

**Request For Information (“RFI”) from Israel Independent System Operator
("NOGA")
regarding the Transmission of Submarine Electrical Energy**

1. General

- 1.1. NOGA - Israel Independent System Operator Ltd. (“NOGA”) is an Israeli government-owned company operating as an independent system operator pursuant to a System Operator License, as defined in the Electricity Sector Law, 5756-1996. As an independent system operator, NOGA is responsible for the operation of the Israeli electricity system, as well as for its future planning and development.
- 1.2. Through this RFI, NOGA requests information regarding the existing technologies of transmission of submarine electrical energy for the purpose of NOGA’s review of a future submarine power cable.

2. Time Schedule

- 2.1. The RFI shall be conducted on the following dates:

RFI release date	04-Apr.2023,
Last date for submitting a Clarification Request (“ Last Date for Submitting CR ”)	18-Apr.2023
Last date for submitting a response to the RFI (“ Last Date for Submitting Response ”)	01-May.2023,

- 2.2. NOGA may, at its sole discretion, postpone any of the deadlines listed above, but shall not be obliged to do so at the request of any of the participants.

3. Required Information

- 3.1. NOGA wishes to carry out a review of **the experience of installation** that are implemented for the transmission of submarine electrical energy for its implementation along the Israeli coastline. The information should include a review of the technical literature, a review of technologies suitable for the system requirements, examples of systems installed around the world (including a description of similarities to NOGA requirements for this project), experience of equipment manufacturers, cost estimations and initial configuration of the system in the State of Israel.

3.2. Detailed information below in Annex 1.

4. **Clarification Requests**

- 4.1. The participants may direct questions or seek additional information (“**Clarification Request**”).
- 4.2. Any Clarification Request should be submitted in writing to the e-mail address mentioned in Section 5.2.
- 4.3. A Clarification Request should be submitted by no later than the Last Date for Submitting CR as specified in Section 2.1.
- 4.4. NOGA may address a Clarification Request but is not obligated to do so. At NOGA’s discretion, any response to a Clarification Request may be issued in writing to all participants, *provided, however*, that the identity of the participant submitting the Clarification Request will not be disclosed.

5. **NOGA’s POC; Submission Place**

- 5.1. NOGA has appointed the following person as its POC for the purpose of this RFI: Itay Heidemann (“**NOGA’s POC**”).
- 5.2. All communications relating to this RFI should be addresses to NOGA’s POC through the following e-mail address: Itay.Heidemmann@noga-iso.co.il
- 5.3. All documents submitted pursuant to this RFI, should be submitted to the e-mail address mentioned in Section 5.2.

6. **General Prerogative**

- 6.1. At any time prior to the Last Date for Submitting Response, NOGA may refine, change, amend, add to, eliminate from or modify this RFI, for any reason, whether on its own initiative, or in response to a Clarification Request received pursuant to Section 4.
- 6.2. NOGA may communicate and hold meetings with any or all participants during any stage, including after the Last Date for Submitting Response, at NOGA’s sole discretion.

7. **General Terms**

- 7.1. The purpose of this RFI is only to gather information from entities interested in participating in a future tender or competition process for a consultation project in the field of submarine electrical energy, should one take place.
- 7.2. This RFI does not constitute a tender or an invitation to make proposals, but an early request for information in accordance with the provisions of Section 14A of the Mandatory Tenders Regulations

5753-1993 (“**Regulations**”). Therefore, the participants are hereby informed that according to the provisions of the Regulations:

- 7.2.1. NOGA’s tenders committee shall keep a record of any information received through the responses and any discussions that have taken place with participants.
- 7.2.2. Responding to this RFI is not a prerequisite for participating in a future tender or competition process, should one be held, and will not confer any advantage on participants. The participants are not obligated to participate in any future tender or to engage with NOGA in any other way.
- 7.2.3. Any information received through a response to this RFI, on the basis of which a tender or other competition process was held in accordance with the Regulations, shall be subject *mutatis mutandis* to the right to review and access to information under Section 21(e) of the Regulations.
- 7.3. Without derogating from the generality of the aforesaid, it is hereby clarified that any detail described or indicated in this RFI may be changed at the sole discretion of NOGA and is not meant to bind NOGA in any way.
- 7.4. The participants shall bear all costs associated with preparing and submitting a response and shall not be entitled to any consideration and/or any reimbursement and/or compensation and/or indemnity for any expenses and/or damages incurred in connection with this RFI and/or with submitting a response.
- 7.5. This RFI shall be governed by and construed in accordance with the laws and regulations of the State of Israel. The applicable courts in Haifa shall have the exclusive jurisdiction with respect to all matters and all disputes arising in connection with this RFI.

Annex 1

Detailed requests

Subject: **Contact for information / advice on submarine electric energy transmission solutions**

1. Background:

NOGA wishes to carry out a review of the experience of installation that are implemented for the transmission of submarine electrical energy for its implementation along the Israeli coastline.

The requested service may include the requirements listed below. These requirements should not be taken as a closed list and additional requirements may be added in the future. The information should include a review of the technical literature, a review of technologies suitable for the system requirements, examples of systems installed around the world (including a description of similarities to NOGA requirements for this project), experience of equipment manufacturers, cost estimations and initial configuration of the system in the State of Israel.

2. Defining the basic system needs:

2.1. Basic assumptions:

2.1.1. The Israeli transmission system is according to the Grid Code at NOGA website-

www.noga-iso.co.il

2.1.1.1. The transmission system including 400 kV and 161 kV lines, while the interface are at the 400/161 kV substations.

2.1.1.2. The transmission system is design according to N-1 and N-2 criteria.

2.1.2. Submarine transmission system:

2.1.2.1. The submarine lines will be in parallel to the Israeli transmission lines.

2.1.2.2. The reliability of the submarine system will be equivalent to the Israeli transmission system.

2.1.2.3. The landing points shall be according to sub-clause 2.2.

2.1.2.4. The system under study will have a transmission capacity of 900 MW.

2.1.3. The transmission line length is up to the entire length according to the landing points, moreover the landing areas near the coastline and/or far up to 10 km from the coastline.

2.2. Landing points - The options for landing points for each landing zone:

2.2.1. Center

2.2.1.1. Sorek

2.2.1.2. Morasha

2.2.1.3. Cesarea (Orot Rabin Power Plant)

2.2.2. South

2.2.2.1. Ashkelon (Rotenberg Power Plant)

2.2.2.2. Nir Galim

3. Required information:

3.1. It is required to receive information about the following issues:

3.1.1. A inform on currently installation methods for laying HV cables (offshore and onshore) considering the guidelines included in clause 4.

3.1.2. Information about statutory and environmental aspects that may directly or indirectly influence in the project characteristics both offshore and onshore.

4. Note:

The study should consider the characteristics of the seabed in the corridor belonging to the statutory strip for a marine infrastructure of natural gas called National Outline Plan no. 37/a/2 (תמ"א 37/א/2). This strip runs about 3 km from the Israeli coastline with a variable width of about 100 m. With land entrances in the area of Ashkelon, Ashdod, Palmachim, Tel Aviv, Hadera and Dor. The possibility of expanding this marine infrastructure strip for the transmission of electrical energy will be considered as part of a plan for national infrastructure, accompanied by a supportive government decision

