POWER GRID COMPANY OF BANGLADESH LIMITED

Tender Documents
for
Procurement of

Southern Chattogram and Kaliakoir Transmission Infrastructure Development Project.

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Package-2)

Volume 3 of 3

Invitation for Tenders No.	: 27.21.0000.101.07.319.23.4130; August 28, 2023
IOCT No.	: PGCB/AIIB/000308-BGD/TL/Package-2
Country	: Peoples Republic of Bangladesh

Employer:

Power Grid Company of Bangladesh (PGCB)
Head Office, Avenue-03, Jahurul Islam City
Aftabnagar, Badda, Dhaka-1212, Bangladesh

Contents of the Tender documents

Table of Contents Page

Schedule A: Introduction and Preamble to the Price and Technical Schedules

1. Scope of Works and General Information

Please refer to the volume 2 of 3 of the tender documents.

Annex 1-1: Scope and Extent of Definite Works

Please refer to the volume 2 of 3 of the tender documents.

Annex 1-2: Terminal Points

Please refer to the volume 2 of 3 of the tender documents.

Schedule B: Tender Prices & Schedules

1. General

1. The Price Schedules are divided as follows:

Schedule No. 1:	Plant and Mandatory Spare Parts Supplied from Abroad
Schedule No. 2:	Plant and Mandatory Spare Parts Supplied from within the Employer's Country
Schedule No. 3:	Design Services
Schedule No. 4:	Installation and Other Services
Schedule No. 5:	Grand Summary
Schedule No. 6:	Recommended Spare Parts

2. The Schedules do not generally give a full description of the plant to be supplied and the services to be performed under each item. Tenderers shall be deemed to have read the Employer's Requirements and other sections of the Tender document and reviewed the Drawings to ascertain the full scope of the requirements included in each item prior to filling in the rates and prices. The entered rates and prices shall be deemed to cover the full scope as previously mentioned, including overheads and profit.

3. If Tenderers are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with ITB 7 prior to submitting their tender.

2. Pricing

1. The units and rates in figures entered into the price schedules should be type written or if written by hand, must be in print form. Price schedules not presented accordingly may be considered nonresponsive. Any alterations necessary due to errors, etc., shall be initialed by the Tenderer.

   As specified in the tender data sheet and special conditions of contract, prices shall be fixed and firm for the duration of the contract, or prices shall be subject to adjustment in accordance with the corresponding appendix (price adjustment) to the contract agreement.

2. Tender prices shall be quoted in the manner indicated and in the currencies specified in the Instructions to Tenderers in the tender document.

   For each item, Tenderers shall complete each appropriate column in the respective schedules, giving the price breakdown as indicated in the schedules.

   Prices given in the schedules against each item shall be for the scope covered by that item as detailed in Volume II (Employer's Requirements) or elsewhere in the tender document.

3. Payments will be made to the Contractor in the currency or currencies indicated under each respective item.

4. When requested by the Employer for the purposes of making payments or part payments, valuing variations or evaluating claims, or for such other purposes as the Employer may reasonably require, the Contractor shall provide the Employer with a breakdown of any composite or lump sum items included in the schedules.

3. Schedules of Rates and Prices

Schedule No. 1: Plant and Mandatory Spare Parts Supply from Abroad

Schedule No. 2: Plant and Mandatory Spare Parts Supplied from Within the Employer's Country

Schedule No. 3: Design Services

Schedule No. 4: Installation and Other Services

Schedule No. 5: Grand Summary

Schedule No. 6: Recommended Spare Parts

Please see the separate EXCEL file for the above.

The Tenderer shall fill, sign and stamp the attached price schedules and shall attach them to the tender.

(Price schedules are attached at the end of this document.)

Schedule C: Bar Chart Program of Key Activities - Delivery & Completion Time Schedule

The Tenderer shall fill, sign and stamp the attached time schedule and shall attach it to the tender.

Time for completion of the whole facilities shall be **for Scope-I (as mentioned in EQC) is 720 (seven hundred twenty) days and for the Scope-II (as mentioned in EQC) is 1260 (one thousand twelve hundred sixty)** from the effective date as described in Section 8 - Special Conditions of Contract, Sub-Clause 8.2.

The Tenderer shall provide

- filled general time schedule, provided below and as Appendix 4 to the Section 9: Contract Forms,
- a detailed proposal for mobilization schedule, Section 4: Tendering forms, item 5.3. and
- a detailed proposal for the construction schedule, Section 4: Tendering forms, item 5.4.

Please find the time schedule attached.

Time Schedule (Show Activity in Bar Chart for 720 days for scope -I & 1260 days for scope-II.)

Work under this contract shall be completed within 720 (seven hundred twenty) days and 1260 (one thousand two hundred sixty) days from contract effective date.

Design, Supply, Installation, Testing & Commissioning of 230kV & 132V Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on turnkey basis	Duration	Month																																		
Line Route Survey		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	....	....	....	....	....	36	37	38	39	40	41	42	....
Geotechnical Investigation																																						
Line Design																																						
Approval of the Line Design																																						
Civil Design																																						
Approval of the Civil Design																																						
Manufacturing of the Towers																																						
Tower Testing																																						
Manufacturing of Conductor, Insulator, Earthwire, OPGW & Accessories																																						
Testing of Conductor, Insulator, Earthwire, OPGW & Accessories																																						
Civil Works																																						
Tower Erection																																						
Stringing																																						
Testing & Commissioning																																						

Schedule D: Manufacturers, Places of Manufacture and Testing

The following form shall be filled and attached to the tender. Tenderers are free to propose more than one Manufacturer for each item.

Manufacturers

Item	Description	Manufacturer	Place of Manufacture	Place of Testing and Inspection	Country of Origin
1.	Tower				
2.	Pole				
3.	Nuts, bolts, washers etc.				
4.	Conductor (ACCC)				
5.	Conductor (ACSR)				
6.	Earthwire				
7.	OPGW				
8.	Insulator				
9.	Hardware fittings for ACCC & Insulator				
10.	Hardware fittings for ACSR & Insulator				
11.	Hardware fittings for OPGW				

Name of Tenderer: ____

Signature of Tenderer: ____

Schedule E: Technical Particulars and Guarantees

1. General

The technical data schedules hereafter provide more details on the specific technical criteria and complement the Information given in the tender document.

They form an essential part of tender submission and will be used in tender evaluation. They should be fully completed and submitted with the tender.

2. Technical Data Schedules

The technical data schedules hereafter provide more details on the specific technical criteria and complement the Information given in the tender documents.

They form an essential part of tender submission and will be used in tender evaluation. They should be fully completed and submitted with the tender.

2.1 Towers

2.1.1 400 kV Tower- For Twin ACCC Dhaka Conductor-Not Applicable

Fill out 1 form for each manufacturer

Parameters	Unit	Tower Type				
		4DL	4D1	4D25	4D45	4DT6
Total height of tower (standard)	(mm)					
Vertical spacing between conductor-earthwire	(mm)					
Horizontal phase separation	(mm)					
Vertical phase separation	(mm)					
Total approx. mass of standard height tower without stub & cleat*	(kg)					
Total approx. mass of E1.5 tower*	(kg)					
Total approx. mass of E3.0 tower*	(kg)					
Total approx. mass of E4.5 tower*	(kg)					
Total approx. mass of E6.0 tower*	(kg)					
Total approx. mass of E9.0 tower*	(kg)					
Total approx. mass of E12.0 tower*	(kg)					
Total approx. mass of E15.0 tower*	(kg)					
Total approx. mass of E20.0 tower*	(kg)					
Total approx. mass of E25.0 tower*	(kg)					
Total approx. mass of E30.0 tower*	(kg)					
Total approx. mass of E40.0 tower*	(kg)					
Total approx. mass of stub & cleat*	(kg)					
Approximate ultimate compression load/leg (highest extension)*	(kN)					
Approximate ultimate uplift load/leg (highest extension)*	(kN)					

* The final figures will be obtained during detailed design of towers and the approval thereof after award of contract, and the towers shall be supplied accordingly within the contract price.

	Mild Steel			High Yield Steel		
	Standard	**Grade**	**Yield Stress**	**Standard**	**Grade**	**Yield Stress**
Steel standard and grades						
Bolt standard and grades						

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.1.2 400 kV Tower-For Quad ACSR Mallard Conductor

Fill out 1 form for each manufacturer

Parameters	Unit	Tower Type				
		4DL-Not Applicable	4D1	4D25- Not Applicable	4D45- Not Applicable	4DT6- Not Applicable
Total height of tower (standard)	(mm)					
Vertical spacing between conductor-earthwire	(mm)					
Horizontal phase separation	(mm)					
Vertical phase separation	(mm)					
Total approx. mass of standard height tower without stub & cleat*	(kg)					
Total approx. mass of E1.5 tower*	(kg)					
Total approx. mass of E3.0 tower*	(kg)					
Total approx. mass of E4.5 tower*	(kg)					
Total approx. mass of E6.0 tower*	(kg)					
Total approx. mass of E9.0 tower*	(kg)					
Total approx. mass of E12.0 tower*	(kg)					
Total approx. mass of E15.0 tower*	(kg)					
Total approx. mass of E20.0 tower*	(kg)					
Total approx. mass of E25.0 tower*	(kg)					
Total approx. mass of E30.0 tower*	(kg)					
Total approx. mass of E40.0 tower*	(kg)					
Total approx. mass of stub & cleat*	(kg)					
Approximate ultimate compression load/leg (highest extension)*	(kN)					
Approximate ultimate uplift load/leg (highest extension)*	(kN)					

* The final figures will be obtained during detailed design of towers and the approval thereof after award of contract, and the towers shall be supplied accordingly within the contract price.

	Mild Steel			High Yield Steel		
	Standard	Grade	Yield Stress	Standard	Grade	Yield Stress
Steel standard and grades						
Bolt standard and grades						

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.1.3 230kV Towers (No need to fill if tower design is provided by the Employer)

Fill out 1 form for each manufacturer

Parameters	Unit	Tower Type										
		2DL	2D1	2D25	2DT6	2D9	2QL	2Q1	2Q30	2QT6	2DR	2DAX
Total height of tower (standard)	(mm)											
Vertical spacing between conductor- earthwire	(mm)											
Horizontal phase separation	(mm)											
Vertical phase separation	(mm)											
Total approx. mass of standard height tower without stub & cleat*	(kg)											
Total approx. mass of E1.5 tower*	(kg)											
Total approx. mass of E3.0 tower**	(kg)											
Total approx. mass of E4.5 tower**	(kg)											
Total approx. mass of E6.0 tower**	(kg)											
Total approx. mass of E9.0 tower**	(kg)											
Total approx. mass of E12.0 tower**	(kg)											
Total approx. mass of E15.0 Tower**	(kg)											
Total approx. mass of stub & cleat*	(kg)											
Approximate ultimate compression load/leg (E9.0 & E15)*	(kN)											
Approximate ultimate uplift load/leg (E9.0 & E15)*	(kN)											

* The final figures will be obtained during detailed design of towers and the approval thereof after award of contract, and the towers shall be supplied accordingly within the contract price.

2.1.4 132kV Towers (No need to fill if tower design is provided by the Employer)

Fill out 1 form for each manufacturer

Parameters	Unit	Tower Type									
		1DL	1D1	1D25	1DT6	1DR- Not Applicable	1DAX- Not Applicable	1QL	1Q15	1Q30	1QT6
Total height of tower (standard)	(mm)										
Vertical spacing between conductor- earthwire	(mm)										
Horizontal phase separation	(mm)										
Vertical phase separation	(mm)										
Total approx. mass of standard height tower without stub & cleat*	(kg)										
Total approx. mass of E1.5 tower*	(kg)										
Total approx. mass of E3.0 tower**	(kg)										
Total approx. mass of E4.5 tower**	(kg)										
Total approx. mass of E6.0 tower**	(kg)										
Total approx. mass of E9.0 tower**	(kg)										
Total approx. mass of E12.0 tower**	(kg)										
Total approx. mass of E15.0 Tower**	(kg)										
Total approx. mass of stub & cleat*	(kg)										
Approximate ultimate compression load/leg (E9.0 & E15)*	(kN)										
Approximate ultimate uplift load/leg (E9.0 & E15)*	(kN)										

* The final figures will be obtained during detailed design of towers and the approval thereof after award of contract, and the towers shall be supplied accordingly within the contract price.

2.2 132kV Poles

2.2.1 Particulars of Steel

	Mild Steel			High Yield Steel		
	Standard	Grade	Yield Stress	Standard	Grade	Yield Stress
Steel standard and grades						
Bolt standard and grades						

- The final figures will be obtained during detailed design of poles and the approval thereof after award of contract, and the towers shall be supplied accordingly within the contract price.

2.3 Piled Foundation Details

2.3.1 400 kV Towers- For Twin ACCC Dhaka Conductor (ACSR Finch equivalent - Not Applicable)

Tower Type Particulars	4DL (Highest extension)	4D1 (Upto 25m extension)	4D1 (above 25m to 40m extension)	4D25 (Highest extension)	4D45 (Highest extension)	4DT6 (Highest extension)	4DR-Not Required (Highest extension)	4DAX-Not Required
Type of piled								
Number of piles per leg*								
Length of pile* (mm)								
Diameter of pile* (mm)								

* The final figures will be obtained during detailed design of tower foundations and the approval thereof after award of contract, and the foundations shall be supplied accordingly within the contract price.

2.3.2 400 kV Towers (For Quad ACSR Finch Conductor-Not Applicable)

Tower Type Particulars	4DL (Highest extension)	4D1 (Upto 25m extension)	4D1 (above 25m to 40m extension)	4D25 (Highest extension)	4D45 (Highest extension)	4DT6 (Highest extension)	4DR-Not Required (Highest extension)	4DAX- Not Required
Type of piled								
Number of piles per leg*								
Length of pile* (mm)								
Diameter of pile* (mm)								

* The final figures will be obtained during detailed design of tower foundations and the approval thereof after award of contract, and the foundations shall be supplied accordingly within the contract price.

2.3.3 400 kV Towers- For Twin ACSR mallard Conductor

Tower Type Particulars	4DL (Highest extension) - Not applicable	4D1 (Upto 25m extension)	4D1 (above 25m to 40m extension)	4D25 (Highest extension)- Not applicable	4D45 (Highest extension) - Not applicable	4DT6 (Highest extension) - Not applicable	4DR-Not Required (Highest extension) - Not applicable	4DAX- Not Required
Type of piled								
Number of piles per leg*								
Length of pile* (mm)								
Diameter of pile* (mm)								

* The final figures will be obtained during detailed design of tower foundations and the approval thereof after award of contract, and the foundations shall be supplied accordingly within the contract price.

2.3.4 230kV Towers

Tower Type Particulars	2DL (Highest extension)	2D1 (Highest extension)	2D25 (Highest extension)	2DT6 (Highest extension)	2D9 (Highest extension)	2QL (Highest Extension)	2Q1 (Highest Extension)	2Q30 (Highest Extension)	2QT6 (Highest Extension)	2DR - (Highest Extension)	2DAX (Highest Extension)
Type of piled foundation											
Number of piles per leg*											
Length of pile* (mm)											
Diameter of pile* (mm)											

* The final figures will be obtained during detailed design of tower foundations and the approval thereof after award of contract, and the foundations shall be supplied accordingly within the contract price.

2.3.5 132kV Towers

Tower Type Particulars	1DL (Highest extension)	1D1 (Highest extension)	1D25 (Highest extension)	1DT6 (Highest extension)	1DR- Not Applicable (Highest extension)	1DAX- Not Applicable (Highest extension)	1QL (Highest Extension)	1Q15 (Highest Extension)	1Q30 (Highest Extension)	1QT6 (Highest Extension)
Type of piled foundation										
Number of piles per leg*										
Length of pile* (mm)										
Diameter of pile* (mm)										

* The final figures will be obtained during detailed design of tower foundations and the approval thereof after award of contract, and the foundations shall be supplied accordingly within the contract price.

2.3.6 132kV Poles

Tower Type Particulars	1DLP (Highest extension)	1D1P (Highest extension)	1D25P (Highest extension)	1DT6P (Highest extension)	1D9P (Highest Extension)
Type of piled foundation					
Number of piles per leg*					
Length of pile* (mm)					
Diameter of pile* (mm)					

* The final figures will be obtained during detailed design of pole foundations and the approval thereof after award of contract, and the foundations shall be supplied accordingly within the contract price.

