A METHODOLOGICAL FRAMEWORK FOR INTEGRATED PLANNING IN THE PROTECTION AND DEVELOPMENT OF NATURAL RESOURCE AREAS IN SERBIA – A CASE STUDY OF SPATIAL PLANS FOR SPECIAL PURPOSE AREAS FOR PROTECTED NATURAL AREAS

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Spatial plans for special purpose areas for natural resources are one of the main instruments for their protection and development, and significant results have been achieved in spatial planning practice in Serbia in recent years. The main purpose of this research is to consider a methodological framework for drawing up integrated plans enabling protection and development in areas of natural resources. The results of a comparative analysis are presented through a case study of four spatial plans: for the Kopaonik and Đerdap national parks and for the Stara Planina Mountain and Radan Mountain nature parks. The representation of the elements and models of implementation in the plans was considered. The main conclusion of this paper is that the integrated planning for the protection and development of natural resource areas in spatial plans is satisfactory, primarily in terms of the relativization of conflicts, though monitoring the implementation of the plans can be further improved.

Key words: Spatial planning, spatial plan, special purposes, natural resources, development, implementation.

INTRODUCTION

The role of spatial planning is the key to the protection and development of protected natural resources, and spatial plans for special purpose areas (SPASP) are a significant instrument for this purpose. Many spatial plans for the special purpose areas of national parks, nature parks and other larger natural resource areas have been adopted and implemented in Serbia over the last fifteen years.

In addition to the Law on Planning and Construction (2009), the planning of protected natural resources and the character of the special purposes are mostly determined by the Law on Nature, in which the concept of protection is based on the following basic elements: protected natural areas – as protected areas; protected wild species and protected objects of natural tangible heritage; protected areas – as areas that have a pronounced geological,

biological, ecosystem and/or landscape diversity because of which they are declared protected areas by a legal document on protection; protected zones – as areas outside the boundaries of a protected area, ecologically important areas and/or ecological corridors, which can be determined while establishing areas for the purpose of preventing or mitigating any internal impacts; protection regimes – as a set of measures and requirements by which the method and degree of protection, use, planning and improvement of the protected natural area are determined; etc.

Protected areas for which spatial plans for special purpose areas are, as a rule, drawn up include: strict nature reserves; special nature reserves; national parks; landscapes of exceptional quality; and nature parks. Due to their larger coverage and the need to align different functions and activities in the protected area, spatial plans for national and nature parks particularly stand out (Eagles and McCool, 2002).

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A national park is an area with a larger number of diverse natural ecosystems of national importance, pronounced landscape quality and cultural heritage (González, 2013) in which man lives in harmony with nature.

A nature park is an area of well-preserved natural values with preserved natural ecosystems and picturesque landscapes, designated for the preservation of the overall geological, biological and landscape diversity, as well as for satisfying scientific, educational, aesthetic, cultural, tourism, cultural, health and recreational needs.

Spatial plans for protected areas have boundaries, inside of which is the area where adequate regimes of protection are necessary. In addition, the boundaries of the spatial plans may also encompass an even wider area in which there are mutual impacts between the special purposes and other functions and activities in the area, or in which other activities with the character of the special-purpose activities are recognized, or which are under the cultural heritage protection regime (Zan *et al.*, 2016). In this case, the boundaries of the spatial plan are, as a rule, determined by the boundaries of the cadastral municipalities, and only exceptionally by the analytically determined boundaries or boundaries of cadastral parcels when there is the need for large-scale planning and when the area is covered by a large number of planning documents.

In drawing up spatial plans for protected natural areas, the character of the special purposes and the main subject of planning are not the only aspects of planning. Spatial planning for the protection of natural areas also needs to consider sustainable development in a wider context, whereby the development of tourism is planned as a complementary activity (Dabić, 2002). Most spatial plans for special purpose areas in Serbia have used an integrated approach to planning the sustainable development of mountain areas, particularly in relation to tourism development. (Krunić et al., 2010). In this context, the main issues that influences all aspects of the sustainable development of mountain areas include a balance between the development and protection of natural resources and values (Milijić, 2015). For this reason, a major challenge for the further development of spatial planning methodology for protected natural areas lies in analyzing previous good practice in Serbia and further improving it in order to achieve a satisfactory level of alignment between the protection and development of natural resources.

