination team on the WB side was maintained to ensure the delivery of technical outputs, the management of communication with stakeholders, and administrative support for the program. Arrangements were made for frequent interactions with local and regional stakeholders on the ground. Four autonomous teams were established for each defined activity, with the technical work coordinated by an activity leader and a team of experts. Each activity team was present in the field on a regular basis, with frequent (often weekly) communication with key stakeholders, to ensure an efficient two-way information flow, as well as stakeholders' engagement, and to properly respond to the needs and requests of stakeholders. Thanks to this hands-on approach, progress was steadily made on the defined actions.

The WB team also prepared a contextual analysis (Overview Report), in January 2019, to highlight the macroeconomic and regional development dynamics and challenges in the Slovak Republic, with special attention devoted to the Prešov Region. This report analytically underpins individual components of the Slovak Republic Catching-up Regions Initiative (SR CUR1) work.

Regular steering committee meetings were organized with all the stakeholders present to: 1) assess the progress of the work to date (the Bank shared short presentations with the steering committee participants prior to each meeting); 2) discuss problems and issues encountered, and take decisions how to solve them; 3) propose next steps to be taken with clear deadlines and responsibility for delivery; and 4) agree on a change of an approach, or additional/ different work to be completed. The frequency of the steering committee meetings ensured that all the problems and issues identified were addressed in a timely manner, which helped save time and resources needed later in the process to achieve agreed upon results.

TABLE 1 List of steering committee meetings

Number	Date	Place
1	May 17 - 18, 2018	Prešov
2	June 28 - 29, 2018	Prešov
3	September 13 - 14, 2018	Prešov
4	November 15 - 16, 2018	Bratislava
5	January 24 - 25, 2019	Prešov
6	March 25 - 26, 2019	Prešov
7	May 16 - 17, 2019	Vysoké Tatry

The final conference of the first year of the Slovak Republic CUR1 implementation will be held on June 18, 2019 in Prešov. Participants will evaluate achieved results and discuss how to close/narrow the convergence gap of the catching-up regions in the EU, and the Slovak Republic. Four thematic workshops on the topics addressed in the initiative are also on the agenda of the final conference.⁷

KEY IMPLEMENTATION FACTORS AND CHALLENGES

The Slovak Catching-up Regions Initiative work has been appreciated by all the parties involved. Some of the factors that have made the Slovak Republic Catching-up Regions Initiative a success, are listed below:

- **Buy-in and involvement of regional and local stakeholders.** Development is about people and even the best ideas, tools, and policies cannot achieve a positive impact if they are not endorsed. The fact that the regional and local stakeholders were fully involved in the initiative, from the definition of its activities to the implementation of the recommendations, made the difference.
- **Mobilization of additional resources.** There is only so much that can be achieved within the time span of a one-year activity, but the opportunity of accessing additional EU and national funds is a key incentive in the implementation of the proposed recommendations. The EC, the Slovak government, and the PSK found additional resources from their own budgets to finance additional activities identified during the implementation, such as training, study tours, financing the Snina District feasibility study for water supply and wastewater management, among others. It shows their devotion to the initiative and the desire to achieve success.
- **Dedication, commitment, and leverage of the European Commission's team.** The EC team not only financed the initiative, it was actively involved throughout. They reviewed all the output produced, and closely monitored the activities on the ground, working as a mediator whenever difficult decisions had to be taken. The close involvement of the EC ensured the smooth progress of the work, and an efficient and effective response to the challenges and bottlenecks that appeared along the way.
- **Periodic steering committee meetings.** Frequent meetings, which included open discussions, were a key ingredient to the success of the initiative.
- **Local coordination.** While international experts helped provide key technical knowledge, it would have been very difficult to keep the initiative together and running smoothly, without the proper local coordination of efforts on the ground; it would have been difficult to deliver all the required results in the allotted time frame, given the large team and the diverse sectors involved.
- **World Bank expertise.** The World Bank combines operational expertise with sectoral know-how. It has a unique advantage in dealing with technical assistance projects focused on development issues, particularly projects that have a strong operational and implementation focus. In addition, the World Bank acts as an honest broker, focused on achieving concrete development results (rather than generating a profit), and it has the convening power required to bring different stakeholders around the table, to discuss complex and difficult matters, and then act on them.
- **Ambitious but pragmatic objectives.** The EC team decided at the outset that each catching-up regions initiative component is to achieve ambitious, yet feasible objectives that can realistically be accomplished within the allotted timeline (that is, 12 months), and which are defined by all the participating stakeholders.

The first year of the implementation of SR CUR1 also brought several challenges. The key challenges for the future include:

- **To identify and ensure the financing of the identified investments** under each component. This process requires close collaboration with the Government of the Slovak Republic, its ministries, and the managing authorities responsible for EU funds management. The national authorities are in control of the existing operational programs and strategies. While the actions

that were targeted under the Slovak CUR1 are distinct and well-defined, it is important that they be aligned with existing operational programs, so that they can still be financed under the current programming period (2014–2020).

- **Current setup of the EU funds management system in the Slovak Republic is very sectoral and fragmented.** The scope should be shifted to a more comprehensive approach to regional development, focusing on the major developmental bottlenecks and on an integrated approach to territorial investments.
- **Cooperation and synergies** have, in the meantime, been ensured, between the activities within the SR CUR1 and the current initiative of the Government of the Slovak Republic, to support the least-developed districts (NRO Initiative⁸). These synergies are important to enhance the effectiveness and the impact of the proposed interventions at the regional and local level.
- **Weak implementation and co-financing capacities at the regional and local level.** The PSK would benefit from an enhancement of the personal capacities that are dedicated to the initiative. Close attention could also be paid to the required human resources, thereby ensuring the continuity and sustainability of the results achieved. The PSK needs to put in place a project preparation and implementation team to be able to successfully apply for the EU funds in a timely manner.
- **The Roma issue is one of the key development obstacles in the Prešov Region.** This issue was not addressed in a thorough manner during the current engagement. The Prešov Region will not be able to achieve improvement in its social and economic development indicators, unless it makes progress in integrating the Roma communities. Meaningful improvement will require an integrated approach and a long-term commitment, in order to overcome cultural barriers, stigma, discrimination, and isolation.
- The Slovak CUR1 partners have also explored possible synergies under all the four components with the geographic information system (GIS) activities, (for example, geo-localizing potential investments, geo-localizing protected areas, using GIS for energy data visualization and analysis, and so on). More must be done to achieve tangible results from such possible synergies.

NEXT STEPS

After a first year of implementation in the Slovak Republic, the Catching-up Regions Initiative has become a recognizable approach and tool that is also used in other EU countries. The Slovak experience can now serve as an example for the development of similar approaches in other EU and/or World Bank client countries.

The implementation of the second phase of the SR Catching-up Regions Initiative is currently being discussed with all the partners. The second phase is likely to focus on:

1. rolling out the results of the work already undertaken in the Banská Bystrica Region: focusing on vocational education and training (VET), sustainable mobility, and research and innovation, among others;
2. following up and extending the work of the VET, GIS, and tourism and regional development components in the Prešov Region;
3. starting new activities in the Prešov Region, especially targeting integration of the marginalized Roma communities (MRC), and capacity building at the PSK Office. The expected start of phase two is in July 2019, with its closure in June 2020.

The Bank's "Rethinking Lagging Regions" report⁹ may prove to be one of the critical works in the rethinking of the EU regional development policy for the 2021–2027 programming period.

The background of the entire page is a repeating pattern of teal-colored triangles. The triangles are arranged in a grid-like fashion, with some pointing upwards and some downwards, creating a textured, geometric effect. The color is a consistent shade of teal or seafoam green.

OVERVIEW OF INITIATIVE RESULTS

ACTIVITY 1

**IMPROVING SECONDARY
VOCATIONAL EDUCATION
AND TRAINING
IN SECONDARY SCHOOLS:
MATCHING THE EXISTING
SUPPLY OF VOCATIONAL
SECONDARY STUDY
PROGRAMS AND THE NEEDS
OF THE LABOR MARKET
IN THE PREŠOV REGION**

WHY?

