Black Sea Submarine Cable Project

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The Main Technical Parameters of Black Sea Submarine Cable Project

1. **Structure:**

   a) 500 kV double circuit OHL SS „Jvari“ - SS „Anaklia“

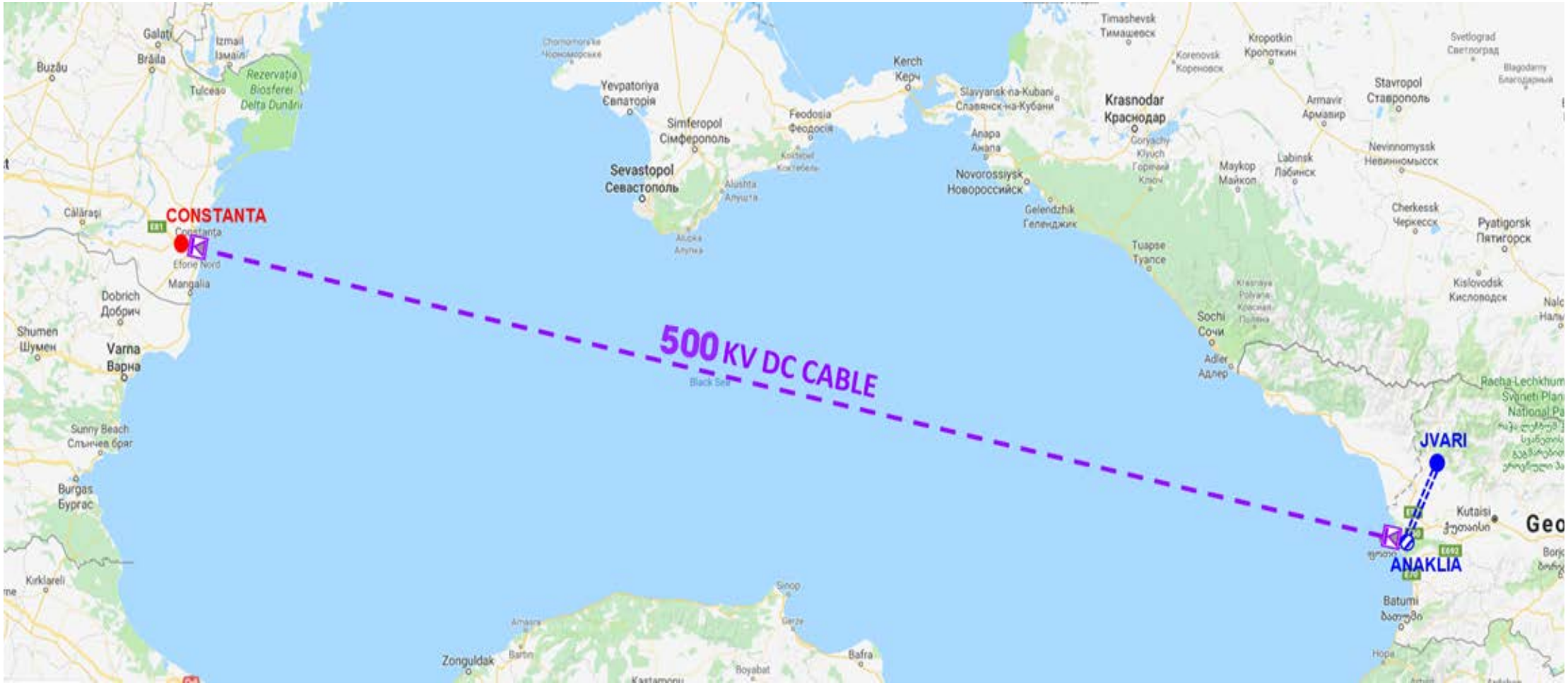
   b) 2X500MW converter station in „Anaklia“

   c) Submarine cable Anaklia - Constanta Sud ±500kV

   d) 2X500MW converter station in Romania (Constanta Sud)

2. **Voltage level of cable**: *500 kV*
3. **Capacity of cable:** *1000-1500 MW*
4. **Length of the interconnector:** *1195 km (OHL - 95 km in Georgia and Romania and submarine cable - 1100 km)*
5. **The submarine cable will also be equipped with fiber-optic cable,** *which will provide high quality internet connection between Romania and Georgia.*
6. **Estimated date of commencement of commercial operation of interconnector**: *year 2030*
7. **Approximate cost of the Project:** *Euro 2,3 Bln.*

Geographical Location of Black Sea Submarine Cable Project



Progress

2019	• Participation in PEPI projects listing (Projects of Eastern Partnership Interest)
2020	• Participation in PECI/PMI projects listing (Projects of energy Community Interest/ Projects of Mutual Interest)
2020	• Release of Preliminary Economic Analysis of the project by the World bank
2021	• Release of two technical studies: HVDC Technology Review and Stability Analysis in the frames of BSTP project (funded by USEA)
2021	• Submission of Black Sea Submarine Cable project to the ENTSO-E 10-year Network Development Plan (TYNDP) projects platform
2022	• Commencement of the Feasibility Study of the project

Current Activities

Feasibility Study

- On the given stage the Feasibility Study (FS) of the project is underway and will be completed by the end of 2023.
- The FS is performed by Italian Consultation Company - CESI.
- The FS will define the technical, economic and financial viability of the project as well as set preliminary the route for the submarine cable.

Cooperation with ENTSO-E

- Georgian State Electrosystem JSC submitted the application of the Black Sea Submarine Cable project to the ENTSO-E 10-year Network Development Plan (TYNDP) projects platform on October 15, 2021 for the purpose of including the given project into ENTSO-E 10-year Network Development Plan of 2022.
- As a result, the project application has been selected in the list of projects to be potentially included in the ENTSO-E TYNDP 2022 list
- The approved TYNDP 2022 will be released by ENTSO-E in first quarter of 2023.

