



Luxembourg, 15 June 2023

Environmental and Social Data Sheet

Overview

Project Name:	LUGOJ-DEVA MOTORWAY II (SPL 2015-0712)
Project Number:	20190393
Country:	Romania
Project Description:	The project consists of the construction of approximately 59 km long sections of the A1 Lugoj - Deva motorway.
EIA required:	yes
Project included in Carbon Footprint Exercise ¹ :	yes

Environmental and Social Assessment

Environmental Assessment

The project concerns two constructed non-continuous sections of the greenfield 2x2 lane A1 motorway between Dumbrava and Deva. For implementation purpose, the project is divided into three lots. Lot 2 is further divided into five (A-E) sub-sections. The project scope includes:

- Section 1: Lot 2 sub-sections A-C. Dumbrava – Margina, 15.4 km;
- Section 2: Lot 3. Holdea – Ilia, 21.1 km and Lot 4. Ilia – Deva, 22.2 km.

Both project sections are open to traffic and operational since 2020. The 13.6 km A1 motorway section between the two (Margina – Holdea, sub-sections D-E of Lot 2) is still to be constructed and is not part of the project scope.

Compliance with Environmental Legislation

SEA

The project is included in the General Transport Master Plan approved through the Governmental Decision 666/2015 which was subject to a SEA. The SEA Decision was issued by the Ministry of Environment on 11 December 2015 and is published on the Ministry's website. The project is part of the Sectoral Operational Programme – Transport (SOP-T) for the period 2007-2013, which was subject to a SEA.

EIA

The project falls under Annex I of the EU EIA Directive point 7, b) Construction of motorways and express roads. The competent authority for this project is the National Environmental Protection Agency (NEPA).

The EIA procedure for the entire Lugoj - Deva motorway (including the project section Dumbrava - Deva) was carried out during 2008 - 2010. On 9 September 2010 NEPA issued the EIA Decision (ED) RO-ANPM-07/09.09.2010.

¹ Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20 000 tonnes CO₂e/year absolute (gross) or 20 000 tonnes CO₂e/year relative (net) – both increases and savings.



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Due to the changes to the design in 2012, the notification of changes was submitted to NEPA. Considering that in the meantime several new Natura 2000 sites were designated in the project area, the NEPA decided that the EIA report should be updated, including also preparing of an Appropriate Assessment study (AA). Following the public consultation, the NEPA issued on the 11 December 2013 the revised ED. Based on the conclusions of the AA, the revised ED included mitigation and protection measures addressing air quality, biodiversity, noise, water and soil. It also included conditions related to the calendar of construction works, site organization, deforestation, works in the vicinity of ash landfill.

Following the completion of the design stage, the ED and the AA were once more revised in 2016. Following the public consultation, the revised ED was issued on 9 December 2016. The revised ED imposed considerable additional works (tunnels, ecoducts, viaducts and mitigation measures) which represented essential changes to the technical solutions agreed in the signed works contract for Lot 2. Therefore, on July 2017, the CNAIR issued the partial contract interruption letter referring to the section E of the Lot 2 contract and in March 2018 rejected works done on section D. Both these sections (D and E) are not part of the current project scope.

The project mainly impacts biodiversity (deforestation), migration patterns of animals, noise levels, air pollution, surface and groundwater quality and land uptake. Therefore targeted mitigation measures, both for construction and operation phases, were foreseen, including the requirements for paying special attention to the deforestation technology and monitoring of the process, placement of acoustic screens, protection from the possible negative impacts related to the interference with the ash landfill near Mintia thermal power plant, diversion of Iciu Creek for facilitating the flow of water, as well as monitoring equipment for large carnivores and bats.

The assessment concluded that, subject to the implementation of the foreseen measures, the project shall not have permanent significant negative impacts.

Assessment of effects on Natura 2000 sites

The project interferes with the following Natura 2000 sites:

- ROSPA0029 “Defileul Muresului Inferior - Dealurile Lipovei” area between km 63+000 and km 65+000,
- ROSCI0355 “Podisul Lipovei - Poiana Rusca” area between km 56+220 and km 60+000,
- ROSCI0064 “Defileul Muresului” areas between km 69+080 and 69+180; km 72+500 and km 73+300; km 77+205 and 77+350.
- ROSCI0373 “Raul Mures intre Branisca si Iliia” areas between km 80+650 and 81+670; km 83+300 and km 86+200; km 87+700 and km 88+800; km 90+500 and km 91+200.

The motorway is situated in the vicinity of the several other Natura 2000 sites:

- ROSCI0338 “Padurea Paniova” – 5.78 km;
- ROSCI0109 “Lunca Timisului” – 1.74 km;
- ROSCI0054 “Dealul Cetatii Deva” – 5.71 km.

The EIA Report, elaborated in 2008, analyzed only the impact on ROSPA0029 “Defileul Muresului Inferior - Dealurile Lipovei” (the other sites were declared Natura 2000 sites in 2011) and proposed mitigation measures for reducing it. In 2013, as part of the revision of the ED, the project was subject to an AA as required in line with the art.6(3) of Habitats Directive. The AA addressed both - construction and operational stages, by analyzing the impacts on the protected species (birds, bats, amphibians, reptiles, fish and habitats) in the above mentioned NATURA 2000 sites. The AA concluded that the construction of the road will not significantly affect the species or habitats in the long term. The species adaptation period with the new motorway was estimated at being 3 years. For each type of species, the specific mitigation measures were proposed, such as scheduling the construction works outside of sensitive



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period for species (nesting, nursing, etc.), temporary fencing during construction, installation of noise protection screens, etc.

