NON-TECHNICAL SUMMARY

Introduction

This SEA study is prepared for the IPA Cross-Border Cooperation Programme Croatia-Serbia for the period 2014-2020 that aims to strengthen the social, economic and territorial development of the cross-border area between Croatia and Serbia.

The programme has been prepared for an area covering four counties in the north-east of Croatia: Osječko-baranjska, Vukovarsko-srijemska, Brodsko-posavska and Požeško-slavonska county and five districts on north-west of Serbia: North Bačka, West Bačka, South Bačka, Srem and Mačva.

The programme has a total indicative budget of 34.293.188,00 EUR for the 2014-2020 period. With this budget and territorial focus, the cooperation programme focuses on four priority axes:

- Priority Axis 1: Improving the quality of social and health services in the programme area (5.143.978,20 mil €) with one Specific Objective:
 - \circ 1.1 To improve facilities, services and skills in the area of health and social care
- Priority Axis 2: Protecting the environment and biodiversity, improving risk prevention and promoting sustainable energy and energy efficiency (9.602.092,64 €) with two Specific Objectives:
 - 2.1 To improve management systems for risk prevention and environmental and biodiversity protection, and
 - 2.2 To promote use of sustainable energy and energy efficiency.
- Priority Axis 3: Contributing to the development of tourism and preserving cultural and natural heritage (8.573.297,00 €) with one Specific Objective:
 - 3.1 To strengthen, diversify, integrate the cross-border tourism offer and better manage cultural and natural heritage assets
- Priority Axis 4: Enhancing competitiveness and developing business environment in the programme area (7.544.501,36 €) with one Specific Objective
 - 4.1 To improve competitiveness of the programme area through strengthening cooperation between business support institutions, education and research organisations and entrepreneurs with aim to develop new products/services/patents/trademarks in the programme area

The programme will be implemented through various calls for proposals. Support to projects and ad-hoc application procedures and templates will be developed for each call for proposals. Calls for proposals might have different characteristics, i.e. they might be open to all programme priorities or thematically targeted in response to changed framework conditions in the area and/or taking into consideration the progress of the programme implementation. All these documents will be widely circulated and available from the programme and national websites.

Overview of key expected impacts of the proposed programme

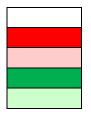
The design of the programme - its focus on cross-border cooperation, nature of eligible activities and a rather limited budget - allows to support activities that address some of the most urgent trans boundary environmental problems. In addition to these positive impacts, the programme includes some proposals that - like any other development activities - pose some risks of adverse impacts on the environment. The expected impacts of the programme are shortly summarized in the matrix below:

Matrix of interactions between proposed Specific Objectives for each of the Priority Axes and their environmental implications		Climate changemitigation	Climate change adaptation	Air quality	Soil and agriculture	Water quality	Forests	Biodiversity	Ecological network	Cultural heritage	Public health	Waste and resource mgmt.
Priority Axis 1: Improving the quality of social and health services in the programme area (5.143.978,20 mil €)												
1.1	To improve facilities, services and skills in the area of health and social care											
Priority Axis 2: Protecting the environment and biodiversity, improving risk prevention and promoting sustainable energy and energy efficiency (9.602.092,64 €)												
2.1	To improve management systems for risk prevention and environmental and biodiversity protection											
2.2	To promote use of sustainable energy and energy efficiency.											
	ity Axis 3: Contributing to the developmer 3.297,00€)	nt of	touris	m an	d pre	servir	ng cul	tural	and r	natura	l heri	tage
3.1	To strengthen, diversify, integrate the cross-border tourism offer and better manage cultural and natural heritage assets											
	ity Axis 4: Enhancing competitiveness and	deve	loping	busi	ness	envirc	nmer	nt in t	the p	rograi	nme	area
(7.54	4.501,36 €)	1			-	1		1	-	1	1	
4.1	To improve competitiveness of the programme area through strengthening cooperation between business support institutions, education and research organisations and entrepreneurs with aim to develop new products/services/patents/trademarks in the programme area											

Key:



Likely significant impacts expected, impacts can be either positive or negative Potential impacts expected, impacts can be either positive or negative



No significant impact expected Likely significant adverse impacts expected Potential adverse impacts expected Likely significant positive impacts expected Potential positive impacts expected

The following text summarizes the nature of the proposed interventions, their possible impacts and recommendations formulated within this SEA study.