The research in this paper was conducted using a case study of four spatial plans for special purpose areas of the newer generation, prepared at the Institute of Architecture and Urban & Spatial Planning of Serbia. These are: the Spatial Plan for Stara Planina Nature Park and Tourism Region (from 2008); the Spatial Plan for Kopaonik National Park (versions of the plan from 1989, 2009, 2016); the Spatial Plan for Berdap National Park (from 2013), and the Spatial Plan for Radan Nature Park (from 2014). The basic criteria for selecting these spatial plans were their natural diversity and the fact they were produced in the last decade for different areas in central Serbia.

MAIN ELEMENTS OF THE CONCEPT OF PROTECTION AS A FRAMEWORK FOR PLANNING IN PROTECTED NATURAL AREAS

The protection of nature and natural resources and the potential development of tourism were determined to be the special purposes of the Spatial Plan for Stara Planina Nature Park and Tourism Region. The framework for such purposes was determined by the major goal of ensuring the lasting protection of the natural phenomenon in the nature park area, as well as by the goal of determining the capacity of the area for its presentation to the public, recreation and complementary activities, education and scientific research.

The protected area of the National Park, established as an IBA, IPA, PBA and EMERALD site, was designated as a special purpose area by the Spatial Plan for Kopaonik National Park, while there is also a plan to establish its biosphere reserve status under UNESCO's Man and the Biosphere Programme (MAB). However, tourism in the most important part of Kopaonik's primary tourism destination is designated as another special purpose of the area. Other special purposes in the Spatial Plan also include: water resources management; protection of cultural heritage; and a land security zone with a special-purpose complex.

The protected area of Đerdap National Park, which is of key importance for determining the planning solution, is established as a special purpose area in the Spatial Plan for Đerdap National Park. Đerdap National Park is an IBA, IPA and PBA site and is part of the EMERALD network. The National Park is included in the tentative list of UNESCO World Heritage Sites and is a candidate for being a Biosphere Reserve (MaB). Other special purposes in the Spatial Plan, determined by planning and strategic documents at the national level, are: its diverse cultural values; its position as a section of the Pan-European Transport Corridor VII - the Danube; the water infrastructure - the hydropower potential of the Danube, with the two existing hydropower plants, Đerdap I and Đerdap II; as a tourism destination Donje Podunavlje (Lower Danube Basin); as a zone of exploitation and significant reserves of minerals – part of the Majdanpek-Bor basin; and as the border area between the Republic of Serbia and the Republic of Romania.

The protected areas of the Đavolja Varoš Monument of Nature and the Radan Mountain protected area, with their great biological and landscape diversity, geoheritage objects and phenomena worthy of being geoheritage and with their cultural and historical heritage, as well as sustainable tourism development and agriculture, are designated as special purpose areas in the Spatial Plan for Radan Nature Park (Maksin *et al.*, 2011).

In the past, the concept of protecting natural resources has been based on a three-degree protection regime which needs to be spatially determined and considered in terms of planning:

• First degree protection regime – implemented in the protected area or part thereof with the original or a slightly changed ecosystem of exceptional scientific and practical importance, which enables processes of natural succession and conservation of habitats and communities of living things in conditions of wilderness;

- Second degree protection regime, active protection

 implemented in the protected area or part thereof
 with a partly changed ecosystem of high scientific
 and practical importance and with especially valuable
 landscapes and geoheritage objects; and
- Third degree protection regime, proactive protection

 implemented in the protected area or part thereof with partially changed and/or changed ecosystem, landscape and geoheritage objects of scientific and practical importance.

