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ADVANCING THE METHODOLOGY OF STRATEGIC ENVIRONMENTAL ASSESSMENT IN LIGHT OF THE NEW LEGISLATIVE FRAMEWORK IN SERBIA

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Abstract

The adoption of the new Law on Strategic Environmental Assessment - SEA (2024), along with the amended Law on Planning and Construction (2023), creates a foundation for improving methodological approaches to the evaluation of strategic documents in Serbia. This paper analyzes key changes in the legal framework, including the expanded scope of mandatory assessments, enhanced public participation, and a clearer relationship between spatial and sectoral planning documents. Special attention is given to methodological improvements through the application of qualitative and quantitative criteria, integration of climate and ecosystem indicators, and the use of digital tools for spatial analysis. Through comparative analysis with EU practices, the paper identifies areas for further harmonization, particularly regarding cumulative and transboundary impacts. It emphasizes the necessity of developing standardized procedures and technical guidelines to support consistent and effective implementation of the new legal provisions. The findings suggest that the operationalization of the revised framework can significantly enhance environmental protection in strategic decision-making processes and facilitate the alignment of Serbia's planning system with European standards.

Key words: *Strategic environmental assessment, spatial planning, sectoral planning, legislation, cumulative and transboundary impacts, spatial analzsis.*

Introduction

In the modern era of urban change, spatial and urban planning has become central to shaping sustainable development. Planning systems are increasingly required to move beyond technical land-use allocation and engage with broader societal challenges such as environmental protection, climate resilience, and sustainable resource management. One of the most effective instruments for ensuring that these

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concerns are systematically incorporated into planning practice is Strategic Environmental Assessment (SEA).

Among the numerous definitions of SEA, one of the most widely cited and comprehensive describes it as a systematic process for evaluating the environmental consequences of proposed policies, plans, or programmes [1, 2, 3, 4]. Its principal purpose is to ensure that such consequences are explicitly considered and appropriately addressed at the earliest possible stage of the decision-making process, and that they are weighed on an equal footing with economic and social considerations [1]. The main role of SEA is shaping policy-making across a wide array of societal sectors, as well as its contribution to enhancing the quality and legitimacy of decision-making processes. Consequently, the subject of SEA remains both scientifically engaging and professionally relevant, representing a cornerstone in the formulation and advancement of contemporary environmental policy.

SEA provides a structured and anticipatory framework for integrating environmental and social considerations (including human health) into plans and programs, and therefore enabling planners and decision-makers to evaluate alternatives, identify potential cumulative effects, and propose measures for mitigation and adaptation [2, 3]. Unlike project-level Environmental Impact Assessment (EIA), which focuses on individual interventions, SEA addresses higher-order planning documents and strategies, making it particularly relevant for guiding urban growth, infrastructure development, and land-use change.

In Serbia, the modernization of the legislative framework — through the adoption of the Law on Strategic Environmental Assessment and the updated Law on Environmental Impact Assessment (Official Gazette RS, no. 94/2024) — reflects an effort to align national planning practice with European standards and international best practice. These changes underscore the need for a more systematic integration of SEA findings into spatial and urban plans and strategies at national, regional, and local levels. By embedding SEA into planning processes, Serbia aims to strengthen climate-sensitive, participatory, and ecologically responsible approaches to spatial and urban development.

However, the introduction of stricter environmental measures has generated debates within professional and academic circles. On the one hand, these reforms are seen as a major step towards sustainable urban governance and the modernization of planning instruments. On the other, critics point to administrative complexity, increased costs, and challenges in implementation capacity, raising concerns about potential delays in the realization of strategic projects [5, 6].

Comparative analysis of the previous and the newly adopted legal framework highlights a shift from predominantly sectoral, growth-oriented planning towards more integrated, sustainability-oriented approaches. This evolution positions SEA not only as a legal requirement but also as a strategic instrument of urban and spatial governance, ensuring that development pathways balance economic advancement with environmental protection, and ultimately contribute to the creation of more resilient and livable urban environments.