Findings regarding Specific Objective 1.1.

The proposed programme's Specific Objective 1.1. '**To improve facilities**, services and skills in the area of health and social care' envisages that support will be provided to developing and implementing joint activities on enhancing the quality of health care and social care: e.g. joint health services delivery, active and healthy aging, disease prevention implementation plan, implementing joint strengthening of health care for vulnerable groups with focus on elderly, palliative care and persons with disabilities, networking of institutions in the area of enhancing health and social care facilities, services and skills, etc.

These interventions are expected to have minor positive impacts on public health. No adverse impacts are expected.

This SEA recommends that the following measures can be taken in order to enhance positive environmental impacts of the proposed interventions:

- a. Supported facilities for health and social services should be located in flood-safe areas and should be easily accessible in emergency situations (e.g. not be cut-off by floods).
- b. Development or modernization of buildings must meet all applicable environmental requirements and should ideally demonstrate good environmental building practices - e.g. easy accessibility for public transport, energy efficiency, sound waste collection, etc.

Findings regarding Specific Objective 2.1.

The proposed programme's Specific Objective 2.1. '**To improve management systems for risk prevention and environmental and biodiversity protection**' aim to support developing and implementing of especially joint initiatives for biodiversity protection and environmental management, risk prevention systems (floods and other hazards) and pilot and demonstration projects including innovative approaches to risk prevention and mitigation.

The proposed interventions under Specific Objective 2.1 include actions related to joint actions in the area of monitoring and management of environmental and/or biodiversity protection which are expected to have positive impacts without any risks of adverse impacts. In this regard, we only recommend that monitoring and management responses should focus specifically on priority issues addressed by the Danube River Basin Management Plan and the EU Strategy for the Danube Region (EUSDR) where more information is needed from the region: i.e. ecological and chemical status of water

bodies, source of water pollution, ground-water pollution and accidental risk spots inventory, indigenous species (especially Danube sturgeon species), status of all species and habitats covered by EU nature legislation, and invasive species. Improvements of monitoring systems should primarily entail exchange of information and making it publicly available - new monitoring systems should be set up only when really needed. Monitoring system should be coordinated with bodies in charge of Danube River Basin Management Plan (i.e. ICPDR) - in terms of issues addressed, exact parameters monitored, using lessons from the Joint Danube Survey 3.

The character of proposed activities within IPA CBC Croatia-Serbia programme 2014-2020 also offers a suitable framework for supporting range of initiatives related to this cross-border Biosphere Reserve, especially on the Serbian side which awaits formal designation and where implementation needs are extensive given the large area involved. In this regard, pay increased attention to possible support to activities related to this Biosphere Reserve as long as they fit into logic of programme interventions and they demonstrate additionality to any ongoing projects that may be funded from other sources (EU, international or national).

On the other hand, the Specific Objective 2.1 include actions related to risk prevention systems which may have both positive or adverse impacts on flooding, water quality and possibly also biodiversity - depending on the exact choice of measures to be supported. Our recommendations for actions related to emergency preparedness and risk prevention systems and small/scale investments for reducing or mitigating environmental problems and risks are as follows.