The act on the declaration of protected natural resources/ areas refers to the protection study, by which a protection regime with the cartographic presentation of boundaries is determined. However, such a legal solution raises many questions and problems in practice. There is no methodology given for creating a cartographic map for the protection regimes, and the scale, type and updating of the physical layouts are not prescribed, which raises the question of the usability and further implementation of the prescribed protection regimes. At the same time, practice has shown that the protection regimes have been determined only in the context of protection, without considering any aspects of development in the protected area or its surroundings (Stefanović et al., 2017). This causes further conflicts with other activities in the area, as well as with the planning documents at the republic and local levels. Therefore, it is necessary to draw up the spatial plans for special purpose areas with a detailed graphic determination of the protection regimes and their alignment with aspects of development, and also obtain synthesis solutions to many other issues.

The conservation and improvement of the environmental quality in protected areas of natural resources is primarily determined by the relationship between the natural and anthropogenic factors, actually by the regimes of the preservation and use of natural resources and values (Margules and Pressey, 2000). In the area of the spatial plan outside the protected natural resources, the environment is significantly affected by anthropogenic factors associated with construction areas in rural and urban settlements, as well as by the infrastructure and arable land. For this reason, the integrated protection of the natural environment in the area of the spatial plan may be based on the following requirements and solutions:

- Treating the natural environmental protection in accordance with the provisions of the planning documents, as well as on the basis of the forest, hunting, agricultural and other plans, programmes and other documents drawn up on the basis of and in accordance with the planning documents;
- Determining a moderate concentration of stationary tourism and development of a tourism infrastructure in the planned area (according to the spatial capacity), and, if possible, to the benefit of settlements and localities on the edge of these areas and in sub-mountain areas;
- Building a circular road ring around the protected natural resource area and wider tourism region, with radial connections, as well as the possibility of organizing the public transportation system to reduce

the number of individual passenger vehicles, i.e. to ensure that the daily visitors from the surroundings (particularly skiers from ski resorts) can enter the protected natural resource area without traffic overload (example of the Spatial Plan for Kopaonik);

- Creating a single water resources management system;
- Building sewerage systems in the settlements situated in the area covered by the spatial plan with a complete sewerage network and sewerage treatment equipment (example of the Spatial Plan for Stara Planina);
- Building a district heating system for all concentrated complexes in new sites in the mountain areas; implementing clean energy, primarily gas, as well as geothermal, solar, electric and biogas energy;
- Introducing an integrated waste management system, recycling and the use of energy from waste in adequate devices;
- Establishing a system of permanent monitoring of all environmental quality parameters in the area covered by the spatial plan (quality of soil, water, air and vegetation); and
- Reconsidering the level of compensation for the use of commercial space and nature in the protected area to ensure higher income for their protection, as well as compensation to the local population for restrictions in production.

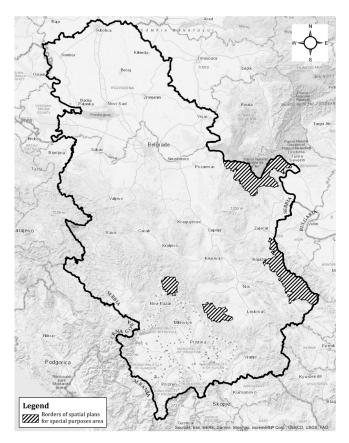


Figure 1. Location of the case study spatial plans for special purposes in the Republic of Serbia

PLANNING THE PROTECTION AND DEVELOPMENT OF THE PROTECTED NATURAL AREAS IN THE SPATIAL PLANS FOR SPECIAL PURPOSE AREAS – CASE STUDY

The case studies of the spatial plans presented here for Stara Planina, Kopaonik (2009), Đerdap and Radan Mountain show that, relative to the plan's coverage, 37% to 74% of the area is under protection (Table 1). Out of this, 2.7% to 4.53% of the area is under the 1st degree protection regime, 8.7% to 15.12% of the area is under the 2nd degree protection regime and 21.56% to 58.68% of the area in under the 3rd degree protection regime. In relation to the total surface under protection, the 1st degree of regime is on average 7%, the 2nd degree is on average 24.5%, and the 3rd degree is about 68.45%.