These legislative acts establish the foundations for developing a sustainable and integrated approach to spatial and urban planning, as well as for enhancing regulatory mechanisms that would enable more effective land management. All of the

aforementioned laws have undergone varying degrees of modification, the incorporation of which into planning documentation is expected to contribute to a substantial ecological improvement of planned development activities.

Transformations in SEA legislation – a challenge for planners or a necessary advancement in environmental governance?

In recent decades, European countries have emphasized the definition and implementation of an integrated planning system as an imperative, one that, in addition to the standard planning toolkit, devotes particular attention to environmental protection in the context of emerging challenges embodied in climate change [5] Establishing a holistic approach and ensuring coordination between spatial, sectoral, and environmental planning has been recognized as a key factor in integrated planning for sustainable territorial development [6, 7, 8, 9]. The incorporation of ecological concerns and climate change into strategic documents has become crucial in order to align environmental and developmental interests within a given territory. Similarly, decisions adopted through planning documents directly affect the quality of all elements of the environment, which is why the integration of environmental protection issues into planning processes is of fundamental importance [10, 11, 12, 13, 14, 15].

Accordingly, since 2004, the Republic of Serbia has aimed to improve its environmental legislation, in line with the acquis of the European Union, with a particular emphasis on introducing the obligation to conduct SEA procedures, which until then had neither been a legal requirement nor an established practice in the domestic planning system. The Law on Strategic Environmental Assessment in the Republic of Serbia was first enacted in 2004, as a direct response to Directive 2001/42/EC of the European Parliament and of the Council on the assessment of the effects of certain plans and programmes on the environment (2002) [16], together with the Protocol on Strategic Environmental Assessment [17], which sought to embed SEA into strategic planning in Serbia. In doing so, the Republic of Serbia effectively harmonized its environmental legislation with European standards, thereby preparing the ground for a renewed application of ecological criteria within spatial and urban planning.

Since its initial adoption in 2004, this law has undergone several iterations, which to a greater or lesser extent improved the existing practice, particularly by placing stronger emphasis on the effective evaluation of planning activities. However, the SEA has never acquired a more prominent status in the legislative sense, as its official publication in public gazettes such as the *Official Gazette of the Republic of Serbia* or in local self-government bulletins was not enabled, like for spatial or urban plans. Instead, SEA has consistently remained at the level of an analytical and documentary basis for spatial and urban plans.

In practice, SEAs have indeed become an important control and coordination instrument within spatial and urban planning in Serbia, enabling, at least in principle, the neutralization or limitation of more or less adverse effects of planned activities on the environment, the quality of life, and the economic well-being of local populations

[7, 14, 15]. Nevertheless, the question of the effective implementation of these documents continues to represent a major challenge for Serbian planning practice.

Analysis of iterations

An analysis of the previous set of SEA Laws (*Official Gazette of RS*, No. 135/04 and 88/10) [18], as well as of the newly adopted Law on Strategic Environmental Assessment (*Official Gazette of RS*, No. 94/24) [19], reveals several key differences that represent new obligations on spatial planners. This is primarily reflected in the shift of the law's main focus: from particular categories of projects directly impacting the environment (with an emphasis on large-scale infrastructure and industrial projects) toward an expanded scope that now also encompasses projects which had previously not been fully covered. This allows for a more comprehensive approach and the identification of potential negative impacts at earlier stages of the planning process.
The previously defined principles of SEA have not undergone substantial changes, nor has the subject of assessment itself, except in the domain of the expanded obligation to prepare an assessment of acceptability for the ecological network (SEA Law, Article 5).
The criteria for determining potential significant direct and indirect effects on the environment, as well as the phases in the preparation of the SEA, have remained unchanged. Likewise, the content of the assessment, with all its elements, has been retained; however, the new legislation introduces an additional requirement — the obligation to conduct a decision-making procedure on the assessment of acceptability for the ecological network (Article 31).
The assessment of acceptability constitutes a new obligation within the SEA procedure, to be undertaken immediately prior to the preparation of the SEA itself, and thus represents one of its preparatory steps. This assessment of the acceptability of plans and programmes is carried out by the competent ministry responsible for environmental protection. The procedure must be conducted in line with the precautionary principle, drawing on the best available scientific evidence during the process of drafting the plan and/or programme. The assessment of acceptability anticipates the decision on whether to prepare a SEA, and in practice, it may significantly prolong both the decision-making process and the subsequent drafting of the SEA. Furthermore, if the assessment of acceptability concludes that a plan or programme could have a significant negative impact on the conservation objectives or the integrity of the ecological network, the ministry is obliged to withhold approval of the SEA report.
Although this newly introduced obligation within the SEA process may reduce efficiency and extend the time required for its preparation, it can, nonetheless, generate profoundly positive environmental outcomes. Specifically, in the early stages of plan development, it enables the absolute elimination of options and proposed activities that could adversely affect the environment or the status of ecological networks within the territory of the Republic of Serbia.
In addition, the new SEA Law introduces improved legislative principles in the areas of transparency and public participation. The previous law provided for public hearings and consultations with interested stakeholders, but in practice these were