All supported activities on flood protection should promote a long-term flood protection and retention approach that respects the ecological processes in the flood plains. Priority attention should be given to actions that address the following six targets of the Action Programme for Sustainable Flood Protection in the Danube River Basin which follow the same logic and have been endorsed within the framework of the International Commission for Protection of Danube River. Interventions on flood risks should be closely coordinated with Danube and Sava basin flood risk management plans and should also take into account potential impacts of climate change. Both of the proposed measures should ideally support implementation of Danube wide flood risk management plans due in 2015 under the Floods Directive. Alternately, should suitable application arise, priority consideration should be given to flood protection measures that can support implementation of priority measures endorsed through ICPDR's Sub-Basin Level Flood Action Plan for Pannonian Southern Danube (2009) - i.e.:

- Spatial planning (Preparation of flood risk maps, Ensuring that spatial plans contain flood hazard maps, Defining limitations related to land use in flood prone areas).
- Enhancing retention and detention capacities (Preserving and where possible enhancing existing capacities of natural flood retention capacities).
- Non-structural preventive measures: (Introducing principles of EU Floods directive to decisionmaking, Capacity building of professionals, Raising awareness and preparedness of general public (Raise awareness and preparedness of general public).

Lastly, we provide the following specific recommendations for actions related to pilot and demonstration projects including innovative approaches to risk prevention and mitigation that may have both positive and adverse impacts on environment and biodiversity:

• Supported measures must not restrict natural retention of flood plains - ideally should expand natural retention by e.g. promoting the 'room for river' approach that allows flooding during periods of high discharge.

- Consider adding establishment of protection forests amongst the types of eligible activities that can be supported.
- Flood prevention and drought protection projects should not be planned on locations where they will not have a negative impact on the Ecological Network target features or integrity.
- In case of support to irrigation, give preference to irrigation systems that do not require reservoir construction (especially not on the rivers) for their water source and that are not planned or already located within or in the vicinity of Ecological Network areas.

Findings regarding Specific Objective 2.2.

The proposed programme's Specific Objective 2.2. 'To promote use of sustainable energy and energy efficiency' creates a funding framework for developing and implementing pilot and demonstration projects on innovative technologies and solutions in the field of sustainable energy and energy efficiency, implementing awareness rising, information campaigns, education, training and capacity building on sustainable energy production, utilisation of renewable energy resources and energy efficiency and joint incentives in order to improve planning and/or legal framework in the area of renewable energy resources and energy efficiency (e.g. analyses, comparisons, recommendation, local/regional action plans, etc).

Although these interventions will have positive impacts on both climate change mitigation concerns (reductions in CO_2 emissions) and also adaptation concerns (adaptation to changing climatic conditions), there are several risks associated with their implementation. Renewable energy development may have - depending on the types of supported renewable energy options and their locations - adverse impacts especially on biodiversity, Natura 2000 network, water quality, landscape and cultural heritage.

In order to reduce these risks and enhance positive impacts of proposed activities, this SEA recommends that priority support within this Specific Objective should be given to:

- a. energy efficiency measures in public buildings (such as hospitals, schools where possible synergies with interventions under Thematic Priority 1 Employment, Social Inclusion, Health and Social services exist)
- b. use of agricultural waste for energy production,
- c. demonstration projects for solar power on roofs or build surfaces as long as they do not have adverse visual impacts on the landscape amenity.

We also recommend that:

- d. Supported projects must be subject to applicable environmental and health protection standards and be subject (when needed) to: environmental impacts assessments, assessments of impacts on Natura 2000 network and consultations on transboundary impacts (if such impacts would be expected).
- e. Wind turbines and large solar parks should not be planned within areas important for bird preservation (Special Protection Areas, SPA).
- f. Large solar parks and hydropower plants should not be planned within areas important for preservation of species and habitat types (Special Areas of Conservation, SAC)
- g. It is recommended to finance smaller-scale solar power projects (use of several panels, rather than large parks). Solar parks should be limited to already built urban areas.