The 1st degree protection regime – in the natural resource area under the 1st degree protection regime, the use of natural resources and all other uses and activities are prohibited, except for scientific research, organized education and limited presentations.

The 2nd degree protection regime – in the protected natural resource area under the 2nd degree protection regime, the use of natural resources is restricted and controlled. Construction and the use of space are also restricted and concentrated. Activities in the area can be performed to the extent that they enable improvement of its conditions and the presentation of natural resources without consequences for their primary value. No construction is allowed other than planned and controlled construction and development of the area for the following needs:

- Tourism and recreation construction of Alpine and Nordic ski trails (with accompanying systems and facilities) and snowboard trails and parks, building golf courses and other sports and recreation grounds;
- Presentation of the protected natural resources excursions, fishing, hiking, horseback riding, biking and other trails, along with tourist information points, trail marking, the construction of smaller facilities for resting, watching natural beauty and educational functions, which are to be built as rustic facilities;
- Construction and reconstruction of the transport and technical infrastructure to connect, equip and revitalize rural settlements, tourism resorts and tourism centres

and settlements situated in 3rd degree protected areas, as well as to connect Alpine and Nordic ski resorts; and

• Reconstruction of the existing suprastructure facilities for electrical power, water resources management and forestry, and the construction and reconstruction of the residential buildings and agricultural facilities of rural households within the existing buildings plots along with mandatory controlled municipal solid waste disposal and sanitary, safe waste water collection and disposal.

The 3rd degree protection regime – in the protected natural resource areas under the 3rd degree protection regime there is selective and controlled natural resource management, construction and the use of space and other activities, along with the condition of maintaining high environmental quality and biological and landscape diversity. This includes agricultural and forest zones and zones of settlements which, in addition to the planned utility infrastructure of the existing settlements, also implies: the planned development of tourism centres and settlements and tourism and recreational infrastructure; restricted use of minerals; forestry development; livestock development and development of other branches of agriculture; hunting and sport fishing; as well as other forms of sustainable development.

These plans fully confirm that the protection of natural areas should be seen in a wider context of sustainable development, with a special accent on the development of tourism (Dabić, 2002; Milijić, 2015). Because the majority of these resources are in mountainous areas (Stara Planina and Kopaonik), stationary and excursion tourism with winter sports and recreation, Alpine skiing and other winter sports are the dominant forms of tourism. As the rationality of business in mountain tourism implies the use of a year-round tourism offer, for which there is enough potential in the protected natural resource areas in mountains, numerous other forms of tourism are envisaged for in the summer season, such as sports and recreational, cultural, hunting, rural, health and urban tourism (business, congress, event tourism, etc.), as well as transit tourism.

As for the mountain areas, the contents of tourism, recreation and sports are zoned and organized into two main altitude zones: the mountain zone and the sub-mountain zone.

SPASP	Zone under the 1st degree protection regime		Zone under the 2nd degree protection regime		Zone unde degree pr regi	rotection	Total are prote	ea under ection	Outsio protectio		Total plan		
	1		2		3		1+2	2+3	4	ŀ	1+2+3+4		
	кm ²	%	кm ²	%	кm²	%	кm ²	%	кm ²	%	кm ²	%	
Stara Planina	41.60	2.70	196.79	12.76	904.93	58.68	1143.32	74.14	398.58	25.86	1541.90	100	
Kopaonik	14.71	4.53	36.00	11.08	70.08	21.56	120.79	37.17	204.05	62.83	324.84	100	
Đerdap	56.33	3.65	134.15	8.70	447.51	29.02	637.99	41.37	904.09	58.63	1542.08	100	
Radan mountain	9.51	2.03	70.93	15.12	156.55	33.38	236.99	50.53	232.21	49.47	469.20	100	

Table 1: Balance of areas/coverage of the special purpose area spatial plan and zone of protection

The mountain zone consists of a belt of the higher-altitude mountains with a dominant mountain offer in the area and new tourist accommodation directly related to this offer. The sub-mountain zone consists of the lower-altitude foothills of the mountains and wider surroundings, with a tourism offer related to the hilly and lowland areas and accommodation in the existing rural and mixed settlements and urban centres (examples of Kopaonik and Stara Planina).

