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SOCIO-ECONOMIC IMPACT ASSESSMENT OF THE PROSPECTIVE NEW RAILWAY LINE IN SLOVENIA

Summary. Socio-Economic Impact Assessment (SEIA) represents the most widely used tool for determining the potential current and future social and economic impacts of proposed infrastructure and other development projects and for developing appropriate policies and measures by which the identified adverse effects can be mitigated or eliminated, and positive social and economic impacts can be effectively capitalized on for the benefit of communities in which the projects are spatially located. In Slovenia, SEIA is not legally binding; for this reason, its use depends on the content and nature of specific development projects as well as on the assessments of the contracting entity. In this paper, the results of a partial SEIA of the new railway link site selection in the Pomurska region on the route Bad Radkersburg (A) - Murska Sobota (SLO) are presented. The assessment was carried out at three hierarchical territorial levels: at the level of EU, the Republics of Slovenia and Austria; at a wider cross-border level that includes the Austrian Province of Styria and the Slovenian Podravska and Pomurska regions; and at a narrower cross-border level, covering the area between the Austrian town Bad Radkersburg and the Slovenian town Murska Sobota, also including some other important settlements on the Slovenian side of the border. For the purpose of the analysis, we prepared a proposal for four corridors of the new railway line on the route Bad Radkersburg - Murska Sobota. The proposed corridors were evaluated considering the set of seven selected criteria and three evaluation parameters. With the help of the implementation of partial SEIA, we selected the most suitable corridor for the prospective new railway line in this part of Slovenia. We ascertain that SEIA is an appropriate instrument for evaluating the social, economic, and partly also spatial impacts of transport infrastructure planning and construction. Therefore, we suggest that it would be advisable to consider its future inclusion in the relevant legal and regulatory framework in Slovenia.

1. INTRODUCTION

There is a clear determination and commitment in the European Union to promote the future development of competitive and sustainable transport links and infrastructure. In this context, the emphasis on the importance of the development of modern railway infrastructure stands out, with a special focus on the (re) establishment of missing cross-border connections. This fact is confirmed by important development and other documents of the European Union (hereinafter referred to as the EU), which, in their goals and orientations, advocate the following:

1. Cross-border coordination of bottom-up business-oriented projects, such as rail freight corridors and green corridors [4].
2. Development of an integrated European railway market [5].

3. Focus on completing missing connections (especially cross-border sections and bottlenecks/bypasses) and on improving existing infrastructure (ibid.).
4. Preparation of a set of regional cross-border rail links that have been removed or abandoned, especially those that could be connected to TEN-T [6]
5. Construction and expansion /.../ of the railway network /.../, which is extremely important for border regions, including the elimination of missing connections between regional/national and trans-European transport axes and networks [2].

A similar orientation and development orientation cannot be detected in the framework of long-term development documents that guide the future development of the transport and, within it, especially the railway system/infrastructure in the Republic of Slovenia (hereinafter RS). This is especially characteristic of the Pomurska (statistical) region, which is also the least developed Slovenian statistical region. In the past, some important regional railway lines connecting the region with the neighboring cross-border areas in the Republic of Austria and Hungary have been abandoned in the region. Here, we have in mind the railway connection Ljutomer - Gornja Radgona - Bad Radkersburg - Lipnica and Lendava - Redics.

The Spatial Development Strategy of Slovenia (2004; hereinafter SDSS) does not propose the possibility of re-establishing the mentioned railway connections. The Resolution on the national program for the development of transport in the Republic of Slovenia for the period up to 2030 (2016; hereinafter Resolution) does not envisage the reconnection of Gornja Radgona (SLO) and Bad Radkersburg (A) with the abandoned railway connection.

The Resolution - despite the defined broader goals (harmonization with the EU network, betterment of interregional connectivity, improvement of mobility and accessibility, road safety, and security, curtailment of energy consumption in transport, confinement of costs for users and operators, reducing environmental burdens) - does not envisage investments in the network of regional lines in the Pomurska (statistical) region. At the same time, it abandons guidelines from an older development document (Social plan of the SR of Slovenia for the period 1986-1990), which envisaged the construction of a regional line from Lendava to the Dolga vas border crossing (and on to Redics in Hungary) and does not conceive the possibility of restoring a direct and modern railway connection from the regional center Murska Sobota (SLO) to Bad Radkersburg (A). In this way, at the strategic planning level, it actively contributes to deepening the traffic isolation of the Pomurska region, weakening the traffic hub position of Murska Sobota as the center of the Pomurska (statistical) region, reducing opportunities for improved sustainable transport mobility within the region, deteriorating harmonization conditions, and ensuring interoperability with neighboring countries Austria, Hungary, and Croatia. Nevertheless, tackling bottlenecks and optimizing the capacity of cross-border regional transport - in our case prospective new rail line - connections are crucial to improving the efficiency of passenger and freight transport within the European single market.