2.4 Conductor, Earthwire & OPGW

2.4.1 400 kV Line – Twin ACCC Dhaka Conductor (ACSR Finch equivalent-Not Applicable)

Fill out 1 form for each manufacturer

	Phase		Earthwire	
Conductor	**As per Tender requirement**	**As per Tender Proposal**	**As per Tender requirement**	**As per Tender Proposal**
Designation (Code Name)				
Type				
Reference standards				
Aluminium/ Aluminium alloy grade				
Steel grade				
Galvanising Thickness				
Aluminium class (AS wire)				
Aluminium type (AS wire)				
Conductor max. continuous operating temperature (°C)				
Minimum mass of grease (kg/km)				
Creep period of conductor to be considered (years)				
No. and diameter of aluminium wire (No./mm)				
No. and diameter of steel wire (No./mm)				
Overall diameter of conductor (mm)				
Overall sectional area of conductor (mm^2)				
Rated tensile strength of conductor (kN)				
Weight (kg/km)				
Direction of external lay				
Cross Sectional Area of Al (mm^2)				
Cross Sectional Area of Composite Core (mm^2)				
No. of Composite Core (mm)				
Shape of wires				
Diameter of Composite Core (mm)				
Rated tensile strength of core (kN)				
Current carrying capacity at 180 Deg C (amp)				
Max. allowable emergency operating temp. (Deg C)				
Maximum DC Resistance at 20 Deg C (ohm/km)				

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.4.2 400kV Line –Quad ACSR Finch Conductor-Not Applicable

	Phase		Earthwire	
Conductor	As per Tender requirement	As per Tender Proposal	As per Tender requirement	As per Tender Proposal
Designation (Code Name)				
Type				
Reference standards				
Aluminium/ Aluminium alloy grade				
Steel grade				
Galvanising Thickness				
Aluminium class (AS wire)				
Aluminium type (AS wire)				
Conductor max. continuous operating temperature (°C)				
Minimum mass of grease (kg/km)				
Creep period of conductor to be considered (years)				
No. and diameter of aluminium wire (No./mm)				
No. and diameter of steel wire (No./mm)				
Overall diameter of conductor (mm)				
Overall sectional area of conductor (mm^2)				
Rated tensile strength of conductor (kN)				
Weight (kg/km)				
Direction of external lay				
Cross Sectional Area of Al (mm^2)				
Cross Sectional Area of Composite Core (mm^2)				
No. of Composite Core (mm)				
Shape of wires				
Diameter of Composite Core (mm)				
Rated tensile strength of core (kN)				
Current carrying capacity at 180 Deg C (amp)				
Max. allowable emergency operating temp. (Deg C)				
Maximum DC Resistance at 20 Deg C (ohm/km)				

2.4.3 230 kV Line - Overland Portion (Twin ACSR Mallard Conductor)

Fill out 1 form for each manufacturer

	Phase		Earthwire	
Conductor	**As per Tender requirement**	**As per Tender Proposal**	**As per Tender requirement**	**As per Tender Proposal**
Designation (Code Name)				
Type				
Reference standards				
Aluminium/ Aluminium alloy grade				
Steel grade				
Galvanising Thickness				
Aluminium class (AS wire)				
Aluminium type (AS wire)				
Conductor max. continuous operating temperature (°C)				
Minimum mass of grease (kg/km)				
Creep period of conductor to be considered (years)				
No. and diameter of aluminium wire (No./mm)				
No. and diameter of steel wire (No./mm)				
Overall diameter of conductor (mm)				
Overall sectional area of conductor (mm^2)				
Rated tensile strength of conductor (kN)				
Weight (kg/km)				
Direction of external lay				
Cross Sectional Area of Al (mm^2)				
Cross Sectional Area of Composite Core (mm^2)				
No. of Composite Core (mm)				
Shape of wires				
Diameter of Composite Core (mm)				
Rated tensile strength of core (kN)				
Current carrying capacity at 180 Deg C (amp)				
Max. allowable emergency operating temp. (Deg C)				
Maximum DC Resistance at 20 Deg C (ohm/km)				

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.4.4 230kV Line - River Crossing Portion (Twin ACSR Mallard Conductor)

Fill out 1 form for each manufacturer

	Phase		Earthwire	
Conductor	**As per Tender requirement**	**As per Tender Proposal**	**As per Tender requirement**	**As per Tender Proposal**
Designation (Code Name)				
Type				
Reference standards				
Aluminium/ Aluminium alloy grade				
Steel grade				
Galvanising Thickness				
Aluminium class (AS wire)				
Aluminium type (AS wire)				
Conductor max. continuous operating temperature (°C)				
Minimum mass of grease (kg/km)				
Creep period of conductor to be considered (years)				
No. and diameter of aluminium wire (No./mm)				
No. and diameter of steel wire (No./mm)				
Overall diameter of conductor (mm)				
Overall sectional area of conductor (mm^2)				
Rated tensile strength of conductor (kN)				
Weight (kg/km)				
Direction of external lay				
Cross Sectional Area of Al (mm^2)				
Cross Sectional Area of Composite Core (mm^2)				
No. of Composite Core (mm)				
Shape of wires				
Diameter of Composite Core (mm)				
Rated tensile strength of core (kN)				
Current carrying capacity at 180 Deg C (amp)				
Max. allowable emergency operating temp. (Deg C)				
Maximum DC Resistance at 20 Deg C (ohm/km)				

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.4.5 132 kV Line – Overland Portion (Single ACSR Grosbeak Equivalent ACCC)

Fill out 1 form for each manufacturer

	Phase		Earthwire	
Conductor	**As per Tender requirement**	**As per Tender Proposal**	**As per Tender requirement**	**As per Tender Proposal**
Designation (Code Name)				
Type				
Reference standards				
Aluminium/ Aluminium alloy grade				
Steel grade				
Galvanising Thickness				
Aluminium class (AS wire)				
Aluminium type (AS wire)				
Conductor max. continuous operating temperature (°C)				
Minimum mass of grease (kg/km)				
Creep period of conductor to be considered (years)				
No. and diameter of aluminium wire (No./mm)				
No. and diameter of steel wire (No./mm)				
Overall diameter of conductor (mm)				
Overall sectional area of conductor (mm^2)				
Rated tensile strength of conductor (kN)				
Weight (kg/km)				
Direction of external lay				
Cross Sectional Area of Al (mm^2)				
Cross Sectional Area of Composite Core (mm^2)				
No. of Composite Core (mm)				
Shape of wires				
Diameter of Composite Core (mm)				
Rated tensile strength of core (kN)				
Current carrying capacity at 180 Deg C (amp)				
Max. allowable emergency operating temp. (Deg C)				
Maximum DC Resistance at 20 Deg C (ohm/km)				

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.4.6 132 kV Line – River Crossing Portion (Not Applicable)

Fill out 1 form for each manufacturer

	Phase		Earthwire	
Conductor	**As per Tender requirement**	**As per Tender Proposal**	**As per Tender requirement**	**As per Tender Proposal**
Designation (Code Name)				
Type				
Reference standards				
Aluminium/ Aluminium alloy grade				
Steel grade				
Galvanising Thickness				
Aluminium class (AS wire)				
Aluminium type (AS wire)				
Conductor max. continuous operating temperature (°C)				
Minimum mass of grease (kg/km)				
Creep period of conductor to be considered (years)				
No. and diameter of aluminium wire (No./mm)				
No. and diameter of steel wire (No./mm)				
Overall diameter of conductor (mm)				
Overall sectional area of conductor (mm^2)				
Rated tensile strength of conductor (kN)				
Weight (kg/km)				
Direction of external lay				
Cross Sectional Area of Al (mm^2)				
Cross Sectional Area of Composite Core (mm^2)				
No. of Composite Core (mm)				
Shape of wires				
Diameter of Composite Core (mm)				
Rated tensile strength of core (kN)				
Current carrying capacity at 180 Deg C (amp)				
Max. allowable emergency operating temp. (Deg C)				
Maximum DC Resistance at 20 Deg C (ohm/km)				

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.4.7 132 kV Line –(Single ACSR Grosbeak)

Fill out 1 form for each manufacturer

	Phase		Earthwire	
Conductor	**As per Tender requirement**	**As per Tender Proposal**	**As per Tender requirement**	**As per Tender Proposal**
Designation (Code Name)				
Type				
Reference standards				
Aluminium/ Aluminium alloy grade				
Steel grade				
Galvanising Thickness				
Aluminium class (AS wire)				
Aluminium type (AS wire)				
Conductor max. continuous operating temperature (°C)				
Minimum mass of grease (kg/km)				
Creep period of conductor to be considered (years)				
No. and diameter of aluminium wire (No./mm)				
No. and diameter of steel wire (No./mm)				
Overall diameter of conductor (mm)				
Overall sectional area of conductor (mm^2)				
Rated tensile strength of conductor (kN)				
Weight (kg/km)				
Direction of external lay				
Cross Sectional Area of Al (mm^2)				
Cross Sectional Area of Composite Core (mm^2)				
No. of Composite Core (mm)				
Shape of wires				
Diameter of Composite Core (mm)				
Rated tensile strength of core (kN)				
Current carrying capacity at 180 Deg C (amp)				
Max. allowable emergency operating temp. (Deg C)				
Maximum DC Resistance at 20 Deg C (ohm/km)				

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.5 OPGW & Fittings

2.5.1 400kV Line-Not Applicable

Fill out 1 form for each manufacturer

Parameter	Unit	Overland Portion		River Crossing Portion	
		As per Tender requirement	As per Tender Proposal	As per Tender requirement	As per Tender Proposal
OPGW designation & type					
Number of fibres					
Reference standard					
Number and diameter of aluminium strands	mm				
Number and diameter of steel strands	mm				
Corrosion protection of steel strands					
Internal fibre tube diameter	mm				
Overall diameter	mm				
Guaranteed ultimate tensile strength	kN				
Final modulus of elasticity	N/mm²				
Coefficient of linear expansion	1/degree				
DC resistance at 20°C	ohms/m				
Maximum short circuit current capacity	kA² sec				
Assumed temperature rise	°C				
Standard weight	kg/m				
Weight of grease	kg/m				
Standard length on drum*	m				
Weight of complete drum	kg				
Maximum drum length	m				
Installation minimum bending radius	m				
Optical Characteristics:					
Cut-off wave length	nm				
Attenuation at …………. Nm	dB/km				
Zero dispersion wave length	nm				
Chromatic dispersion at ………… nm	ps/km				
Individual splice loss	dB				
Bit error rate					
OPGW Fittings:					
Guaranteed ultimate tensile					
strength	kN				

Parameter	Unit	Overland Portion		River Crossing Portion	
		As per Tender requirement	As per Tender Proposal	As per Tender requirement	As per Tender Proposal
• Suspension set • Tension set	kN				
Overall length of set					
• Suspension set	mm				
• Tension set	mm				
Mass of set					
• Suspension set	kg				
• Tension set	kg				
Drawing numbers					
Cross section of OPGW					
Cross section of non-metallic cable					
Joint box					
Fixing clamps					
OPGW suspension set					
OPGW tension set					
OPGW vibration damper					

* Drum length to be finalized after finalization of tower locations as per check survey.

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.5.2 230kV Line

Fill out 1 form for each manufacturer

Parameter	Unit	Overland Portion		River Crossing Portion	
		As per Tender requirement	As per Tender Proposal	As per Tender requirement	As per Tender Proposal
OPGW designation & type					
Number of fibres					
Reference standard					
Number and diameter of aluminium strands	mm				
Number and diameter of steel strands	mm				
Corrosion protection of steel strands					
Internal fibre tube diameter	mm				
Overall diameter	mm				
Guaranteed ultimate tensile strength	kN				
Final modulus of elasticity	N/mm^2				
Coefficient of linear expansion	1/degree				
DC resistance at 20°C	ohms/m				
Maximum short circuit current capacity	kA^2 sec				
Assumed temperature rise	°C				
Standard weight	kg/m				
Weight of grease	kg/m				
Standard length on drum*	m				
Weight of complete drum	kg				
Maximum drum length	m				
Installation minimum bending radius	m				
Optical Characteristics:					
Cut-off wave length	nm				
Attenuation at …………. Nm	dB/km				
Zero dispersion wave length	nm				
Chromatic dispersion at ………… nm	ps/km				
Individual splice loss	dB				
Bit error rate					
OPGW Fittings:					
Guaranteed ultimate tensile strength	kN				

Parameter	Unit	Overland Portion		River Crossing Portion	
		As per Tender requirement	As per Tender Proposal	As per Tender requirement	As per Tender Proposal
• Suspension set • Tension set	kN				
Overall length of set					
• Suspension set	mm				
• Tension set	mm				
Mass of set					
• Suspension set	kg				
• Tension set	kg				
Drawing numbers					
Cross section of OPGW					
Cross section of non-metallic cable					
Joint box					
Fixing clamps					
OPGW suspension set					
OPGW tension set					
OPGW vibration damper					

* Drum length to be finalized after finalization of tower locations as per check survey.

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.5.3 132 kV Line

Fill out 1 form for each manufacturer

Parameter	Unit	Overland Portion		River Crossing Portion	
		As per Tender requirement	As per Tender Proposal	As per Tender requirement	As per Tender Proposal
OPGW designation & type					
Number of fibres					
Reference standard					
Number and diameter of aluminium strands	mm				
Number and diameter of steel strands	mm				
Corrosion protection of steel strands					
Internal fibre tube diameter	mm				
Overall diameter	mm				
Guaranteed ultimate tensile strength	kN				
Final modulus of elasticity	N/mm²				
Coefficient of linear expansion	1/degree				
DC resistance at 20°C	ohms/m				
Maximum short circuit current capacity	kA² sec				
Assumed temperature rise	°C				
Standard weight	kg/m				
Weight of grease	kg/m				
Standard length on drum*	m				
Weight of complete drum	kg				
Maximum drum length	m				
Installation minimum bending radius	m				
Optical Characteristics:					
Cut-off wave length	nm				
Attenuation at …………. Nm	dB/km				
Zero dispersion wave length	nm				
Chromatic dispersion at ………… nm	ps/km				
Individual splice loss	dB				
Bit error rate					
OPGW Fittings:					
Guaranteed ultimate tensile					

Parameter	Unit	Overland Portion		River Crossing Portion	
		As per Tender requirement	As per Tender Proposal	As per Tender requirement	As per Tender Proposal
strength	kN				
• Suspension set • Tension set	kN				
Overall length of set					
• Suspension set	mm				
• Tension set	mm				
Mass of set					
• Suspension set	kg				
• Tension set	kg				
Drawing numbers					
Cross section of OPGW					
Cross section of non-metallic cable					
Joint box					
Fixing clamps					
OPGW suspension set					
OPGW tension set					
OPGW vibration damper					

* Drum length to be finalized after finalization of tower locations as per check survey.

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.6 Insulator Sets & Fittings

2.6.1 400kV Line- Twin ACCC Dhaka Conductor-Not Applicable

Fill out 1 form for each manufacturer

Parameter	Unit	As per Tender requirement					As per Tender Proposal				
		Insulator Set Type									
		Suspension	Heavy Suspension	Tension	Low Duty Tension	Jumper Suspension	Suspension	Heavy Suspension	Tension	Low Duty Tension	Jumper Suspension
Insulator unit type no.											
Dielectric material											
Total creepage per unit	mm										
Spacing	mm										
Overall shed diameter	mm										
Puncture voltage	kV										
Electro-mechanical failing load of unit	kN										
Drawing no. of unit											
Type test certificate no.											
Number of units per string	pcs.										
Total creepage of string	mm										
Overall length of set	mm										
Sag adjuster type and step	mm										
Ultimate strength of set	kN										
Mass of set	kg										
Anticipated											
• lightning impulse withstand voltage	kV										
• Power frequency withstand voltage	kV										
• Corona extinction level	kV										

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.6.2 400kV Line- Quad ACSR Finch Conductor-Not Applicable

Parameter	Unit	As per Tender requirement		As per Tender Proposal	
		Insulator Set Type			
		Suspension	Tension	Suspension	Tension
Insulator unit type no.					
Dielectric material					
Total creepage per unit	mm				
Spacing	mm				
Overall shed diameter	mm				
Puncture voltage	kV				
Electro-mechanical failing load of unit	kN				
Drawing no. of unit					
Type test certificate no.					
Number of units per string	pcs.				
Total creepage of string	mm				
Overall length of set	mm				
Sag adjuster type and step	mm				
Ultimate strength of set	kN				
Mass of set	kg				
Anticipated					
• lightning impulse withstand voltage	kV				
• Power frequency withstand voltage	kV				
• Corona extinction level	kV				

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.6.3 230kV Line - Overland Portion (ACSR Twin Mallard Conductor)

Fill out 1 form for each manufacturer

Parameter	Unit	As per Tender requirement				As per Tender Proposal			
		Insulator Set Type							
		Suspension/ Heavy Suspension	Tension	Low Duty Tension	Jumper Suspension	Suspension/ Heavy Suspension	Tension	Low Duty Tension	Jumper Suspension
Insulator unit type no.									
Dielectric material									
Total creepage per unit	mm								
Spacing	mm								
Overall shed diameter	mm								
Puncture voltage	kV								
Electro-mechanical failing load of unit	kN								
Drawing no. of unit									
Type test certificate no.									
Number of units per string	pcs.								
Total creepage of string	mm								
Overall length of set	mm								
Sag adjuster type and step	mm								
Ultimate strength of set	kN								
Mass of set	kg								
Anticipated									
• lightning impulse withstand voltage	kV								
• Power frequency withstand voltage	kV								
• Corona extinction level	kV								

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.6.4 230kV Line – River Crossing Portion (ACSR Twin Mallard Conductor)