Particular analysis was addressing impacts on migration of large carnivores. The impact during the construction phase was considered high due to the increase of the anthropic influence in the area, permanent changes in the areas of migration routes and increased risk of mortality induced by the traffic. For identification of most suitable mitigation measures, the experts from the National Museum of Natural History elaborated a "Report for the permeability of large carnivores: aspects of species monitoring, analysis and permeability, proposing measures for maintaining permeability for project Lugoj - Deva highway km 0 + 000 - km 99 + 764 and link road from the highway to bypass from km 0 + 000 - km 10 + 518". The report was used as a basis for the AA. The proposed mitigation measures include building of permanent structures. Part of the structures, located within the project section, include building of four "green bridges" at km 57+550 - 58+300; km 58+700 - 58+850; km 68+770 - 69+710 and km 85+750 - 86+000. The rest of the structures are not part of the project scope. Being located outside the project section (on Lot 2, sections D-E, km 42+695 – km 56+220), these will be implemented as a separate project. This concerns construction of three eco-ducts at km 48+170 - km 48+510 (viaduct); km 51+420 - 51+760 (viaduct) and km 52+620 - 54+205 (tunnel-viaduct-tunnel).

By implementing all mitigation measures the impact of the project on environment will be minimized. The ED specifies the requirements to monitor, both during the construction and operation phases, the implementation of mitigation measures resulting from the AA study for large carnivores, mammals, birds, bats, amphibians, reptiles, fish and other habitats.

Building permits

Works were completed by 2020. All building permits were issued by 2015 and were published on the Ministry of Transport website.

Climate change

At the time of the project preparation stage (2008-2010), the climate change risk and vulnerability assessment requirements were not in force and have not been studied as a separate task. However, the feasibility study addressed environmental and climate risk analysis in the project area (geotechnical and geological studies, precipitation, and flooding analysis, etc.). The assessment identified that the project is subject to a risk of increased precipitation and flooding, as well as snow loading. Bridges, hydrological works, drainage systems and other related project components were designed in accordance with the recommendations made by the studies carried in the project area. The climate adaptation measures adopted in the project include not only structural (design) but also operational measures, including adaptation to snow loading, strong winds and extreme precipitation risks.

The project is consistent with the Romanian National Climate Change Strategy and supportive of its objective to integrate local climate change concerns into transport policy. The project design overall meets the requirements of nowadays design standards to accommodate increased physical climate risks.

Paris Alignment

The project was assessed by the Bank's services for Paris Alignment in accordance with the policies set out in the Climate Bank Roadmap ("CBR"). The project is considered being aligned with the low carbon goal as it consists of a capacity expansion of an existing road infrastructure meeting the EIB eligibility criteria for Transport, including passing the Adapted Economic Test introduced under the CBR and is consistent with national and EU level infrastructure planning.



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Romania's alternative fuel infrastructure national policy framework has been assessed to have shortcomings in the EU latest assessment (2022, but based on information from 2018), most notably the distance requirement of one recharging point at least every 60 km of the TEN-T would not be met (~70km foreseen on average). More recent data shows that the number of charging stations has increased rapidly after 2018 although from a low basis. To illustrate, the number of charging stations already exceeds by more than 400% the target for 2030. Romania's latest National Implementation Report (2020), reports on several measures underway to further improve alternative fuel provision.

EIB Carbon Footprint Exercise

The project is included in the Carbon Footprint exercise on the following basis:

- Estimated annual emissions of project in a standard year of operation:
 - Forecast absolute (gross) emissions are 120 200 tonnes of CO₂ equivalent per year.
 - Forecast emissions created are 9 500 tonnes of CO₂ equivalent per year.
- The project boundaries are given by the new road and the existing roads DN68A and DN7 between Lugoj (Dumbrava) and Deva (Șoimuș).

The baseline is the forecast third party emission, in the absence of the project, from the existing network, only within the boundary defined above. The forecasts reflect the Services' assumptions on initial traffic, traffic growth, speed/flow, infrastructure capacity and fuel consumption.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

Social Assessment, where applicable

Land acquisition is completed. In accordance with nine governmental expropriation decisions, approximately 923 ha of mostly agricultural lands have been expropriated for the project needs.

Road safety audits at various stages of design, pre-commissioning and operation have been performed in accordance with Romanian legislation.

Public Consultation and Stakeholder Engagement

Before issuing the ED in 2010, the NEPA made environmental studies available to the public through announcements at NEPA headquarters and media, and organized a public consultation in the impacted localities.

In 2012, considering that several new Natura 2000 sites were designated in the project area, the NEPA decided that the EIA report should be updated, including also preparing of an Appropriate Assessment study (AA). The results of the studies were published on NEPA website. Five public debates were organised in Costeiu, Sudrias (Traian Vuia), Margina, Lapuglu de Jos, Ilia and Deva. The comments received during the public consultation period were related to the information presented in the AA and addressed the impact on some species, cumulative impacts and monitoring program. The comments/opinions raised by the public were addressed by requiring further revision of the studies. The revised versions of the AA and the EIA report were published on NEPA website, and the revised ED was made public on the NEPA and beneficiary's websites, as well as in the newspaper. No further comments were received from the public. Another similar round of public consultations was held during the revision of the ED in 2016.



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Conclusions and Recommendations

The project sections are included in the General Transport Master Plan which was subject to a Strategic Environmental Assessment (SEA) in 2015.

The project falls under Annex I of the EIA Directive 2011/92/EU, as amended by the Directive 2014/52/EU, and therefore is subject to a full EIA procedure.

The EIA process, the mitigation measures, and the promoter's capacity to manage their implication are deemed to be adequate.

The project is considered acceptable for EIB financing from an environmental and social point of view.