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Tender

## **NGET Call For Innovation - Innovative Solutions For Partial Discharge Monitoring On Substation Assets**

NATIONAL GRID ELECTRICITY TRANSMISSION PLC

F05: Contract notice – utilities

Notice identifier: 2023/S 000-008871

Procurement identifier (OCID): ocds-h6vhtk-03b667

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### **Section I: Contracting entity**

#### **I.1) Name and addresses**

NATIONAL GRID ELECTRICITY TRANSMISSION PLC

1 - 3 Strand

LONDON

WC2N5EH

#### **Contact**

Krishna Chauhan

#### **Email**

[Krishna.Chauhan@nationalgrid.com](mailto:Krishna.Chauhan@nationalgrid.com)

#### **Telephone**

+44 7866154330

#### **Country**

United Kingdom

**Region code**

UK - United Kingdom

**Companies House**

2366977

**Internet address(es)**

Main address

<https://www.nationalgrid.com/electricity-transmission/innovation>

**I.3) Communication**

The procurement documents are available for unrestricted and full direct access, free of charge, at

<https://www.nationalgrid.com/electricity-transmission/innovation/how-to-work-with-us>

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

<https://www.nationalgrid.com/electricity-transmission/innovation/how-to-work-with-us>

**I.6) Main activity**

Electricity

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## **Section II: Object**

### **II.1) Scope of the procurement**

#### **II.1.1) Title**

NGET Call For Innovation - Innovative Solutions For Partial Discharge Monitoring On Substation Assets

Reference number

CFI002

#### **II.1.2) Main CPV code**

- 71700000 - Monitoring and control services

#### **II.1.3) Type of contract**

Services

#### **II.1.4) Short description**

The Call for Innovation (CFI) is an approach to the market to see what products and services are available in the industry with funding coming from Ofgem's Network Innovation Allowance.

A CFI is not a formal competitive tender process but is an approach to the market with a specific problem statement or topic of interest that National Grid would like to hear ideas about from the marketplace.

All information received will be used to consider whether we want to engage with a specific supplier or whether we believe a competitive tender approach is required. Essentially this CFI will inform or dictate our procurement strategy.

#### **II.1.6) Information about lots**

This contract is divided into lots: No

### **II.2) Description**

#### **II.2.2) Additional CPV code(s)**

- 65300000 - Electricity distribution and related services

### **II.2.3) Place of performance**

NUTS codes

- UK - United Kingdom

### **II.2.4) Description of the procurement**

National Grid Electricity Transmission (NGET) currently carries out routine radio frequency interference (RFI) surveys using hand held survey technology and trailer bound equipment to monitor partial discharge (PD) activities in substations. The survey results are important for NGET to implement effective asset management.

However, due to the intermittent nature of PD, the surveys cannot capture all PD activities and thus can miss early signs of asset failures. The survey activities and the maintenance of the trailer fleet also incur overheads and carbon emission. NGET thus seeks more efficiency ways to monitor PD activities in substation.

The purpose of this CFI is to help NGET to identify:

- A solution for long-term PD monitoring that is suitable for HV transmission substation assets and involves minimum manual intervention

This CFI will inform NGET about current state-of-the-art of long-term PD monitoring and the approach of obtaining the required resources, products and services.

NGET is looking to explore what services could be developed and/or packaged to address the requirements with reference to geographical coverage, information about these services and companies able to provide them, and the interest from the supply base in working with National Grid.

The solution(s) must:

- Be able to provide the same or higher quality of PD monitoring results when compared with NGET's current methods
- Have the potential to provide long-term PD monitoring in HV transmission substations
- Have the potential to replace the current manual RFI survey which is based on hand held, portable equipment and trailer bound monitoring technology.
- Be non-intrusive and does not require an outage for installation, maintenance or repairment
- Be effective and efficient in PD monitoring with minimal manual intervention

- Be of an optimised design to ensure space efficiency while being maintainable
- Be able to last for at least 12 months in a HV substation environment uninterrupted
- Be able to interface via suitable means to substation systems, e.g., secure IP rated power connectors to LVAC systems
- Meet all relevant NG technical specifications
- Comply with all relevant industry and international standards
- Be clear on asset lifecycle and lifespan
- Have provision for an implementation/delivery plan or timescales
- Have provision for the cost for the contractor to deliver the project proposal / response to this call

The solution(s) should:

- Consider different delivery platforms to achieve minimal CAPEX and OPEX
- Have relevant product or service certification to operate within a substation environment or electricity network.
- Be redeployable
- Economical and time efficient service schedule(s).
- Minimal environmental impact - from the manufacture to operations.
- Require minimal civil works to install.
- Be able to monitor all areas of a High Voltage substation
- Be deployable and redeployable by National Grid Technicians
- Be configurable by National Grid technicians without recourse to supplier.

The solution(s) won't:

- Be a research project or concept (TRL 1 - 4)

#### **II.2.5) Award criteria**

Price is not the only award criterion and all criteria are stated only in the procurement documents

**II.2.7) Duration of the contract, framework agreement or dynamic purchasing system**

Duration in months

12

This contract is subject to renewal

No

**II.2.10) Information about variants**

Variants will be accepted: Yes

**II.2.11) Information about options**

Options: Yes

Description of options

NGET will have the option to extend the term of any agreement.

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## **Section IV. Procedure**

### **IV.1) Description**

#### **IV.1.1) Type of procedure**

Negotiated procedure with prior call for competition

#### **IV.1.8) Information about the Government Procurement Agreement (GPA)**

The procurement is covered by the Government Procurement Agreement: No

### **IV.2) Administrative information**

#### **IV.2.2) Time limit for receipt of tenders or requests to participate**

Date

26 April 2023

Local time

5:00pm

#### **IV.2.4) Languages in which tenders or requests to participate may be submitted**

English

#### **IV.2.6) Minimum time frame during which the tenderer must maintain the tender**

Duration in months: 6 (from the date stated for receipt of tender)

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## **Section VI. Complementary information**

### **VI.1) Information about recurrence**

This is a recurrent procurement: No

### **VI.4) Procedures for review**

#### **VI.4.1) Review body**

National Grid Electricity Transmission Plc

Warwick

Country

United Kingdom