Fill out 1 form for each manufacturer

Parameter	Unit	As per Tender requirement		As per Tender Proposal	
		Insulator Set Type			
		Suspension	Tension	Suspension	Tension
Insulator unit type no.					
Dielectric material					
Total creepage per unit	mm				
Spacing	mm				
Overall shed diameter	mm				
Puncture voltage	kV				
Electro-mechanical failing load of unit	kN				
Drawing no. of unit					
Type test certificate no.					
Number of units per string	pcs.				
Total creepage of string	mm				
Overall length of set	mm				
Sag adjuster type and step	mm				
Ultimate strength of set	kN				
Mass of set	kg				
Anticipated					
• lightning impulse withstand voltage	kV				
• Power frequency withstand voltage	kV				
• Corona extinction level	kV				

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.6.5 132kV Line- Overland Portion (ACSR Grosbeak equivalent ACCC Conductor)

Parameter	Unit	As per Tender requirement		As per Tender Proposal	
		Insulator Set Type			
		Suspension	Tension	Suspension	Tension
Insulator unit type no.					
Dielectric material					
Total creepage per unit	mm				
Spacing	mm				
Overall shed diameter	mm				
Puncture voltage	kV				
Electro-mechanical failing load of unit	kN				
Drawing no. of unit					
Type test certificate no.					
Number of units per string	pcs.				
Total creepage of string	mm				
Overall length of set	mm				
Sag adjuster type and step	mm				
Ultimate strength of set	kN				
Mass of set	kg				
Anticipated					
• lightning impulse withstand voltage	kV				
• Power frequency withstand voltage	kV				
• Corona extinction level	kV				

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.6.6 132kV Line- River Crossing Portion (Not Applicable)

Parameter	Unit	As per Tender requirement		As per Tender Proposal	
		Insulator Set Type			
		Suspension	Tension	Suspension	Tension
Insulator unit type no.					
Dielectric material					
Total creepage per unit	mm				
Spacing	mm				
Overall shed diameter	mm				
Puncture voltage	kV				
Electro-mechanical failing load of unit	kN				
Drawing no. of unit					
Type test certificate no.					
Number of units per string	pcs.				
Total creepage of string	mm				
Overall length of set	mm				
Sag adjuster type and step	mm				
Ultimate strength of set	kN				
Mass of set	kg				
Anticipated					
• lightning impulse withstand voltage	kV				
• Power frequency withstand voltage	kV				
• Corona extinction level	kV				

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.6.7 132kV Line- ACSR Grosbeak Conductor

Parameter	Unit	As per Tender requirement		As per Tender Proposal	
		Insulator Set Type			
		Suspension	Tension	Suspension	Tension
Insulator unit type no.					
Dielectric material					
Total creepage per unit	mm				
Spacing	mm				
Overall shed diameter	mm				
Puncture voltage	kV				
Electro-mechanical failing load of unit	kN				
Drawing no. of unit					
Type test certificate no.					
Number of units per string	pcs.				
Total creepage of string	mm				
Overall length of set	mm				
Sag adjuster type and step	mm				
Ultimate strength of set	kN				
Mass of set	kg				
Anticipated					
• lightning impulse withstand voltage	kV				
• Power frequency withstand voltage	kV				
• Corona extinction level	kV				

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.7 Spacers and Spacer Dampers

Fill out 1 form for each manufacturer

230kV Line:

Parameter	Unit	As per Tender requirement	As per Tender Proposal	As per Tender requirement	As per Tender Proposal
		Overland		River Crossing	
Unit weight	kg				
Material	-				
Number of spacer dampers to be used for each phase per span*	pcs.				
Total quantity of spacer dampers for one basic span*	pcs.				

* These quantities shall be based on the design of the proposed spacer dampers. The quantities mentioned above may increase at the contractor's cost, if during design approval such increase is necessary.

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

2.8 Vibration Dampers

Fill out 1 form for each manufacturer

230kV Line:

Parameter	Unit	As per Tender requirement	As per Tender Proposal	As per Tender requirement	As per Tender Proposal
		Overland		River Crossing	
Unit weight of vibration dampers • for phase conductor • for earthwire • for OPGW	 kg kg kg				
Number of vibration dampers to be used for phase conductor per standard span	pcs.				
Number of vibration dampers to be used for earthwire per standard span	pcs.				
Number of vibration dampers to be used for OPGW per standard span	pcs.				

These quantities shall be based on the design of the proposed vibration dampers. Actual number of vibration damper will be decided according to the Manufacturer's recommendation for each span.

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

132kV Line:

Parameter	Unit	As per Tender requirement	As per Tender Proposal	As per Tender requirement	As per Tender Proposal
		Overland		River Crossing	
Unit weight of vibration dampers • for phase conductor • for earthwire • for OPGW	 kg kg kg				
Number of vibration dampers to be used for phase conductor per standard span	pcs.				
Number of vibration dampers to be used for earthwire per standard span	pcs.				
Number of vibration dampers to be used for OPGW per standard span	pcs.				

These quantities shall be based on the design of the proposed vibration dampers. Actual number of vibration damper will be decided according to the Manufacturer's recommendation for each span.

Name & Signature of
Manufacturer`s Representative:

Stamp of Manufacturer

Attachment-Price Schedule

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No. PGCB/AIIB/000308-BGD/TL/Package-2)

A. Anwara-Cox's Bazar (North) 230 kV double circuit transmission line (Initially charged at 132 kV): 109 km with 0.49 km river crossing portion (using twin ACSR mallard Conductor)

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 1.1 Plant and Mandatory Spare Parts Supplied from Abroad								
1.Supply of 230 kV and 400kV double circuit towers, complete with all stubs, nuts, bolts, locking nuts, washers, phase conductors and earthwire, swivels/shackles, step bolts, tower notice and identification plates, ACDs, protective coating, earthing, etc.								
1.1	**Tower type "4D1"**							
1.1.1	Tower type 4D1+30 m		each	3				
1.1.2	Tower type 4D1+40 m		each	3				
1.2	**Tower type 2DL**							
1.2.1	Tower type 2DL Standard		each	10				
1.2.2	Tower type 2DL+1.5 m		each	10				
1.2.3	Tower type 2DL+3 m		each	18				
1.2.4	Tower type 2DL+4.5 m		each	28				
1.2.5	Tower type 2DL+6 m		each	33				
1.2.6	Tower type 2DL+9 m		each	33				
1.2.7	Tower type 2DL+12 m		each	23				
1.2.8	Tower type 2DL+15 m		each	23				
1.3	**Tower type "2D1"**							
1.3.1	Tower type 2D1 Standard		each	2				
1.3.2	Tower type 2D1 +1.5 m		each	2				
1.3.3	Tower type 2D1 +3 m		each	2				
1.3.4	Tower type 2D1 +4.5 m		each	2				
1.3.5	Tower type 2D1 +6 m		each	2				
1.3.6	Tower type 2D1 +9 m		each	3				
1.3.7	Tower type 2D1 +12 m		each	4				
1.3.8	Tower type 2D1 +15 m		each	4				
1.3.9	Tower type 2D1 +18 m		each	3				
1.3.10	Tower type 2D1 +21 m		each	2				
1.3.11	Tower type 2D1 +25 m		each	2				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price1		Total Price1	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 1.1 Plant and Mandatory Spare Parts Supplied from Abroad								
1.4	**Tower type "2D25"**							
1.4.1	Tower type 2D25 Standard		each	5				
1.4.2	Tower type 2D25 +1.5 m		each	2				
1.4.3	Tower type 2D25+3 m		each	4				
1.4.4	Tower type 2D25 +4.5 m		each	2				
1.4.5	Tower type 2D25 +6 m		each	5				
1.4.6	Tower type 2D25 +9 m		each	11				
1.4.7	Tower type 2D25 +12 m		each	5				
1.4.8	Tower type 2D25 +15 m		each	4				
1.5	**Tower type "2DT6"**							
1.5.1	Tower type 2DT6 Standard		each	6				
1.5.2	Tower type 2DT6+1.5 m		each	3				
1.5.3	Tower type 2DT6+3 m		each	8				
1.5.4	Tower type 2DT6+4.5 m		each	3				
1.5.5	Tower type 2DT6+6 m		each	12				
1.5.6	Tower type 2DT6+9 m		each	14				
1.5.7	Tower type 2DT6+12 m		each	8				
1.5.8	Tower type 2DT6+15 m		each	8				
1.6	**Tower type "2D9"**							
1.6.1	Tower type 2D9 Standard		each	1				
1.6.2	Tower type 2D9+1.5 m		each	NIL				
1.6.3	Tower type 2D9+3 m		each	NIL				
1.6.4	Tower type 2D9+4.5 m		each	1				
1.6.5	Tower type 2D9+6 m		each	NIL				
1.6.6	Tower type 2D9+9 m		each	1				
1.6.7	Tower type 2D9+12 m		each	1				
1.6.8	Tower type 2D9+15 m		each	1				
1.7	**Tower type "2QL"**							
1.7.1	Tower type 2QL Standard		each	1				
1.7.2	Tower type 2QL+1.5 m		each	NIL				
1.7.3	Tower type 2QL+3 m		each	NIL				
1.7.4	Tower type 2QL+4.5 m		each	NIL				
1.7.5	Tower type 2QL+6 m		each	1				
1.7.6	Tower type 2QL+9 m		each	1				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 1.1 Plant and Mandatory Spare Parts Supplied from Abroad								
1.8	**Tower type "2Q1"**							
1.8.1	Tower type 2Q1 Standard		each	1				
1.8.2	Tower type 2Q1 +1.5 m		each	NIL				
1.8.3	Tower type 2Q1 +3 m		each	NIL				
1.8.4	Tower type 2Q1 +6 m		each	1				
1.8.5	Tower type 2Q1 +9 m		each	1				
1.8.6	Tower type 2Q1 +12 m		each	NIL				
1.8.7	Tower type 2Q1 +15 m		each	NIL				
1.8.8	Tower type 2Q1 +18 m		each	NIL				
1.8.9	Tower type 2Q1 +21 m		each	NIL				
1.8.10	Tower type 2Q1 +25 m		each	NIL				
1.9	**Tower type "2Q15"**							
1.9.1	Tower type 2Q15 Standard		each	1				
1.9.2	Tower type 2Q15 +1.5 m		each	NIL				
1.9.3	Tower type 2Q15 +3 m		each	NIL				
1.9.4	Tower type 2Q15 +6 m		each	1				
1.9.5	Tower type 2Q15 +9 m		each	1				
1.10	**Tower type "2Q30"**							
1.10.1	Tower type 2Q30 Standard		each	1				
1.10.2	Tower type 2Q30+1.5 m		each	NIL				
1.10.3	Tower type 2Q30+3 m		each	NIL				
1.10.4	Tower type 2Q30+4.5 m		each	NIL				
1.10.5	Tower type 2Q30+6 m		each	1				
1.10.6	Tower type 2Q30+9 m		each	1				
1.11	**Tower type "2QT6"**							
1.11.1	Tower type 2QT6 Standard		each	1				
1.11.2	Tower type 2QT6+1.5 m		each	NIL				
1.11.3	Tower type 2QT6+3 m		each	NIL				
1.11.4	Tower type 2QT6+4.5 m		each	NIL				
1.11.5	Tower type 2QT6+ 6 m		each	1				
1.11.6	Tower type 2QT6+ 9 m		each	1				
	River Crossing Portion							
1.12	**Tower type 2DR**							
1.12.1	Tower type 2DR Standard		each	2				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 1.1 Plant and Mandatory Spare Parts Supplied from Abroad								
1.12.2	Tower type 2DR M20		each	1				
1.13	**Tower type 2DAX**							
1.13.1	Tower type 2DAX Standard		each	3				
1.14	Auxiliary crossarm for tower type 2DT6		per set of three	3				
1.15	Galvenized Tower Steel							
(a)	Fabricated		ton	30				
(b)	Non-fabricated		ton	30				
2	**Phase conductor, earthwire and OPGW cable, complete with repair sleeves and joints**							
2.1	**Overland Portion**							
2.1.1	"ACSR Mallard" Phase Conductor (3 Phase, Double Circuit, Twin Conductor per phase on the line)		Route km[3]	109				
2.1.2	7x4.00mm equivalent OPGW inclusive of joint boxes, fixing clamps, fusion splices and connections to the joint boxes. Two OPGW earthwire on the line.		Route km[3]	109				
2.2	**River Crossing Portion**							
2.2.1	"ACSR Mallard" Phase Conductor (3 Phase, double circuit line, both circuits erected, one conductors per phase)		Route km[3]	0.49				
2.2.2	19x3.67 20SA earthwire equivalent OPGW inclusive of joint boxes, fixing clamps, fusion splices and connections to the joint boxes. Two OPGW earthwire on the line.		Route km[3]	0.49				
3	**Insulator strings, with associated suspension and tension clamps for twin ACSR Mallard Conductor**							
3.1	**Over Land Portion**							
3.1.1	a) Single suspension string, 120 kN -disc only		Set	1,086				
	b) Single suspension string, 120 kN -fittings only		Set	1,086				
3.1.2	a) Single suspension string (Heavy Suspension), 210 kN -disc only		Set	198				
	a) Single suspension string (Heavy Suspension), 210 kN -fittings only		Set	198				
3.1.3	a) Double tension string,2x210kN -disc only		Set	1308				
	b) Double tension string,2x210kN -fittings only		Set	1308				
3.1.4	a) Single jumper suspension I-string, having each string 1x120 kN-disc only		Set	327				
	b) Single jumper suspension I-string, having each string 1x120 kN-fittings only		Set	327				
3.1.5	a) Single tension string, upright low duty 120kN- disc only		Set	12				
	b) Single tension string, upright low duty 120kN- fittings only		Set	12				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 1.1 Plant and Mandatory Spare Parts Supplied from Abroad								
3.1.6	a) Single tension string, inverted low duty 120kN -discs only		Set	12				
	b) Single tension string, inverted low duty 120kN -fittings only		Set	12				
3.1.7	Counterweights for 210kN suspension insulator sets complete with yoke plate attachment bolts to be used for 2D1 towers:							
(a)	- 40kg set		each	3				
(b)	- 80kg set		each	3				
(c)	- 120kg set		each	5				
3.2	**River Crossing Portion**							
3.2.1	a) 210kN twin suspension Insulators Set (2x210kN) for River Crossing Portion of Twin ACSR Mallard Conductor - disc only		Set	18				
	b) 210kN twin suspension Insulators Fittings Set (2x210kN) for River Crossing Portion of Twin ACSR Mallard Conductor - hardware fittings only		Set	18				
3.2.2	a) 300kN twin tension Insulators Set (2x300kN) for River Cossing Portion of Twin ACSR Mallard Conductor - disc only		Set	36				
	b) 300kN twin tension Insulators Fittings Set for (2x300kN) River Crossing Portion of Twin ACSR Mallard Conductor - hardware fittings only		Set	36				
4	**OPGW sets, complete with all accessories, incl. armour rods and earth bounds**							
4.1	**Over Land Portion**							
4.1.1	Suspension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)		set	214				
4.1.2	Tension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)		set	218				
4.2	**River Crossing Portion**							
4.2.1	Suspension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)		set	6				
4.2.2	Tension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)		set	12				
5	**Dampers**							
5.1	**Over Land Portion**							
5.1.1	Vibration damper for phase conductor		per span	333				
5.1.2	Spacer damper for phase conductor		per span	333				
5.1.3	Vibration damper for earthwire		per span	333				
5.1.4	Vibration damper for OPGW		per span	333				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 1.1 Plant and Mandatory Spare Parts Supplied from Abroad								
5.1.5	Spacer for jumper		nos.	300				
5.2	**River Crossing Portion**							
5.2.1	Vibration damper for phase conductor		per span	5				
5.2.2	Spacer damper for phase conductor		per span	5				
5.2.3	Vibration damper for earthwire		per span	5				
5.2.4	Vibration damper for OPGW		per span	5				
5.2.5	Spacer for jumper		nos.	18				
6	**Aerial Markers**							
6.1	Painting of tower having height more than 60 meter in accordance with the requirements of the Technical Specification		per tower	17				
6.1	Painting of tower (Reflecting Paint) upto 3 meter in submerge area in accordance with the requirements of the Technical Specification		per tower	5				
6.1	Air craft obstruction lights solar powered complete with lamps, solar, panels, batteries, control equipment cables, support framework, tower work platform etc.		each	30				
6.1	Aircraft warning spheres		each	17				
6.1	Bird diverters		each	15				
6.1	Bird guards, one bird guard per each crossarm applied on intermediate towers		each	1248				
7	**Mandatory Spare Parts and Tools**							
7.1	**Insulator and Fittings**							
	Insulator sets complete with insulators and all hardware fittings including suspension clamps, tension dead ends,armour rods, arcing horn. Arcing ring etc							
7.1.1	120kN single suspension Insulators set for "ACSR Mallard" - Complete Assembly		set	5				
7.1.2	120kN jumper suspension set for "ACSR Mallard" - Complete Assembly		set	10				
7.1.3	210kN Single tension set for "ACSR Mallard" - Complete Assembly		set	20				
7.2	**Phase conductor, earthwire, OPGW & Fittings**							
7.2.1	Phase conductor "ACSR Mallard" conductor		km	7				
7.2.2	Midspan Joint for "ACSR Mallard " conductor		each	5				
7.2.3	Repair sleeve for "ACSR Mallard" conductor		each	5				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 1.1 Plant and Mandatory Spare Parts Supplied from Abroad								
7.2.4	Spacer Damper for "ACSR Mallard"		each	7				
7.2.5	Jumper Spacer for "ACSR Mallard"		each	7				
7.2.6	7x4.00mm Equivalent OPGW		km	10				
7.2.7	Suspension set for 7x4.00mm Equivalent OPGW		each	12				
7.2.8	Tension set for 7x4.00mm Equivalent OPGW		each	12				
7.2.9	Vibration damper for 7x4.00mm Equivalent OPGW		each	15				
7.3	**Temporary earthing equipment**		each	1				
7.4	**Motorised jointing compressor for conductor complete with dies suitable for conductors & earthwires to be used for this Contract**		each	2				
Total Columns 8 to be carried forward to Schedule No. 5 - Grand Summary								

Name of Bidder	
Signature of Bidder	

1 Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2 Bidders shall enter a code representing the country of origin of all imported plant and equipment.