With 62% of recently surveyed Prešov Region employers indicating that they expect labor-related factors will be a *considerable* or *severe constraint* to their future growth, the misalignment between, the supply and outcomes of secondary VET education and the requirements of the labor market, has been one of the significant challenges to Prešov's regional development efforts. International experience has shown that mismatches are often due to many factors, including: a lack of information on the demands and needs of the employers, as well as the employees and graduates; little interest in retraining courses; and the need for the modernization and updating of the vocational schools to be able to offer professional training that meets the employers' current demands. Therefore, as part of the SR CUR1 program, the "Improving Secondary Vocational Education" (VET) project was agreed upon and designed for the Prešov Region, with the overall objective of assisting the PSK Education Department (PSK-ED) to improve the quality and relevance of secondary VET schools so that they can meet the labor market needs in Prešov, and to effectively identify and pursue EU funds, to enable the region to make the necessary secondary VET reforms in five prioritized secondary VET schools.

HOW?

The Secondary VET School Project has three main activities:

Activity 1 was an Employer Study consisting of an assessment of the Prešov Region labor market's needs for VET graduates through 50 in-depth firm interviews, and two regional focus groups (based on four main subregions) with a representational group of employers, business associations, civil society organizations, and VET school representatives from the region. The firms were selected for the employer survey in a way that represented twenty-four key 'strategic' and twenty-six 'randomly-selected' employers in Prešov. The survey analysis included data from in-depth, structured interviews to assess the causes, nature, and scale of the potential skills mismatch, and the employers' views about the quality and relevance of secondary VET in the region. The survey was supplemented by qualitative data from regional focus groups, to provide more detailed information regarding the survey findings and the views of additional stakeholders. The final report focused on labor market needs in the Prešov Region, summarizing the firms' perceptions about the existing VET system, the current skills it produces, and suggestions for its reform.

Activity 2 was a Secondary VET Schools Study to assess the reform needs of the 73 secondary VET schools in the region, including public, private, and religious schools. The Bank reviewed and assessed the current curriculum offered at the schools by: identifying major mismatches between the existing curriculum and the demanded skills; gathering basic administrative data about the number of students, teachers/instructors, and programs, classified by vocational type and subregion; and producing a list of over and undersubscribed courses. Three data collection approaches were used: in-depth, structured interviews with representatives of each of the 73 VET schools, focus groups, and administrative data capture sheets. The four focus groups were held during a conference in January 2019, and consisted of school directors and other school officials, who were split up according to sector groupings. A data capture sheet (DCS) was designed and administered separately to capture detailed administrative data, and to provide input for the analysis of the study programs offered (including time series data on enrolments, and the level of utilized capacity for individual study programs). A final report

was produced, reporting on: the key features existing in the secondary VET programs; teacher qualifications and other school and student characteristics; and other existing study programs in the Prešov secondary VET schools, including initial recommendations for altering the current offering of study programs, and other reform efforts to better match labor market needs.

Activity 3 was Development of Investment Packages, in which the Bank, in conjunction with the PSK-ED, used the results from the previous two activities to first identify five prioritized secondary vocational schools, and then work with them to determine their investment needs, and to develop proposed tailor-made investment packages. The nomination and selection process used four agreed-upon criteria, from Activities 1 and 2, in which 15 schools were nominated in five ‘strategic school profile’ categories. The PSK-ED then picked one school from each category. Over a two-month period, the WB team then did intensive collective five-school group work, and individual work with each selected school to design individual project proposals. These analyses and reform project proposals were collated into one collection of reports and investment packages for each of the five prioritized schools that identified the changes required: (i) update the schools’ curriculum to better meet a specific market need; (ii) upgrade teaching facilities and improve the qualifications of teachers; (iii) identify and estimate the cost of improvements in the schools’ equipment and infrastructure; and (iv) finance strategies and identify particular European structural funds relevant for each school’s specific set of proposed reforms. The underlying process and proposed investment packages serve as a demonstration of what further could be done by the PSK-ED with other VET schools in the future. The overall region-specific recommendations will start the reform process and assist regional authorities and VET school administrators in improving the match between the existing VET study programs and the current and future labor market needs.

WHAT?

The Employer Study

From the analysis of the employer study results, there is clear evidence of *skills shortages*—81% of the employers data capture sheet reported difficulties in hiring in the last three years due to “a lack of applicant skills”—and *skills mismatches*, regarding several skills demanded by employers in the current and future labor market. This latter issue is even more worrying, given the firms’ indications that hiring, and potentially, economic activity, are expected to pick up in the near future. For instance, there is a large-scale mismatch in the preparation of students, with 94% of the surveyed employers indicating that newly hired workers lack specific job-related technical skills, and nearly 30% indicating that new hires lack communication and interpersonal (that is, 21st century) skills. This issue exists, despite the fact, that these occupational types (as well as, other jobs for certain types of skilled workers or professionals, such as biologists, farming/fisheries advisers, doctors, engineers, teachers, business administrators, software developers, social workers, and so on) rely on high levels of these ‘soft skills’, and are among the jobs expected to increase the most in the future. On a more moderate level, a mismatch exists in the students’ preparation of light manual skills and digital competencies. The good news is that the VET students in the Prešov Region are being well trained on basic skills and competencies for the work world.

The main causes of these mismatches can be organized into two overall groupings. First, there appears to be **weak communication between all the stakeholders**. Though there are mixed results in terms of how many, and which, employers have regular contact with schools, the results very clearly show that few employers (only 16% of the firms surveyed) across all the subregions and sectors are working with VET schools to actively provide feedback on curriculum development and specific curricular decisions. There are also few formal, structured, and state-sponsored opportunities or mechanisms for the Prešov Region’s employers to share and communicate information about their specific labor needs with the VET school providers. Where communication with employers takes place, it largely occurs in an opportunistic manner between a specific firm and a specific VET school, rather than through formal, regular and strategic forums. This results in weak, or no signaling, by employers about their labor market needs.

The second main group of causes for the skills mismatch appears to be the *weak use of the existing channels for cooperation between the employers and the VET schools*. In particular, though just over half (26 out of 50) of the surveyed firms do participate in certain kinds of basic internships, the Prešov Region's firms, as a whole, and the VET schools themselves, are not taking advantage of the existing and new legislation that promotes more intensive and purposeful work- and school-based learning modalities. In some cases, the costs are deemed too high by firms, and in other cases, it is reportedly a matter of too high an administrative burden. Whereas representatives of the government's Dual Point Program (to promote dual education) have recently been praised for their initial efforts to assist employers and schools in reducing the initial transaction costs associated with dual education applications, the firms and VET schools are still not taking full advantage of the resources and capabilities of the regional labor offices. Furthermore, these offices, themselves, are not equipped to provide data and information of a sufficiently detailed quality to be of optimal use to the firms and VET schools.

The Secondary VET School Study

In looking at the principal research question, and the results of the Secondary VET School Study, it is clear that the secondary VET schools in the Prešov Region need to take measures to improve their ability to respond to, and produce graduates in line with, the needs of regional employers.

Cooperation and Coordination with Employers

Even though 100% of the VET schools in the Prešov Region reported having a management committee and governance board with industry representatives as members, there are significant gaps and mismatches between what companies are saying they want, and what VET schools are supplying. While many schools interact with employers through internships, these programs do not allow for interactions that would directly affect the content of students' study programs. Instead, the majority of the VET schools are making decisions about the skills to be taught, and the assessments to be given to evaluate the students' skill levels and preparedness for the labor market, based solely on compliance with regulations. And although a number of schools are cooperating with the employers to provide internships, far fewer VET students than anticipated are participating in dual education, or other work- and school-based learning activities.

Are Teachers' Qualifications and Profiles Adequate?

The overall percentage of teachers in the Prešov Region who hold a certificate—versus a higher formal qualification—is notable and significantly high (approximately 25%), while in the schools in the Humenné subregion and in the 'other' sectoral grouping, it is even higher, with about one-third of teachers having a certificate as their highest VET-related qualification. This high level of certificates creates a concern about the quality of instruction, and the depth of understanding of the subject matter, being taught in these classrooms. The PSK-ED and the school administrators will need to examine why the higher than average years of teaching experience (nearly 79% of teachers have 10 or more years of experience), and industry experience (69% of staff have 10 or more years of experience) are not necessarily translating into better student outcomes, and better responsiveness to the employers' skill and knowledge requirements. They also need to investigate what can be done to build a more sustainable teacher-career pipeline. Schools are doing reasonably well at equally compensating male and female teachers, though the overall relatively low salaries may be creating challenges in teacher recruitment.

What Are the Characteristics of the VET Students and Schools' Facilities?

A full quarter of all the students who dropped out, reportedly did so because the program was too difficult, with a particularly high figure respectively (roughly 34%) for the Prešov and Poprad subregions. Focus group participants indicated that this situation could be the result of the students not being adequately prepared in their earlier schooling; and/or that the programs are not being planned well pedagogically—more support should be integrated earlier on in the study programs, to give students a stronger base. More positively, nearly 90% of the facilities in schools across the region are reported to have very good to reasonable functionality. However, only 53% of the schools stated that their equipment is adequate to meet the enrolled student demand.

