

# **SCOPE OF WORK (SOW)**

## **TABLE OF CONTENT**

<b>1. GENERAL.....</b>	<b>3</b>
<b>2. SCOPE OF WORK .....</b>	<b>3</b>
<b>3. BID PRICE SCHEDULE:.....</b>	<b>4</b>
<b>4. PHYSICAL AND OTHER PARAMETERS .....</b>	<b>4</b>
<b>5. DIFFERENT SECTIONS OF TECHNICAL SPECIFICATION.....</b>	<b>6</b>
<b>6. SPECIFIC REQUIREMENT .....</b>	<b>6</b>

## 1. GENERAL

Purulia Kharagpur Transmission Company Limited (PKTCL) has been awarded for implementation of "Supply and Installation of OPGW (48F) along with required accessories and required Fiber Optic Terminal Equipment (FOTE) for commissioning of optical fiber links on ISTS line -: 400 kV D/C Kharagpur Chaibasa Transmission Line (Line Length: 161.67 Km) approved as Communication Scheme in the 38th meeting of NCT held on 25.02.2026.

### 1.1. Associated Communication System:

The following communication system is envisaged under the scheme:

- Installation of one (1) OPGW cable containing 48 fibers (48F) by replacing one (1) existing earth wire under live-line condition.
- One (1) no. STM 16 Fiber Optic Terminal Equipment (FOTE)

Supply and installation of OPGW (48F) along with required accessories, approach cables, required Fiber Optic Terminal Equipment (FOTE) for commissioning of optical fibre links on ISTS. The line length is 161.67 Km.

## 2. SCOPE OF WORK

The scope of work shall cover following:

Survey, planning, design, engineering, supply, testing at manufacturer's works, transportation, removing of Earthwire and its accessories, unloading and delivery at site including insurance & storage, installation & supervision of OPGW and its accessories in live line condition including all associated works, splicing, termination, testing, training, and demonstration for acceptance, commissioning and documentation for the Communication System defined below:

### I. Fiber Optic Cabling and associated items

- a) OPGW including all associated hardware accessories & fittings
- b) Fiber Optic Approach Cable including installation hardware
- c) Fiber Optic Distribution Panels (FODP) & Joint Box
- d) Supply of Spares
- e) Fiber Optic Terminal Equipment (FOTE)
- f) All other associated work/items described in the technical specifications.

*The existing earthwire along with its hardware & fittings shall be dismantled & taken away by the Contractor for installation of OPGW. The Contractor shall quote the buyback price for the dismantled earth wire / OPGW (along with hardware fittings & accessories)."*

Standard OPGW designs are to be used for various voltage levels & wind zones of transmission lines that are mentioned in **Section-02 Specification for OPGW cabling and associated hardware & fittings**. In case of constraints in adopting standard design for any of the transmission line(s) or for any specific sections such as higher spans (>600m), Valley crossings, snow covered sections or for other voltage levels & wind zones etc., the Contractor may propose customized design(s) during detailed engineering to meet the requirement. Mostly, the OPGW Cable under this specification shall be installed under live line conditions, i.e. with all circuits of the transmission line charged to their voltage Installation.

However, the actual quantities for the requirement may vary during implementation which shall be finalized after detailed survey. The Contractor has to carry out the detailed survey and collect the required data for preparation of OPGW BOQ.

All other associated works/items described in the technical specifications for a viable and fully functional communication network.

The above scope of work is indicative, and the detailed scope of work is given in Section-01 of Technical Specifications (Volume-II) of the Bidding Documents.

### 3.0 BID PRICE SCHEDULE:

The Bid Price Schedule is attached separately in Volume-III

### 4.0 PHYSICAL AND OTHER PARAMETERS

#### 4.1 Details of the Transmission Line - The details of the transmission line are indicated below:

Name of Transmission Line	Originating Location	Terminating Location	Line Length (KM)
<ul style="list-style-type: none"> <li>400 kV D/C Kharagpur Chaibasa Transmission Line</li> </ul>	Kharagpur Substation	Chaibasa substation	161.67

Total -**161.67 kms** (approx.)

PKTCL will provide the requisite support to the successful Bidder to access to the site/locations for performing the Scope of Work.

The Contractor shall be responsible for planning and conducting its operations and those of its sub-contractors so that neither the Contractor nor any of its sub-contractor shall (a) enter upon lands (other than the designated Site) or waterbodies in their natural state unless authorized by the Project Manager and or appropriate person; (b) close or obstruct any utility installation, highway, waterway, harbor, road or other property unless applicable permits are obtained and authorized by the Project Manager and or appropriate person; or (c) disrupt or otherwise interfere with the operation of any portion of any pipeline, telephone, conduit or electric transmission line, ditch, navigational aid, dock or structure unless otherwise specifically authorized by the appropriate Person.

5. **DIFFERENT SECTIONS OF TECHNICAL SPECIFICATIONS**

For the purpose of scope of work, technical specification shall consist of following sections along with associated Sections that are mentioned below:

1. Section -01 General
2. Section -02 OPGW
3. Section -07 Testing
4. Section -08 Training and support services
5. Section -09 Documentation
6. Section -10 Project Management

6. **SPECIFIC REQUIREMENTS**

*{Left Blank}*

*----- End of Scope of Work -----*