3 Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is exclusive sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such extra costs in his unit rate.

Country of Origin Declaration Form

Item	Description	Code	Country

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No. PGCB/AIIB/000308-BGD/TL/Package-2)

A. Anwara-Cox's Bazar (North) 230 kV double circuit transmission line (Initially charged at 132 kV): 109 km with 0.49 km river crossing portion (using twin ACSR mallard Conductor)

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 1.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
1.Supply of 230 kV double circuit towers, complete with all stubs, nuts, bolts, locking nuts, washers, phase conductors and earthwire, swivels/shackles, step bolts, tower notice and identification plates, ACDs, protective coating, earthing, etc.								
1.1	**Tower type "4D1"**							
1.1.1	Tower type 4D1+30 m	each	3					
1.1.2	Tower type 4D1+40 m	each	3					
1.2	**Tower type "2DL"**							
1.2.1	Tower type 2DL Standard	each	10					
1.2.2	Tower type 2DL+1.5 m	each	10					
1.2.3	Tower type 2DL+3 m	each	18					
1.2.4	Tower type 2DL+4.5 m	each	28					
1.2.5	Tower type 2DL+6 m	each	33					
1.2.6	Tower type 2DL+9 m	each	33					
1.2.7	Tower type 2DL+12 m	each	23					
1.2.8	Tower type 2DL+15 m	each	23					
1.3	**Tower type "2D1"**							
1.3.1	Tower type 2D1 Standard	each	2					
1.3.2	Tower type 2D1 +1.5 m	each	2					
1.3.3	Tower type 2D1 +3 m	each	2					
1.3.4	Tower type 2D1 +4.5 m	each	2					
1.3.5	Tower type 2D1 +6 m	each	2					
1.3.6	Tower type 2D1 +9 m	each	3					
1.3.7	Tower type 2D1 +12 m	each	4					
1.3.8	Tower type 2D1 +15 m	each	4					
1.3.9	Tower type 2D1 +18 m	each	3					
1.3.10	Tower type 2D1 +21 m	each	2					
1.3.11	Tower type 2D1+25 m	each	2					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 1.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
1.4	**Tower type "2D25"**							
1.4.1	Tower type 2D25 Standard	each	5					
1.4.2	Tower type 2D25 +1.5 m	each	2					
1.4.3	Tower type 2D25+3 m	each	4					
1.4.4	Tower type 2D25 +4.5 m	each	2					
1.4.5	Tower type 2D25 +6 m	each	5					
1.4.6	Tower type 2D25 +9 m	each	11					
1.4.7	Tower type 2D25 +12 m	each	5					
1.4.8	Tower type 2D25 +15 m	each	4					
1.5	**Tower type "2DT6"**							
1.5.1	Tower type 2DT6 Standard	each	6					
1.5.2	Tower type 2DT6+1.5 m	each	3					
1.5.3	Tower type 2DT6+3 m	each	8					
1.5.4	Tower type 2DT6+4.5 m	each	3					
1.5.5	Tower type 2DT6+6 m	each	12					
1.5.6	Tower type 2DT6+9 m	each	14					
1.5.7	Tower type 2DT6+12 m	each	8					
1.5.8	Tower type 2DT6+15 m	each	8					
1.6	**Tower type "2D9"**							
1.6.1	Tower type 2D9 Standard	each	1					
1.6.2	Tower type 2D9+1.5 m	each	NIL					
1.6.3	Tower type 2D9+3 m	each	NIL					
1.6.4	Tower type 2D9+4.5 m	each	1					
1.6.5	Tower type 2D9+6 m	each	NIL					
1.6.6	Tower type 2D9+9 m	each	1					
1.6.7	Tower type 2D9+12 m	each	1					
1.6.8	Tower type 2D9+15 m	each	1					
1.7	**Tower type "2QL"**							
1.7.1	Tower type 2QL Standard	each	1					
1.7.2	Tower type 2QL+1.5 m	each	NIL					
1.7.3	Tower type 2QL+3 m	each	NIL					
1.7.4	Tower type 2QL+4.5 m	each	NIL					
1.7.5	Tower type 2QL+6 m	each	1					
1.7.6	Tower type 2QL+9 m	each	1					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 1.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
1.8	**Tower type "2Q1"**							
1.8.1	Tower type 2Q1 Standard	each	1					
1.8.2	Tower type 2Q1 +1.5 m	each	NIL					
1.8.3	Tower type 2Q1 +3 m	each	NIL					
1.8.4	Tower type 2Q1 +6 m	each	1					
1.8.5	Tower type 2Q1 +9 m	each	1					
1.8.6	Tower type 2Q1 +12 m	each	NIL					
1.8.7	Tower type 2Q1 +15 m	each	NIL					
1.8.8	Tower type 2Q1 +18 m	each	NIL					
1.8.9	Tower type 2Q1 +21 m	each	NIL					
1.8.10	Tower type 2Q1 +25 m	each	NIL					
1.9	**Tower type "2Q15"**							
1.9.1	Tower type 2Q15 Standard	each	1					
1.9.2	Tower type 2Q15 +1.5 m	each	NIL					
1.9.3	Tower type 2Q15 +3 m	each	NIL					
1.9.4	Tower type 2Q15 +6 m	each	1					
1.9.5	Tower type 2Q15 +9 m	each	1					
1.10	**Tower type "2Q30"**							
1.10.1	Tower type 2Q30 Standard	each	1					
1.10.2	Tower type 2Q30+1.5 m	each	NIL					
1.10.3	Tower type 2Q30+3 m	each	NIL					
1.10.4	Tower type 2Q30+4.5 m	each	NIL					
1.10.5	Tower type 2Q30+6 m	each	1					
1.10.6	Tower type 2Q30+9 m	each	1					
1.11	**Tower type "2QT6"**							
1.11.1	Tower type 2QT6 Standard	**each**	1					
1.11.2	Tower type 2QT6+1.5 m	each	NIL					
1.11.3	Tower type 2QT6+3 m	each	NIL					
1.11.4	Tower type 2QT6+4.5 m	each	NIL					
1.11.5	Tower type 2QT6+ 6 m	each	1					
1.11.6	Tower type 2QT6+ 9 m	each	1					
	River Crossing Portion							
1.12	**Tower type 2DR**							
1.12.1	Tower type 2DR Standard	each	2					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 1.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
1.12.2	Tower type 2DR M20	each	1					
1.13	**Tower type 2DAX**							
1.13.1	Tower type 2DAX Standard	each	3					
1.14	Auxiliary crossarm for tower type 2DT6	per set of three	3					
1.15	Galvenized Tower Steel							
(a)	Fabricated	ton	30					
(b)	Non-fabricated	ton	30					
2	**Phase conductor, earthwire and OPGW cable, complete with repair sleeves and joints**							
2.1	**Overland Portion**							
2.1.1	"ACSR Mallard" Phase Conductor (3 Phase, Double Circuit, Twin Conductor per phase on the line)	Route km^3	109					
2.1.2	7x4.00mm equivalent OPGW inclusive of joint boxes, fixing clamps, fusion splices and connections to the joint boxes. Two OPGW earthwire on the line.	Route km^3	109					
2.2	**River Crossing Portion**							
2.2.1	"ACSR Mallard" Phase Conductor (3 Phase, double circuit line, both circuits erected, one conductors per phase)	Route km^3	0.49					
2.2.2	19x3.67 20SA earthwire equivalent OPGW inclusive of joint boxes, fixing clamps, fusion splices and connections to the joint boxes. Two OPGW earthwire on the line.	Route km^3	0.49					
3	**Insulator strings, with associated suspension and tension clamps for twin ACSR Mallard Conductor**							
3.1	**Over Land Portion**							
3.1.1	a) Single suspension string, 120 kN -disc only	Set	1,086					
	b) Single suspension string, 120 kN -fittings only	Set	1,086					
3.1.2	a) Single suspension string (Heavy Suspension), 210 kN -disc only	Set	198					
	a) Single suspension string (Heavy Suspension), 210 kN -fittings only	Set	198					
3.1.3	a) Single tension string,2x210kN -disc only	Set	1,308					
	b) Single tension string,2x210kN -fittings only	Set	1,308					
3.1.4	a) Single jumper suspension I-string, having each string 1x120 kN-disc only	Set	327					
	b) Single jumper suspension I-string, having each string 1x120 kN-fittings only	Set	327					
3.1.5	a) Single tension string, upright low duty 120kN- disc only	Set	12					
	b) Single tension string, upright low duty 120kN- fittings only	Set	12					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 1.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
3.1.6	a) Single tension string, inverted low duty 120kN -discs only	Set	12					
	b) Single tension string, inverted low duty 120kN -fittings only	Set	12					
3.1.7	Counterweights for 210kN suspension insulator sets complete with yoke plate attachment bolts to be used for 2D1 towers:							
(a)	- 40kg set	each	3					
(b)	- 80kg set	each	3					
(c)	- 120kg set	each	5					
3.2	**River Crossing Portion**							
3.2.1	a) 210kN twin suspension Insulators Set (2x210kN) for River Crossing Portion of Twin ACSR Mallard Conductor - disc only	Set	18					
	b) 210kN twin suspension Insulators Fittings Set(2x210kN) for River Crossing Portion of Twin ACSR Mallard Conductor - hardware fittings only	Set	18					
3.2.2	a) 300kN twin tension Insulators Set (2x300kN) for River Cossing Portion of Twin ACSR Mallard Conductor - disc only	Set	36					
	b) 300kN twin tension Insulators Fittings Set for(2x300kN) River Crossing Portion of Twin ACSR Mallard Conductor - hardware fittings only	Set	36					
4	**OPGW sets, complete with all accessories, incl. armour rods and earth bounds**							
4.1	**Over Land Portion**							
4.1.1	Suspension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)	set	214					
4.1.2	Tension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)	set	218					
4.2	**River Crossing Portion**							
4.2.1	Suspension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)	set	6					
4.2.2	Tension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)	set	12					
5	**Dampers**							
5.1	**Over Land Portion**							
5.1.1	Vibration damper for phase conductor	per span	333					
5.1.2	Spacer damper for phase conductor	per span	333					
5.1.3	Vibration damper for earthwire	per span	333					
5.1.4	Vibration damper for OPGW	per span	333					
5.1.5	Spacer for jumper	nos.	300					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 1.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
5.2	**River Crossing Portion**							
5.2.1	Vibration damper for phase conductor	per span	5					
5.2.2	Spacer damper for phase conductor	per span	5					
5.2.3	Vibration damper for earthwire	per span	5					
5.2.4	Vibration damper for OPGW	per span	5					
5.2.5	Spacer for jumper	nos.	18					
6	**Aerial Markers**							
6.1	Painting of tower having height more than 60 meter in accordance with the requirements of the Technical Specification	per tower	17					
6.1	Painting of tower (Reflecting Paint) upto 3 meter in submerge area in accordance with the requirements of the Technical Specification	per tower	5					
6.1	Air craft obstruction lights solar powered complete with lamps, solar, panels, batteries, control equipment cables, support framework, tower work platform etc.	each	30					
6.1	Aircraft warning spheres	each	17					
6.1	Bird diverters	each	15					
6.1	Bird guards, one bird guard per each crossarm applied on intermediate towers	each	1248					
7	**Mandatory Spare Parts and Tools**							
7.1	**Insulator and Fittings**							
	Insulator sets complete with insulators and all hardware fittings including suspension clamps, tension dead ends,armour rods, arcing horn. Arcing ring etc							
7.1.1	120kN single suspension Insulators set for "ACSR Mallard" - Complete Assembly	set	5					
7.1.2	120kN jumper suspension set for "ACSR Mallard" - Complete Assembly	set	10					
7.1.3	210kN Single tension set for "ACSR Mallard" - Complete Assembly	set	20					
7.2	**Phase conductor, earthwire, OPGW & Fittings**							
7.2.1	Phase conductor "ACSR Mallard" conductor	km	7					
7.2.2	Midspan Joint for "ACSR Mallard " conductor	each	5					
7.2.3	Repair sleeve for "ACSR Mallard" conductor	each	5					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 1.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
7.2.4	Spacer Damper for "ACSR Mallard"	each	7					
7.2.5	Jumper Spacer for "ACSR Mallard"	each	7					
7.2.6	7x4.00mm Equivalent OPGW	km	10					
7.2.7	Suspension set for 7x4.00mm Equivalent OPGW	each	12					
7.2.8	Tension set for 7x4.00mm Equivalent OPGW	each	12					
7.2.9	Vibration damper for 7x4.00mm Equivalent OPGW	each	15					
7.3	**Temporary earthing equipment**	each	1					
7.4	**Motorised jointing compressor for conductor complete with dies suitable for conductors & earthwires to be used for this Contract**	each	2					
Total Columns 8 to be carried forward to Schedule No. 5 - Grand Summary								

Name of Bidder

Signature of Bidder

1 Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2 Bidders shall enter a code representing the country of origin of all imported plant and equipment.

3 Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is exclusive sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such extra costs in his unit rate.

Country of Origin Declaration Form

Item	Description	Country

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No.PGCB/AIIB/000308-BGD/TL/Package-2)

B. Bangabandhu Hi-Tech City-Kaliakoir 230 kV double circuit transmission line: 4.88 km (using Twin ACSR Mallard conductor)