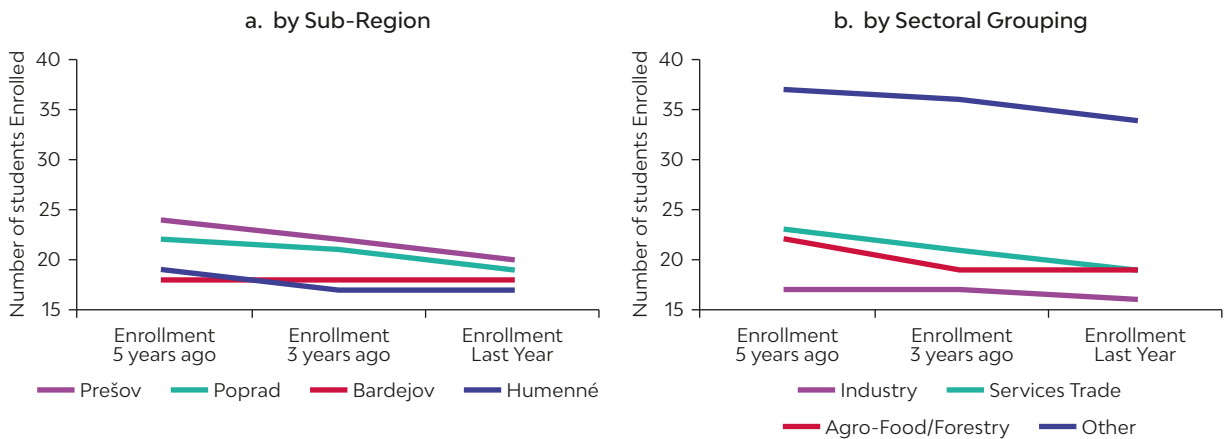
Which Study Programs Will Need to be Increased or Decreased/Ended?

The percentage of schools introducing new study programs in the last year (51%) is significantly higher than the percentage ending them (12.5%). A high number of schools are therefore failing to cancel programs with little or no enrolment, while continuing to open new study programs that are often already being offered by neighboring schools. As a result, schools are increasingly competing for a decreasing number of the same students, rather than developing strategic specializations in line with the labor market demands. More than 46% of the study programs had no enrolment in the last year, with a significant number coming from schools in Bardejov, and in the agro-food/forestry sectoral grouping. In looking at the schools that had study programs with enrolments, the agro-food/forestry sectoral grouping had the highest used capacity, while about half of the schools in the 'other' sectoral grouping had enrolments, but with a low usage of the existing capacity (see Figures 4 and 5 for analysis examples).

FIGURE 4 Individual study program-specific analysis of capacity utilization

Sector Code	Sector	Study Program name	Total Number of Schools that offer the study Program	% of School With Enrolment	% of School without enrolment	Frequency of capacity 0	Frequency of capacity 1	Frequency of capacity 2	Frequency of capacity 3	Frequency of capacity 4	Average of capacity with enrolment
1	Industry	3446 K - print media graphic designers	2	0%	100%	0					0
1	Industry	3447 K - graphic designer of digital media	6	67%	33%			2	3	4x2P	3.25
1	Industry	3457 K - print operator	1	100%	0%						3
1	Industry	3473 H 07 - polygraf - print	1	0%	100%	0					0
1	Industry	3650 M - engineering	4	50%	50%			2		4	3
1	Industry	3650 N - engineering	1	0%	100%	0					0
1	Industry	3656 K - operator of construction	3	33%	67%					4	4
1	Industry	3658 K - mechanic of building installations	4	75%	25%		1		3x2P		2.3
1	Industry	3659 4 01 - construction industry - manufacture of buildings	2	0%	100%	0					0
1	Industry	3659 4 05 - construction industry - construction business	1	0%	100%	0					0
1	Industry	3659 L - construction	6	83%	17%		1	2x4P			1.8
1	Industry	3668 H - drywall installer	6	0%	100%	0					0
1	Industry	3673 H - teacher	1	0%	100%	0					0
1	Industry	3675 H - painter	5	0%	100%	0					0
1	Industry	3678 H - plumber	9	67%	33%		1	2	3x3P	4	2.7
1	Industry	3682 M - geodesy, cartography and cadastral	1	100%	0%					4	4
1	Industry	3762 M - technology and waste	4	50%	50%			2		4	3

FIGURE 5 Trend analysis of the aggregate study program enrollments



The Investment Packages

The outcomes of the employer and VET school studies were used to identify five different strategic school types or profiles, and four selection criteria that served as the basis for the nomination (and final selection by the PSK-ED) of five schools prioritized for the development of a tailor-made investment package. The five school types were: industry-oriented, small and medium enterprises (SMES), services, innovation, and agro-forestry and food. Each of the school investment packages were designed to help the selected school foster innovative and improved VET training in line with different aspects of Prešov's regional development needs. The investment packages contain project concept fiches (notes), specification of the investment needs in the four different investment categories (study program development, training of the teachers and staff, equipment and materials, and buildings), and the identification of the relevant structural funds for all of the proposed investments.

The grand total of the anticipated investments for all the five schools in all the categories is €20,554,000. The subtotals for the investments by category are: €610,000 for study program development; €765,000 for teacher training; €10,714,000 for equipment and materials; €8,095,000 for buildings; €370,000 for other investments, mainly for public relations and communication; as well as €1,000,000 for support and networking projects, which will have an impact on all the VET Schools in the Prešov Region. Figures 6 and 7 are illustrative examples of the overall summary/aggregate and an individual investment table, organized by the four different investment categories.

FIGURE 6 Investment Summarization Table for All PSK VET Schools

Investment Type/Nature	Investment Costs (100k EUR)	City/District	Investment description (3-4 sentences)	Stage of Preparation (Phase/Concept/Feasibility)	Issues/Problems	Est. Preparation Time and Costs	OP Name and Priority Axis	Potential Call Name and #	Submission Timing and Deadline of Call	Other Issues
Study Programs Development/Enhancement	610	PSK	With scope of current SOV plan • Assess/audit current programs • Review & apply national & regional skills forecasting • Design, develop, pilot • Study materials development • LLL certification • Online training mob.	Concepts	• Requires close consultation of SOV, 25,000 industry reps, etc. according to national legislation • Detailed technical needs assessment • Intensive stakeholder consults • Design and	9-12 months (5,000*)	OP Human Resources/OP Research and Innovation/ Interreg SK-PL/Eramus*	TBD see other table • Synergy and Complementarity between OP – CUR-VET Slovakia, version 1	mostly open calls	VET Sector Integration & Strengthening
Other (PR & Communication, etc.)	370	PSK	Intensive stakeholder communication	Concept	Intensive stakeholder communication	9-12 months	OP Human Resources		mostly open calls	VET Sector Integration
VET Sector Integration & Strengthening/ several projects	1 000	PSK	• Develop regional VET stakeholder platforms • Cross border cooperation (Poland, Ukraine, etc.) • Establish VET school temporary joint investments & coop. • Pilot implementation of EC-VET • VET fairs, exhibitions and competitions • Transfer know-how	None to Concepts	• Intensive stakeholder consults • Design and approve • Public procurement (new software solutions) 3-6 mo's	6-12 months (12,500*)	OP Human Resources/OP Research and Innovation/ Interreg SK-PL/Eramus/EP *	TBD see other table • Synergy and Complementarity between OP – CUR-VET Slovakia, version 2	mostly open calls	ROMA Inclusion Program

FIGURE 7 Individual Investment Table for Small and Medium Enterprises (SME) VET Schools in Medzilaborce

Investment Type	Investment Costs (k EUR)	Investment description (3-4 sentences)	Stage of Prep (None/Concept/Feasibility)	Issues/Problems to be Tackled
Strančí odbojná žiada polytechnická A. Warhol MEDZILABORCE OVERALL OBJECTIVE: Entrepreneurial Communities and Competitive Territory - transforming the school into a modern educational centre with a significant impact on the development and support of entrepreneurship in the sub-region Hornosere Expected Outcomes: • SME Business Incubator • DUAL +a and support services • Creative Zone				
Study Programs Development	50	• Digitalization of Training and Study Materials • Update of Existing Study Programs • New LLL Programs	Concept	• Access to LLL • SME Support Program • New Study Programs and Materials
Equipment & Materials	1 025	• Connection between school areas & Creative Zone (e-mobility) • Creative Zone Equipment • Business Incubator Equipment and Materials	Concept	• New Skills Development • LMS • New Services
Trainings of Teachers/Staff	100	• Study visits and Mobility Program • Internships in Companies for Staff and Pupils • Co-operation with Companies	Concept	• CPD • WBL • Experts from companies as trainers
Infrastructure	1 850	• Reconstruction of existing buildings for Energy Efficiency • Modification of public spaces and the surroundings of the school area I. and area II. • New Building for Business Incubator	None	• Inconvenient Buildings • Multifunctional areas/community spaces • New forms of cooperation
Other (PR & Communication, etc.)	50	• Cooperation with companies	Concept	• New forms of cooperation

Suggested Immediate Next Steps

It is necessary to reach an agreement on the individual subprojects, verify their relative preparedness, and approve them for implementation and funding by the end of May or, at the latest, June 2019. In this case, the appropriate selection, evaluation, and approval procedures for the projects, with a deadline no later than the end of 2019, should be consulted and prepared together with the relevant managing authorities.

