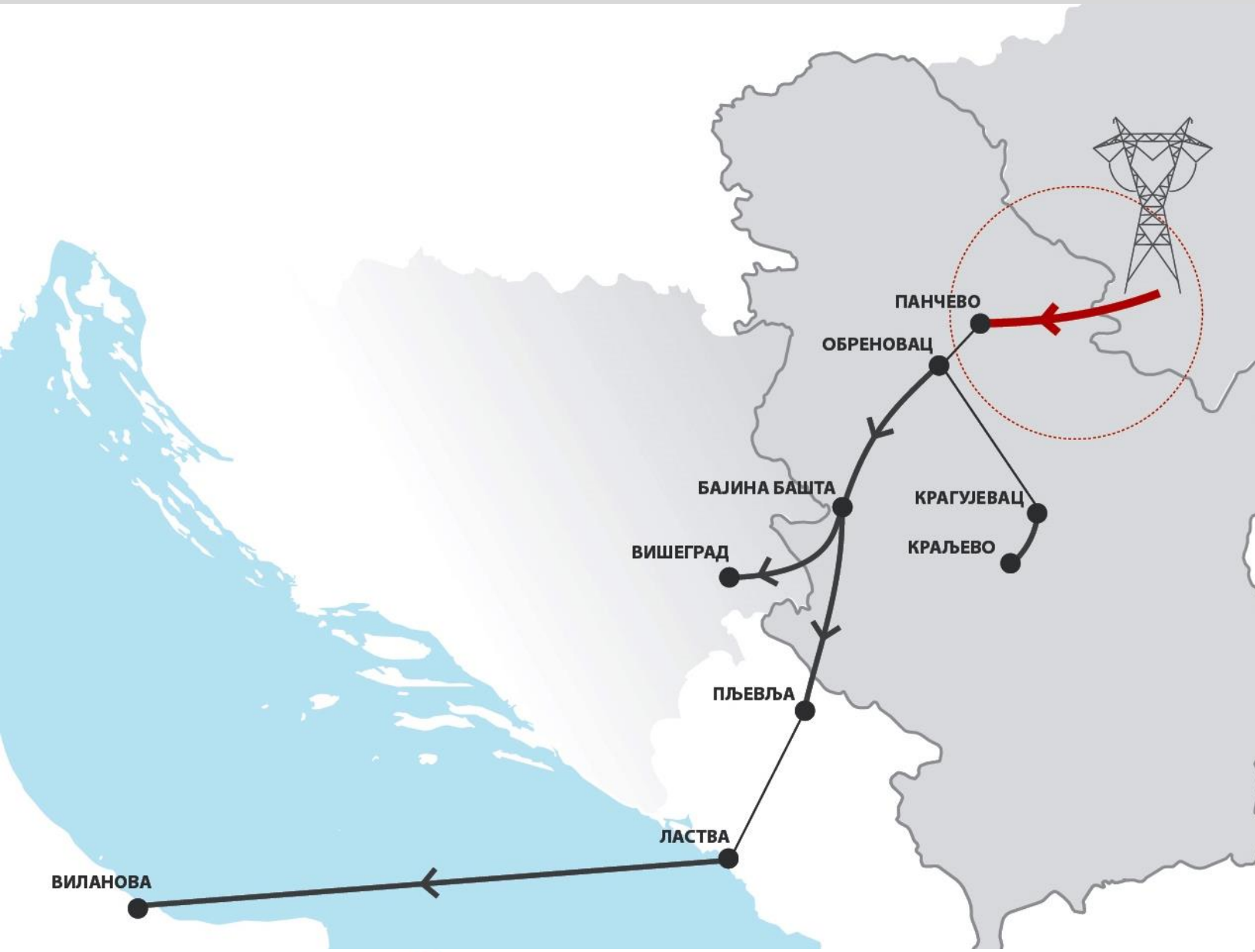
TRANS-BALKAN ELECTRICITY CORRIDOR – PHASE I



АКЦИОНАРСКО ДРУШТВО
ЕЛЕКТРОМРЕЖА СРБИЈЕ

Project overview

Construction of Trans-Balkan Electricity Corridor - Phase I, with its 400 kV power transmission system, represents a project of exceptional national and regional interest which improves the safety and stability of grid operation, provides higher-quality connections for transmission system users and facilitates integration of renewable energy sources.

Having in mind its geographical position, the Corridor acts as a supporting pillar in further integration of regional and national electricity markets into a single European market.