The planning criteria for commercial tourism are the following:

- Achieving a high standard of the tourism offer in the area, at the same time as presenting the protected natural resources;
- Organizing the activities and development of the area for specific forms of eco, ethno and monumental tourism in the area;
- Achieving a dispersed distribution of tourist accommodation, depending on the available area for construction, as well as on the protection regime, possibilities of a rational water supply and channelling of wastewater, the possibilities of rational traffic access, etc.;
- Elevating the standard of the existing tourist accommodation facilities, and building new high-standard tourist accommodation;
- The construction of new high-standard facilities for sport and recreation, and public services, within the year-round tourism offers of the resorts, tourism centres and settlements, which is important both for tourism in the protected natural areas and for mountain villages; and
- Transport and functional connections for the tourism offer for the sub-mountain and wider tourism zones.

The approaches to the spatial plans are different regarding the details and number of rules prescribing the level of development and construction. This depends on the total plan coverage area and the area under the protection regime, the level of development, the number of settlements and inhabitants, the percentage share of building land in the overall plan coverage area, the existing and planned locations for tourism, etc., which has also consequences any further implementation.

The different ways of presenting the planned proposals have been used in the plans, i.e. rules, standards and capacity for future land development and use. For example, the spatial plans for Kopaonik and Stara Planina have used parameters in specifying the future tourism centers which relate to the type and standard of tourist accommodation capacities, number of beds, number of skiers, number of visitors, number employees, occupancy level of the accommodation capacities in season and out of season, etc. The population density is higher in settlements, i.e. the number of people per unit area (ha, km²). The determinants regarding the vertical regulation of hotels and residential buildings (e.g. the maximum number of floors GF+3 or maximum height of 20m) are also given for the Stara Planina Mountain, as well as that the architectural design should be in accordance with the traditional architecture in the region (ethno model).

Considering that further development and elaboration of urban plans for areas intended for development is expected, it is not necessary to give all urban planning parameters, but only those giving general directions. Furthermore, the availability of physical outlays, based on which the plans and scale drawings are produced, does not allow more details to be included. On the other hand, it is necessary to give as many specific rules as possible for the entities that have the possibility of direct implementation. In this context, there are examples of plans (Spatial Plan for Kopaonik, version 2016) which, in some segments, such as the construction rules for a business-residential complex, include precise detail to the level of the building plot for a complex and specify all urban planning parameters (minimum plot area, floor area ratio, plot coverage, maximum number of floors, and occasionally the gross building area, horizontal regulation - position of the building, distance from the plot boundaries, etc.). This form of determination is not necessary, and not always possible, but may be useful and an excellent example of combining the planning and urban planning methods in prescribing the requirements for planning, use and construction.

Further elaboration of plans involves the drawing up of urban plans, primarily detailed regulation plans, which are, as a rule, prescribed for the zones and complexes intended for tourism in the areas under the 3rd degree protection regime, as well as for some other types of land use (skiing infrastructure, communal and traffic infrastructure, etc., in or outside the protected area).