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 2.1Plant and Mandatory Spare Parts Supplied from Abroad								
1.Supply of 230 kV double circuit towers, complete with all stubs, nuts, bolts, locking nuts, washers, phase conductors and earthwire, swivels/shackles, step bolts, tower notice and identification plates, ACDs, protective coating, earthing, etc.								
1.1	**Tower type "2DL"**							
1.1.1	Tower type 2DL Standard		each	1				
1.1.2	Tower type 2DL+1.5 m		each	NIL				
1.1.3	Tower type 2DL+3 m		each	NIL				
1.1.4	Tower type 2DL+4.5 m		each	NIL				
1.1.5	Tower type 2DL+6 m		each	1				
1.1.6	Tower type 2DL+9 m		each	1				
1.1.7	Tower type 2DL+12 m		each	NIL				
1.1.8	Tower type 2DL+15 m		each	1				
1.2	**Tower type "2D1"**							
1.2.1	Tower type 2D1 Standard		each	1				
1.2.2	Tower type 2D1 +1.5 m		each	NIL				
1.2.3	Tower type 2D1 +3 m		each	NIL				
1.2.4	Tower type 2D1 +4.5 m		each	NIL				
1.2.5	Tower type 2D1 +6 m		each	NIL				
1.2.6	Tower type 2D1 +9 m		each	1				
1.2.7	Tower type 2D1 +12 m		each	NIL				
1.2.8	Tower type 2D1 +15 m		each	NIL				
1.2.9	Tower type 2D1 +18 m		each	NIL				
1.2.10	Tower type 2D1 +21 m		each	1				
1.3	**Tower type "2D25"**							
1.3.1	Tower type 2D25 Standard		each	1				
1.3.2	Tower type 2D25 +1.5 m		each	NIL				
1.3.3	Tower type 2D25+3 m		each	1				
1.3.4	Tower type 2D25 +4.5 m		each	NIL				
1.3.5	Tower type 2D25 +6 m		each	NIL				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price1		Total Price1	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 2.1	**Plant and Mandatory Spare Parts Supplied from Abroad**							
1.3.6	Tower type 2D25 +9 m		each	1				
1.3.7	Tower type 2D25 +12 m		each	NIL				
1.3.8	Tower type 2D25 +15 m		each	1				
1.4	**Tower type "2DT6"**							
1.4.1	Tower type 2DT6 Standard		each	1				
1.4.2	Tower type 2DT6+1.5 m		each	NIL				
1.4.3	Tower type 2DT6+3 m		each	NIL				
1.4.4	Tower type 2DT6+4.5 m		each	NIL				
1.4.5	Tower type 2DT6+6 m		each	1				
1.4.6	Tower type 2DT6+9 m		each	1				
1.4.7	Tower type 2DT6+12 m		each	NIL				
1.4.8	Tower type 2DT6+15 m		each	NIL				
1.5	**Tower type "2QL"**							
1.5.1	Tower type 2QL Standard		each	NIL				
1.5.2	Tower type 2QL+1.5 m		each	NIL				
1.5.3	Tower type 2QL+3 m		each	NIL				
1.5.4	Tower type 2QL+4.5 m		each	NIL				
1.5.5	Tower type 2QL+6 m		each	1				
1.5.6	Tower type 2QL+9 m		each	1				
1.6	**Tower type "2Q1"**							
1.6.1	Tower type 2Q1 Standard		each	NIL				
1.6.2	Tower type 2Q1 +1.5 m		each	NIL				
1.6.3	Tower type 2Q1 +3 m		each	NIL				
1.6.4	Tower type 2Q1 +6 m		each	1				
1.6.5	Tower type 2Q1 +9 m		each	1				
1.6.6	Tower type 2Q1 +12 m		each	NIL				
1.6.7	Tower type 2Q1 +15 m		each	NIL				
1.6.8	Tower type 2Q1 +18 m		each	NIL				
1.6.9	Tower type 2Q1 +21 m		each	NIL				
1.6.10	Tower type 2Q1 +25 m		each	NIL				
1.7	**Tower type "2Q15"**							
1.7.1	Tower type 2Q15 Standard		each	NIL				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 2.1	**Plant and Mandatory Spare Parts Supplied from Abroad**							
1.7.2	Tower type 2Q15 +1.5 m		each	NIL				
1.7.3	Tower type 2Q15 +3 m		each	NIL				
1.7.4	Tower type 2Q15 +6 m		each	1				
1.7.5	Tower type 2Q15 +9 m		each	1				
1.8	**Tower type "2Q30"**							
1.8.1	Tower type 2Q30 Standard		each	NIL				
1.8.2	Tower type 2Q30+1.5 m		each	NIL				
1.8.3	Tower type 2Q30+3 m		each	NIL				
1.8.4	Tower type 2Q30+4.5 m		each	NIL				
1.8.5	Tower type 2Q30+6 m		each	1				
1.8.6	Tower type 2Q30+9 m		each	1				
1.9	**Tower type "2QT6"**							
1.9.1	Tower type 2QT6 Standard		each	NIL				
1.9.2	Tower type 2QT6+1.5 m		each	NIL				
1.9.3	Tower type 2QT6+3 m		each	NIL				
1.9.4	Tower type 2QT6+4.5 m		each	NIL				
1.9.5	Tower type 2QT6+ 6 m		each	1				
1.9.6	Tower type 2QT6+ 9 m		each	1				
1.10	Auxiliary crossarm for tower type 2DT6		per set of three	3				
1.11	Galvenized Tower Steel							
(a)	Fabricated		ton	10				
(b)	Non-fabricated		ton	5				
2	**Phase conductor, earthwire and OPGW cable, complete with repair sleeves and joints**							
2.1	**Overland Portion**							
2.1.1	"ACSR Mallard" Phase Conductor (3 Phase, Double Circuit, Twin Conductor per phase on the line)		Route km[3]	4.88				
2.1.2	7x4.00mm equivalent OPGW inclusive of joint boxes, fixing clamps, fusion splices and connections to the joint boxes. One OPGW earthwire on the line.		Route km[3]	4.88				
2.1.3	7x4.00mm earthwire. One earthwire on the line.		Route km[3]	4.88				
3	**Insulator strings, with associated suspension and tension clamps for twin ACSR Mallard Conductor**							
3.1	**Over Land Portion**							
3.1.1	a) Single suspension string, 120 kN -disc only		Set	36				
	b) Single suspension string, 120 kN -fittings only		Set	36				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 2.1	**Plant and Mandatory Spare Parts Supplied from Abroad**							
3.1.2	a) Single suspension string (Heavy Suspension), 210 kN -disc only		Set	30				
	a) Single suspension string (Heavy Suspension), 210 kN -fittings only		Set	30				
3.1.3	a) Double tension string,2x210kN -disc only		Set	156				
	b) Double tension string,2x210kN -fittings only		Set	156				
3.1.4	a) Single jumper suspension I-string, having each string 1x120 kN-disc only		Set	39				
	b) Single jumper suspension I-string, having each string 1x120 kN-fittings only		Set	39				
3.1.5	a) Single tension string, upright low duty 120kN- disc only		Set	12				
	b) Single tension string, upright low duty 120kN- fittings only		Set	12				
3.1.6	a) Single tension string, inverted low duty 120kN -discs only		Set	12				
	b) Single tension string, inverted low duty 120kN -fittings only		Set	12				
3.1.7	Counterweights for 210kN suspension insulator sets complete with yoke plate attachment bolts to be used for 2D1 towers:							
(a)	- 40kg set		each	3				
(b)	- 80kg set		each	3				
(c)	- 120kg set		each	5				
4	**Earthwire sets, complete with all accessories**							
4.1	**Over Land Portion**							
4.1.1	Suspension set		set	7				
4.1.2	Tension set		set	14				
5	**OPGW sets, complete with all accessories, incl. armour rods and earth bounds**							
5.1	**Over Land Portion**							
5.1.1	Suspension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)		set	7				
5.1.2	Tension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)		set	14				
6	**Dampers**							
6.1	**Over Land Portion**							
6.1.1	Vibration damper for phase conductor		per span	23				
6.1.2	Spacer damper for phase conductor		per span	23				
6.1.3	Vibration damper for earthwire		per span	23				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 2.1	**Plant and Mandatory Spare Parts Supplied from Abroad**							
6.1.4	Vibration damper for OPGW		per span	23				
6.1.5	Spacer for jumper		nos.	21				
7	**Aerial Markers**							
7.1	Painting of tower having height more than 60 meter in accordance with the requirements of the Technical Specification		per tower	5				
7.2	Painting of tower (Reflecting Paint) upto 3 meter in submerge area in accordance with the requirements of the Technical Specification		per tower	5				
7.3	Air craft obstruction lights solar powered complete with lamps, solar, panels, batteries, control equipment cables, support framework, tower work platform etc.		each	12				
7.4	Aircraft warning spheres		each	12				
7.5	Bird diverters		each	15				
7.6	Bird guards, one bird guard per each crossarm applied on intermediate towers		each	42				
8	**Mandatory Spare Parts and Tools**							
8.1	**Insulator and Fittings**							
	Insulator sets complete with insulators and all hardware fittings including suspension clamps, tension dead ends,armour rods, arcing horn. Arcing ring etc							
8.1.1	120kN single suspension Insulators set for "ACSR Mallard" - Complete Assembly		set	5				
8.1.2	120kN jumper suspension set for "ACSR Mallard" - Complete Assembly		set	10				
8.1.3	210kN Single tension set for "ACSR Mallard" - Complete Assembly		set	20				
8.2	**Phase conductor, earthwire, OPGW & Fittings**							
8.2.1	Phase conductor "ACSR Mallard" conductor		km	7				
8.2.2	Midspan Joint for "ACSR Mallard " conductor		each	5				
8.2.3	Repair sleeve for "ACSR Mallard" conductor		each	5				
8.2.4	Spacer Damper for "ACSR Mallard"		each	7				
8.2.5	Jumper Spacer for "ACSR Mallard"		each	7				
8.2.6	Earthwire 7x4.00mm		km	7				
8.2.7	Midspan Joint for 7x4.00mm earthwire		each	3				
8.2.8	Suspension set for 7x4.00mm earthwire		each	10				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 2.1	**Plant and Mandatory Spare Parts Supplied from Abroad**							
8.2.9	Tension set for 7x4.00mm earthwire		each	10				
8.2.10	Vibration damper for 7x4.00mm earthwire		each	15				
8.2.11	7x4.00mm Equivalent OPGW		km	10				
8.2.12	Suspension set for 7x4.00mm Equivalent OPGW		each	12				
8.2.13	Tension set for 7x4.00mm Equivalent OPGW		each	12				
8.2.14	Vibration damper for 7x4.00mm Equivalent OPGW		each	15				
8.3	**Temporary earthing equipment**		each	1				
8.4	**Motorised jointing compressor for conductor complete with dies suitable for conductors & earthwires to be used for this Contract**		each	2				
Total Columns 8 to be carried forward to Schedule No. 5 - Grand Summary								

Name of Bidder	
Signature of Bidder	

1 Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2 Bidders shall enter a code representing the country of origin of all imported plant and equipment.

3 Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is exclusive sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such extra costs in his unit rate.

Country of Origin Declaration Form

Item	Description	Code	Country

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No. PGCB/AIIB/000308-BGD/TL/Package-2)

B. Bangabandhu Hi-Tech City-Kaliakoir 230 kV double circuit transmission line: 4.88 km (using Twin ACSR Mallard conductor)

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 2.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
1.Supply of 230 kV double circuit towers, complete with all stubs, nuts, bolts, locking nuts, washers, phase conductors and earthwire, swivels/shackles, step bolts, tower notice and identification plates, ACDs, protective coating, earthing, etc.								
1.1	**Tower type 2DL Standard**	each	1					
1.1.1	Tower type 2DL+1.5 m	each	NIL					
1.1.2	Tower type 2DL+3 m	each	NIL					
1.1.3	Tower type 2DL+4.5 m	each	NIL					
1.1.4	Tower type 2DL+6 m	each	1					
1.1.5	Tower type 2DL+9 m	each	1					
1.1.6	Tower type 2DL+12 m	each	NIL					
1.1.7	Tower type 2DL+15 m	each	1					
1.2	**Tower type "2D1"**							
1.2.1	Tower type 2D1 Standard	each	1					
1.2.2	Tower type 2D1 +1.5 m	each	NIL					
1.2.3	Tower type 2D1 +3 m	each	NIL					
1.2.4	Tower type 2D1 +4.5 m	each	NIL					
1.2.5	Tower type 2D1 +6 m	each	NIL					
1.2.6	Tower type 2D1 +9 m	each	1					
1.2.7	Tower type 2D1 +12 m	each	NIL					
1.2.8	Tower type 2D1 +15 m	each	NIL					
1.2.9	Tower type 2D1 +18 m	each	NIL					
1.2.10	Tower type 2D1 +21 m	each	1					
1.3	**Tower type "2D25"**							
1.3.1	Tower type 2D25 Standard	each	1					
1.3.2	Tower type 2D25 +1.5 m	each	NIL					
1.3.3	Tower type 2D25+3 m	each	1					
1.3.4	Tower type 2D25 +4.5 m	each	NIL					
1.3.5	Tower type 2D25 +6 m	each	NIL					
1.3.6	Tower type 2D25 +9 m	each	1					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 2.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
1.3.7	Tower type 2D25 +12 m	each	NIL					
1.3.8	Tower type 2D25 +15 m	each	1					
1.4	**Tower type "2DT6"**							
1.4.1	Tower type 2DT6 Standard	each	1					
1.4.2	Tower type 2DT6+1.5 m	each	NIL					
1.4.3	Tower type 2DT6+3 m	each	NIL					
1.4.4	Tower type 2DT6+4.5 m	each	NIL					
1.4.5	Tower type 2DT6+6 m	each	1					
1.4.6	Tower type 2DT6+9 m	each	1					
1.4.7	Tower type 2DT6+12 m	each	NIL					
1.4.8	Tower type 2DT6+15 m	each	NIL					
1.5	**Tower type "2QL"**							
1.5.1	Tower type 2QL Standard	each	NIL					
1.5.2	Tower type 2QL+1.5 m	each	NIL					
1.5.3	Tower type 2QL+3 m	each	NIL					
1.5.4	Tower type 2QL+4.5 m	each	NIL					
1.5.5	Tower type 2QL+6 m	each	1					
1.5.6	Tower type 2QL+9 m	each	1					
1.6	**Tower type "2Q1"**							
1.6.1	Tower type 2Q1 Standard	each	NIL					
1.6.2	Tower type 2Q1 +1.5 m	each	NIL					
1.6.3	Tower type 2Q1 +3 m	each	NIL					
1.6.4	Tower type 2Q1 +6 m	each	1					
1.6.5	Tower type 2Q1 +9 m	each	1					
1.6.6	Tower type 2Q1 +12 m	each	NIL					
1.6.7	Tower type 2Q1 +15 m	each	NIL					
1.6.8	Tower type 2Q1 +18 m	each	NIL					
1.6.9	Tower type 2Q1 +21 m	each	NIL					
1.6.10	Tower type 2Q1 +25 m	each	NIL					
1.7	**Tower type "2Q15"**							
1.7.1	Tower type 2Q15 Standard	each	NIL					
1.7.2	Tower type 2Q15 +1.5 m	each	NIL					
1.7.3	Tower type 2Q15 +3 m	each	NIL					
1.7.4	Tower type 2Q15 +6 m	each	1					
1.7.5	Tower type 2Q15 +9 m	each	1					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 2.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
1.8	**Tower type "2Q30"**							
1.8.1	Tower type 2Q30 Standard	each	NIL					
1.8.2	Tower type 2Q30+1.5 m	each	NIL					
1.8.3	Tower type 2Q30+3 m	each	NIL					
1.8.4	Tower type 2Q30+4.5 m	each	NIL					
1.8.5	Tower type 2Q30+6 m	each	1					
1.8.6	Tower type 2Q30+9 m	each	1					
1.9	**Tower type "2QT6"**							
1.9.1	Tower type 2QT6 Standard	each	NIL					
1.9.2	Tower type 2QT6+1.5 m	each	NIL					
1.9.3	Tower type 2QT6+3 m	each	NIL					
1.9.4	Tower type 2QT6+4.5 m	each	NIL					
1.9.5	Tower type 2QT6+ 6 m	each	1					
1.9.6	Tower type 2QT6+ 9 m	each	1					
1.10	Auxiliary crossarm for tower type 2DT6	per set of three	3					
1.11	Galvenized Tower Steel							
(a)	Fabricated	ton	10					
(b)	Non-fabricated	ton	5					
2	**Phase conductor, earthwire and OPGW cable, complete with repair sleeves and joints**							
2.1	**Overland Portion**							
2.1.1	"ACSR Mallard" Phase Conductor (3 Phase, Double Circuit, Twin Conductor per phase on the line)	Route km^3	4.88					
2.1.2	7x4.00mm equivalent OPGW inclusive of joint boxes, fixing clamps, fusion splices and connections to the joint boxes. One OPGW earthwire on the line.	Route km^3	4.88					
2.1.3	7x4.00mm earthwire. One earthwire on the line.	Route km^3	4.88					
3	**Insulator strings, with associated suspension and tension clamps for twin ACSR Mallard Conductor**							
3.1	**Over Land Portion**							
3.1.1	a) Single suspension string, 120 kN -disc only	Set	36					
	b) Single suspension string, 120 kN -fittings only	Set	36					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 2.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
3.1.2	a) Single suspension string (Heavy Suspension), 210 kN -disc only	Set	30					
	a) Single suspension string (Heavy Suspension), 210 kN -fittings only	Set	30					
3.1.3	a) Single tension string,2x210kN -disc only	Set	156					
	b) Single tension string,2x210kN -fittings only	Set	156					
3.1.4	a) Single jumper suspension I-string, having each string 1x120 kN-disc only	Set	39					
	b) Single jumper suspension I-string, having each string 1x120 kN-fittings only	Set	39					
3.1.5	a) Single tension string, upright low duty 120kN- disc only	Set	12					
	b) Single tension string, upright low duty 120kN- fittings only	Set	12					
3.1.6	a) Single tension string, inverted low duty 120kN -discs only	Set	12					
	b) Single tension string, inverted low duty 120kN -fittings only	Set	12					
3.1.7	Counterweights for 210kN suspension insulator sets complete with yoke plate attachment bolts to be used for 2D1 towers:							
(a)	- 40kg set	each	3					
(b)	- 80kg set	each	3					
(c)	- 120kg set	each	5					
4	**Earthwire sets, complete with all accessories**							
4.1	**Over Land Portion**							
4.1.1	Suspension set	set	7					
4.1.2	Tension set	set	14					
5	**OPGW sets, complete with all accessories, incl. armour rods and earth bounds**							
5.1	**Over Land Portion**							
5.1.1	Suspension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)	set	7					
5.1.2	Tension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)	set	14					
6	**Dampers**							
6.1	**Over Land Portion**							
6.1.1	Vibration damper for phase conductor	per span	23					
6.1.2	Spacer damper for phase conductor	per span	23					
6.1.3	Vibration damper for earthwire	per span	23					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	**2**	**3**	**4**	**5**	**6=4*5**	**7**	**8=4*7**	**9**
Schedule No. 2.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
6.1.4	Vibration damper for OPGW	per span	23					
6.1.5	Spacer for jumper	nos.	21					
7	**Aerial Markers**							
7.1	Painting of tower having height more than 60 meter in accordance with the requirements of the Technical Specification	per tower	5					
7.2	Painting of tower (Reflecting Paint) upto 3 meter in submerge area in accordance with the requirements of the Technical Specification	per tower	5					
7.3	Air craft obstruction lights solar powered complete with lamps, solar, panels, batteries, control equipment cables, support framework, tower work platform etc.	each	12					
7.4	Aircraft warning spheres	each	12					
7.5	Bird diverters	each	15					
7.6	Bird guards, one bird guard per each crossarm applied on intermediate towers	each	42					
8	**Mandatory Spare Parts and Tools**							
8.1	**Insulator and Fittings**							
	Insulator sets complete with insulators and all hardware fittings including suspension clamps, tension dead ends,armour rods, arcing horn. Arcing ring etc							
8.1.1	120kN single suspension Insulators set for "ACSR Mallard" - Complete Assembly	set	5					
8.1.2	120kN jumper suspension set for "ACSR Mallard" - Complete Assembly	set	10					
8.1.3	210kN Single tension set for "ACSR Mallard" - Complete Assembly	set	20					
8.2	**Phase conductor, earthwire, OPGW & Fittings**							
8.2.1	Phase conductor "ACSR Mallard" conductor	km	7					
8.2.2	Midspan Joint for "ACSR Mallard " conductor	each	5					
8.2.3	Repair sleeve for "ACSR Mallard" conductor	each	5					
8.2.4	Spacer Damper for "ACSR Mallard"	each	7					
8.2.5	Jumper Spacer for "ACSR Mallard"	each	7					
8.2.6	Earthwire 7x4.00mm	km	7					
8.2.7	Midspan Joint for 7x4.00mm earthwire	each	3					
8.2.8	Suspension set for 7x4.00mm earthwire	each	10					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 2.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
8.2.9	Tension set for 7x4.00mm earthwire	each	10					
8.2.10	Vibration damper for 7x4.00mm earthwire	each	15					
8.2.11	7x4.00mm Equivalent OPGW	km	10					
8.2.12	Suspension set for 7x4.00mm Equivalent OPGW	each	12					
8.2.13	Tension set for 7x4.00mm Equivalent OPGW	each	12					
8.2.14	Vibration damper for 7x4.00mm Equivalent OPGW	each	15					
8.3	**Temporary earthing equipment**	each	1					
8.4	**Motorised jointing compressor for conductor complete with dies suitable for conductors & earthwires to be used for this Contract**	each	2					
Total Columns 8 to be carried forward to Schedule No. 5 - Grand Summary								

Name of Bidder
Signature of Bidder

1 Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2 Bidders shall enter a code representing the country of origin of all imported plant and equipment.