To do this, it is necessary to ensure the funding and creation of a joint pilot project team that will propose a detailed timetable and procedures for the preparation of individual approved subprojects for each of the pilot schools separately.

Since the PSK is the founder of the VET schools, and, given the impact of the proposed activities on the PSK budget, it would be advisable to prepare more detailed information on the state of the preparation of the investment packages for the PSK regional parliament. Among other things, this would help gain the support of the PSK, especially when using PSK funds, thereby ensuring publicity and the awareness of the PSK government (and its staff and deputies), regarding the selected VET schools projects, and other possible additional complementary projects.

LESSONS LEARNED FOR A MORE EFFECTIVE RESPONSE TO LABOR MARKET DEMAND

Based on the results of the two studies, the following lessons learned—presented here as recommendations and conclusions—were developed on how to better respond to the labor market demand in the Prešov Region:

1. **There is a critical need to strengthen formal feedback opportunities (that is, the development of a regional platform) by:**
 - Developing a regional platform for key stakeholders, which would more formally include employers in regional councils and committees
 - Considering more robust and innovative ways to work with the regional labor offices, and requiring the labor offices to track relevant education data and information (that is, International Standard Classification of Occupations [ISCO] codes) on workers (especially, the unemployed)

2. Firms, government actors, and professional associations (especially, nationally and regionally), need to take an active role in establishing connections with the VET schools. The current state of these connections show that:

- Certain sectors are already doing this really well (health, social services, and information and communications technology). The Ministry of Health holds annual events and professional conferences, where they bring together health-based firms and the relevant VET school providers. They also often provide regional forums, where health-related business associations meet and converse with the VET school providers about their needs
- However, in the infrastructure sector, for example, there is no or very low involvement from the relevant line ministries (that is, the Ministry of Transport) and the national authorities, in fostering sector-based events, joint firm and VET school activities, and so on. As a result, the firms in the study from these sectors report very poor levels of cooperation with the relevant VET schools

3. Firms need to be more open to, flexible with, and actively involved in supporting the PSK-ED and the schools, as they begin to adapt the following changes to be more in line with the firms' feedback:

- Study programs, curriculum, and content need to be more relevant to the job market
- Instructional approaches need to be modified, more active, practice-based, and project-based
- Facilities and infrastructure need to be reorganized to provide greater opportunities for school-based and work-based learning opportunities

4. PSK-ED, schools, and firms need to be more open to, flexible with, and equally involved in increasing and broadening the types of school- and work-based learning, to move beyond dual education by recognizing the following:

- Current normative financing, though increased recently, is still not enough to attract the number of dual education students envisioned in the national plan
- A need to broaden the activity categories which are permitted to receive funding

5. Schools and firms should be actively involved in working with the PSK-ED to draw attention to the following areas:

- Introducing quality standards for VET schools
- Innovative use of technology for quality improvement
- Career guidance and school-to-work transitions

ACTIVITY 2

**ENERGY EFFICIENCY
OF PUBLIC BUILDINGS
IN THE PREŠOV REGION**

WHY?

Improving energy efficiency (EE) in public buildings in the PSK will help the country meet its commitments under the energy policy, lead to lower expenditure on energy, more efficient use of public resources, and lower emissions from the use of fossil fuels. As of November 2016, the EU's EE Directive includes a 30% target for EE by 2030. To meet this new target, member countries, like the Slovak Republic, will have to take measures that include annually renovating at least three percent of the total floor area of publicly owned buildings, to meet the minimum energy performance requirements. Improved EE in public buildings would also reduce the consumption of natural gas, which is the primary fuel used for heating public buildings in the PSK, and, would help improve energy security for the Slovak Republic, which imports natural gas. Implementation of EE in public buildings in the PSK would also allow better and smoother management of the operation and maintenance resources, and, enable those funds to be used for other infrastructure and economic development activities. An EE program would support economic growth by creating new job opportunities, which is crucial for the economic development of the PSK. Therefore, as part of the Slovak Republic CURI program, the "Enhancing of Energy Efficiency of Public Buildings in the PSK" was agreed upon to help delineate a strategy to scale up EE investments in their public facilities.

HOW?

The "Enhancing Energy Efficiency of Public Buildings in the PSK" component has the following two activities:

Activity 1 was a strategic plan to scale up EE in the PSK buildings, consisting of an assessment of the existing regulatory framework, readiness of the market, and existing financial opportunities, to then be able to recommend strategic options that could help the Prešov Self-governing Region (PSK) scale up EE. For this plan, a broad review of the regulatory and institutional framework was done, and consultations were held with a wide range of stakeholders, including the Ministry of Finance, Ministry of the Economy, the Slovak Innovation and Energy Agency (SIEA), the Energy Service Company (ESCO) Association of the Slovak Republic, the Building for the Future (BOF) Association for manufacturers, suppliers, installers, and commercial banks, as well as international financial institutions (IFIs), like the European Bank for Reconstruction and Development (EBRD). An assessment of the market readiness with key stakeholders was done that included an assessment of the Slovak Energy Performance Contract (EPC) Act being developed by the Ministry of Finance. Activity 1 also developed an excel-based energy modeling tool for public buildings in Prešov to conduct a detailed analysis of the opportunities to improve the energy performance of the buildings. Based on the energy modeling tool, different EE measures were assessed for six public buildings with more energy consumption, to have a deeper understanding of the economic rate of returns, and the payback period, for the investments that helped prepare a financing framework for undertaking the investments in PSK public buildings.

Activity 2 was designed to assist the PSK in establishing an energy management team within the PSK's recently created Property Management Department (PMD) that would mainstream energy consumption within their portfolio of public buildings. This activity provided a systematic approach to developing an energy management system (EMS), so that the PMD can mainstream energy consumption in all their activities, as well as a systematic process for identifying and

prioritizing EE investment projects. A guidebook for the implementation of the EMS was prepared that is expected to be used by the PMD, and that also could be used as a reference for the individual property facilities' managers responsible for the operation and management of the facilities. A systematic way to assess the public building portfolio, from an energy consumption perspective, would be thus provided to the PMD.

WHAT?

Based on the work involved, the following key findings can be summarized below.

Commercial banks have been involved in the market for financing energy efficiency services in both the public and private sectors. Banks have provided financing for EE projects to creditworthy clients following normal lending practice and have applied the same lending principles to finance either public agencies or ESCOs to undertake EE projects in public buildings. The Slovak Guarantee and Development Bank could also finance regional governments, although financing is provided on a project basis. Commercial banks consider municipalities and public agencies a low-risk debtor, and consequently, they are offered lower interest rates and longer tenors, compared to private firms. However, in general, public agencies and municipalities are close to reaching their debt capacity, or they would use their funds for other sector priorities. Commercial banks have experience with credit lines for EE with IFIS, such as, EBRD's credit line to finance EE programs in small and medium industries (SLOVSEFF) and in municipalities (MUNSEFF), the latter offered loan tenors of 10-15 years and a 10-15% grant, which were attractive and in high demand.

The Ministry of Finance has been leading the development of the Energy Performance (EPC) Act¹⁰ to conform to Eurostat guidance.¹¹ The EPC Act is designed for the ESCOs to finance and implement EE projects in public buildings and recover costs from guaranteed energy savings. *Public buildings that have annual energy bills in excess of €50,000, and projects with a minimum contract period of eight years, are eligible to be implemented under the EPC Act.* The EPC Act is structured to ensure that the public agency does not assume any debt (as required by Eurostat guidelines). The EPC Act is designed to implement only energy-related projects and not undertake deep building renovation, which may include non-energy related elements.

