

Biodiversity Impact Assessment

The Proposed Shëngjin to Velipojë Road Scheme, Albania

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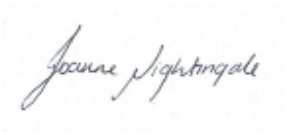
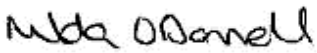
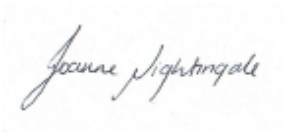
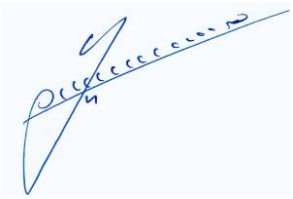
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Executive Summary

On behalf of the European Bank for Reconstruction and Development (EBRD) and the Albanian Development Fund (ADF), RSK undertook a biodiversity impact assessment in August 2019, for the proposed Shëngjin to Velipojë road scheme (hereafter 'the project'). This biodiversity impact assessment supplements the updated Environmental Impact Assessment (EIA): Design of Road Shëngjin – Velipojë Project Ideas (ADF, 2019) and as such this biodiversity impact assessment should be considered in combination with the EIA for the Project.

The proposed project is located on the west coast of Albania, approximately 55 km from Tirana and entails the rehabilitation and upgrade of an existing road and the construction of a new section of road (approximately 15 km in length) between these two towns. According to the Government of Albania, the project is of great public importance, especially for the tourism sector. The proposed project will traverse the Buna River Protected Landscape (IUCN Category 5; National Park), Ramsar, Important Bird Area, Important Plant Area and candidate Emerald Network Site. A dedicated Habitat Regulations Assessment (RSK, 2019) has been undertaken for the Project to identify and assess project-related impacts on the candidate Emerald site's conservation objectives. This was undertaken to ensure and demonstrate that the integrity of the site is not adversely affected by the proposed Project.

The biodiversity baseline of the Project Development Area (PDA) is described in the Albania National Roads Project: Supplementary Baseline Biodiversity Assessment – The Proposed Shëngjin and Velipojë Road Scheme (RSK, 2019c). This supplementary biodiversity assessment characterises the existing biodiversity features within the Project footprint and surrounding environs including the Priority Biodiversity Features (PBFs) and critical habitat-qualifying features for the Project based on screening. These features are of high conservation importance for the Project. This process of prioritisation provides focus to this impact assessment and ensures that the avoidance, mitigation and restoration measures focused on the highest biodiversity values and risks within the zone of influence.

This biodiversity impact assessment assesses project-related impacts on priority biodiversity features during the pre-construction,construction and operation phases. The assessment covers terrestrial habitats and flora; terrestrial fauna (including avifauna, reptiles and invertebrates) and their habitats; aquatic habitats and flora; and aquatic fauna. A precautionary approach was undertaken due to the paucity of project-based environmental and social information and data. The ADF is committed to filling these data gaps and will undertake pre-construction assessments for noise, air quality, water quality and soil conditions prior to the commencement of works. It is anticipated that the data will be used to refine the EIA and the Environmental Management Plan for the Project where necessary.

Some of the key impacts to priority biodiversity features, prior to mitigation, are summarised as follows:

- the permanent loss of a total of 13.7 ha of terrestrial habitat from within the Project footprint including the permanent loss of 11.4 ha habitat from within the Buna River Protected Landscape (a critical habitat-qualifying feature)

- loss of breeding bird habitats, including habitats used by five globally rare and threatened birds and 17 bird species that are classified as rare and threatened by the national Albania Red List arising from habitat clearance, arising from habitat clearance
- loss of a lesser horseshoe bat and greater horseshoe bat roost during habitat clearance
- clearance of 14 Albanian Red Listed plant species (including PBFs) from within the project footprint
- the permeant loss of oak woodland habitat for the great Capricorn beetle (IUCN listed VU, Albanian Red Data Book listed EN) arising from from habitat clearance
- habitat clearance, earth works, excavating and levelling works present a risk of accidental fauna collisions with vehicles and machinery resulting in injury or mortality to some individuals of priority biodiversity fauna including great Capricorn beetles, golden jackals, Eurasian badgers and wildcats that are PBFs for the project
- during operation, the physical structure of the proposed road (i.e. steep sided road embankments, safety barriers and concrete structures), compounded by noise and vehicle movement and artificial lighting is expected to form a barrier to the movement of medium sized fauna with home ranges that overlap the project footprint, in particular golden jackals
- Indirect Project-related impacts associated with facilitated access and Project-related in-migration, particularly the high influx of tourists, poses the greatest risk to habitats and species diversity and abundance within the Project area. It is anticipated that unchecked tourism will result in disturbance to species, habitat degradation and habitat loss.