3 Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is exclusive sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such extra costs in his unit rate.

Country of Origin Declaration Form

Item	Description	Country

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No. PGCB/AIIB/000308-BGD/TL/Package-2)								
C. Cox's Bazar (North)-Teknaf 132 kV double circuit transmission line: 65 km (using Single ACSR Grosbeak Conductor)								
Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 3.1 Plant and Mandatory Spare Parts Supplied from Abroad								
1.Supply of 132 kV double circuit towers, complete with all stubs, nuts, bolts, locking nuts, washers, phase conductors and earthwire, swivels/shackles, step bolts, tower notice and identification plates, ACDs, protective coating, earthing, etc.								
1.1	**Tower type "1DL"**							
1.1.1	Tower type 1DL Standard		each	20				
1.1.2	Tower type 1DL+1.5 m		each	16				
1.1.3	Tower type 1DL+3 m		each	18				
1.1.4	Tower type 1DL+4.5 m		each	20				
1.1.5	Tower type 1DL+6 m		each	32				
1.1.6	Tower type 1DL+9 m		each	32				
1.2	**Tower type "1D1"**							
1.2.1	Tower type 1D1 Standard		each	1				
1.2.2	Tower type 1D1 +1.5 m		each	1				
1.2.3	Tower type 1D1 +3 m		each	1				
1.2.4	Tower type 1D1 +4.5 m		each	1				
1.2.5	Tower type 1D1 +6 m		each	1				
1.2.6	Tower type 1D1 +9 m		each	1				
1.2.7	Tower type 1D1 +12 m		each	1				
1.3	**Tower type "1D25"**							
1.3.1	Tower type 1D25 Standard		each	5				
1.3.2	Tower type 1D25 +1.5 m		each	7				
1.3.3	Tower type 1D25+3 m		each	10				
1.3.4	Tower type 1D25 +9 m		each	18				
1.4	**Tower type "1DT6"**							
1.4.1	Tower type 1DT6 Standard		each	5				
1.4.2	Tower type 1DT6+1.5 m		each	5				
1.4.3	Tower type 1DT6+3 m		each	5				
1.4.4	Tower type 1DT6+4.5 m		each	9				
1.4.5	Tower type 1DT6+6 m		each	12				
1.4.6	Tower type 1DT6+9 m		each	12				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price1		Total Price1	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 3.1 Plant and Mandatory Spare Parts Supplied from Abroad								
1.5	**Tower Type 1QL**							
1.5.1	Tower Type 1QL Standard		each	1				
1.5.2	Tower Type 1QL+1.5 m		each	NIL				
1.5.3	Tower Type 1QL+3.0 m		each	1				
1.5.4	Tower Type 1QL+4.5 m		each	NIL				
1.5.5	Tower Type 1QL+6.0 m		each	1				
1.5.6	Tower Type 1QL+9.0 m		each	NIL				
1.6	**Tower Type 1Q15**							
1.6.1	Tower type 1Q15 Standard		each	1				
1.6.2	Tower type 1Q15 +1.5 m		each	NIL				
1.6.3	Tower type 1Q15 +3.0 m		each	1				
1.6.4	Tower type 1Q15 +4.5 m		each	NIL				
1.6.5	Tower type 1Q15 +6.0 m		each	1				
1.6.6	Tower type 1Q15+9.0 m		each	NIL				
1.6.7	Tower type 1Q15 +12.0 m		each	NIL				
1.6.8	Tower type 1Q15 +15.0 m		each	NIL				
1.7	**Tower Type 1Q30**							
1.7.1	Tower type 1Q30 Standard		each	1				
1.7.2	Tower type 1Q30 +3.0 m		each	1				
1.7.3	Tower type 1Q30 +4.5 m		each	NIL				
1.7.4	Tower type 1Q30 +6.0 m		each	1				
1.7.5	Tower type 1Q30 +9.0 m		each	NIL				
1.8	**Tower Type 1QT6**							
1.8.1	Tower type 1QT6 Standard		each	1				
1.8.2	Tower type 1QT6+1.5 m		each	NIL				
1.8.3	Tower type1QT6+3.0 m		each	1				
1.8.4	Tower type 1QT6+4.5 m		each	NIL				
1.8.5	Tower Type 1QT6+6.0 m		each	1				
1.8.6	Tower Type 1QT6+9.0 m		each	NIL				
1.9	**Pole**							
1.9.1	Pole type 1DLP		each	1				
1.9.2	Pole type 1D1P		each	1				
1.9.3	Pole type 1D25P		each	1				
1.9.4	Pole type 1DT6P		each	1				
1.9.5	Pole type 1D9P		each	1				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price1		Total Price1	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 3.1 Plant and Mandatory Spare Parts Supplied from Abroad								
1.10	Auxiliary Crossarm for pole type 1DT6P		per set of three	1				
1.11	Auxiliary crossarm for tower type 1DT6		per set of three	3				
1.12	Galvenized Tower Steel							
(a)	Fabricated		ton	20				
(b)	Non-fabricated		ton	10				
2	**Phase conductor, earthwire and OPGW cable, complete with repair sleeves and joints**							
2.1	**Overland Portion**							
2.1.1	"ACSR Grosbeak" Phase Conductor (3 Phase, Double Circuit, Single Conductor per phase on the line)		Route km[3]	65				
2.1.2	7x3.25mm equivalent OPGW inclusive of joint boxes, fixing clamps, fusion splices and connections to the joint boxes. One OPGW earthwire on the line.		Route km[3]	65				
2.1.3	7x3.25mm earthwire. One earthwire on the line.		Route km[3]	65				
3	**Insulator strings, with associated suspension and tension clamps for twin ACSR Mallard Conductor**							
3.1	**Over Land Portion**							
3.1.1	a) Single suspension string, 70 kN -disc only		Set	852				
	b) Single suspension string, 70 kN -fittings only		Set	852				
3.1.2	a) Single suspension string (Heavy Suspension), 120 kN -disc only		Set	48				
	a) Single suspension string (Heavy Suspension), 120 kN -fittings only		Set	48				
3.1.3	a) Single tension string, 120kN -disc only		Set	1200				
	b) Single tension string, 120kN -fittings only		Set	1200				
3.1.4	a) Single jumper suspension I-string, having each string 1x70 kN-disc only		Set	300				
	b) Single jumper suspension I-string, having each string 1x70 kN-fittings only		Set	300				
3.1.5	a) Single tension string, upright low duty 70kN- disc only		Set	12				
	b) Single tension string, upright low duty 70kN- fittings only		Set	12				
3.1.6	a) Single tension string, inverted low duty 70kN -discs only		Set	12				
	b) Single tension string, inverted low duty 70kN -fittings only		Set	12				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 3.1 Plant and Mandatory Spare Parts Supplied from Abroad								
3.1.7	Counterweights for 120kN suspension insulator sets complete with yoke plate attachment bolts to be used for 1D1 towers:							
(a)	- 40kg set		each	3				
(b)	- 80kg set		each	3				
(c)	- 120kg set		each	5				
4	**Earthwire sets, complete with all accessories**							
4.1	**Over Land Portion**							
4.1.1	Suspension set		set	149				
4.1.2	Tension set		set	200				
5	**OPGW sets, complete with all accessories, incl. armour rods and earth bounds**							
5.1	**Over Land Portion**							
5.1.1	Suspension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)		set	149				
5.1.2	Tension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)		set	200				
6	**Dampers**							
6.1	**Over Land Portion**							
6.1.1	Vibration damper for phase conductor		per span	232				
6.1.2	Spacer damper for phase conductor		per span	232				
6.1.3	Vibration damper for earthwire		per span	232				
6.1.4	Vibration damper for OPGW		per span	232				
6.1.5	Spacer for jumper		nos.	291				
7	**Aerial Markers**							
7.1	Painting of tower having height more than 60 meter in accordance with the requirements of the Technical Specification		per tower	5				
7.2	Painting of tower (Reflecting Paint) upto 3 meter in submerge area in accordance with the requirements of the Technical Specification		per tower	5				
7.3	Air craft obstruction lights solar powered complete with lamps, solar, panels, batteries, control equipment cables, support framework, tower work platform etc.		each	12				
7.4	Aircraft warning spheres		each	12				
7.5	Bird diverters		each	15				
7.6	Bird guards, one bird guard per each crossarm applied on intermediate towers		each	882				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 3.1 Plant and Mandatory Spare Parts Supplied from Abroad								
8	**Mandatory Spare Parts and Tools**							
8.1	**Insulator and Fittings**							
	Insulator sets complete with insulators and all hardware fittings including suspension clamps, tension dead ends,armour rods, arcing horn. Arcing ring etc							
8.1.1	70 kN single suspension Insulators set for "ACSR Grosbeak" - Complete Assembly		set	5				
8.1.2	70 kN jumper suspension set for "ACSR Grosbeak" - Complete Assembly		set	10				
8.1.3	120kN Single tension set for "ACSR Grosbeak" - Complete Assembly		set	20				
8.2	**Phase conductor, earthwire, OPGW & Fittings**							
8.2.1	Phase conductor "ACSR Grosbeak" conductor		km	7				
8.2.2	Midspan Joint for "ACSR Grosbeak " conductor		each	5				
8.2.3	Repair sleeve for "ACSR Grosbeak" conductor		each	5				
8.2.4	Spacer Damper for "ACSR Grosbeak"		each	7				
8.2.5	Jumper Spacer for "ACSR Grosbeak"		each	7				
8.2.6	Earthwire 7x3.25mm		km	7				
8.2.7	Midspan Joint for 7x3.25mm earthwire		each	3				
8.2.8	Suspension set for 7x3.25mm earthwire		each	10				
8.2.9	Tension set for 7x3.25mm earthwire		each	10				
8.2.10	Vibration damper for 7x3.25mm earthwire		each	15				
8.2.11	7x3.25mm Equivalent OPGW		km	10				
8.2.12	Suspension set for 7x3.25mm Equivalent OPGW		each	12				
8.2.13	Tension set for 7x3.25mm Equivalent OPGW		each	12				
8.2.14	Vibration damper for 7x3.25mm Equivalent OPGW		each	15				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 3.1 Plant and Mandatory Spare Parts Supplied from Abroad								
8.3	Temporary earthing equipment		each	1				
8.4	Motorised jointing compressor for conductor complete with dies suitable for conductors & earthwires to be used for this Contract		each	2				
Total Columns 8 to be carried forward to Schedule No. 5 - Grand Summary								

Name of Bidder	
Signature of Bidder	

1 Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2 Bidders shall enter a code representing the country of origin of all imported plant and equipment.

3 Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is exclusive sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such extra costs in his unit rate.

Country of Origin Declaration Form

Item	Description	Code	Country

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No. PGCB/AIIB/000308-BGD/TL/Package-2)