The project helps to fulfill the obligations of the Republic of Serbia related to the mandatory 27% share of renewable energy in gross final consumption, as it will be built in such regions in the Republic of Serbia where massive connections to the transmission system of renewable energy sources are expected, especially wind farms.

All the planned investment facilities of Trans-Balkan Corridor - Phase I have been envisaged by the respective planning documentation of EMS at national level (Ten-Year Transmission System Development Plan of the Republic of Serbia), respective Regional Investment Plans (RgIP) and ENTSO-E pan-European ten-year development plan (TYNDP - Ten Year Network Development Plan).

The Corridor has been the first and unique project of this type and scope in the Republic of Serbia, for which a special Law on determining public interest and special procedures for expropriation and obtaining documentation in order to construct the 400 kV electricity transmission system Trans-Balkan Corridor - Phase I has been adopted. The Law has enacted rules for dealing with administrative procedures initiated for project construction and the rules for acting of authorities when determining the manner of payment of charges and fees in such administrative procedures, thereby significantly reducing the preparation period for constructing transmission lines.

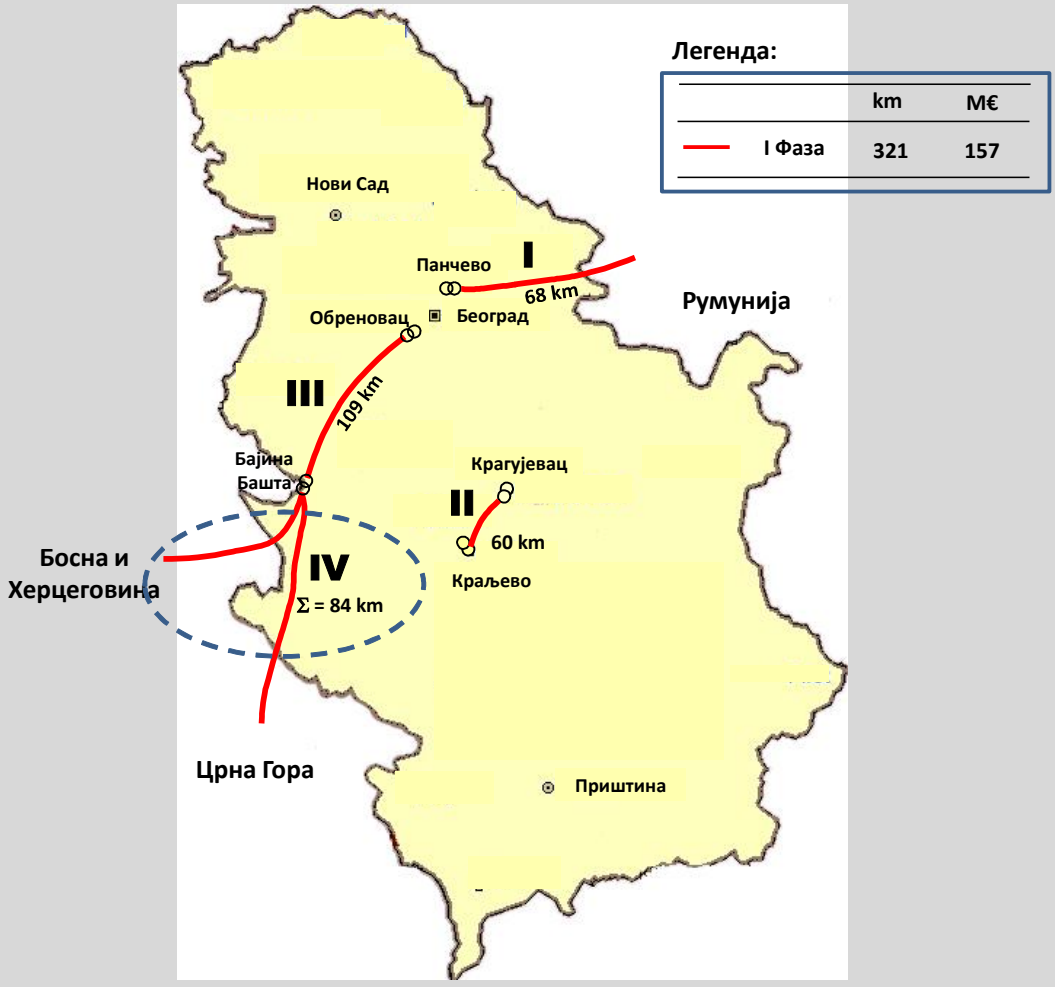
Total length of 400 kV overhead power lines planned for construction in the first phase of the project is approximately 350 km, almost 300 km of which are double-circuit 400 kV overhead power lines. Total estimated budget value of the first phase of project construction amounts to around EUR 157 million. EMS has already initiated the activities on the construction of the Trans-Balkan Electricity Corridor.