In contrast to the presented national strategic development documents, the Regional Development Program of the Pomurska Region for the period 2014–2020 [14] highlights the problem of the lack of cross-border railway connections between Ljutomer (SLO) and Bad Radkersburg (A) and between Lendava (SLO) and Redics (A). As part of the measure "Improvement of transport infrastructure", it envisages projects and investments with which the missing railway lines would be planned and built.

In the described context and within the Operational Program Slovenia-Austria 2007-2013, the project "Feasibility study for the establishment of railway infrastructure to the new Corridor V on the route Bad Radkersburg - Murska Sobota" was carried out [12]. The aim of the feasibility study was to examine and evaluate possible corridor variants of the location of the railway line in the direction of Bad Radkersburg (A) - Murska Sobota (SLO). The study contains a number of work packages, which include indicative investment value of new infrastructure connections, operational study, economic and financial analyses, market research, analysis of geological and hydrological conditions, analysis of market potentials of the new line, line tracing study, and feasibility study of four possible corridor variants. As part of the study, the author of the article, as a representative of the Urban Planning Institute of the Republic of Slovenia, conducted a socio-economic research, which represents the expert basis of this article [7].

2. SPATIAL CONTEXT

The spatial context within which we carried out the assessment of the socio-economic impacts of possible corridor variants of the railway line location in the direction of Bad Radkersburg - Murska Sobota covers three analytical areas. The widest area of influence includes the EU, the Republics of Slovenia, and Austria. A wider area of influence includes the Austrian Province of Styria and the Slovenian Podravska and Pomurska regions, which we named the cross-border region. The narrower area of influence - within which the socio-economic impact assessment was focused - refers to the cross-border area between Bad Radkersburg and Murska Sobota, which also includes some important settlements in this part of the Pomurska region (Gornja Radgona, Radenci, and Tišina).

3. METHODOLOGICAL FRAMEWORK AND THE MAIN PRINCIPLES OF THE RESEARCH

Socio-economic impact assessment (SEIA) is an increasingly used tool for identifying possible current and future social and economic impacts of the proposed transportation infrastructure and other development projects and for the preparation of appropriate policies and measures to address the identified negative impacts, and mitigate and make good use of the positive social and economic impacts for the benefit of the community in which the planned projects are to be spatially located.

In previous planning and policy evaluation practices, social and economic impact assessments have usually been prepared and carried out separately, often connected with strategic environmental assessment. In recent times, however, the need for their closer integration and the development of an integrated approach have become increasingly apparent. An integrated approach can provide comprehensive and cost-effective results that provide information on potential economic impacts of the planned transportation infrastructure, as well as information on its potential impacts on prevailing societal values, attitudes, and responses of residents and other stakeholders to proposed changes.

The assessment of the socio-economic impacts of the possible implementation of development projects usually includes the following methodological steps: definition of the spatial, temporal, and problem frameworks of the assessment; determination of the baseline circumstances and conditions; forecasting direct, indirect, and cumulative social and economic impacts; identification of mitigation measures for the management, reduction, and elimination of negative impacts of the implementation of the development project; evaluation (possible variants) of the development project proposal by various stakeholders and the general public, and implementation of adaptation measures and monitoring of the implementation of the development project [3].

Socio-economic impact assessment in Slovenia is not legally binding, which is why their use depends on the content and nature of specific development projects as well as on the project requirements of their clients. The same applies to social impact assessments, which are an integral part of socio-economic impact assessments. This is pointed out by Bojan Radej [13], who states that "social impact assessments in Slovenia are not mandatory for social policy makers and are not widely used, so their impact on public decisions is still small today."