Tasks in Feasibility Study

- Task 1 - Estimation of an Optimal Interconnection Capacity → Ongoing, partially completed
- Task 2 - Technical Definition of the Project (including Routing and Environmental & Social study) → Ongoing
- Task 3 - Power System Studies → Started, network models setting-up completed. Waiting for data confirmation from Task 1
- Task 4 - Evaluation of Project Construction Cost and Economic Analysis of the Project → Started with preliminary CAPEX definition
- Task 5 - Evaluation of Financing Options of the Project and Financial Analysis → Not started
- Task 6 - Development of Implementation Plan, Procurement Strategy, and Preparation of Bidding Documents → Not started

HVDC cable technology

- Preliminary seabed profile based on preliminary (indicative) route
  - ❑ length of approx. 1110 km
  - ❑ maximum water depth around 2250m
- Target year of the project (link in operation at 2030)
- Maximum power with two cables up to 1300 or 1500MW (depending on cable insulation technology) as per manufacturers indications
- Fiber optic cable to be separate from power cable

Romania **Georgia**

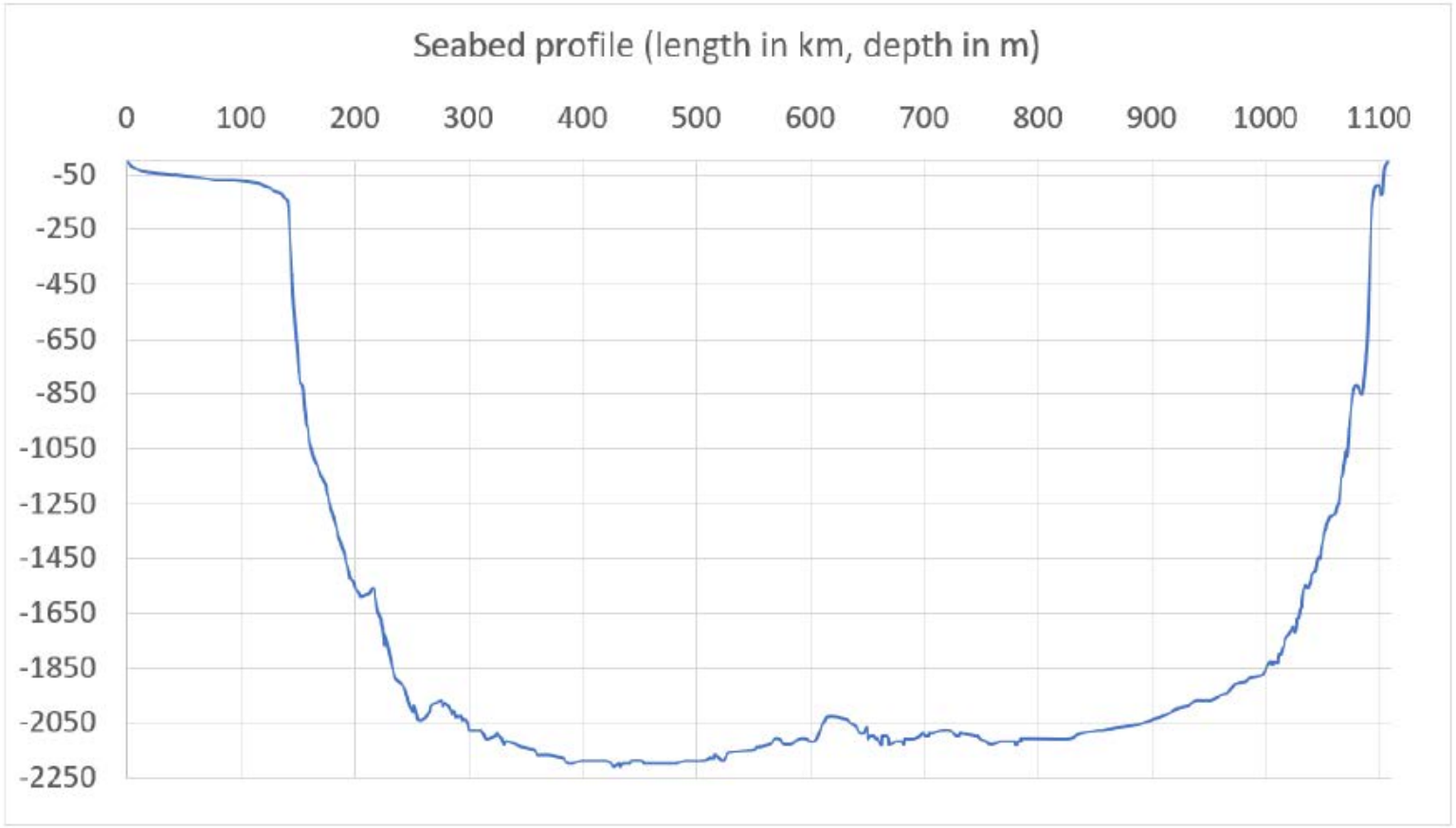


Figure 2 – Preliminary seabed profile of route corridor (KP 0 corresponds to Romania side)

Activities to be performed

2022

Signing tripartite Memorandum of Understanding between Georgia, Romania and the Republic of Azerbaijan

2022

Release of project assessment report by ENTSO-E

2023

Initiation of ESIA

2023-2024

Initiation of underwater geotechnical and geophysical study

THANK YOU FOR YOUR ATTENTION!