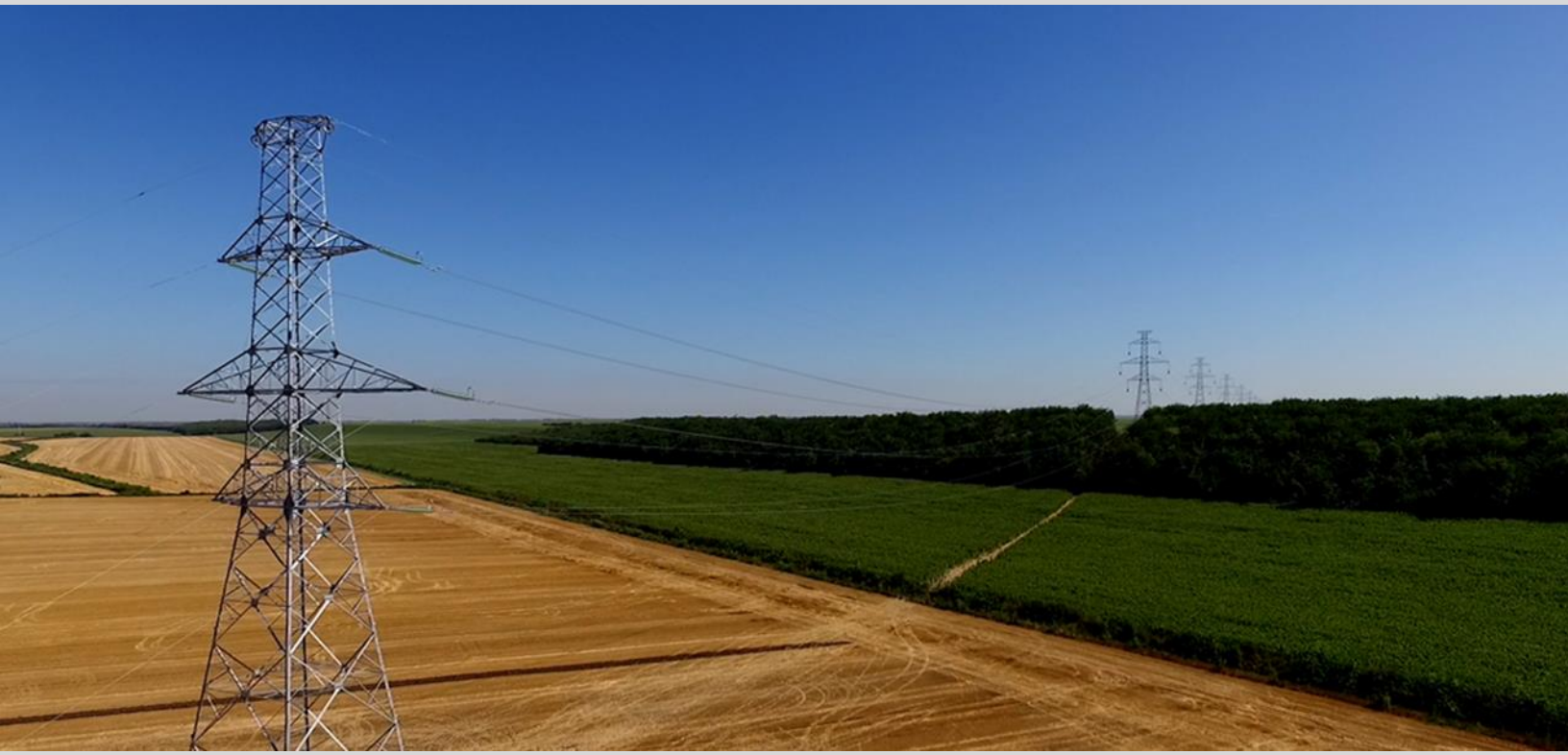
Trans-Balkan Corridor – Phase I
Investment Project and the Status of Its Individual Sections

Trans-Balkan Corridor - Phase I includes the following infrastructural facilities for electricity transmission in the investment phase:

- Section 1: double-circuit 400 kV interconnecting line between Serbia and Romania,
- Section 2: 400 kV overhead power line PS Kragujevac – PS Kraljevo 3, with increase of voltage level in TS Kraljevo 3 to 400 kV,
- Section 3: increase of voltage level of Western Serbia transmission grid to 400 kV between PS Obrenovac and PS Bajina Bašta, which implies new double-circuit 400 kV overhead power line PS Obrenovac – PS Bajina Bašta, reconstuction of the presently operating PS Obrenovac and PS Bajina Bašta,
- Section 4: double-circuit 400 kV interconnection between Serbia, Montenegro, and Bosnia and Herzegovina.