Some provisions of the EPC Act may make the market less attractive, both for commercial banks and ESCOs, and capacity building may be needed for public agencies and municipalities. Commercial banks would prefer the municipality or public agency to take debt, since they are considered more creditworthy than smaller ESCOs. Banks are also not sure if public agencies would be able to retain monetary savings from EE projects, and would prefer a model where monetary savings from projects are ring-fenced for debt service. The repayment provisions to the ESCOs, as only from monetary savings from reduced energy, and not from any reduced maintenance and operational costs (as had been the case so far), may limit the ESCOs' participation. Under the EPC Act, maintenance of the equipment or facility would now be an obligation of the ESCOs, and this additional cost may not be adequately or quickly recovered from savings in energy costs alone. If there is a shortfall in the guaranteed savings, it would further reduce the revenue stream available to make repayments. Energy efficiency ESCO contracts have been done in projects with relatively short payback periods that entail equipment replacement, rather than thermal retrofitting, and have mostly not involved public buildings. In addition, municipalities and public agencies will have to build capacity to develop bid documents for EPC projects, and to train public agency staff on conducting audits, interpreting results, and identifying EE measures that meet required building standards (for example, Class A1 or Class A0).

There is a strong need for a pilot to test the EPC Act in public buildings to clarify implementation procedures that could serve as an example to scale up the EPC Act in the public sector. The PSK is well positioned to perform the pilot with government support. Given the multiple provisions and requirements of the EPC Act, which have not been tested, as well as the lack of clarity as to how they will actually work in the Slovak Republic, it is desirable to perform a pilot using

the PSK's public buildings, to test the new EPC scheme. The Ministry of Finance, Ministry of the Economy, SIEA, ESCO Association of the Slovak Republic and the banks are very supportive of piloting an EPC program in the PSK. The pilot could also help develop a standardized framework and process to identify a pipeline of projects that could potentially be bundled together. It could also develop baselines, and undertake monitoring and verification, all with the aim of testing and lowering transaction costs and portfolio risk. The EPC Act pilot could also help identify specific tailored financial products that may be needed for risk mitigation purposes.

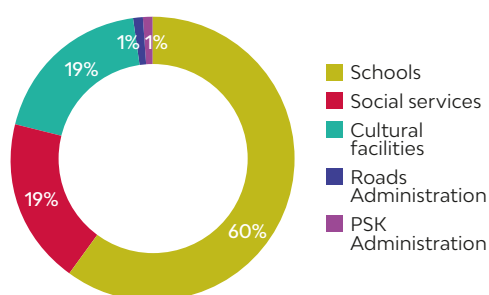
The PSK region owns 133 public facilities that include secondary schools, assisted living facilities (social services), cultural facilities, buildings of the regional roads administration (RRA), and administrative building of the PSK.¹² The 133 public facilities encompass some 488 public buildings with most facilities comprising multiple buildings. The 133 public facilities are characterized below.

TABLE 2 Characterization of public buildings in the Prešov Region

Facility	Number of Facilities	Number of Buildings	Floor Area (m ²)
Schools	80	239	580,000
Social services	25	87	91,000
Cultural facilities	26	71	73,000
Road administration and maintenance	1	89	32,000
PSK buildings	1	2	12,000
Total	133	488	788,000

Source: PSK, 2019

FIGURE 8 Share of Facilities



The public facilities are managed independently by directors or managers who coordinate with the relevant director in the PSK to plan and budget operational and capital improvement projects. The public facilities receive budgetary support from the line ministries of the Slovak central government, and the facilities individually manage their energy facilities and pay their utility bills. Any increase in energy consumption negatively impacts the operational budgets of the facilities. At times of budgetary shortfalls, especially in the winter months when heating bills increase, the PSK provides incremental financing to cover utility bills. A relatively small number of public buildings in the PSK have been renovated (14%) and have, on average, completed their life cycle (for instance, schools have an average age of 47 years, social services of 73 years, and cultural facilities of 35 years), thus requiring energy efficiency and deep renovations.

The opportunities are in thermal and equipment modernization, rather than in fuel switching. The annual energy consumption in public buildings over the period 2010 to 2017 shows that, on average, natural gas consumption accounts for over 72% of the total fuel consumption, while electricity accounts for about 14%. The main energy use is for space heating. The fuel sources include natural gas, some biomass, and purchased heat (from local district heating companies).

Systematic analysis to prioritize the PSK investments in public buildings. The PSK would benefit from a systematic analysis of its stock of public buildings to identify and prioritize investment opportunities to implement EE measures. A four-step process is suggested for the PSK to identify and prioritize EE projects and investments in public buildings. It includes: Step 1: Development of a longlist of projects; Step 2: Development of a shortlist of projects; Step 3: Identify top priority investment projects; and Step 4: Preparation of bid documents.

Building energy model assessment. A building energy model has been developed in collaboration with technical experts from the Košice Technical University's Department in Building Energy Use, to conduct a detailed analysis of opportunities to improve the energy performance of buildings. The excel-based model has been developed specifically for the climate and labor conditions in the Prešov Region and was done in collaboration with the PMD and energy experts from the ENECO. The energy model has three principal components: (i) Component 1: Energy demand for

heating; (ii) Component 2: Energy demand for other facilities—air conditioning, lighting, hot water; and (iii) Component 3: Data on fuel and energy use (actual billing information), emissions from fuel use, and material and labor costs of energy efficiency measures. The building energy model makes possible the generation of building certificates that are consistent with the building energy codes in the country.

Six buildings were identified in the first level of analysis and were selected for further analysis using the building energy model. The buildings included: four school facilities, with one vocational school; and two social facilities, with one health center for the elderly—all with high energy consumption. For each of the EE measures proposed, the energy use, investment costs, operating costs, payback period and the environmental impacts are estimated in the energy model. The EE measures considered in the energy modelling included: thermal insulation; heat source replacement; the optimization of the heating distribution system, including hydraulic regulation; replacement of the hot water heating system; change in fuel use; the installation of solar hot water; hot water accumulation; the optimization of the hot water distribution system; and the replacement of lighting by LED lights.

Energy savings, investment and payback period. The results from the modeling of six of the PSK's public building is provided in Table 3. The alternative scenarios in each facility (A, B, and so on) represent the different energy efficiency measures included in the analysis. The overall investment under scenario A is €39, 649, and the payback period is about 20 years. Under scenario B, the investment is €112,353, and the payback period is 22 years. The total investment for the entire portfolio of six buildings, considering only measures that have lower payback periods, is €857,137.

KEY TAKEAWAYS FROM THE RESULTS OF ENERGY MODELING

The modeling of energy efficiency measures in the six selected buildings with the highest energy consumption potential indicated that the simple payback period, in all cases, for all measures, is above 15 years. Some of the principal conclusions from the energy modeling are:

- It is not possible to meet A1 building performance standards within a 15-year payback period.
- Thermal insulation of buildings is expensive, and the investment has a simple payback period of 30 to 58 years. This is principally because changes to the building envelope are expensive to implement, especially when little maintenance has been done, and thus require investments beyond energy efficiency measures, and public facilities like schools and cultural facilities are underheated.
- Buildings that use electricity as a fuel for space heating or heating hot water are good candidates for fuel switching to gas, or the use of heat pumps and solar systems, where possible.
- In cases where a building uses coal or wood as a fuel for space and water heating, the payback period for replacing the system with a new fuel source is not cost-effective. Only replacement with a more efficient system is recommended.
- Replacement of lighting systems with LED is recommended, but it is expensive, given the cost of the replacement of the lamps, fixtures, cabling, sensors, and the increased lighting needed to meet the lighting norm. The cost assumption was thus €8 per square meter, which is aligned with other similar lighting retrofits.
- The Property Management Department (PMD) at the PSK needs to continue doing level two assessments to complete about 12 buildings (social services or schools) with the most energy potential, and ensure that there is not a mix of energy efficiency packages that have a 15-year payback period. This will be important in identifying potential projects for blended finance (EPC and grant funding).