C. Cox's Bazar (North)-Teknaf 132 kV double circuit transmission line: 65 km (using Single ACSR Grosbeak Conductor)

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 3.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
1.Supply of 132 kV double circuit towers, complete with all stubs, nuts, bolts, locking nuts, washers, phase conductors and earthwire, swivels/shackles, step bolts, tower notice and identification plates, ACDs, protective coating, earthing, etc.								
1.1	**Tower type "1DL"**							
1.1.1	Tower type 1DL Standard	each	20					
1.1.2	Tower type 1DL+1.5 m	each	16					
1.1.3	Tower type 1DL+3 m	each	18					
1.1.4	Tower type 1DL+4.5 m	each	20					
1.1.5	Tower type 1DL+6 m	each	32					
1.1.6	Tower type 1DL+9 m	each	32					
1.2	**Tower type "1D1"**							
1.2.1	Tower type 1D1 Standard	each	1					
1.2.2	Tower type 1D1 +1.5 m	each	1					
1.2.3	Tower type 1D1 +3 m	each	1					
1.2.4	Tower type 1D1 +4.5 m	each	1					
1.2.5	Tower type 1D1 +6 m	each	1					
1.2.6	Tower type 1D1 +9 m	each	1					
1.2.7	Tower type 1D1 +12 m	each	1					
1.3	**Tower type "1D25"**							
1.3.1	Tower type 1D25 Standard	each	5					
1.3.2	Tower type 1D25 +1.5 m	each	7					
1.3.3	Tower type 1D25+3 m	each	10					
1.3.4	Tower type 1D25 +9 m	each	18					
1.4	**Tower type "1DT6"**							
1.4.1	Tower type 1DT6 Standard	each	5					
1.4.2	Tower type 1DT6+1.5 m	each	5					
1.4.3	Tower type 1DT6+3 m	each	5					
1.4.4	Tower type 1DT6+4.5 m	each	9					
1.4.5	Tower type 1DT6+6 m	each	12					
1.4.6	Tower type 1DT6+9 m	each	12					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 3.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
1.5	**Tower Type 1QL**							
1.5.1	Tower Type 1QL Standard	each	1					
1.5.2	Tower Type 1QL+1.5 m	each	NIL					
1.5.3	Tower Type 1QL+3.0 m	each	1					
1.5.4	Tower Type 1QL+4.5 m	each	NIL					
1.5.5	Tower Type 1QL+6.0 m	each	1					
1.5.6	Tower Type 1QL+9.0 m	each	NIL					
1.6	**Tower Type 1Q15**							
1.6.1	Tower type 1Q15 Standard	each	1					
1.6.2	Tower type 1Q15 +1.5 m	each	NIL					
1.6.3	Tower type 1Q15 +3.0 m	each	1					
1.6.4	Tower type 1Q15 +4.5 m	each	NIL					
1.6.5	Tower type 1Q15 +6.0 m	each	1					
1.6.6	Tower type 1Q15+9.0 m	each	NIL					
1.6.7	Tower type 1Q15 +12.0 m	each	NIL					
1.6.8	Tower type 1Q15 +15.0 m	each	NIL					
1.7	**Tower Type 1Q30**							
1.7.1	Tower type 1Q30 Standard	each	1					
1.7.2	Tower type 1Q30 +3.0 m	each	1					
1.7.3	Tower type 1Q30 +4.5 m	each	NIL					
1.7.4	Tower type 1Q30 +6.0 m	each	1					
1.7.5	Tower type 1Q30 +9.0 m	each	NIL					
1.8	**Tower Type 1QT6**							
1.8.1	Tower type 1QT6 Standard	each	1					
1.8.2	Tower type 1QT6+1.5 m	each	NIL					
1.8.3	Tower type1QT6+3.0 m	each	1					
1.8.4	Tower type 1QT6+4.5 m	each	NIL					
1.8.5	Tower Type 1QT6+6.0 m	each	1					
1.8.6	Tower Type 1QT6+9.0 m	each	NIL					
1.9	**Pole**							
1.9.1	Pole type 1DLP	each	1					
1.9.2	Pole type 1D1P	each	1					
1.9.3	Pole type 1D25P	each	1					
1.9.4	Pole type 1DT6P	each	1					
1.9.5	Pole type 1D9P	each	1					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 3.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
1.10	Auxiliary Crossarm for pole type 2DT6P	per set of three	1					
1.11	Auxiliary crossarm for tower type 2DT6	per set of three	3					
1.12	Galvenized Tower Steel							
(a)	Fabricated	ton	20					
(b)	Non-fabricated	ton	10					
2	**Phase conductor, earthwire and OPGW cable, complete with repair sleeves and joints**							
2.1	**Overland Portion**							
2.1.1	"ACSR Grosbeak" Phase Conductor (3 Phase, Double Circuit, Single Conductor per phase on the line)	Route km[3]	65					
2.1.2	7x3.25mm equivalent OPGW inclusive of joint boxes, fixing clamps, fusion splices and connections to the joint boxes. One OPGW earthwire on the line.	Route km[3]	65					
2.1.3	7x3.25mm earthwire. One earthwire on the line.	Route km[3]	65					
3	**Insulator strings, with associated suspension and tension clamps for twin ACSR Mallard Conductor**							
3.1	**Over Land Portion**							
3.1.1	a) Single suspension string, 70 kN -disc only	Set	852					
	b) Single suspension string, 70 kN -fittings only	Set	852					
3.1.2	a) Single suspension string (Heavy Suspension), 120 kN -disc only	Set	48					
	a) Single suspension string (Heavy Suspension), 120 kN -fittings only	Set	48					
3.1.3	a) Single tension string, 120kN -disc only	Set	1200					
	b) Single tension string, 120kN -fittings only	Set	1200					
3.1.4	a) Single jumper suspension I-string, having each string 1x70 kN-disc only	Set	300					
	b) Single jumper suspension I-string, having each string 1x70 kN-fittings only	Set	300					
3.1.5	a) Single tension string, upright low duty 70kN- disc only	Set	12					
	b) Single tension string, upright low duty 70kN- fittings only	Set	12					
3.1.6	a) Single tension string, inverted low duty 70kN -discs only	Set	12					
	b) Single tension string, inverted low duty 70kN -fittings only	Set	12					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 3.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
3.1.7	Counterweights for 120kN suspension insulator sets complete with yoke plate attachment bolts to be used for 1D1 towers:							
(a)	- 40kg set	each	3					
(b)	- 80kg set	each	3					
(c)	- 120kg set	each	5					
4	**Earthwire sets, complete with all accessories**							
4.1	**Over Land Portion**							
4.1.1	Suspension set	set	149					
4.1.2	Tension set	set	200					
5	**OPGW sets, complete with all accessories, incl. armour rods and earth bounds**							
5.1	**Over Land Portion**							
5.1.1	Suspension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)	set	149					
5.1.2	Tension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)	set	200					
6	**Dampers**							
6.1	**Over Land Portion**							
6.1.1	Vibration damper for phase conductor	per span	232					
6.1.2	Spacer damper for phase conductor	per span	232					
6.1.3	Vibration damper for earthwire	per span	232					
6.1.4	Vibration damper for OPGW	per span	232					
6.1.5	Spacer for jumper	nos.	291					
7	**Aerial Markers**							
7.1	Painting of tower having height more than 60 meter in accordance with the requirements of the Technical Specification	per tower	5					
7.2	Painting of tower (Reflecting Paint) upto 3 meter in submerge area in accordance with the requirements of the Technical Specification	per tower	5					
7.3	Air craft obstruction lights solar powered complete with lamps, solar, panels, batteries, control equipment cables, support framework, tower work platform etc.	each	12					
7.4	Aircraft warning spheres	each	12					
7.5	Bird diverters	each	15					
7.6	Bird guards, one bird guard per each crossarm applied on intermediate towers	each	882					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 3.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
8	**Mandatory Spare Parts and Tools**							
8.1	**Insulator and Fittings**							
	Insulator sets complete with insulators and all hardware fittings including suspension clamps, tension dead ends,armour rods, arcing horn. Arcing ring etc							
8.1.1	70 kN single suspension Insulators set for "ACSR Grosbeak" - Complete Assembly	set	5					
8.1.2	70 kN jumper suspension set for "ACSR Grosbeak" - Complete Assembly	set	10					
8.1.3	120 kN Single tension set for "ACSR Grosbeak" - Complete Assembly	set	20					
8.2	**Phase conductor, earthwire, OPGW & Fittings**							
8.2.1	Phase conductor "ACSR Grosbeak" conductor	km	7					
8.2.2	Midspan Joint for "ACSR Grosbeak " conductor	each	5					
8.2.3	Repair sleeve for "ACSR Grosbeak" conductor	each	5					
8.2.4	Spacer Damper for "ACSR Grosbeak"	each	7					
8.2.5	Jumper Spacer for "ACSR Grosbeak"	each	7					
8.2.6	Earthwire 7x3.25mm	km	7					
8.2.7	Midspan Joint for 7x3.25mm earthwire	each	3					
8.2.8	Suspension set for 7x3.25mm earthwire	each	10					
8.2.9	Tension set for 7x3.25mm earthwire	each	10					
8.2.10	Vibration damper for 7x3.25mm earthwire	each	15					
8.2.11	7x3.25mm Equivalent OPGW	km	10					
8.2.12	Suspension set for 7x3.25mm Equivalent OPGW	each	12					
8.2.13	Tension set for 7x3.25mm Equivalent OPGW	each	12					
8.2.14	Vibration damper for 7x3.25mm Equivalent OPGW	each	15					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 3.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
8.3	**Temporary earthing equipment**	each	1					
8.4	**Motorised jointing compressor for conductor complete with dies suitable for conductors & earthwires to be used for this Contract**	each	2					
Total Columns 8 to be carried forward to Schedule No. 5 - Grand Summary								

Name of Bidder

Signature of Bidder

1 Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2 Bidders shall enter a code representing the country of origin of all imported plant and equipment.

3 Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is exclusive sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such extra costs in his unit rate

Country of Origin Declaration Form

Item	Description	Country

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No. PGCB/AIIB/000308-BGD/TL/Package-2)								
D. 132 kV Line-In-Line-Out (LILO) at Cox's Bazar (North) substation from Dohazari - Cox's Bazar 132 kV double circuit transmission line: 1.55 km (using Single ACSR Grosbeak equivalent ACCC conductor)								
Item	**Description**	**Country of origin[2]**	**Unit**	**Quantity**	**Unit Price[1]**		**Total Price[1]**	**Taxes and Duties**
					Foreign Currency [xxx]	**CIP**	**Foreign Currency [xxx] CIP**	**Local Currency [BDT]**
1	**2**	**3***	**4**	**5**	**6**	**7**	**8= 5 x 7**	**9**
Schedule No. 4.1 Plant and Mandatory Spare Parts Supplied from Abroad								
1.Supply of 132 kV double circuit towers, complete with all stubs, nuts, bolts, locking nuts, washers, phase conductors and earthwire, swivels/shackles, step bolts, tower notice and identification plates, ACDs, protective coating, earthing, etc.								
1	**Supply of 132 kV Double circuit towers, complete with all stubs, nuts, bolts, locking nuts, washers, phase conductors and earthwire, swivels/shackles, step bolts, tower notice and identification plates, ACDs, protective coating, earthing, etc.**							
1.1	**Tower Type 1DT6**							
1.1.1	Tower Type 1DT6+6.0 m		each	1				
1.1.2	Tower Type 1DT6+9.0 m		each	1				
2	**Supply of 132 kV Four circuit towers, complete with all stubs, nuts, bolts, locking nuts, washers, phase conductors and earthwire, swivels/shackles, step bolts, tower notice and identification plates, ACDs, protective coating, earthing, etc.**							
2.1	**Tower Type 1QL**							
2.1.1	Tower Type 1QL+9.0 m		each	1				
2.2	**Tower Type 1Q15**							
2.2.1	Tower type 1Q15 +15.0 m		each	1				
2.3	**Tower Type 1Q30**							
2.3.1	Tower type 1Q30 +9.0 m		each	2				
2.4	**Tower Type 1QT6**							
2.4.1	Tower Type 1QT6+9.0 m		each	3				
3	**Auxiliary Crossarm for tower**							
3.1	Auxiliary Crossarm for Tower Type 1QT6		per set of three	4				
4	**Phase conductor, earthwire and OPGW cable, complete with repair sleeves and joints**							
4.1	"ACSR Grosbeak equivalent ACCC" (four circuit line, all circuits erected, one conductors per phase) [3]		Route km[3]	1.55				
4.2	Two optical fibre ground wire, 24 fibres 7×3.25 steel earthwire equivalent OPGW, including joint box		Route km[3]	1.55				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 4.1 Plant and Mandatory Spare Parts Supplied from Abroad								
5	**Insulator strings, with associated suspension and tension clamps for single "ACSR Grosbeak equivalent ACCC " Conductor**							
5.1	a) 70kN suspension Insulators set for single "ACSR Grosbeak equivalent ACCC" Conductor (Suspension) - disc only		Set	12				
	b) 70kN suspension Insulators set for single "ACSR Grosbeak equivalent ACCC" Conductor (Suspension) - hardware fittings only		Set	12				
5.2	a) 120kN tension Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - disc only		Set	156				
	b) 120kN tension Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - hardware fittings only		Set	156				
5.3	a) 70kN jumper suspension Insulators Set forsingle "ACSR Grosbeak equivalent ACCC" Conductor - disc only		Set	66				
	b) 70kN jumper suspension Insulators Set forsingle "ACSR Grosbeak equivalent ACCC" Conductor - hardware fittings only		Set	66				
5.4	a) 70kN single upright low duty Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - disc only		Set	12				
	b) 70kN single upright low duty Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - hardware fittings only		Set	12				
5.5	a) 70kN single inverted low duty Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - disc only		Set	12				
	b) 70kN single inverted low duty Insulators Fittings Set for single "ACSR Grosbeak equivalent ACCC" Conductor - hardware fittings only		Set	12				
6	**OPGW sets, complete with all accessories, incl. armour rods and earth bounds**							
6.1	Suspension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)		set	2				
6.2	Tension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)		set	28				
7	**Dampers**							
7.1	Vibration damper for phase conductor		per span	5				
7.2	Vibration damper for OPGW		per span	5				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price1		Total Price1	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 4.1 Plant and Mandatory Spare Parts Supplied from Abroad								
8	**Aerial Markers**							
8.1	Air craft obstruction lights solar powered complete with lamps, solar, panels, batteries, control equipment cables, support framework, tower work platform etc.		Per tower	1				
8.2	Bird diverters		pcs.	3				
8.3	Bird guards, one bird guard per each crossarm applied on intermediate towers		pcs.	12				
8.4	Aircraft warning spheres		pcs.	1				
8.5	Painting of 60 meter and over tower in accordance with the requirements of the Technical Specification		per tower	1				
8.6	Painting of tower (Reflecting Paint) upto 3 meter in submerge area in accordance with the requirements of the Technical Specification		per tower	NIL				
9	**Mandatory Spare Parts and Tools**							
9.1	Conductor "ACSR Grosbeak equivalent ACCC" type		km	2				
9.2	Optical fibre ground wire, 24 fibres 7×3.25 steel earthwire equivalent OPGW		km	1				
9.3	a) 70kN suspension Insulators set for single "ACSR Grosbeak equivalent ACCC" Conductor (Suspension) - disc only		set	5				
	b) 70kN suspension Insulators set for single "ACSR Grosbeak equivalent ACCC" Conductor (Suspension) - hardware fittings only		set	5				
9.4	a) 120kN tension Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - disc only		set	6				
	b) 120kN tension Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - hardware fittings only		set	6				
9.5	OPGW 24 fibres suspension set		set	2				
9.6	OPGW 24 fibres tension set		set	2				
9.7	OPGW junction box		set	8				
9.8	Vibration damper for phase conductor single "ACSR Grosbeakequivalent ACCC" Conductor		each	6				
9.9	Vibration damper for OPGW		each	3				
9.10	Repair sleeve for conductor - single "ACSR Grosbeak equivalent ACCC" Conductor		pcs	3				

Item	Description	Country of origin[2]	Unit	Quantity	Unit Price[1]		Total Price[1]	Taxes and Duties
					Foreign Currency [xxx]	CIP	Foreign Currency [xxx] CIP	Local Currency [BDT]
1	2	3*	4	5	6	7	8= 5 x 7	9
Schedule No. 4.1 Plant and Mandatory Spare Parts Supplied from Abroad								
9.11	Midspan joints for conductor single "ACSR Grosbeak equivalent ACCC Conductor" Conductor		pcs	3				
9.12	Bird diverters		pcs	2				
9.13	Bird guard		pcs	4				
9.14	Terminal ground resistance tester (tools)		pcs	1				
9.15	**Temporary earthing equipment**		each	1				
9.16	**Motorised jointing compressor for conductor complete with dies suitable for conductors & earthwires to be used for this Contract**		each	1				
Total Columns 8 to be carried forward to Schedule No. 5 - Grand Summary								

Name of Bidder	____________
Signature of Bidder	____________

1 Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2 Bidders shall enter a code representing the country of origin of all imported plant and equipment.

3 Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is exclusive sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such extra costs in his unit rate.

Country of Origin Declaration Form

Item	Description	Code	Country

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No. PGCB/AIIB/000308-BGD/TL/Package-2)								
D. 132 kV Line-In-Line-Out (LILO) at Cox's Bazar (North) substation from Dohazari - Cox's Bazar 132 kV double circuit transmission line: 1.55 km (using Single ACSR Grosbeak equivalent ACCC conductor)								
Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 4.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
1.Supply of 132 kV double circuit towers, complete with all stubs, nuts, bolts, locking nuts, washers, phase conductors and earthwire, swivels/shackles, step bolts, tower notice and identification plates, ACDs, protective coating, earthing, etc.								
1	**Supply of 132 kV Double circuit towers, complete with all stubs, nuts, bolts, locking nuts, washers, phase conductors and earthwire, swivels/shackles, step bolts, tower notice and identification plates, ACDs, protective coating, earthing, etc.**							
1.1	**Tower Type 1DT6**							
1.1.1	Tower Type 1DT6+6.0 m	each	1					
1.1.2	Tower Type 1DT6+9.0 m	each	1					
2	**Supply of 132 kV Four circuit towers, complete with all stubs, nuts, bolts, locking nuts, washers, phase conductors and earthwire, swivels/shackles, step bolts, tower notice and identification plates, ACDs, protective coating, earthing, etc.**							
2.1	**Tower Type 1QL**							
2.1.1	Tower Type 1QL+9.0 m	each	1					
2.2	**Tower Type 1Q15**							
2.2.1	Tower type 1Q15 +15.0 m	each	1					
2.3	**Tower Type 1Q30**							
2.3.1	Tower type 1Q30 +9.0 m	each	2					
2.4	**Tower Type 1QT6**							
2.4.1	Tower Type 1QT6+9.0 m	each	3					
3	**Auxiliary Crossarm for tower**							
3.1	Auxiliary Crossarm for Tower Type 1QT6	per set of three	4					
4	**Phase conductor, earthwire and OPGW cable, complete with repair sleeves and joints**							
4.1	"ACSR Grosbeak equivalent ACCC" (four circuit line, all circuits erected, one conductors per phase) [3]	Route km^3	1.55					
4.2	Two optical fibre ground wire, 24 fibres 7×3.25 steel earthwire equivalent OPGW, including joint box	Route km^3	1.55					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 4.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
5	**Insulator strings, with associated suspension and tension clamps for single "ACSR Grosbeak equivalent ACCC " Conductor**							
5.1	a) 70kN suspension Insulators set for single "ACSR Grosbeak equivalent ACCC" Conductor (Suspension) - disc only	Set	12					
	b) 70kN suspension Insulators set for single "ACSR Grosbeak equivalent ACCC" Conductor (Suspension) - hardware fittings only	Set	12					
5.2	a) 120kN tension Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - disc only	Set	156					
	b) 120kN tension Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - hardware fittings only	Set	156					
5.3	a) 70kN jumper suspension Insulators Set forsingle "ACSR Grosbeak equivalent ACCC" Conductor - disc only	Set	66					
	b) 70kN jumper suspension Insulators Set forsingle "ACSR Grosbeak equivalent ACCC" Conductor - hardware fittings only	Set	66					
5.4	a) 70kN single upright low duty Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - disc only	Set	12					
	b) 70kN single upright low duty Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - hardware fittings only	Set	12					
5.5	a) 70kN single inverted low duty Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - disc only	Set	12					
	b) 70kN single inverted low duty Insulators Fittings Set for single "ACSR Grosbeak equivalent ACCC" Conductor - hardware fittings only	Set	12					
6	**OPGW sets, complete with all accessories, incl. armour rods and earth bounds**							
6.1	Suspension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)	set	2					
6.2	Tension set (including all fittings and accessories for surplus and to guide the OPGW to the joint box)	set	28					
7	**Dampers**							
7.1	Vibration damper for phase conductor	per span	5					
7.2	Vibration damper for OPGW	per span	5					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 4.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
8	**Aerial Markers**							
8.1	Air craft obstruction lights solar powered complete with lamps, solar, panels, batteries, control equipment cables, support framework, tower work platform etc.	Per tower	1					
8.2	Bird diverters	pcs.	3					
8.3	Bird guards, one bird guard per each crossarm applied on intermediate towers	pcs.	12					
8.4	Aircraft warning spheres	pcs.	1					
8.5	Painting of 60 meter and over tower in accordance with the requirements of the Technical Specification	per tower	1					
8.6	Painting of tower (Reflecting Paint) upto 3 meter in submerge area in accordance with the requirements of the Technical Specification	per tower	NIL					
9	**Mandatory Spare Parts and Tools**							
9.1	Conductor "ACSR Grosbeak equivalent ACCC" type	km	2					
9.2	Optical fibre ground wire, 24 fibres 7×3.25 steel earthwire equivalent OPGW	km	1					
9.3	a) 70kN suspension Insulators set for single "ACSR Grosbeak equivalent ACCC" Conductor (Suspension) - disc only	set	5					
	b) 70kN suspension Insulators set for single "ACSR Grosbeak equivalent ACCC" Conductor (Suspension) - hardware fittings only	set	5					
9.4	a) 120kN tension Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - disc only	set	6					
	b) 120kN tension Insulators Set for single "ACSR Grosbeak equivalent ACCC" Conductor - hardware fittings only	set	6					
9.5	OPGW 24 fibres suspension set	set	2					
9.6	OPGW 24 fibres tension set	set	2					
9.7	OPGW junction box	set	8					
9.8	Vibration damper for phase conductor single "ACSR Grosbeakequivalent ACCC" Conductor	each	6					
9.9	Vibration damper for OPGW	each	3					
9.10	Repair sleeve for conductor - single "ACSR Grosbeak equivalent ACCC" Conductor	pcs	3					

Item	Description	Unit	Quantity	Local Currency in BDT		Foreign Currency in (xxx)		Sales and Other Taxes
				Unit EXW Price1	Total EXW Price	Unit EXW Price1	Total EXW Price	Local Currency [BDT]
1	2	3	4	5	6=4*5	7	8=4*7	9
Schedule No. 4.2 Plant and Mandatory Spare Parts Supplied From Within Employer's Country								
9.11	Midspan joints for conductor single "ACSR Grosbeak equivalent ACCC Conductor" Conductor	pcs	3					
9.12	Bird diverters	pcs	2					
9.13	Bird guard	pcs	4					
9.14	Terminal ground resistance tester (tools)	pcs	1					
9.15	**Temporary earthing equipment**	each	1					
9.16	**Motorised jointing compressor for conductor complete with dies suitable for conductors & earthwires to be used for this Contract**	each	1					
Total Columns 8 to be carried forward to Schedule No. 5 - Grand Summary								

Name of Bidder

Signature of Bidder

1 Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2 Bidders shall enter a code representing the country of origin of all imported plant and equipment.