The implementation of the SEIA, which represents the main part of the performed analytical activities, was conjoined with the two other preceding analytical activities, namely, the synthetic assessment of the current situation of the wider area of influence of the prospective new railway line and the implementation of the partial SWOT analysis of the suitability of its accomplishment considering wider territorial levels. The main aims of the conducted research were to present all possible identifiable advantages and disadvantages of the possible construction of a prospective railway line at all relevant territorial levels, to present its possible impacts on various social subsystems, and select the most appropriate course of the line that will have positive long-term impacts on the development of the railway system and the development of the economy and society in this underdeveloped part of Slovenia.

4. SYNTHETIC FINDINGS OF THE ASSESSMENT OF THE CURRENT SITUATION WITHIN A WIDER AREA OF INFLUENCE

Based on the assessment of socio-economic impacts within a wider area of influence, we obtained some synthetic findings that relate to the assessment of the current situation and served as a basis for performing a partial SWOT analysis. The following findings were obtained:

1. The project-bounded cross-border region is developmentally inhomogeneous, within which there are significant development differences between - considering all socio-economic indicators - more developed Austrian areas and less developed Slovenian areas.
2. The identified socio-economic differences between the Austrian and Slovenian areas have not diminished in the last two decades.
3. In this respect, in a negative developmental sense, the Pomurska region within which a new railway connection on the route Bad Radkersburg - Murska Sobota will be located to a greater extent stands out.
4. In recent history, the border between the two countries has drawn a strong development (but also cultural and linguistic) dividing line, which has affected the relative development lag of areas on both sides of the state border and directed labor force, business, and traffic flows to central urban centers in Graz on the Austrian side and to Maribor and Murska Sobota on the Slovenian side of the border.
5. Despite the peripheralization of border areas on both sides of the border, differences in the level of development and living standards of the population have been preserved.
6. Worse economic situation in the Pomurska region - where activities in the primary and secondary sectors of the economy still predominate - is accompanied by unfavorable demographic movements due to low birth rates and high mortality, as well as emigration to other Slovenian regions and abroad.
7. The settlement system in Radkersburg district and in the Pomurska region is developing independently of the current and even more future potential of the railway stations, which stimulates the suburbanization and deurbanization processes in the cross-border region and calls into question the possibility of establishing an efficient railway system as a backbone of the transport system.
8. The cross-border region is dominated by the use of the road transport system, which has the effect of stimulating the growth of transport demand and of neglecting the development of other transport systems (mainly railway).
9. There are significant differences between the valid regional and national development documents in the field of promoting the development of railway infrastructure in the Pomurska region.
10. In this way, at the strategic planning level, the Republic of Slovenia actively contributes to increasing the traffic isolation of the Pomurska region, weakening the transport hub position of Murska Sobota as the center of the Pomurska region, reducing opportunities for improved sustainable transport mobility within the region, deteriorating the conditions for harmonization, and ensuring the interoperability of the regional railway network with the railway networks of the neighboring countries of Austria, Hungary, and Croatia. Addressing bottlenecks and optimizing the capacity of cross-border regional transport - in our case railway - connections are the key to improving the efficiency of passenger and freight transport within the European single market.

5. PARTIAL SWOT ANALYSIS OF THE SUITABILITY OF THE ESTABLISHMENT OF A NEW RAILWAY LINE CONSIDERING WIDER TERRITORIAL LEVELS

In this chapter, we present the results of a partial SWOT analysis of the suitability of establishing a new railway line considering wider territorial levels: the EU, the Republic of Slovenia, the Republic of Austria, the Province of Styria, and the Pomurska Region.

At the EU level, the possible establishment of new railway infrastructure in the direction of Bad Radkersburg - Murska Sobota offers the following opportunities:

- elimination of bottlenecks and other obstacles in the field of railway infrastructure;

- integration of the transport systems of the eastern and western parts of Europe;
- establishing infrastructural conditions for the development of multimodal logistics chains; and
- establishment of the infrastructural conditions for the development of an integrated European railway network and market.

At the same time, there is a danger that the establishment of new transversal links between corridors and the possible reorientation of part of freight traffic flows will lead to a weakening of the role of the identified trans-European transport corridors.

At the level of the Republic of Slovenia, the possible establishment of new railway line offers the following opportunities:

- facilitate the realization of the expected high growth rate of freight transport demand by 2050;
- improve the competitiveness of the Slovenian railway network;
- improve the transport accessibility of the Pomurska region;
- strengthen the transport hub position of Murska Sobota as a center of national importance, capable of cooperating on an equal footing with cross-border areas in Austria, Hungary, and Croatia; and
- eliminate bottlenecks and optimize the capacity of cross-border regional rail links.