A COMPARATIVE ANALYSIS OF THE APPLICATION OF THE ELEMENTS AND MODELS OF IMPLEMENTATION IN SPATIAL PLANS FOR SPECIAL PURPOSE AREAS FOR PROTECTED NATURAL AREAS

In addition to the mentioned elements of spatial plans, which indicate a simultaneous elaboration of aspects of protection and aspects of development for areas of protected natural resources, a comparative analysis of the application of the elements and models of implementation in the special purpose spatial plans was also carried out (Stefanović et al., 2015). The analysis was based on the attitude that the "model of the implementation of spatial plans is a simplified presentation of a set of the related planning decisions on future actions, thus reflecting the logical, functional and time coherence of the planning actions depending on the type and method of planning" (Stefanović et. al., 2017). It was also based on the main types of models of implementation recognized in the practice of drawing up plans and their elements, as well as on the criteria for assessing the application of the model (Stefanović et. al., 2017a). In accordance with this, two models of implementation were analyzed: the model of implementation for the protection of an area, which refers to all aspects of protected natural resource areas, and the model of implementation for planning solutions of a technical nature, which refers to the planning solutions aiming at further development, primarily the development of tourism capacities and accompanying infrastructure (Table 2).

	Spatial Plans for Special Purpose Areas	I Planning elements				II Post-planning elements								III Monitoring elements		
			General goals	Specific goals	Planning solutions	Dynamic framework		Measures and instruments			I					ments
		Strategic framework				Priority planning solutions (4 years)	Medium-term and long-term stages	Planning-programming	Organizational	Normative-legal	Financial	Participants (subjects)	Monitoring system	Evaluation (indicators)	Institutional and organizational aspects Representation of ele	Representation of elements in model (%)
Model of implementation for spatial protection	Stara planina	\checkmark	\checkmark	~	~	\checkmark	~	\checkmark	\checkmark	~	\checkmark	\checkmark	\checkmark		~	93
	Kopaonik	\checkmark	\checkmark	~	~	~		\checkmark	~			\checkmark				57
Model of plementati for spatial protection	Đerdap	\checkmark	\checkmark	\checkmark	~	\checkmark		\checkmark	\checkmark	~		\checkmark	\checkmark		~	79
.E	Radan planina	\checkmark	~	~	~	~		~	~			~	~		~	71
Model of implementation for planning solutions of a technical nature	Stara planina	\checkmark	~	~	~	~	~	~	~		\checkmark	~			~	79
	Kopaonik			~	~	\checkmark	~	\checkmark	~			\checkmark				50
	Đerdap	\checkmark	\checkmark	\checkmark	~	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark		~	79
	Radan planina	\checkmark	\checkmark	\checkmark	~	\checkmark		\checkmark	\checkmark			\checkmark				57

Table 2: The representation of the elements and models of implementation in spatial plans for special purpose areas

The implementation model for protected areas was applied, and is dominant, in the Spatial Plan for Stara Planina Nature Park and Tourism Region, which has the highest percentage of the model's elements out of the spatial plans analyzed here and all models of implementation. In addition, the implementation model for the planning solutions of a technical nature, the elements of which mostly relate to the tourist accommodation capacities, tourism infrastructure like ski lifts and ski trails, utility infrastructure, etc., was also applied to a high level. These contents are supported by a number of rules for their use, development and construction, which are rather detailed regardless of the fact that they are implemented indirectly through urban plans. A characteristic of this Spatial Plan is that it is the only one in which the two mentioned models of implementation also contain precisely specified financial measures and implementation instruments which, in addition to the sources of financing, also comprise the costs by planning solution.

The implementation model for the protection of space is dominant in the Spatial Plan for Kopaonik National Park. It refers to a series of goals, planning solutions and other elements of the plan to protect natural values, and it also prescribes the use of space in the areas under the 1st, 2nd and 3rd degree protection regimes. Like in other spatial plans, the implementation model for planning solutions of a technical nature also refers to the tourist accommodation capacities, tourism infrastructure and utility infrastructure, along with a number of rules for the use, design and construction of the tourism facilities and accompanying infrastructure. The results of the analysis are similar to those for the Spatial Plan for Đerdap National Park and the Spatial Plan for Radan Nature Park. The specificity of these spatial plans, also including the Spatial plan for Stara Planina, lies in the fact that they are the only ones containing the elements of implementation which consider and tentatively specify the monitoring system, as well as the institutional and organizational aspects of implementation, through the dominant implementation model for the protection of areas.