- h. Any larger-scale promotion of biomass farming should be permitted only if it can be proved that it will not lead to the deterioration of already achieved state of any water body surface and groundwater (which is e.g. a fourth objective of Croatian River Basin Management Plan). Biomass farming should not be supported on vulnerable areas under Nitrate Directive, unless the such project applications prove that the choice of crops and framing practice will not increase fertilizers and pesticides loads.
- i. Targeted support can be provided to elaboration of renewable energy plans for counties in the study area and their optimizing through SEA processes. Such plans may be helpful for guiding preparations of specific investment projects and they can simplify environmental permitting processes (if SEA is done well). Such plans, can also consider any possible transboundary impacts.

Findings regarding Specific Objective 3.1.

The proposed programme's Specific Objective 3.1.' **To strengthen, diversify, integrate the cross-border tourism offer and better manage cultural and natural heritage assets**' envisages that support will be provided to e.g. joint development, branding and promotion of tourism niches; development and diversification of the tourism offer and capacity; improvement of recreational and small-scale tourism infrastructure; developing and implementing joint initiatives on valuation, preservation, restoration and revitalisation of cultural and natural heritage sites; implementing training programs in quality assurance systems and different types of standardisation (e.g. ISO certification, etc.) of cultural and natural heritage, etc.

Proposed interventions related to development and diversification of the tourism offer and capacity; improvement of recreational and small-scale tourism infrastructure may have some local impacts on biodiversity and Natura 2000 network with possible minor local impacts on water quality, landscape and cultural heritage. Our recommended measures for reducing risks of adverse impacts and enhancing positive environmental impacts of these interventions are:

- a. Ensure in the project preparatory phase, that no important and protected habitats and species (target features) are endangered by the planned infrastructure and activities.
- b. Preparation and development of joint tourism strategies and action plans should be subject to strategic environmental assessments (when their potential impacts would merit so).

It is recommended to consider prioritizing eco/agro-tourism projects that contribute to sustainable management of protected areas (e.g. walking and cycling paths, renovation of visitor centres, etc.) that have been prepared in cooperation with nature protection and culture protection authorities and adhere to the principles of EU Agenda for a sustainable and competitive European tourism such as: taking a holistic, integrated approach; planning for the long term; involving all stakeholders; recognizing, minimising and monitoring risks.

Proposed interventions related to preservation, restoration and revitalisation of cultural and natural heritage sites are expected to bring positive impacts on cultural heritage and also possibly on natural heritage sites. However, inappropriate implementation of these activities poses a risk of unintended adverse impacts on tangible and intangible attributes of heritage sites and on nature heritage sites.

The following measures can be taken in order to enhance positive environmental impacts of the proposed interventions:

- a. Ensure in the project preparatory phase, that no important and protected habitats and species (target features) are endangered by the planned infrastructure and activities.
- b. The supported projects must meet all applicable national rules for cultural heritage protection.
- c. It is also recommended to inform prospective applicants about the following principles that should guide their planning of interventions for sustainable use of cultural and natural heritage:
 - Conservation plans must contribute to the authenticity and integrity of the sites and monuments and their tangible and intangible elements.
 - Conservation plans must address all relevant factors necessary for adequate long-term safeguarding and sustainable use of the heritage site or monument.
 - The principal objectives of the conservation plans should be clearly stated. The proposals in the conservation plan must be articulated in a realistic fashion, from the legislative, financial and economic point of view, as well as with regard to the required standards and restrictions.
 - The conservation plans should aim at ensuring a harmonious relationship between the heritage sites and monuments and the surrounding environment as a whole. Wherever necessary for the proper protection of the property, an adequate buffer zone should be provided.
 - New functions and activities should be compatible with the character of the heritage sites and monuments. Proponents must ensure that such changes do not impact adversely on the outstanding value of the heritage site or monument.
 - Before any intervention, existing conditions in the area should be thoroughly documented.
 - Conservation planning should therefore encourage the active participation of the communities and stakeholders concerned with the property as necessary conditions to its sustainable protection, conservation, management and presentation.