often inadequately implemented or remained largely ineffective. By contrast, the new law establishes more precise procedures for public involvement, placing strong emphasis on transparency through the digitalization of processes via a central database and an official web portal (Article 34). This innovation ensures easier access to information and more effective communication between decision-makers and citizens, thereby reinforcing both accountability and inclusiveness in the planning process.

With regard to deadlines and procedures, the previous law had significantly more flexible timelines, which in practice often resulted in extended and prolonged evaluations and consequently delayed project implementation. The new law introduces stricter deadlines for the preparation of studies and the adoption of decisions, with the explicit aim of ensuring more timely impact assessments and faster implementation of environmental protection measures.

A particularly important modification compared to the earlier legislation concerns the monitoring and evaluation system. Under the old law, there was no comprehensive mechanism for continuous monitoring and evaluation of the impacts of implemented measures, which later restrained both the analysis of effectiveness and the application of corrective actions. An additional challenge derived from the fact that the measures prescribed within SEAs were often considered only declaratively, while only the key environmental protection measures acquired "legal status" through their incorporation into spatial and urban plans. The new law introduces clear mechanisms for monitoring and evaluation (Article 20), thereby enabling continuous oversight of the implementation of environmental protection measures, as well as providing the basis for timely adjustment of strategies should deficiencies or shortcomings arise.

The new SEA Law also tightens the conditions for selecting the authors of SEA reports by requiring the establishment of multidisciplinary teams with clearly defined responsibilities across all relevant fields of assessment (Article 11). In doing so, the law enhances the objectivity of the assessment process and minimizes the possibility of manipulation with the results, thereby ensuring the overall credibility and relevance of the evaluation.

In conclusion, the new law introduces substantial reforms designed to strengthen the SEA process through broader scope, greater transparency, stricter procedures, and a more systematic monitoring regime. These changes represent a step forward in aligning national legislation with European standards and the requirements of sustainable development. Although some of the newly introduced legal obligations may pose an additional burden for planners involved in preparing and adopting SEAs, the restructured legal framework is expected to lead to significant improvements in environmental quality, particularly in relation to projects with the potential to cause major adverse ecological impacts.

At present, no SEA procedure in Serbia has yet been conducted in full compliance with the new requirements of the 2024 law. Therefore, the real — rather than merely theoretical — effects of the tightened legal criteria will be established only in the forthcoming period, once these procedures are practically implemented.

Results

The implementation of the new SEA legislation in Serbia shows a series of challenges, particularly in relation to institutional coordination and the reconciliation of developmental priorities with ecological standards. While the new framework represents a significant advancement in environmental protection and sustainable development, its practical application is complex and demands careful management and readiness for compromise. Solutions lie in strengthening institutional capacities, building professional expertise, promoting sustainable strategies, and ensuring the meaningful involvement of all relevant stakeholders in the decision-making process. Spatial development policy must therefore be shaped in line with the principles of sustainability and the long-term preservation of natural resources, contributing to a balanced relationship between economic and environmental objectives.

