

# INVITATION FOR PREQUALIFICATION

**for 400 kV Transmission Line Albania - North Macedonia (Fier - Elbasan - Qafe Thane)**  
**BMZ-Nr. 2010 66 992**

## **Lot 2: Substations**

1. The Operatori i Sistemit të Transmetimit (OST sh.a), in Albania, will use funds provided by KfW within the scope of German Financial Co-operation towards financing the implementation of the project

### **400 kV Transmission Line Albania - North Macedonia (Fier - Elbasan - Qafe Thane)<sup>1</sup>**

The project comprises two (2) lots, as follows:

- **Lot 1: Overhead Lines**, pertaining to the construction of a 400 kV transmission line between Fier - Elbasan - Qafe Thane (Albania/North Macedonia border). The line corridor for Fier - Elbasan section will have an approximate length of 74 km and the section Elbasan - Qafe Thane section will have an approximate length of 56 km. Both sections will be configured as a single-circuit. After commissioning of the new lines, Elbasan and Fier will be part of the regional 400 kV network, the so-called Corridor 8.
  - **Lot 2: Substations**, pertaining to the construction of a new substation Elbasan 3 and the reinforcement and extension of substation Fier. The new substation Elbasan 3 will extend the existing 400/220/30 kV substation Elbasan 2 with a switchyard on 400 kV level with double busbar to connect the lines to Tirana 2, Zemblak, Fier and North Macedonia and a shunt reactor. In substation Fier, the existing 220 kV switchyard will be extended, a new 400/220/35 kV autotransformer shall be installed and a double busbar switchyard on 400 kV level will be constructed.
2. OST sh.a, hereinafter referred to as “the Employer”, now invites Applications of firms/joint ventures interested to qualify for **Lot 2: Substations**.

Bidding shall be conducted by means of the International Competitive procedure with prequalification, as specified in KfW’s “Guidelines for the Procurement of Consulting Services, Works, Goods, Plant and Non-Consulting Services in Financial Cooperation with Partner Countries” (“Guidelines” - [https://www.kfw-entwicklungsbank.de/PDF/Download-Center/PDF-Dokumente-Richtlinien/Vergaberichtlinien-2019-Englisch-Internet\\_2.pdf](https://www.kfw-entwicklungsbank.de/PDF/Download-Center/PDF-Dokumente-Richtlinien/Vergaberichtlinien-2019-Englisch-Internet_2.pdf)).

3. The contract scope includes design, engineering, manufacturing, transportation to site, unloading, temporary storage, installation, commissioning and tests on completion of the substations, all works on the respective locations, as well as obtaining necessary permits for construction and commissioning, on a turnkey basis, for:

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<sup>1</sup> A development Project of the Republic of Albania through Operatori i Sistemit të Transmetimit Sh. a. (OST) co-financed by the Federal Republic of Germany through KfW and by the European Union within the Western Balkans Investment Framework.

### Extension of existing 220/110/35 kV Fier Substation

- 220 kV switchyard extension by a new bus-coupler and a new 400/220/35 kV transformer bay and space for future OHL bays
- new 400 kV switchyard in double busbar arrangement, comprising:
  - one (1) transformer bay for connection to new 400/220/35 kV autotransformer
  - one (1) busbar coupler bay
  - one (1) OHL bay
  - three (3) spare spaces OHL bays
  - two (2) metering bays.
- one (1) new 3-ph autotransformer 400/220/35 kV 400/400/30 MVA
- MV switchgear
- Auxiliary Power Supply Systems, including auxiliary transformers, diesel generator set, LV AC/DC installations
- power and control cabling
- integration of new facilities to the existing control and protection system
- new Substation Control and Monitoring System (SCMS) controlling existing and new facilities
- integration of new facilities to the existing telecommunication system
- extension of existing lighting and small power system for the new facilities
- extension of existing earthing and lightning protection systems for the new facilities
- integration of new facilities to the existing metering system
- civil works, including:
  - site investigations
  - piling or soil improvement works
  - preparatory and infrastructural works
  - site installation works
  - foundation works for building(s) and equipment supporting structures
  - structural and non-structural steel works
  - building works (extension of existing Control Building and new Relay & Auxiliary House)
  - access roads, internal and connection roads, foot paths, pavings etc.
  - works for cable routing, ducts, channels, road crossings etc.
  - fire protection works
  - water supply system, water tanks for the new building(s)
  - extension of existing outdoor system and new indoor lighting system for the new building(s)
  - rainwater and domestic water drainage and sewage systems
  - extension of existing fencing system and gates
  - surfacing and landscaping
  - heating, ventilation and air-conditioning of new building(s).