Findings regarding Specific Objective 4.1.

The proposed programme's Specific Objective 4.1 'To improve competitiveness of the programme area through strengthening cooperation between business support institutions, education and research organisations and entrepreneurs with aim to develop new products/services/patents/trademarks in the programme area' will offer funding for strengthening capacities of the business support institutions in order to enhance competitiveness of the programme area through e.g.: development of e-business and e-trade; establishment of and support to existing and new business related sectorial networks and organisations in developing new products/services/patents/trademarks, standardisation, product protection, marketing and development of cross-border markets, developing and strengthening cooperation between public sector, education, research & development organisations and entrepreneurs in order to improve competitiveness by applying business innovativeness based on smart specialization approach; and cross-border development, adaptation and exchange of best practices in application of new technologies, processes, products or services to be directly used by the enterprises between the clusters or groups of business, R&D and education institutions, etc.

These interventions are not expected to have any significant impacts on the environment. In order to enhance their potential positive environmental impacts, we recommend to prioritize support - if suitable applications for programme support arise - to business clusters that address opportunities arising from:

producing and marketing organic agriculture products,

- waste management and waste reuse (e.g. waste from electronic equipment),
- water efficiency and water conservation systems;
- water-efficient irrigation systems;
- drought-resistant and other climate-resilient crops, etc.

Alternatives considered, uncertainties and the need for environmental monitoring

This SEA study has focused on the two alternatives - 'do nothing' and 'proposed programme'. Information provided within Chapters 5 and 6 of this study outline the expected impacts of proposed programme as compared with 'do nothing' option. The SEA was conducted in ex-ante manner during final 4 months of the programme elaboration. Within this context, the assessment aimed to identify possible problems and measures during the formulation of the programme itself - and indeed, several recommendations, especially those related to Priority Axis 2 were directly incorporated into the programming team strived to optimize the cooperation programme so that it does not pose - on the level of the programme itself - any risks to environment and maximizes opportunities for achieving positive impacts on the environment. The recommendations provided within this SEA study should be treated as additional detailed safeguards to ensure that this happens.

The assessment itself has not been constrained by any difficulties, except facing the usual challenge of having no information about the exact features and locations of future activities that will be actually supported during the implementation of the cooperation programme. The assessment therefore considered the likely possible scenarios of possible implementation without being speculative (by e.g. considering extreme hypothetical options). Other than these usual challenges, there were no constrains in the SEA process and the conclusions made are not bound by any significant uncertainties.

Due to the absence of significant risks and uncertainties on the programme-wide level, the SEA study concluded that there is no need for dedicated environmental monitoring system for the proposed IPA CBC programme Croatia-Serbia 2014-2020.

However, joint environmental management initiatives under the programme Specific Objective 2.1 may provide useful data on biodiversity protection, water quality, flood risks and related hazards. Any proposals for monitoring systems should be therefore consulted with the relevant national authorities in order to maximise potential synergies with higher-level monitoring systems.

Feedback sought

This SEA study is made available for public comments. Relevant authorities and the public can provide comments on any matters that they deem relevant.

The Managing Authority for the IPA Cross-Border-Cooperation Programme Croatia-Serbia 2014-2020 and the authors of this SEA study will appreciate feedback on especially the following questions:

- 1. Does this SEA study address all main strategic environmental concerns which are relevant to the proposed programme considering its focus and nature of the proposed interventions?
- 2. Does the analysis of the baseline and impact assessment correctly capture key environmental risks, opportunities and other issues of strategic importance and if not, what changes should be made?
- 3. Do the proposed mitigation and enhancement measures suggest realistic and cost-effective arrangements for reducing the risks and/or for enhancing environmental benefits of the proposed programme and if not, what changes should be made?

Should you wish to obtain any clarifications or directly discuss any matters relevant to this SEA with the authors of this SEA study, please contact:

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