The Biodiversity Management Plan (BMP; RSK, 2019), the Environmental and Social Action Plan (ESA) and the Environmental Management Plan (ESMP) detail specific avoidance, mitigation and restoration measures to minimise adverse Project-related impacts to habitats and species. Diligent application of best practice measures for minimising and managing the risk of potential Project-related impacts arising from habitat loss and degradation, noise and vibration, accidental vehicle collisions with fauna, artificial light spill, air and water pollutants, barriers to movement, changes in hydrology and water quality is expected to minimise the risks to both priority habitats, species and the Buna River Protected Landscape.

A key priority for the project is the continued safeguard and conservation of the Buna River Protected Landscape, Ramsar site and IBA. Pre-clearance checks will be undertaken to avoid any disturbance and injury to bats, badgers and breeding birds in the PDA during construction. Deadwood from within oak woodland located in the working width will be translocated to a suitable receptor site to minimise the habitat loss and risk of mortality for the great Capricorn beetle. Nationally endemic, rare and threatened plant species will be translocated from within the PDA to a suitable receptor site to minimise the risk of mortality or injury to these individual species. Roosting bats within the PDA will also be translocated to a purpose-built bat roost. The establishment of a wildlife crossing point for golden jackals and other priority fauna will be integral to enable golden jackals and other wildlife to retain access to resources in the PDA.

The implementation of the Reinstatement and Landscaping Plan will be integral to restoring the physical environment and ecosystem function within the PDA as ‘like for like’ (or better) than that which existed prior to Project construction where feasible.

Whilst avoidance, mitigation and restoration actions will reduce the significance of impacts to biodiversity, these actions will not eliminate all residual Project-related impacts. For example, a total of 0.012656 ha of common, natural habitats will be permanently lost from within the PDA.

Residual impacts will also arise from facilitated access and Project-related in-migration; and the magnitude of this impact was difficult to quantify. Hence a Sustainability / Eco-tourism Programme will be implemented by the project to minimise indirect project-related impacts to habitats and vascular plants (and other priority biodiversity features) arising from facilitated access and project-related in-migration (predominantly tourists). The objective of the Assignment is to establish a programme of activities and co-ordinated stakeholder consultation to support sustainable eco-tourism in the Shëngjin and Velipojë region of Albania by undertaking strategic and local actions. It is anticipated that the programme will support increased environmental awareness, sustainable and safe communities within the Shëngjin and Velipojë region, promote environmental preservation and conservation practices, circular economy through establishing stakeholder engagement networks, capacity building (through the provision of tools, management plans and awareness raising materials) and support policy dialogue.

The Project has also committed to establishing an Environmental Monitoring Plan (EMP). This will incorporate a Biodiversity Monitoring and Evaluation Programme to assess the efficacy of the avoidance and mitigation measures and to inform the requirement for adaptive management. The biodiversity monitoring actions has been developed based on the avoidance and mitigation measures designed for the Project; these are presented in the BMP. Where possible, thresholds will be established for each monitoring approach that will alert the Project that mitigation measures need to be adapted and revised biodiversity management measures are required. ADF are committed to implementing the BMP, EMP and ESAP and will work with and direct their contractors to ensure full implementation and compliance.

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5 CUMULATIVE BIODIVERSITY IMPACT ASSESSMENT

5.1 Overview

Activities within the Project area and wider region that could have the potential for cumulative impacts include:

- Other road upgrades in the surrounding area including the transnational Adriatic Ionian highway. The Albanian stretch is part of the Blue Highway which connects the coast of Montenegro with Greece
- Upgraded infrastructure within Velipojë and Shëngjin
- Illegal housing and industrial developments in Velipojë, Shëngjin and the surrounding environs
- Shëngjin Europort

These are discussed below in more detail.