At the same territorial level, a number of threats also occur at the same time:

- the inconsistency of development documents at the national and regional levels in the promotion of the future development of the railway system and infrastructure has a negative impact on the realization of the possibilities for the implementation of the referred infrastructure;
- abandonment of existing plans for investments in the new network of regional lines in the Pomurska region;
- taking over part of the freight traffic flows via the new Koralmbahn railway line from the V. Trans-European Corridor and directing them to the northern Adriatic and North Sea ports, which are competitive with the main Slovenian seaport Koper;
- abolition of the 5th Pan-European Corridor on the territory of Slovenia;
- diversion of freight flows to logistics centers in Austria (e.g. Wendorff terminal near Graz); and
- the new railway connection Murska Sobota - Bad Radkersburg - Šentilj - Maribor would compete with the existing connection Murska Sobota - Ormož - Pragersko - Maribor.

At the level of the Republic of Austria, the possible establishment of the new railway line offers the following opportunities:

- connection to the fast and efficient new Koralmbahn railway line on the route Graz - Klagenfurt - Villach - Trieste and taking over part of the freight flows from the current V. pan-European corridor with the possibility of its re-categorization into the V. pan-European corridor and
- elimination of bottlenecks and optimization of the capacity of cross-border regional rail links.

At the same territorial level, the only threat is the possibility of not building the considered new railway line.

At the level of the Province of Styria in Austria, we identified the following advantages of the possible construction of new railway infrastructure:

- this could be a relief line for the Graz Eastern Railway;
- the transport capacity of the railway network would be increased;
- the direct rail connection of the Wendorff terminal with Pomurska region and the nearby Hungarian and Croatian regions would be improved;
- the bottleneck would be eliminated, and the capacity of cross-border regional rail links would be optimized; and
- the conditions for attracting part of the available cheaper labor force from the Pomurska region to employment centers in the Province of Styria based on daily labor mobility would be improved.

As the only danger from the possible construction of the mentioned railway line for the Province of Styria, we recognized the planned construction of a powerful modern combined transport terminal in Murska Sobota, which can take part of the revenue of the logistics terminal in Wendorff.

At the level of the Pomurska region, the possible establishment of new railway line offers the following opportunities:

- improving transport accessibility, which can indirectly affect the improvement of the economic performance of the Pomurska region and limit negative demographic trends;
 - improving interregional connectivity;
 - improving the infrastructural conditions to promote the development of sustainable mobility within the region;
 - strengthening the traffic hub position of Murska Sobota as the center of the Pomurska region;
 - improving the infrastructural conditions for the construction of a modern combined transport terminal; and
 - eliminating bottlenecks and optimizing the capacity of cross-border regional rail links.
- At the same territorial level, two threats also occur simultaneously:
- increasing population dispersion, which may further worsen the spatial conditions for the construction of the considered railway line and
 - the predominant transport and logistics connection of the economy of the Pomurska region to the transport and logistics capacities of the Austrian province of Styria.

6. ASSESSMENT OF THE SUITABILITY OF THE POSSIBLE CORRIDORS FOR A NEW RAILWAY LINE

In this chapter, we present the results of the assessment of the suitability of individual routes of the corridors of the new railway line on the route Bad Radkersburg - Murska Sobota. This assessment is preceded by the assumption that the establishment of a new railway line to the Corridor V on the route Bad Radkersburg - Murska Sobota is assessed positively and that the identified opportunities at wider territorial levels (EU, Slovenia, Pomurska region) outweigh the identified threats. The potential corridors of the new railway line are presented in Fig. 1.

The following basic socio-economic and settlement characteristics apply to the narrower cross-border area through which the corridor versions of the new railway line on the route Bad Radkersburg - Murska Sobota take place:

- The following centers stand out in the area in terms of population and jobs: Murska Sobota, Gornja Radgona, and Radenci on the Slovenian side, and on the Austrian side, Bad Radkersburg.
- Murska Sobota is the regional center, Gornja Radgona and Bad Radkersburg are subregional centers, Radenci is the local center, and Tišina is the sublocal center.