The Spatial Plan for Đerdap National Park stands out as a specific case regarding the application of its model of implementation. The implementation model for the protection of areas and the implementation model for the planning solutions of a technical nature are equally represented in this Spatial Plan, which is a consequence of the fact that the special purposes in this plan are, along with the protection of the natural resource area, both the aspect of water resources management and the energy aspect of the Đerdap system. In addition, only this spatial plan is characterized by a tentatively specified monitoring system and by the institutional and organizational aspect of implementation through the implementation model for planning solutions of a technical nature.

CONCLUSIONS

The main aim of the research and its results presented in this paper is to consider a methodological framework that enables integrated planning for protection and development in protected natural resource areas. Starting from the attitude that it is not desirable to detemine the protection regimes for natural resources by means of an act on protection exclusively in the context of protection, without a synthesized approach and without considering the aspects of development in the protected areas, as well as without precise graphic drawings, the authors have directed the research to the practice of drawing up spatial plans for special purpose areas.

The legal framework in Serbia provides the main elements of the concept of protection based on the type and values of the natural resource and area, as well as on the determination of the three-degree protection regime for these areas. However, until 2000, the normative protection and reservation of areas, also including the protection of natural resources, was relatively close to the practice of the developed European countries, but at the same time the real intensity and efficiency were far behind, along with a pronouncedly large gap between the normative and real protection (Maksin-Mićić, 2000). The total process of natural resource protection has been, for the most part, completed through drawing up and adopting spatial plans for special purpose areas for almost all protected natural areas, in normative, profesional, but also scientific terms, thus reducing the gap between normative and real protection.

The analysis of the new generation of spatial plans for special purpose areas for the protected natural areas of Kopaonik and Đerdap national parks and Stara Planina and Radan nature parks clearly indicates that lately special attention in Serbia has been directed to the planned protection and sustainable development of the protected areas. In this sense, it is obvious that the concept of protecting natural resources is planned integrally with the development of other activities in the area, primarily tourism facilities and infrastructure. By also taking into account the strict protection regimes of the 1st, 2nd, and 3rd degree, as well as their optimal application, it seems possible to specify the spatial distribution and principles for developing other facilities in the area.

This is also indicated by the results of the comparative analysis of the elements and models (protection and planning solutions with techical details) and their application in the mentioned plans, which have the purpose of developing tourism capacities and other systems in the area.

When planning for the protection and development of natural areas it is necessary to balance the contrasting interests of protecting natural values, the development of tourism, and the socio-economic development of local communities, and apply the new methods identified in the plans analyzed here. Planning and managing the development and regulation of tourist centres and resorts inside the protected area are based on improving the infrastructure and communal equipment, and the timely regulation of building land on the sites and in zones planned for construction. In order to reduce conflicts that occur between the local needs and protection, the basic principle is the realization of the benefits for the local community through its involvement in the protection of natural assets, the promotion of local products, and the development of skills and knowledge, as well as establishing a balance between tourism and other economic activities.

The conclusion of the authors is that the methodology for integrated planning in relation to the protection and development of protected natural areas in spatial plans is satisfactory, though it can be further improved, particularly from the aspect of monitoring its implementation. Along with the need for further scientific research on the protection and development of protected natural areas, it seems that the topic of balanced development has moved to the field of implementing the existing normative and planning systems. Spatial plans for special purpose areas for protected natural resources are undoubtedly the main instrument for the protection and development of such areas, and significant results have been achieved in the spatial planning practice in Serbia over recent years.

Acknowledgements

This paper is a result of research conducted within the research projects "Spatial, Environmental, Energy and Social Aspects of Developing Settlements and Climate Change – Mutual Impacts", No. TR 36035 and "Sustainable spatial development of Danube area in Serbia", TR 36036, both financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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Received September 2018; accepted in revised form December 2018.