TABLE 3 Results from energy modeling

		area	volume	structure				heating			hot water			lighting	total		
		m ²	m ³	SO	PDL	SCH	STR	OZ	room	boiler	regul.	source	distr.	solar			
1	SZS POPRAD (School)	A	1,364	4,800	-	-	-	-	-	x	x	x	-	-	-	x	
		cost	€								28,737					10,912	39,649
		payback	year									23.32				15.19	20.33
	B	1,364	4,800	x	-	-	x	-	x	x	x	-	-	-	x		
	cost	€					83,510				17,931				10,912	112,353	
	payback	year					30.66				26.17				15.19	22.05	
2	DSS HANUSOVCE (Social Services Centre)	A	630	1,890	-	-	-	-	-	x	x	x	x	x	x	-	
		cost	€								12,571			5,229			17,800
		payback	year									24.00		9.41			16.49
	B	630	1,890	x	-	x	x	-	x	x	x	x	x	-	x		
	cost	€					61,380				7,522		1,559	5,040		75,501	
	payback	year					39.17				25.41		23.52	19.56		28.04	
C	630	1,890	x	-	x	x	-	x	x	x	x	x	x	x			
cost	€					61,380				7,585		4,942	5,040		78,948		
payback	year					39.17				25.62		9.45	19.56		25.07		
3	SPS SNINA (School)	A	8,659	31,108	x	-	-	x	-	-	x	-	-	-	x		
		cost	€					410,430			27,969					69,272	507,671
		payback	year					34.09			17.28					19.99	26.82
4	SOS POPRAD (Student dormitory)	A	2,940	8,232	x	-	x	-	-	x	x	x	x	x	x	-	
		cost	€					163,510			27,788			47,549			238,847
		payback	year					57.48			52.60			19.87			33.84
5	OA St.LUBOVNA (School)	A	1,770	5,670	-	-	-	-	-	-	x	-	-	-	-	x	
		cost	€								7,646					14,160	21,806
		payback	year								14.07					15.79	15.14
0	DSS BREZOVICKA (Social Services Centre)	A	1,172	3,792	-	-	-	-	-	x	x	x	x	x	x	x	
		cost	€								20,980			19,010	9,374		49,364
		payback	year								-19.14			5.58	16.22		17.08

The long payback period for implementing EE measures in the PSK buildings implies that it may not be possible to implement such measures through the EPC Act alone. While the EPC Act does not limit the time period of the contract, commercial bank financing is unlikely to be available for tenors longer than 15 years. An option for financing projects with long payback periods is to blend financing under the EPC with grant financing from ESIF or other EU funds. As per EUROSTAT guidelines, any grant financing from EU funds provided to the project is permitted. By contrast, the provision of the Government of the Slovak Republic funds as grants to co-finance the project, will make the entire investment an additional debt on the books of the public agency, which is something to be avoided when working within the framework of the EPC Act. We propose that projects with payback periods longer than 22 years should be financed directly by the PSK, with its own budget funds.

However, for projects with payback periods longer than 35 years, a broader discussion needs to take place on what is the most cost-effective way to manage the PSK's public buildings assets. Many buildings are past their useful life, due to deferred maintenance, and would cost more than the PSK is willing, or able, to commit to its renovation. Therefore, a social and economic assessment of the cost-effectiveness of undergoing the EE retrofit, as compared with, for example, building a new facility meeting Class A0 standards, or changing the building's use, should take place. In this discussion, it will be important for the PSK's Property Management Department to have an updated record of all assets, in order to strategically evaluate them. This record should include: property ownership; operation costs, including energy consumption levels and; legal status. With more and better information, the PMD can make an informed decision, aligned with the goals of the PSK's leadership.

TABLE 4 Financing options for EE in public buildings based on a simple payback period

	15 – 22 years	22 – 35 years	> 35 years
Description	Blended finance between the EPC Act and the PSK's own resources to bring down the payback period to 15 years	Project financed by the PSK's own resources	Project financed by the PSK's own resources
Financing	<ul style="list-style-type: none"> • Mezzanine financing • Support from EU funds (ESIF and other funds) • Option to refinance after the project is operational • Preferential financial products from the European Bank for Reconstruction and Development/ the European Investment Bank for lines of credit or risk sharing mechanisms 	<ul style="list-style-type: none"> • Public finance • Support from EU funds (ESIF and other funds) 	<ul style="list-style-type: none"> • Public finance • Support from EU funds (ESIF and other funds)
Rationale	This option shifts the financing burden and the performance risk to the ESCO and is well suited for a regional or local government. The EPC Act does not place an upper boundary on the payback period or the term of the EPC contract. However, commercial financing is typically provided for tenors under 15 years. Blended finance combining ESCO financing with some grant and/or commercial financing could be considered (within the guidelines of the EPC Act) to help bring the payback period down to 15 years.	Projects with payback periods of above 22 years do not generally qualify for commercial bank financing (or it would be at high interest rates). Grant funds from EU vehicles and the Government of the Slovak Republic are best set aside for implementing projects with these long payback periods.	Projects with payback periods above 35 years would not qualify for any kind of commercial financing and should be financed with public finance from EU-based grants. Given the long payback periods, the PMD should assess the social and economic feasibility of maintaining the building's use, as perhaps it may cost more than the PSK is willing or able to commit for the EE retrofit.

ACTIVITY 3

**ENHANCING
REGIONAL AND URBAN
MANAGEMENT CAPACITY
IN THE PREŠOV REGION**

SUBCOMPONENT 3.1.

**ESTABLISHING
A REGIONAL SPATIAL
AND OPEN DATA
INFRASTRUCTURE
IN THE SELF-GOVERNING
REGION OF PREŠOV**

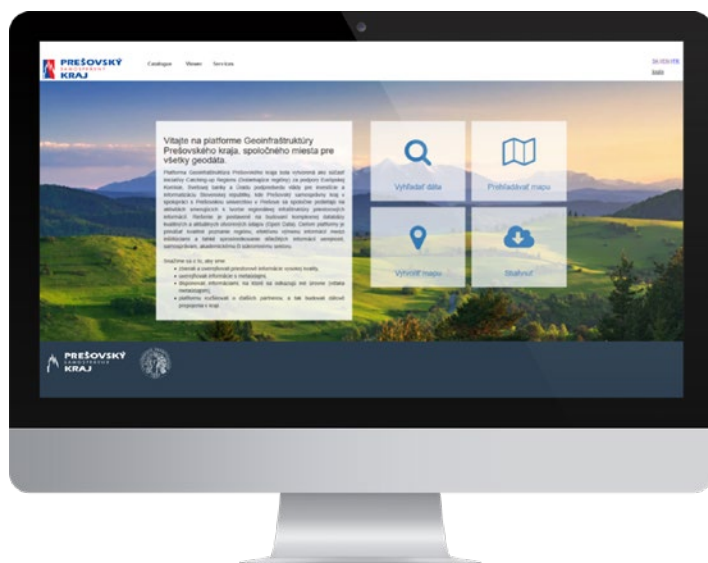
OVERVIEW OF RESULTS

The project included three main activities: (i) the setup and capacity building of the Geographic Information System (GIS) unit placed under the new Department of Information and Communication Technologies; (ii) the deployment of a geoportal as a part of the technical foundation of the spatial data infrastructure (SDI) and related data integration activity; and (iii) engagement with data producers and users in order to foster data collection and data demand.

Key deliverables and achievements of the project include:

In one year, the situation at the PSK evolved from no GIS unit to a team of qualified people under the responsibility of a new Department of Information and Communications Technology. The GIS unit includes one director, one system administrator, two GIS consultants, one senior GIS officer, three junior GIS officers, and one data officer.

FIGURE 9 Homepage of the geoportal of the region of Prešov



Note: Available at <https://geopresovregion.sk/>

Another important outcome of the project was the decision by the PSK to switch to open source software (OSS). The use of OSS may prevent any vendor lock-in situation in the future. It also helps reduce spending on IT, ensure interoperability, facilitate sharing of infrastructures, and foster innovation and security.

The WB team provided technical support to the PSK in deploying the geoportal. In particular, the team helped define, install, and set up the required hardware and software environment for the geoportal. The geoportal is now available online at <https://geopresovregion.sk> and is branded as a platform that has been made available for the entire region of Prešov, not only for the PSK.

The WB team helped the GIS unit and other departments within the PSK to conduct an inventory of geospatial-related data covering the whole region. The objective was to identify,

assess, and categorize any geospatial data that could be useful for the development of the whole territory, and that could eventually be shared through the geoportal.

The WB team trained and supported the GIS unit to perform data integration. Data integration is the process by which data coming from different sources and formats are integrated into a common platform so that they can be viewed and analyzed together. Through a series of training and focused coding sessions (sprints) the GIS unit learned about and conducted the data integration.

