









Draft Joint Strategic Action Plan 2021 - 2023

For the Implementation of the Protocol on Sustainable Transport (Mikulov, 2014) to the Framework Convention on the Protection and Sustainable Development of the Carpathians (Kyiv, 2003)

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About TRANSGREEN

TRANSGREEN means a better connected Carpathian region with transport infrastructure that takes nature into account. The project aims to contribute to safer and environmentally-friendly road and rail networks that are being developed in the Czech Republic, Hungary, Romania, Slovakia, and Ukraine. www.interreg-danube.eu/transgreen

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Introduction

The Protocol on Sustainable Transport to the Carpathian Convention (Mikulov, 2014) covers several aspects related to mobility. Among the others, they include policies development, infrastructure planning and development, different transport modes, traffic management systems, transport externalities and real costs. This Sustainable Transport Strategic Action Plan (SAP), developed with the support of the Danube Transnational Programme project TRANSGREEN in cooperation with the Carpathian Convention experts and stakeholders, is not going to outline actions for all the various aspects of the Protocol. Rather, it is conceived as a document dealing with the integration of transportation and ecological connectivity in the short term. The ideal temporal horizon to reach the objectives and to complete the proposed actions is limited to 3 years, but first results are expected to be implemented already within the end of the TRANSGREEN project, in June 2019. The SAP mirrors the achievements of the project, which are relevant for political decision-making. Results from the work within the pilot areas of TRANSGREEN and relevant project documents (e.g. the guidelines and recommendations for integrated transport infrastructure planning, construction, management and monitoring) and outputs are feeding the content of the SAP. Carpathian Countries suggested to undergo an update of the SAP after 3 years from its approval.

Thematically, the integration of transportation and ecological connectivity merges aspects included both in the Protocol on Sustainable Transport and in the Protocol on Conservation and Sustainable use of Biological and Landscape Diversity.

The current and future development of road infrastructures in the Carpathian Region may lead to considerable changes in land use. These changes have the potential to cause habitat fragmentation and ecosystem loss. The impact of road development and use on biodiversity has become one of the central environmental issues when road infrastructures are under evaluation. Road construction, planning, design and maintenance can greatly diminish the wildlife habitat value of the land in a variety of ways. As humans, also wildlife species need to move. They need to access resources, ensure gene flow, shift their ranges, and establish new territories. Connected landscapes allow for the movement of plants and wildlife and facilitate ecological processes. An ecological network is a coherent system of natural or semi-natural landscape elements configured and managed with the objective of maintaining or restoring ecological function as a means of conserving biodiversity while also providing appropriate opportunities for the sustainable use of natural resources. Ecological connectivity can be increased in two main ways: (1) focus on conserving and restoring areas that facilitate movement, and (2) mitigate landscape features that impede movement, such as linear infrastructures. Wildlife corridors are important to link areas of crucial habitat and facilitate movement, thus reducing the negative impacts of fragmentation and allowing greater flexibility to adapt to stressors.

At the territorial level, this SAP proposes a series of objectives that should be reached by all Carpathian countries jointly, in order to reach a common and shared level. For each of the six proposed main objectives, specific actions and expected results are also included. Ultimately, the goal of the current SAP is to provide indications to maintain and enhance the environmental quality standards in the Carpathians, without curbing its infrastructural development.

Sustainable Transport Strategic Action Plan

Based on the detailed recommendations below, the Carpathian Convention Protocol on Sustainable Transport can best be implemented by taking the following actions:

Pursuant to Article 17 paragraphs 1 and 4 of the Protocol on Sustainable Transport (hereinafter referred to as "the Protocol") to the Framework Convention on the Protection and Sustainable Development of the Carpathians (hereinafter referred to as "the Convention"), adopted by the Conference of the Parties to the Convention in Mikulov on 26th September 2014; Pursuant to Decision COP5/9 on Sustainable transport and infrastructure, industry and energy, in particular its paragraphs 2 and 3; Following the Draft Programme of Work of the Carpathian Convention, 1 January 2018 – 31 December 2020, Annex 1, adopted by the Conference of the Parties to the Convention by its DECISION COP5/15 on Programme of work and budget of the Carpathian Convention paragraph 6; In order to ensure implementation of the provisions of the Protocol, the Carpathian Convention Implementation Committee recommends the following Strategic Action Plan for approval of the Bureau and adoption by the Sixth Meeting of the Conference of the Parties to the Convention.