Although the new SEA framework may impose certain constraints on the pace of spatial development in Serbia—especially in industrial zones or in areas of high ecological value (e.g. nature parks) —it simultaneously brings substantial benefits for environmental protection and the overall quality of urban planning. By setting stricter criteria for the protection of natural resources and the assessment of environmental impacts, the law moves Serbia closer to achieving long-term balance between ecological protection and economic development, which is essential for the creation of sustainable and high-quality urban solutions.

The new provisions also introduce important changes in the way capital investments and development projects are planned and implemented. While these changes may increase the complexity of administrative procedures and extend project timelines, they offer significant benefits in terms of reducing ecological risks, safeguarding environmental quality, and promoting more sustainable spatial and urban development practices. In the long projections, such reforms can enhance the sustainability of Serbian settlements, improve competitiveness at the international level, and strengthen public trust in planning processes and development projects.

Nevertheless, the new legislative requirements may also generate negative implications, mostly identified through higher administrative burdens, the potential slowing of economic development, conflicts between environmental and economic interests, and practical challenges in implementation. To mitigate such consequences, efforts should be directed towards improving vertical and horizontal coordination between different levels of government, simplification of bureaucratic procedures, and providing adequate support to planners and other stakeholders in meeting the new obligations.

Critical views among professionals largely align around concerns over the complexity of implementation, increased costs for investors, administrative burdens, and potential conflicts between developmental and ecological goals. Yet, despite these reservations, there is broad consensus that proper implementation of the SEA law, together with harmonization with existing legislation, can generate long-term benefits for both environmental protection and sustainable territorial development in Serbia.

In this regard, the new SEA framework establishes a solid basis for reforming spatial and urban planning policies. By integrating ecological criteria, strengthening strategic environmental assessment, ensuring greater public participation, and promoting the

rational use of space, Serbia now has the opportunity to develop a more sustainable, responsible, and environmentally feasible model of urbanization and spatial development in general. This legal framework can, like that, serve as a pillar for future reforms in planning, aimed at improving quality of life and preserving natural resources for future generations.

Conclusion

A comparative analysis of the evolution of the SEA legislation in Serbia — from its initial adoption in 2004, its revision in 2010, and the most recent reform in 2024 — clearly illustrates the path of step-by-step adjustment with European environmental standards and the increasing institutionalization of sustainability principles in spatial and urban planning.

The 2004 law, as Serbia's first formal response to Directive 2001/42/EC [16] and the SEA Protocol [17], marked an important step toward integrating environmental concerns into planning processes. However, its provisions remained largely declarative, as SEAs were not published in official gazettes and functioned primarily as analytical appendices to planning documents. The 2010 amendments introduced modest improvements [18], yet did not substantially strengthen either the legal standing of SEAs or their enforceability in planning practice.

In contrast, the 2024 law [19] introduces several critical innovations that significantly reshape the SEA process. First, it expands the scope of projects subject to assessment, moving beyond large infrastructure and industrial projects to encompass a broader range of interventions, thereby ensuring earlier identification of potential negative impacts. Second, it formalizes the *assessment of acceptability for the ecological network* as a preparatory step (Article 31), reinforcing the precautionary principle and grounding decision-making in the best available scientific evidence. Third, it establishes stricter deadlines for the preparation of studies and decision-making, reducing the risk of protracted evaluations and delays in project implementation. Fourth, it strengthens monitoring and evaluation mechanisms (Article 20), introducing continuous oversight of the implementation of protective measures and enabling timely corrective actions. Finally, it advances transparency and public participation (Article 34) through digitalization, ensuring easier access to information and more effective communication between decision-makers and the public.

Although the new requirements — such as the obligation to form multidisciplinary teams for SEA preparation (Article 11) — may represent an additional burden for planners, they simultaneously increase the objectivity, credibility, and practical relevance of assessments. Ultimately, the 2024 law moves beyond the declarative character of earlier legislation, establishing SEA as an actual controlling and coordinating instrument of spatial and urban planning.

While the real effects of the strong requirements remain to be tested in practice, the 2024 reform can be seen as a crucial step towards harmonizing Serbian legislation with EU standards and achieving green and resilient territorial development.

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