Three web map applications were designed and developed. A web map application is an application accessible online that enables users to interact easily with geospatial data. The web map applications focus on the following areas: district and municipality profiles, cultural heritage, and PSK facilities.

One of the most important achievements of the project was to identify and start to respond to data demand from the departments of the PSK, in order to foster the uptake of the SDI. The WB team supported the PSK in identifying the needs, in terms of data access, collection, analysis, and planning how to respond. Uptake is already effective as several departments of the PSK are currently using the geoportal and collaborating with the GIS Division. This includes the Property Management Department that has been working with the GIS team to produce a reference register of public buildings.

The PSK and the University of Prešov signed a collaboration agreement on the GIS. The agreement includes: technical assistance and the training of the PSK staff by the university; the contribution of GIS students to the PSK projects, as part of their university curriculum; and the cooperation in analysis and scientific work involving the GIS. Other collaboration agreements may follow, in particular with the city of Prešov that has been a pioneer of open data in the country.

With support from the European Commission's Technical Assistance and Information Exchange Program (TAIEX), the WB team organized a study visit to Rennes, France, to exchange ideas with the team from GeoBretagne (the Regional SDI of Bretagne). The Self-governing Region of Prešov learned about, and exchanged information on, how to establish and maintain a regional spatial data infrastructure in the context of the European framework.

WHY?

In the Slovak Republic, the self-governing regions are a relatively new administrative structure. Their scope of competencies includes most of the typical functions of a government including: regional roads and public transport; secondary, professional, and vocational education; territorial planning and regional economic development; social welfare; participation in civil defense; health; culture in the form of regional theaters, libraries, museums, galleries, and cultural centers; as well as regional tourism planning and development.

One of the tasks of the self-governing regions is to draw public money into regional development projects. This is where data, and in particular geospatial data, has a role to play. Without detailed information on its territory, the region is left with little evidence for decision-making, and often needs to rely on costly studies, or no information at all. This is also a question of transparency and collaboration, with other stakeholders and the citizens.

While designing the Catching-up Initiative, the lack of data, particularly geospatial data, has been identified as a key element hindering the capacity of the PSK to better support regional development. By deciding to directly address the issue, the PSK became the first local authority to establish and manage its own spatial data infrastructure in the country, complying with national and European-level geospatial and open data standards.

HOW?

Establishing and ensuring the uptake of an SDI is about deploying the necessary digital platforms, standards and processes. It also requires the right institutional setup, the capacity to engage with data providers and partners, and act strategically to foster the demand and use of geospatial data. Considering these different elements, the WB team offered its support in building both the enabling environment, as well as the necessary digital infrastructure, that would form the foundation of the SDI.

The World Bank team proposed to address and contribute to those different aspects of the project in a coherent sequence: (i) it provided continuous support to the newly established GIS Division, including guidance on project management, providing technical training and workshops, bringing

in external stakeholders to build partnerships, help for recruiting new staff, as well as assistance on how to conduct a data inventory; (ii) it conducted a readiness assessment, looking at both the enabling environment (legal and institutional framework, and capacities) but also the technical aspects of the project, such as GIS and IT software, and the standards and processes already in place; (iii) the WB team also contributed to the deployment of the geoportal, including setting up the server, and installing and customizing the software, while ensuring strong involvement of the GIS Division throughout those steps; (iv) lastly, the Bank offered support in identifying and developing web map applications, in order to demonstrate the impact of the SDI, and foster its uptake.

Lastly, in agreement with the PSK, the implementation of the SDI was done, following a set of key open data and open source principles, to maximize its impact and the chance of its long-term success. The team prioritized open source software (OSS), a type of software in which a source code is released under a license that grants anyone the rights to view, change, copy, or distribute the source code to anyone else, for any purpose. Secondly, aligning with national policy, the PSK opted for open data to be the default principle, for the datasets released through the geoportal. Open data is data that anyone can reuse for any purpose. This means technically open (available online in open, machine-readable format), legally open (open license), and provided free of charge. Lastly, another important decision of the PSK has been to transform the initiative into a broader partnership for the region, enabling other stakeholders to step in.

WHAT?

The World Bank team supported the PSK in establishing a new GIS team within the institution, provided sample terms of reference, offered guidance on priority skills and experience needed, and accompanied the PSK in integrating the new GIS team with other IT and information system (IS) departments to form a new ICT department.

In collaboration with GeoBretagne, and with support from the European Commission TAIEX program, the Bank team organized a study visit to the spatial data infrastructure for the region of Bretagne in France. The primary aim of this study visit was for the Self-governing Region of Prešov to learn from the GeoBretagne experience in establishing and coordinating a regional spatial data infrastructure, in the context of the European Union framework on spatial data and access to public sector information.

The WB team provided capacity building support to data integration by organizing full-day sprints with the PSK team, where the participants coordinated the work using online tools. A sprint can be defined as a time-boxed period of development focused on a given list of goals, where collaboration and focus are essential.

The Bank team supported the signing of a partnership agreement between the PSK and the University of Prešov (effectively signed on January 22, 2019), and the preparation of a multilateral agreement or charter that may include other stakeholders, such as the city of Prešov.

Lastly, the WB team contributed to the setting-up and deployment of the geoportal and the underlying hosting environment. It also helped the PSK in deploying web map applications in three areas (demography, job market, and property management).

LOOKING FORWARD

This one-year project helped to build the foundation of the regional spatial data infrastructure for Prešov. However, a lot remains to be done for the initiative to become a catalyst for the development of the region. The way forward looks relatively clear and may include: (i) strengthening the GIS unit and its partnerships; (ii) continuation of the geoportal and data integration activity; (iii) ensuring the uptake of the platform through data activities in priority sectors. Data activities are services provided by the GIS Division to other divisions or departments of the PSK, or directly to the citizens. It can be anything from data collection, data analytics, and web map applications, to communications material.

SUBCOMPONENT 3.2.

**SUPPORTING
THE DEVELOPMENT
OF THE ENDOGENOUS
POTENTIAL OF THE PREŠOV
REGION FOR TOURISM AND
REGIONAL DEVELOPMENT**

OVERVIEW OF RESULTS

The overall objective of component 4 was to identify tailored investments and recommendations for structural reforms, in order to enhance the region's economic competitiveness related to regional and tourism development. Activities within the component were split up into two levels, producing two corresponding outputs.

Output 1 included a comprehensive institutional analysis and structural recommendations for the improvement of the destination management system in the Prešov Region, so that it can competitively meet the demand of current and future visitors. Output 2 derived concrete measures on how local tourism products and destination marketing for the Poloniny National Park and the Snina District can be enhanced in order to boost local and regional economic growth. Linkages to possible structural national funding sources were also identified. Jointly, the two analytical outputs proposed 17 actionable recommendations and recommended investments.

Apart from the outputs' specific recommendations, an overarching takeaway from the extensive field and analytical work that was undertaken was the reality that prior to improving specific local tourism products and services, significant upgrading and investments in the basic service infrastructure are needed. Improvements to the roads, water supply, and wastewater systems serving communities in Poloniny National Park and the surrounding areas, are the sectors where infrastructure upgrades are the most needed.

First steps toward operationalizing some of the proposed recommendations are on their way to being implemented by the PSK's Regional Development Department. Related to Output 1, with the World Bank's technical assistance, terms of reference were developed for a public procurement process that will recruit a consulting firm for the implementation of a feasibility study to identify alternative water supply solutions in Poloniny National Park and the surrounding areas. By May 2019, the public procurement process was successfully completed, and a consulting firm was contracted. Results of the feasibility study are expected to be presented by mid-fall 2019.

In connection to Output 2, the WB, in collaboration with the National Park Administration, the PSK regional administration, and local communities are in the early stages of developing a Poloniny Tourism Trail, based on international best practices. To this effect, i) outlines of the potential trail are being mapped, ii) local experts who will test the trail on foot, bicycle, and horseback are being recruited, and iii) dialogue with local communities to identify potential tourism infrastructure investments that would make the Poloniny Tourism Trail an attractive, brand-worthy destination for tourists is well under way.

Other recommendations proposed are being tackled one-by-one, as finding relevant financing within the existing national fiscal architecture and complex procedures, has proven to be more challenging than initially anticipated. To ensure the sustainability of the recommendations made, within CURI II, securing relevant financing will be a priority for the PSK administration, with the WB's assistance.

WHY?