The following set of criteria was chosen to evaluate the suitability of the defined corridors considering the socio-economic (development) aspect:

- 1. connecting local centers;
- 2. connecting employment centers and business zones;
- 3. possibility of establishing common transport corridors;
- 4. impact on economy;
- 5. impact on tourism;
- 6. sustainable accessibility; and
- 7. cross-border connectivity of the region.

The following evaluation scale was chosen to evaluate the suitability of the selected corridors:

- 1. (+) more appropriate;
- 2. (o) appropriate; and
- 3. (-) less appropriate.

As part of the evaluation, the corridors were also ranked according to their suitability, considering the defined set of criteria. An evaluation scale from (1 - highest value) to (4 - lowest value) was chosen. The results of the evaluation are shown in Table 1.

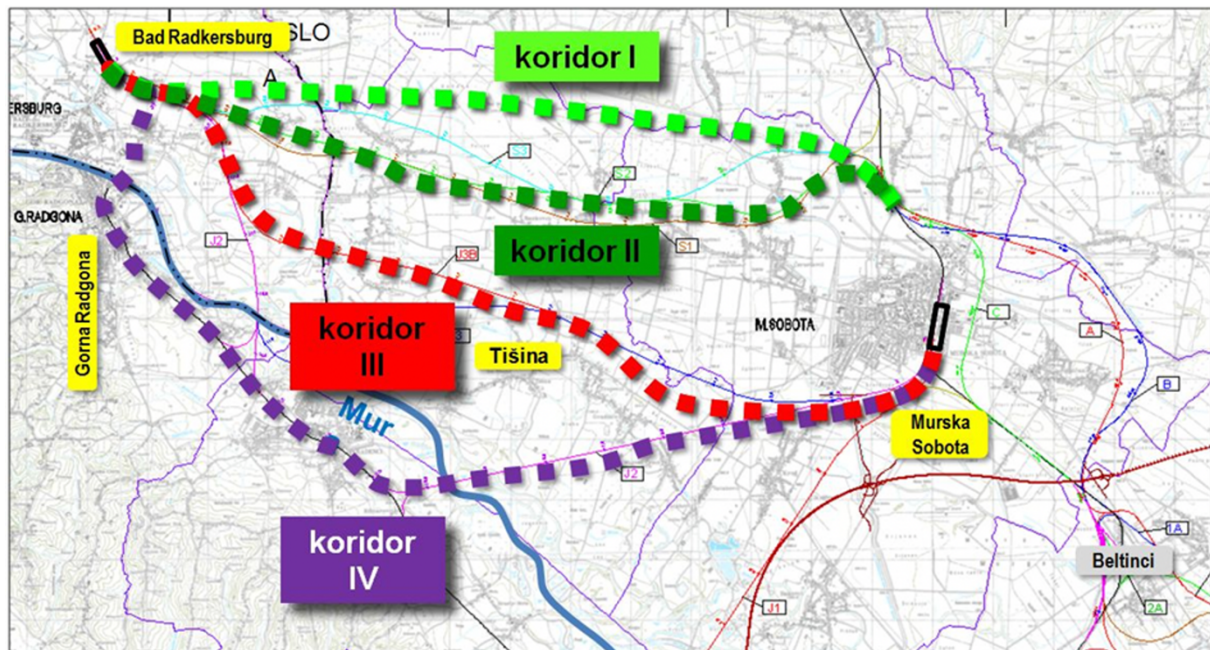


Fig. 1. Overview of the possible corridors of the new railway line on the route Bad Radkersburg - Murska Sobota (source: [12])

Qualitative assessment of the socio-economic (development) suitability of the defined corridors of the new railway line on the route Bad Radkersburg - Murska Sobota - considering the selected set of criteria - showed that Corridor IV is the most appropriate, followed by Corridors III and II. Corridor I proved to be the least suitable.

Here, we present brief comments on the most suitable corridors, considering defined set of criteria (more on this in [7]). Considering:

- the criterion "connecting local centres". Corridor IV is the most appropriate, because on its route, it connects the settlements of G. Radgona and Radenci, which are subregional and local centers;
- the criterion "connecting employment centres and business zones". Corridor IV is the most appropriate, because on its route G. Radgona and Radenci are connected, which are important employment centers and at the same time connects the planned business zone on the southern outskirts of Murska Sobota;
- the criterion "possibilities for the establishment of common transport corridors". Corridor III is the most convenient because, due to its spatial proximity, it is suitable for the establishment of a common transport corridor with road infrastructure;
- the criterion "impact on the economy". Corridor IV is most suitable for the management of (transit) railway transport through which goods can be transported for the needs of the production sector of the Pomurska region and wider territorial units as well as for transport for daily commuting toward existing and planned employment centers (southern part of Murska Sobota, G. Radgona, Radenci);
- the criterion "impact on tourism". Corridor IV is the most appropriate, because in and along the corridor, there are major tourist attractions (nature conservation areas and immovable cultural heritage), visually attractive surrounding landscape (driving and crossing the Mura River, Radgonske gorice), and the planned station and stops are related to existing and planned tourist attractions. The corridor is partly connected to the existing Mura cycling route. The potential establishment of a new railway line can stimulate the further development of "traffic-free tourist destinations" and the development of "heritage railway lines";
- the criterion of "sustainable accessibility". Corridor IV is the most applicable because it has - due to the need for connecting larger settlements and employment centers (G. Radgona and

- Radenci) and their linkage to local public bus hubs and cycling infrastructure - relatively favorable conditions for promoting sustainable accessibility and mobility in the corridor area; and
- the criterion "cross-border connectivity of the region". Corridor IV is the most appropriate because - despite the fact that it connects M. Sobota and Bad Radkersburg and other centers in the direction of Maribor and Graz in a bypass manner - it also has an explicit function of connecting important centers in the Pomurska region (G. Radgona and Radenci as a subregional and local center).

Table 1

Criteria for evaluating and classifying corridors (Source: [5])

Criterion	Corridors	Evaluation	Corr. by priority
Connecting local centers	Corridor I	–	4
	Corridor II	–	3
	Corridor III	O	2
	Corridor IV	+	1
Connecting employment centers and business zones	Corridor I	–	4
	Corridor II	–	3
	Corridor III	O	2
	Corridor IV	+	1
Possibility of establishing common transport corridors	Corridor I	–	3
	Corridor II	–	2
	Corridor III	+	1
	Corridor IV	–	4
Impact on economy	Corridor I	0	2-4
	Corridor II	0	2-4
	Corridor III	0	2-4
	Corridor IV	+	1
Impact on tourism	Corridor I	–	4
	Corridor II	–	3
	Corridor III	–	2
	Corridor IV	+	1
Sustainable accessibility	Corridor I	–	4
	Corridor II	–	3
	Corridor III	–	2
	Corridor IV	+	1
Cross-border connectivity of the region	Corridor I	–	4
	Corridor II	–	3
	Corridor III	0	2
	Corridor IV	+	1

7. CONCLUSIONS

The assessment of the socio-economic impacts of the prospective allocation of a new railway line in the cross-border area of the Pomurska region has shown that this is a multifaceted problem with many social, economic, spatial, and other dimensions.

We would like to draw attention to the following findings:

- There is a significant degree of inconsistency between the strategic development orientations at European (EU), national, and regional levels (Pomurska region) regarding the future development of public railway infrastructure.
- Valid national development documents in the field of public railway infrastructure development abandon past development orientations, which will consequently lead to further deepening of the transport isolation of the Pomurska region as the least developed Slovenian (statistical) region.
- The state does not have a general development vision and strategy that would, among other things, clearly define and coordinate Slovenia's strategic development interests with other development stakeholders at various territorial levels (global, European, neighboring countries, cross-border areas). These documents could represent a strategic framework for the preparation of all sectoral development documents, including those relating to the development of individual transport systems and infrastructure.
- The partial SWOT analysis of the suitability of establishing new railway line revealed opportunities and dangers considering wider territorial levels: the EU, the Republic of Slovenia, the Republic of Austria, the Austrian Province of Styria, and the Pomurska Region. We should not ignore the fact that the identified opportunities for the Republic of Slovenia and the Pomurska region appear as threats to the Republic of Austria and the Austrian Province of Styria and vice versa.
- The assessment of the socio-economic suitability of individual corridors of the new railway line showed that Corridor IV is the most appropriate overall. At the same time, it proved to be the least appropriate in the context of other assessments (in terms of environmental protection issues, technical characteristics, construction, and maintenance costs).

The final general conclusion is that the socio-economic impact assessment (SEIA) has been proven to be an appropriate instrument for evaluating the social, economic, and partly also spatial impacts of transport infrastructure planning and construction, and in our opinion, it would be advisable to consider its inclusion in the relevant legal and regulatory framework in Slovenia. The same also applies for other countries considering the fact that this approach is not very widespread.