The figure below presents geographical layout of the Trans-Balkan Corridor – Phase I project sections, including their respective lengths.



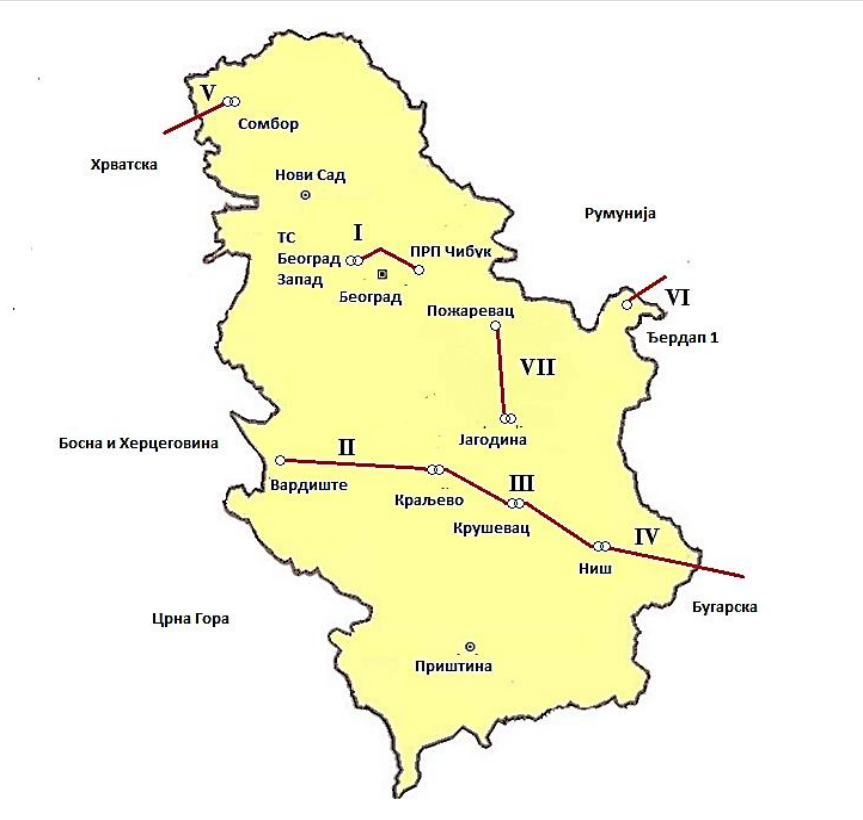


Development project
Trans – Balkan Corridor – Phase II

Further to the aforementioned investment projects, the following activities are also envisaged for future period concerning the electricity transmission infrastructure facilities which are presently in the development or pre-investment stage, under the common name of Trans-Balkan Corridor - Phase II. The second phase of Trans- Balkan Corridor consists of the following sections:

- North CSE corridor – including:
  - PS 400/110 kV Belgrade West,
  - OHPL 400 kV Belgrade West – WF Cibuk 1,
  - Extension of 400 kV interconnection with Romania (Đerdap – Porţile De Fier),
- Central Balkan corridor – with the following projects:
  - OHPL 400 kV Bajina Bašta – Kraljevo,
  - OHPL 400 kV Kraljevo – Kruševac,
  - OHPL 400 kV Kruševac – Niš including upgrade of voltage level in PS Kruševac to 400 kV,
  - 400 kV interconnecting line Niš – Sofia West,
- 400 kV interconnecting line between Serbia and Croatia,
- OHPL 400 kV PS Jagodina 4 – PS Požarevac.

The figure below presents geographical layout of the Trans-Balkan Corridor - Phase II project sections.



All sections of the Trans-Balkan Corridor – Phase I and Phase II project are integrated in the Annex to the Pan-European Ten-Year Network Development Plan, TYNDP 2018 and included in different clusters:

- Transbalkan Corridor – Project ID 227,
- Mid Continental East corridor – Project ID 144,
- North Continental South East Corridor - Project ID 341,
- Central Balkan Corridor - Project ID 342,
- New 400 kV interconnection line between Serbia and Croatia - Project ID 243.

Feasibility Study with Cost Benefit Analysis (CBA) has been developed for the Bajina Bašta – Kraljevo 400 kV OHPL.