

## Feasibility Studies and General Design

## SEETO Road Route 4 Investment Plan

## Feasibility Studies for earthworks (cuts, embankments, ground improvements, rock fall &amp; avalanches), tunnels and other structures

Montenegro

**Project**

Feasibility studies and general design for Road Route 4 connecting the port of Bar with Corridor 10 in Serbia.

Part of Montenegro's highway network lies on Route 4 stretch of the core road network defined by the South East Europe Transport Observatory (SEETO). SEETO road route 4 runs for 597 km between Vatin (Romanian border) – Belgrade (Serbia) – Podgorica (Montenegro) - Bar (Montenegro). The Montenegrin portion, runs for about 180 km, generally North – South, from the Serbian border to the coast at Djurmani where it intersects SEETO road route 1, or Adriatic highway.

Design: 2012- 2013

**Project Description**

Feasibility studies and general designs for the alternative alignments of the project, for earthworks (cuts, embankments, ground improvements, rock fall & avalanches), the tunnels (approx. 29km of road tunnels per branch with cross section approx. 90-120m<sup>2</sup>) and other structures.

**Geology**

At the beginning of the route mainly limestone and dolomite formations with some conglomerates and peridotites. After Uvac and up to the Serbian border, the geology changes and flysch, clayey marls, sandstone formations and marly limestones are met.

**Our Services**

- Inception report
- Geotechnical surveys
- Preliminary geotechnical designs
- General geotechnical design and Bidding documents for the construction works
- Operations & maintenance plan
- Environmental and social impact assessments according to the Montenegrin law and the IFIs requirements

**Client**

- MINISTRY OF TRANSPORT & MARITIME AFFAIRS- MONTENEGRO EBRD FINANCED PROJECT
- URS SCOTT WILSON – UK



Route 4: Montenegrin portion



Mountainous terrain typical view