References

1. Arora, A. & Tiwari, G. *A Handbook for Socio-economic Impact Assessment (SEIA) of Future Urban Transport (FUT) Projects. Transportation Research and Injury Prevention Program (TRIPP)*. Indian Institute of Technology. New Delhi. 2007. 98 p.
2. Association of European Border Regions - AEBR. *Statement on the Green Paper: TEN-T: a policy review*. Gronau. 2009. 9 p.
3. Becker, H. & Vanclay, F. *The International Handbook of Social Impact Assessment: Conceptual and Methodological Advances*. Northampton: Edward Elgar Publishing Inc. 2003. 315 p.
4. Commission of the European Communities. *Green Paper - TEN-T: A policy review - Towards a better integrated transeuropean transport network at the service of the common transport policy*. Brussels. 2009. 19 p.
5. European Commission. *White paper - Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system*. Brussels. 2011. 30 p.
6. European Parliament. *Green Paper on the future of TEN-T*. European Parliament resolution of 22 April 2009 on the Green Paper on the future TEN-T policy (2008/2218(INI)). Strasbourg. 2009. 40 p.
7. Gulič, A. *Socio-economic impact assessment of railway connection establishment between Bad Radkersburg - Murska Sobota: Socio-economic research. Final research report*. Urban Planning Institute of the Republic of Slovenia. Ljubljana. 2012. 79 p.
8. Ha-Duong, M. & Nguyën, L.A. & Strange, T. & Truong, A.H. Social acceptability of large infrastructure projects in Vietnam. *Field Actions Science Reports*. Special Issue 14. 2016. 11 p.

9. Lawrence, D.P. *Environmental Impact Assessment: Practical Solutions to Recurrent Problems*. John Wiley and Sons Inc. 2003. 576 p.
10. National Assembly of the Republic of Slovenia. Social plan of the SR of Slovenia for the period 1986-1990 with amendments. *Official Gazette of the RS*. 2004. No. 76/04. 85 p. Ljubljana.
11. National Assembly of the Republic of Slovenia. *Resolution on the national program for the development of transport in the Republic of Slovenia for the period up to 2030*. Official Gazette of the Republic of Slovenia. 2016. No. 75/16. 48 p. Ljubljana.
12. PNZ, IBK et al. *Študija izvedljivosti vzpostavitve železniške infrastrukture do novega V. koridorja na relaciji Bad Radkersburg – Murska Sobota*. Naročniki Univerza v Mariboru, Fakulteta za logistiko. Mestna občina Murska Sobota. Občina Tišina. Ljubljana in Beljak. 2012. [In Slovenian: *Feasibility study for the establishment of railway infrastructure to the new V. corridor on the route Bad Radkersburg - Murska Sobota*].
13. Radej, B. *Presoja socialnih vplivov*. In: Radej, B. & Golobič, M. & Macur, M. & Dragoš, S. (red.): *Vrednotenje politik: obzorja nove miselnosti*. Založba Vega. Ljubljana. 2011. 248 p. [In Slovenian: *Social impact assessment*].
14. RDA Mura. *Regional development programme for the Pomurska region 2014-2020*. Murska Sobota. 2015. 186 p.
15. Teply, S. & Allingham, D.I. & Richardson, D.B. & Stephenson, B.W. *Canadian Capacity Guide for Signalized Intersections*. Third Edition. Washington: Institute of Transportation Engineers. 2008. 230 p.
16. Taylor, C.N. & Bryan, C.H. & Goodrich, C.G. *Social Assessment: theory, process & techniques*. Taylor Baines and Associates, Christchurch. 1995. 232 p.
17. Vanclay, F. *Social Impact Assessment: International Principles*. IAIA Special Publications Series No. 2. May 2003. International Association for Impact Assessment. 2003. 4 p.
18. Vanclay, F. & Esteves, A.M. *New Directions in Social Assessment: Conceptual and Methodological Advances*. Edward Elgar. Cheltenham. UK. 2011. 382 p.
19. Wagale, M. & Singh, A.P. & Sarkar, A.K. Socio-economic impacts of low-volume roads using a mixed-method approach of PCA and Fuzzy-TOPSIS. *International review for spatial planning and sustainable development A: Planning Strategies and Design Concepts*. 2021. Vol. 9. No. 2. 21 p.

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