The economic impact of travel and tourism on the national GDP, and on sustainable local economic growth, is well-established. The PSK's border location with Poland and Ukraine, as well as its rich cultural and natural heritage, have high tourism potential. The PSK is home to five national parks, 180 protected areas, pristine nature reserves, and numerous geothermal springs. The Poloniny Mountains and the Vihorlatské Peak Mountains, belong to the oldest trilateral nature reserve in the world, covering 165,000 hectares spread across the Slovak Republic, Poland, and the Ukraine, making it an attractive hiking destination. Its cultural heritage is endowed with 4,059 registered cultural monuments, including castles, archaeological sites, military monuments, Jewish heritage cemeteries, unique wooden churches, and open-air folk museums.

Yet statistically, the Snina District and Poloniny National Park are some of the least-visited and least-developed areas of the PSK and the eastern Slovak Republic. According to local stakeholders, opportunities for further tourism development, and related investments in the district, are limited. Recognizing the high potential yet lacking a significant contribution of tourism to the PSK's economic performance, component 4 set out to assess the factors that impede the Snina District's economic opportunities for equitable growth. These were divided into two levels of inquiry:

- Level 1 (Output 1) looked at the structural, institutional and operational capacities of the PSK's destination management system (DMS) as a whole; namely carefully assessing the performance of tourism information centers (TICS) and the destination management organizations (DMOS); and
- Level 2 (Output 2) examined the state of the tourism infrastructure in the Snina District, the existing and potential tourism products, and the effectiveness of local destination marketing.

HOW?

Both levels of analytical inquiry applied a mixed methods approach, extensive field work combined with ad-hoc surveys. Sequentially, the Output 1 analysis of the destination management system, tourism information centers, and destination management organizations in the Prešov Region came first and was conducted from June to December 2019. While the analytical work related to the second output followed, from December to April 2019.

Prior to starting the quantitative and qualitative field research, a comprehensive desktop review of the legislation, strategic documents, and official statistics was first conducted. In relation to Output 1, an online survey based on the Association of Information Centers of the Slovak Republic (AICES)'s performance standards for TICS, was rolled out between June – September 2019. This survey targeted all the 34 TICS in the PSK, with a 79% (26 TICS) response rate. To corroborate the survey findings, semi-structured, in-person interviews were also conducted with staff in all the TICS that were surveyed. Using the same methodology, eight DMOS in the PSK—seven at the district level and one regional DMO—were also surveyed and their staff interviewed. To depict a dynamic model of financial flows and tourist data related to the TICS and DMOS, a Vensim Causal Loop Diagram was developed.

Findings in Output 2 were based on a series of field visits to Prešov, the Snina District and Poloniny National Park, in September and October 2018, when the team held individual meetings with all the 34 mayors of the Snina District, and then in March 2019, during which extensive meetings were held with more than 18 tourism-related public and private sector stakeholders. Interviews were conducted on an individual level and through focus group discussions. In tandem, multiple strategies, regional plans, and background documents related to tourism and sustainable development in the Slovak Republic, the PSK, the Snina District and Poloniny National Park, as well as tourism statistics and reports from national and international sources, were reviewed.

LESSONS LEARNED

Though the team focused on questions related to the tourism sector at the beginning of its inquiry, as its work unfolded, the answers undeniably began to link up with wider strategic regional, as well as sectoral, development considerations. These can be grouped on four levels.

The first concedes that the PSK's strategic border location, and its unique natural and cultural heritage, give it considerable potential to be a tourism-friendly destination—but an attractive location alone is not enough to draw the critical mass of tourists needed to stimulate economic growth. Poor basic services, insufficient infrastructure—roads, transport connectivity, water supply and wastewater—are key impediments that prevent the Snina District from unleashing its tourism potential. To remove this bottleneck, regional and national authorities will need to commit to several structural investments.

The second string of lessons learned, linked to the regional destination management system, observed:

- Due to the severe institutional fragmentation, minimal coordination, and little operational linkage between the tourist information centers and the destination management organizations in the region, it is recommended that they all be integrated and consolidated into a single competitive Regional Destination Management Organization.
- Connections between tourism products and destinations within the region can be significantly scaled up.
- Stimulation of innovation, enhanced marketing, and a larger proportion of revenue-generating tourism services need to continue to be developed.
- An evidenced-based approach to strategic planning and market research through a systematic, better disaggregated collection and use of data needs to be adopted.
- An actionable Regional Strategy for Tourism Development needs to be drafted.

To unlock the endogenous tourism potential of Poloniny National Park and the Snina District, through tourism product development and destination marketing, the following lessons were identified:

- A regular process for convening local stakeholders to establish a consensus on tourism development issues and solutions needs to be institutionalized.
- An outreach plan to invite and host operators and media from the target markets to experience the district and the park needs to be developed and implemented, while promotion of public tourism assets and their related services are improved.
- For capacity building, to ensure competitiveness of the tourism services provided, a 'Tourism 101' training program for public officials and private sector service suppliers in the local tourism industry would be highly beneficial.
- Linked to the former, the development and implementation of a plan that enables local stakeholders to focus on target products and conduct systematic marketing that targets specific market segments is strongly recommended.

The following suggestions were proposed regarding project investment:

- Development of a Poloniny Tourism Trail that connects existing villages, cycle paths, hiking, and horseback riding trails as a local and regional tourism product
- Protection, development and promotion of the cultural heritage and cultural services needs to be continued
- Protection, development and promotion of the natural heritage and eco-tourism
- Physical regeneration and security of public spaces needs to be enhanced

The last (but not least) set of observations pertains to access to financing. Intra-regional investments for the development of the tourism infrastructure in the PSK have been shown to be highly asymmetric. The region's north-western district, where the scenic High Tatra mountains are located, enjoys an established tourism clientele, high revenues, sophisticated marketing, and

a well-maintained infrastructure that attracts a sufficient volume of public and private investments. The less-developed eastern Slovak districts, including Snina, are underfunded and trail behind the Tatras in all the areas mentioned above. The poor infrastructure in the Snina District is a corollary of such asymmetries and needs to be addressed.

To do so, however, the national systems and procedures for allocating EU structural funds to regional and subregional tourism projects needs first to be significantly simplified and made applicant-friendly. It was observed that the annual budgets and administrative human resources available to the mayors and the PSK are hardly sufficient for them to be able to submit properly prepared project applications for the administratively complex national calls for proposals. For the EU funding to be effectively and equitably disbursed at the regional level, this structural limitation needs to be promptly addressed by the national authorities.

NOTES

1. Open Data Portal for the ESIF: <https://cohesiondata.ec.europa.eu/>
2. The volume index of GDP per capita in Purchasing Power Standards (PPS) is expressed in relation to the European Union (EU28) average set to equal 100.
3. European Commission (2017): Competitiveness in low-income and low-growth regions - The lagging regions report. SWD(2017) 132 final. Available at: https://ec.europa.eu/regional_policy/en/information/publications/reports/2017/competitiveness-in-low-income-and-low-growth-regions-the-lagging-regions-report
4. World Bank (2019): Prešov region: Key development dynamics. Available at: <https://www.po-kraj.sk/sk/samosprava/kompetencie-psk/regionalny-rozvoj/catching-up/>
5. World Bank. 2012. Golden Growth: Restoring the lustre of the European development model.
6. European Commission 2018: <https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-slovakia-en.pdf>
7. More information on the Slovak Republic CUR1 implementation can be found at the PSK website: <https://www.po-kraj.sk/sk/samosprava/kompetencie-psk/regionalny-rozvoj/catching-up/>.
8. More information is available here: <https://www.nro.vicepremier.gov.sk/support-of-least-developed-districts/index.html>.
9. World Bank (2018): Rethinking Lagging Regions. Using Cohesion Policy to deliver on the potential of Europe's regions. Available at: <http://pubdocs.worldbank.org/en/739811525697535701/RLR-FULL-online-2018-05-01.pdf>
10. The Government of the Slovak Republic has enacted the Act 4/2019 Amendment to the EE Act for public buildings.
11. Eurostat provides additional methodological guidance documentation on the accounting rules for the EDP statistics and the GfS complementing or interpreting of the general rules of ESA 2010. Guidance notes are released under the responsibility of Eurostat, after consultations with EU Member States. In May 2018, the document "A Guide to the Statistical Treatment of Energy Performance Contracts" was published. More information at: https://ec.europa.eu/eurostat/documents/1015035/8885635/guide_to_statistical_treatment_of_epcs_en.pdf/f74b474b-8778-41a9-9978-8f4fe8548ab1.
12. The administrative buildings of the town and municipalities are not owned by the PSK. Elementary and middle schools, and other public buildings owned by the towns and municipalities are not included in the table.