5.2 The Regional and Local Roads Connectivity Project and Other Road Projects

The Regional and Local Roads Connectivity Project aims to rehabilitate key regional and local roads in Albania. The Project is part of a larger investment programme for the rehabilitation of Albania's regional and local road network. This entails linking the entire of Albania's coast with Macedonia to the north and Greece to the south. These developments are likely to lead to increased vehicle traffic though the region of the project and further contribute to in-migration into the Project area.

It is anticipated that future road developments within the Buna River Protected Landscape will lead to further habitat loss and degradation and adverse impacts to species, particularly the increase risk barriers to movement for fauna. Habitats and species within the Protected Landscape are further vulnerable to indirect impacts associated with facilitated access (i.e. uncontrolled coastal development, poor management of urban waste and wastewater and disturbance levels from tourists) that are likely to increase the pressure on the integrity of the Protected Landscape and species populations.

5.3 In-Migration and Unsustainable Tourism Infrastructure

The Adriatic coastline, beaches and seascapes of the Bojana -Buna delta are important for tourism which fuel regional development and long-term economic growth of the region, in which beaches and woodlands attract nearly 250,000 tourists a year, mostly between July and August (UN 2002). The economy of Velipojë and Shëngjin are heavily dependent on tourism, particularly during the summer months. In 2017, the official number of tourists visiting Velipojë was 830,000 and in Shëngjin, the number was over 1 million tourists. These numbers are likely to increase following Project development as the road provides quicker vehicle access than the existing route.

Unchecked tourism poses a risk to habitat quality and species diversity in the region. Disturbance arising from increased noise and human activity arising from tourist activity has the potential to cause disturbance and displacement of wildlife particularly within the coastal habitats of the Buna River Protected Landscape. Unauthorised vehicle use on the beaches, secondary dune systems and dune wetland and high levels of trampling already pose a risk to the quality of these sensitive habitats and an influx of tourist are likely to further contribute to habitat degradation and disturbance to fauna.

Albania's waste management infrastructure is limited, and much household waste is not appropriately disposed (Lico et al 2015). Littering in Shëngjin, Velipojë and the Buna River Protected Landscape is problematic. Plastic waste can have detrimental effects on the biological fitness of wildlife and / or result in the mortality of individuals if ingested. Chlorinated plastic can release harmful chemicals into the surrounding soil, which can then seep into groundwater, causing potentially harmful effects to the aquatic environment and species dependant on it (UNEP website). Poor waste management may also attract pest species (i.e. vermin) which in turn may result in the displacement of natural wildlife and act as vectors of disease. The impacts are likely to increase with Project-related facilitated access and the tourist in-migration.

Protected areas have great potential for the development of sustainable tourism; they can improve the socio-economic status of the local communities while contributing to biodiversity conservation. A visitor centre opened in 2016 in Velipojë, aiming to support the development of sustainable tourism in the Buna River Protected Landscape. The visitor centre raises awareness of the protected area's biodiversity, coastal and wetland ecosystems located along the border of Montenegro and natural heritage values of the area. The project was financed by the Italian Development Cooperation and implemented by IUCN in close collaboration with the Ministry of Environment and the National Agency for Protected Areas of Albania (NAPA). The IUCN is committed to continuing to support the Albanian authorities in the development of sustainable tourism in protected areas, including visitor management planning, development of soft tourism infrastructure, and capacity building for interpretation and visitor management (IUCN, 2016).

5.4 Uncontrolled Development

The region is characterized by recent rapid development, particularly along a narrow strip within 5 km of the coastline and highways (GWP-Med, PAP/RAC, UNESCO-IHP 2015). A construction boom, mainly affecting the coastal zone and the urban centres, in the 1990s was followed by increased informal development, of which there is insufficient control and inadequate mechanisms for the sanctioning of illegal buildings leading to habitat loss and degradation.

5.5 Shëngjin Europort

The Shëngjin Europort is a proposed development of the port of Shëngjin, with aims to make it Albania's largest industrial port. This will enhance the connections between the South Adriatic and East Mediterranean with the rest of Europe. With an estimated capacity of 60 million tonnes per year, the port is expected to significantly increase the connectivity of neighbouring countries such as Kosovo, Serbia and Macedonia. Along with the port development, two tunnels were proposed to link the port beyond the Renci

mountain rage. As of the time of writing, no investment has been made in this project. If this development proceeds, the increase shipping activity is likely to contributed to water quality impacts and underwater noise impacts to aquatic biodiversity in the region.