In order to ensure realisation of mobility needs harmonious in relation to both society and economy as well as nature, in particular through the development of infrastructure while minimizing its negative impact on the environment, within the next 3 years the Parties shall undertake the following actions:

Identification of current and potential strategic ecological connections

Pursuant to Articles 1, comma 2 d) and Article 8, comma 4 a) of the Protocol, the Parties shall:

- 1. Develop and agree on common definition and characteristics of "landscape fragmentation", "ecological connectivity", "permeability", "linkage areas", "ecological network", "corridors", "core areas", "stepping stones" and "buffer zones" and on their alignment with national and EU legislation
- **2.** Collect, revise and compare the results of previous ecological connectivity projects (e.g., *BioREGIO Carpathians*) and promote the exchange of best practices among countries and involved actors.
- **3.** Analyse available GIS¹ habitat suitability models and define a common methodology to identify current ecological corridors
- 4. Analyse categories of corridors in linkage areas of the Danube Carpathian Region
- **5.** Share countries' current ecological corridors database and wildlife presence within CCIBIS² (if not existing, include it in the specific actions for respective countries)
- **6.** Create and share a common map and a database to identify strategic ecological connections for the whole Carpathians
- 7. Analyse the connection of the Carpathian area with TEN-G³ and with neighbouring macro regions and check the potentials for dedicating wilderness and roadless areas to wildlife's dispersal

¹ Geographic Information System

² Carpathian Integrated Biodiversity Information System

³ Trans-European Network Green

Identification of current and future potential critical intersections

Pursuant to Articles 1, comma 2 a), d) and e) and Article 8, comma 3, 4 a) and 5 of the Protocol, the Parties shall:

- 1. Identify and collect into a common database existing and planned transport infrastructures
- 2. Overlap existing and planned infrastructures with ecological corridors, Natura 2000 sites (and other sites of international importance), components of the Emerald network, UNESCO World Heritage Properties, wildlife dispersal areas, protected areas, linkage and roadless areas (as identified in Strategic Objective 1)
- **3.** Adopt Innovative Support Tools for planners (of spatial, transport, environmental specialization), based on the "any case, a unique case" principle
- **4.** Share and harmonize roadkill data and methodologies of collection, analyses and mapping with the other Carpathian countries
- **5.** Adopt the most efficient algorithm to identify current and to predict potential future risky road sections for animal-vehicle collisions (e.g., KDE+⁴)
- **6.** Share and address main issues related to the application of methodologies (e.g., SEA, EIA, TIA, AA^5) for the assessment of transport infrastructures on wildlife
- **7.** Introduce a shared methodology for the assessment of externalities caused by transport infrastructures, including biodiversity loss

⁴ Kernel Density Estimation (Bíl et al., 2015. DOI: 10.1007/s10980-015-0265-6)

⁵ SEA: Strategic Environmental Assessment; EIA: Environmental Impact Assessment; TIA: Territorial Impact Assessment; AA: Appropriate Assessment

Realization of green infrastructures (GI), introduction of mitigation measures for wildlife conservation and traffic safety and monitoring of strategical ecological connections

Pursuant to Articles 1, comma 2 a), b), d) and e) and Article 8, comma 1, 2, 3 and 4 a), b) and c) of the Protocol, the Parties shall:

- 1. Introduce specific mitigation measures for wildlife conservation and traffic safety in known risky areas
- 2. Define common Carpathian-wide monitoring standards for wildlife movements and dispersal and evaluate the effectiveness of prevention and mitigation elements
- **3.** Develop and update CCIBIS database (as in Strategic Objective 1, Action 5) with monitoring results (wildlife movement, road kills), new GI elements, mitigation and prevention systems and ecological corridors
- **4.** Use spatial planning as a key tool to harmonize grey, green and blue infrastructures mutually and with other interests in the landscape
- **5.** Monitor wildlife vehicle collisions and roadkill and integrate the results into the GI database for improving or proposing new mitigation measures
- **6.** Analyse and propose improvements to the Partnership Agreements between EU and each country regarding GIs
- 7. Increase cooperation and knowledge sharing (including best practices) among parties and develop a common road map for GI implementation in the Carpathians
- 8. Analyse the potential for implementing the "polluter-pays" principle at the national level
- **9.** Encourage the implementation of non- or less polluting measures (e.g., use of electric and hybrid cars, increased tax on fossil fuels, etc.)
- **10.**Increase the regular budget for the construction and the maintenance of infrastructures, dedicating part of the funding to create proper mitigation measures and to perform their adequate maintenance

Identification of all relevant stakeholders and increase the cooperation with other Working Groups (WGs), sectors and international processes for data sharing, mediation and resolution of environmental conflicts

Pursuant to Articles 1, comma 2 a), b), c), d), e), f) and g) and Article 8, comma 1, 2, 3 and 4 a), b) and c) of the Protocol, the Parties shall:

- 1. Increase the participation to WGs and the sharing of data into an ad hoc inter-ministerial platform to lead political support for valuation and to mainstream biodiversity conservation into infrastructure deployment
- 2. Encourage an active cross-sectoral cooperation among the competent institutions and organisations at international level by sharing information, methodological developments, results of projects and researches and by defining possibilities for harmonization of methods and implementation of suggestions (also thanks to the block-chain technology)
- **3.** Take into account the potential impact of planned infrastructures on ecologically sensitive areas, biodiversity and ecological connectivity areas
- **4.** Define common international guidelines and standards for data collection and for the minimization of negative externalities, including their prioritization
- **5.** Define a common transnational ecological corridor development strategy for the Carpathians and share the main issues related to the implementation of national strategies
- **6.** Integrate the need of transport connection to other relevant sectors (*such as tourism*), by ensuring the protection of ecological connectivity and biodiversity areas
- 7. Define and map the current and potential future environmental conflicts
- 8. Define and share common methodologies for dialogue facilitation and conflict mediation
- 9. Organize workshops at different levels to define the response of stakeholders to current conflicts

Approval and implementation of policies to support sustainable transport deriving from outputs and results of relevant projects, especially "TRANSGREEN" and "ConnectGREEN"

Pursuant to Articles 1, comma 2 a), d), f) and h) and Article 8, comma 3 and 4 a), b) and c) of the Protocol, the Parties shall:

- 1. Ratify the Protocol for Sustainable Transport by all States with proper adoption into the legal and institutional systems
- 2. Share and report updates and developed actions since the ratification of the Protocol
- **3.** Support the implementation of TRANSGREEN and ConnectGREEN outputs through the official adoption of documents, consideration and recommendation of the Convention and of relevant national authorities
- **4.** Initiate the process of legal upgrade and harmonization of legal systems and policies especially on public procurement, public-private partnerships, power purchase agreements and concession agreements, in order to support the integration of GIs
- **5.** Delineate the roadmap to integrate transport issues into other topics (such as wildlife conservation), having a hierarchical approach in both short-term (3-5 years) and long-term (15-20 years) strategies
- **6.** Take into account the unique opportunity to build infrastructure related to electromobility and alternative fuels, which will allow transport users to move around the territory of the Carpathians without worrying about the range of their vehicles
- **7.** Support infrastructure preparation and designing in a more systemic manner by providing appropriate financial sources and capacities
- 8. Initiate the development of national biodiversity action plans to point out the intersection of national climate change adaptation plans, and mitigation plans with national infrastructure plans, urban development plans; highlight the opportunities to increase the use of ecosystem infrastructures as a part of the overall biodiversity conservation strategy
- 9. Initiate and national biodiversity plans
- **10.**Include specific performances and benefits of GIs into the concept of Payment for Ecosystem Services
- 11. Reduce the systematic dependence on biodiversity offsets as compensation for unacceptable levels of environmental degradation and biodiversity loss
- **12.**Understand compensation as the last mean (after avoiding and mitigation) of reaction on unacceptable levels of environmental degradation

Enhancement of the public participation in spatial planning, in particular in relation to transport infrastructure

Pursuant to Articles 1, comma 2 a), c) and f) and Article 8, comma 3 and 5 of the Protocol, the Parties shall:

- 1. Increase the engagement of the various stakeholders in the consultation process, ensuring adequate funding
- 2. Develop training courses on biodiversity, transport and eco-corridors
- **3.** Share the knowledge on biodiversity, transport and eco-corridors, through non-expert information (animation films, common presentations) and school education
- **4.** Increase expertise and empowerment of spatial planners and policy-makers to make adequate changes during the phase of project preparation
- **5.** Include an inter- and ex-change communication platform in CCIBIS (as in Strategic Objective 1, action 5)
- **6.** Disseminate information about the Protocol in the Carpathian area, in order to increase public participation, engagement and monitoring on the proper implementation of the Protocol itself
- 7. Create a modern communication platform using the latest IT achievements to share the information, knowledge, experience, etc., aimed at enhancing the wide public involvement in spatial and especially infrastructure planning.

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Project Partners

Austria - WWF Central and Eastern Europe (former WWF DCP, project lead)

Czech Republic - Friends of the Earth Czech Republic - branch Olomouc, Nature Conservation Agency, Transport Research Centre

Hungary - CEEweb for Biodiversity

Romania - Association "Milvus Group", WWF Romania

Slovakia - National Motorway Company, State Nature Conservancy of the Slovak Republic,

SPECTRA - Centre of Excellence of EU - Slovak University of Technology in Bratislava

Associated Strategic Partners

Austria - Ministry for Transport, Innovation and Technology

Czech Republic - Ministry of the Environment

Hungary - National Infrastructure Developing Private Company Ltd.

Poland - Ministry of Infrastructure and Construction

Romania - Ministry of the Environment, Ministry of Transport

Slovenia - Ministry of Infrastructure

Ukraine - Ministry of Ecology and Natural Resources, Transcarpathian Regional State

Administration - Department of Ecology and Natural Resources