### Modification works in existing 400/220/30 kV Elbasan 2 Substation

Modification of existing 400 kV outdoor switchyard, including:

- decommissioning and shifting of reusable primary and secondary equipment from existing 400 kV line bays of Elbasan 2 (connections to Zemblak and Tirana 2) to respective bays within new 400 kV Elbasan 3

- decommissioning and shifting of reusable primary and secondary equipment from existing 400 kV bus coupler bay to new 400 kV switchyard (if applicable)
- decommissioning and storage of primary and secondary equipment identified as non-reusable, from two above-mentioned items
- considering above-mentioned shifting and decommissioning of primary and secondary equipment, necessary arrangement of new connections from existing autotransformers AT-1 and AT-2 circuit breaker to line disconnector of Elbasan 2 substation to be made
- structural works related to above mentioned decommissioning and shifting of equipment.
- Modification/extension of existing outdoor 30 kV auxiliary system, so as to allow the auxiliary supply of new Elbasan 3 by a short overhead line connection with Elbasan 2 (the OHL connection itself is not part of the Contract).
- Modification and updating of existing substation control and protection system
- Modification and updating of existing Substation Control and Monitoring System (SCMS)
- Civil works, as necessary to allow the modifications.

Construction of new 400/30 kV Elbasan 3 Substation:

- The new substation will comprise a new 400 kV switchyard with nine (9) 400 kV bays organized in a double busbar arrangement, plus metering bays:
  - two (2) transformer bays, for connection of remote auto-transformers at Elbasan 2
  - four (4) OHL bays for connection of lines to Bitola, Zemblak, Tirana 2 and Fier
  - one (1) spare OHL bay
  - one (1) shunt reactor bay
  - one (1) coupler bay
  - two (2) metering bays.
- one (1) new 3-ph 1-winding shunt reactor 400 kV, 120 MVar.
- Auxiliary Power Supply Systems, including auxiliary transformers, diesel generator set, LV AC/DC installations
- power and control cabling
- control and protection system
- Substation Control and Monitoring System (SCMS)
- telecommunication system
- lighting and small power system
- earthing and lightning protection systems
- metering system
- civil works, including:
  - site investigations
  - piling or soil improvement works
  - preparatory and infrastructural works
  - site installation works
  - foundation works for building(s) and equipment supporting structures
  - structural and non-structural steel works
  - building works (new Substation Control Building)
  - access roads, internal and connection roads, foot paths, pavings etc.
  - works for cable routing, ducts, channels, road crossings etc.

- fire protection works
- water supply system, water tanks,
- outdoor and indoor lighting systems
- rainwater and domestic water drainage and sewage systems
- fencing systems and gates
- surfacing and landscaping
- heating, ventilation and air-conditioning.

4. The Invitation for Bids is expected to be made in calendar week 32 of 2019.

5. Applicants have to furnish, as part of their Applications, documentary evidence establishing their qualifications to perform the contract if their bid is accepted.

6. Interested firms may obtain further information from:

FICHTNER GmbH & Co. KG  
 Sarweystrasse 3  
 70191 Stuttgart / Germany  
 Mr. Konstantinos Zachos  
 Email: konstantinos.zachos@fichtner.de  
 Phone: +49 (711) 8995 670  
 Fax: +49 (711) 8995 459

7. To purchase the Prequalification Document, eligible Applicants should:

- write to the above mentioned address, requesting the Prequalification Document. This request must be accompanied by a cover letter, clearly stating the name of the company and the country of domicile.
- pay a non-refundable fee of EUR 200.
- upon request, the documents will be promptly dispatched by courier, but no liability can be accepted for loss or late delivery. An electronic copy shall also be sent to the interested Applicants.

8. The Applications for Prequalification (in accordance with the instructions of the Prequalification Document) shall be delivered on the above mentioned address, on or before 26 June 2019, 13:30 p.m. CET.

9. The opening of the Applications shall take place on 26 June 2019, 13:30 p.m. CET., at the main offices of FICHTNER GmbH & Co. KG in Stuttgart.

10. No liability can be accepted for any costs or expenses incurred by the Applicants in connection with the preparation or delivery of their Applications.