3 Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is exclusive sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such

Country of Origin Declaration Form

Item	Description	Country

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (PGCB/AIIB/000308-BGD/TL/Package-2)							
Item	**Description**	**Unit**	**Quantity**	**Unit Price**[1]		**Total Price**[1]	
				Local Currency Portion [BDT]	**Foreign Currency Portion [xxx]**	**Local Currency Portion [BDT]**	**Foreign Currency Portion [xxx]**
1	**2**	**3**	**4**	**5**	**6**	**7 = 4 x 5**	**8 = 4 x 6**
Schedule No. 3 Design Services (Scope-A, B, C & D)							
1	**Line Design**						
1.1	Detailed line design including plan and profiles; conductor, earthwire and OPGW sag tension calculations; tower spotting, establishment of line schedule; Design of insulator strings, OPGW and earthwire attachments	Lump sum	1				
2	**Tower/Pole Test**						
2.1	**Proto assembly of all type towers with all extensions to prove compliance with specification. Payment for successful test only.**						
2.1.1	4D1	Lot	1				
2.1.2	2DL	Lot	1				
2.1.3	2D1	Lot	1				
2.1.4	2D25	Lot	1				
2.1.5	2DT6	Lot	1				
2.1.6	2D9	Lot	1				
2.1.7	2DR	Lot	1				
2.1.8	2DAX	Lot	1				
2.1.9	2QL	Lot	1				
2.1.10	2Q1	Lot	1				
2.1.11	2Q15	Lot	1				
2.1.12	2Q30	Lot	1				
2.1.13	2QT6	Lot	1				
2.1.14	1DL	Lot	1				
2.1.15	1D1	Lot	1				
2.1.16	1D25	Lot	1				
2.1.17	1DT6	Lot	1				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. 3 Design Services (Scope-A, B, C & D)							
2.1.18	1QL	Lot	1				
2.1.19	1Q15	Lot	1				
2.1.20	1Q30	Lot	1				
2.1.21	1QT6	Lot	1				
2.2	**Proto assembly of all type poles with all extensions to prove compliance with specification. Payment for successful test only.**						
2.2.1	1DLP						
2.2.2	1D1P	Lot	1				
2.2.3	1D25P	Lot	1				
2.2.4	1DT6P	Lot	1				
2.2.5	1D9P	Lot	1				
3	**Foundation Design**	Lot	1				
3.1	Foundation design for all soil types including additional soil investigation and additional soil resistivity measurement	Lump sum	1				
Total Columns 7 & 8 to be carried forward to Schedule No. 5 - Grand Summary							
4	Total Tax and VAT deductable at source(TDS & VDS) under the schedule 3(to be quoted in the currency similar as above)[2]						

Name of Bidder ____________

Signature of Bidder ____________

1. Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2. Bidder shall quote the amount considering clause 14.1 of section 8(Special Conditions of Contract), Volume 1 of 3 of the bidding document. The amount quoted by bidder is subject to arithmatic correction by Employer as required.

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No. PGCB/AIIB/000308-BGD/TL/Package-2)							
A. Anwara-Cox's Bazar (North) 230 kV double circuit transmission line (Initially charged at 132 kV): 109 km with 0.49 km river crossing portion (using twin ACSR mallard Conductor)							
Item	Description	Unit	Quantity	Unit Price1		Total Price1	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. A 1.4 Installation and Other Services							
1	**Survey and soil investigation works**						
1.1	**Survey Work**						
1.1.1	Check survey in accordance with the requirements of the technical specification, incl. Full ground survey with change of route, if any, tower plotting and preparation and submission of route maps, profile drawings, SIMM documents, etc.	Route km	109.49				
1.2	**Geotechnical Investigations incl. taking samples, logging and lab testing**						
1.2.1	Boreholes for geotechnical investigation, incl. laboratory test, borehole logs, sampling and interpretive report as per geotechnical specification						
(a)	Level 2	borehole	1				
(b)	Level 4	borehole	1				
1.2.2	Soil resistivity tests (one per tower)	unit	336				
2	**Foundations for towers/Poles including all setting out, Concrete, Reinforcement, Excavation, Pumping, Stub-Setting, Geotechnical Investigation (Level 2/Level 4), Shuttering, Leveling, Timbering, supply & Installation of foundation steelwork, Earthing Materials,Backfilling, approved Protective Coating & site clearing etc.**						
2.1	**Tower type "4D1" (Any extension)**						
2.1.1	Pile Foundation for any Soil Category	per tower	2				
2.1.2	Piled Foundation with 1.0/2.0/3.0m raised chimney for any Soil Category	per tower	2				
2.2	**Tower type "2DL"**						
2.2.1	Pile Foundation for Soil Category-2	per tower	40				
2.2.2	Pile Foundation for Soil Category-3	per tower	48				
2.2.3	Pile Foundation for Soil Category-4	per tower	40				
2.2.4	Piled Foundation with 1.0m raised chimney for Soil Category-2	per tower	7				
2.2.5	Piled Foundation with 1.0m raised chimney for Soil Category-3	per tower	8				
2.2.6	Piled Foundation with 1.0m raised chimney for Soil Category-4	per tower	7				
2.2.7	Piled Foundation with 2.0m raised chimney for Soil Category-2	per tower	7				
2.2.8	Piled Foundation with 2.0m raised chimney for Soil Category-3	per tower	8				
2.2.9	Piled Foundation with 2.0m raised chimney for Soil Category-4	per tower	7				
2.2.10	Piled Foundation with 3.0m raised chimney for any Soil Category	per tower	6				
2.3	**Tower type "2D1" (Any extension)**						
2.3.1	Pile Foundation for Soil Category-2	per tower	4				
2.3.2	Pile Foundation for Soil Category-3	per tower	4				
2.3.3	Pile Foundation for Soil Category-4	per tower	4				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. A 1.4 Installation and Other Services							
2.3.4	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	4				
2.3.5	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	4				
2.3.6	Piled Foundation with 3.0m raised chimney for any Soil Category	per tower	4				
2.4	**Tower type "2D25"**						
2.4.1	Pile Foundation for Soil Category-2	per tower	9				
2.4.2	Pile Foundation for Soil Category-3	per tower	8				
2.4.3	Pile Foundation for Soil Category-4	per tower	9				
2.4.4	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	4				
2.4.5	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	4				
2.4.6	Piled Foundation with 3.0m raised chimney for any Soil Category	per tower	4				
2.5	**Tower type "2DT6"**						
2.5.1	Pile Foundation for Soil Category-2	per tower	14				
2.5.2	Pile Foundation for Soil Category-3	per tower	13				
2.5.3	Pile Foundation for Soil Category-4	per tower	12				
2.5.4	Piled Foundation with 1.0m raised chimney for Soil Category-2	per tower	3				
2.5.5	Piled Foundation with 1.0m raised chimney for Soil Category-3	per tower	3				
2.5.6	Piled Foundation with 1.0m raised chimney for Soil Category-4	per tower	3				
2.5.7	Piled Foundation with 2.0m raised chimney for Soil Category-2	per tower	3				
2.5.8	Piled Foundation with 2.0m raised chimney for Soil Category-3	per tower	3				
2.5.9	Piled Foundation with 2.0m raised chimney for Soil Category-4	per tower	3				
2.5.6	Piled Foundation with 3.0m raised chimney for any Soil Category	per tower	3				
2.6	**Tower type "2D9"**						
2.6.1	Pile Foundation for Soil Category-2	per tower	1				
2.6.2	Pile Foundation for Soil Category-3	per tower	1				
2.6.3	Pile Foundation for Soil Category-4	per tower	1				
2.6.4	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.6.5	Piled Foundation with 2.0m/3.0m raised chimney for any Soil Category	per tower	1				
2.5	**Tower type "2QL"**						
2.5.1	Pile Foundation for any Soil Category	per tower	1				
2.5.2	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.5.3	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				
2.6	**Tower type "2Q1"**						
2.6.1	Pile Foundation for any Soil Category	per tower	1				
2.6.2	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.6.3	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. A 1.4 Installation and Other Services							
2.7	**Tower type "2Q15"**						
2.7.1	Pile Foundation for any Soil Category	per tower	1				
2.7.2	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.7.3	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				
2.8	**Tower type "2Q30"**						
2.8.1	Pile Foundation for any Soil Category	per tower	1				
2.8.2	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.8.3	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				
2.9	**Tower type "2QT6"**						
2.9.1	Pile Foundation for any Soil Category	per tower	1				
2.9.2	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.9.3	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				
2.10	**Tower type 2DR (River Crossing Foundation)**						
2.10.1	Pile Foundation for Tower type 2DR Standard	per tower	1				
2.10.2	Pile Foundation for Tower type 2DR M20	per tower	1				
2.11	**Tower type 2DR (Non-River Crossing Foundation)**						
2.11.1	Pile Foundation for Tower type 2DR Standard	per tower	1				
2.12	**Tower type 2DAX (River Crossing Foundation)**						
2.12.1	Pile Foundation for Tower type 2DAX Standard	per tower	2				
2.13	**Tower type 2DAX (Non-River Crossing Foundation)**						
2.13.1	Pile Foundation for Tower type 2DAX Standard	per tower	1				
2.14	**River Crossing Foundation for Normal (Non-River Crossing) Tower**						
2.14.1	Pile foundation for tower type “2DT6”	Per tower	2				
2.14.2	Pile foundation for tower type “2D1” (Any extension)	Per tower	2				
2.14.3	Pile foundation for tower type “4D1” (Any extension)	Per tower	2				
3	**Erection of 230kV and 400kV double circuit Towers/Poles complete with all stubs, nuts, bolts, locking nuts, washers, phase conductor and earthwire swivels/shackles, step bolts, tower notice and identification plates, ACDs, ptotective coating, earthing etc.**						
3.1	**Tower type "4D1"**						
3.1.1	Tower type 4D1+30 m	each	3				
3.1.2	Tower type 4D1+40 m	each	3				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. A 1.4 Installation and Other Services							
3.2	**Tower type "2DL"**						
3.2.1	Tower type 2DL Standard	each	10				
3.2.2	Tower type 2DL+1.5 m	each	10				
3.2.3	Tower type 2DL+3 m	each	18				
3.2.4	Tower type 2DL+4.5 m	each	28				
3.2.5	Tower type 2DL+6 m	each	33				
3.2.6	Tower type 2DL+9 m	each	33				
3.2.7	Tower type 2DL+12 m	each	23				
3.2.8	Tower type 2DL+15 m	each	23				
3.3	**Tower type "2D1"**						
3.3.1	Tower type 2D1 Standard	each	2				
3.3.2	Tower type 2D1 +1.5 m	each	2				
3.3.3	Tower type 2D1 +3 m	each	2				
3.3.4	Tower type 2D1 +4.5 m	each	2				
3.3.5	Tower type 2D1 +6 m	each	2				
3.3.6	Tower type 2D1 +9 m	each	3				
3.3.7	Tower type 2D1 +12 m	each	4				
3.3.8	Tower type 2D1 +15 m	each	4				
3.3.9	Tower type 2D1 +18 m	each	3				
3.3.10	Tower type 2D1 +21 m	each	1				
3.3.11	Tower type 2D1 +25 m	each	1				
3.4	**Tower type "2D25"**						
3.4.1	Tower type 2D25 Standard	each	5				
3.4.2	Tower type 2D25 +1.5 m	each	2				
3.4.3	Tower type 2D25+3 m	each	4				
3.4.4	Tower type 2D25 +4.5 m	each	2				
3.4.5	Tower type 2D25 +6 m	each	5				
3.4.6	Tower type 2D25 +9 m	each	11				
3.4.7	Tower type 2D25 +12 m	each	5				
3.4.8	Tower type 2D25 +15 m	each	4				

Item	Description	Unit	Quantity	Unit Price1		Total Price1	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. A 1.4 Installation and Other Services							
3.5	**Tower type "2DT6"**						
3.5.1	Tower type 2DT6 Standard	each	6				
3.5.2	Tower type 2DT6+1.5 m	each	3				
3.5.3	Tower type 2DT6+3 m	each	8				
3.5.4	Tower type 2DT6+4.5 m	each	3				
3.5.5	Tower type 2DT6+6 m	each	12				
3.5.6	Tower type 2DT6+9 m	each	14				
3.5.7	Tower type 2DT6+12 m	each	8				
3.5.8	Tower type 2DT6+15 m	each	8				
3.6	**Tower type "2D9"**						
3.6.1	Tower type 2D9 Standard	each	1				
3.6.2	Tower type 2D9+1.5 m	each	NIL				
3.6.3	Tower type 2D9+3 m	each	NIL				
3.6.4	Tower type 2D9+4.5 m	each	1				
3.6.5	Tower type 2D9+6 m	each	NIL				
3.6.6	Tower type 2D9+9 m	each	1				
3.6.7	Tower type 2D9+12 m	each	1				
3.6.8	Tower type 2D9+15 m	each	1				
3.7	**Tower type "2QL"**						
3.7.1	Tower type 2QL Standard	each	1				
3.7.2	Tower type 2QL+1.5 m	each	NIL				
3.7.3	Tower type 2QL+3 m	each	NIL				
3.7.4	Tower type 2QL+4.5 m	each	NIL				
3.7.5	Tower type 2QL+6 m	each	1				
3.7.6	Tower type 2QL+9 m	each	1				
3.8	**Tower type "2Q1"**						
3.8.1	Tower type 2Q1 Standard	each	1				
3.8.2	Tower type 2Q1 +1.5 m	each	NIL				
3.8.3	Tower type 2Q1 +3 m	each	NIL				
3.8.4	Tower type 2Q1 +6 m	each	1				
3.8.5	Tower type 2Q1 +9 m	each	1				
3.8.6	Tower type 2Q1 +12 m	each	NIL				
3.8.7	Tower type 2Q1 +15 m	each	NIL				
3.8.8	Tower type 2Q1 +18 m	each	NIL				
3.8.9	Tower type 2Q1 +21 m	each	NIL				
3.8.10	Tower type 2Q1 +25 m	each	NIL				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. A 1.4 Installation and Other Services							
3.9	**Tower type "2Q15"**						
3.9.1	Tower type 2Q15 Standard	each	1				
3.9.2	Tower type 2Q15 +1.5 m	each	NIL				
3.9.3	Tower type 2Q15 +3 m	each	NIL				
3.9.4	Tower type 2Q15 +6 m	each	1				
3.9.5	Tower type 2Q15 +9 m	each	1				
3.10	**Tower type "2Q30"**						
3.10.1	Tower type 2Q30 Standard	each	1				
3.10.2	Tower type 2Q30+1.5 m	each	NIL				
3.10.3	Tower type 2Q30+3 m	each	NIL				
3.10.4	Tower type 2Q30+4.5 m	each	NIL				
3.10.5	Tower type 2Q30+6 m	each	1				
3.10.6	Tower type 2Q30+9 m	each	1				
3.11	**Tower type "2QT6"**						
3.11.1	Tower type 2QT6 Standard	each	1				
3.11.2	Tower type 2QT6+1.5 m	each	NIL				
3.11.3	Tower type 2QT6+3 m	each	NIL				
3.11.4	Tower type 2QT6+4.5 m	each	NIL				
3.11.5	Tower type 2QT6+ 6 m	each	1				
3.11.6	Tower type 2QT6+ 9 m	each	1				
3.12	**Tower type 2DR**						
3.12.1	Tower type 2DR Standard	per tower	2				
3.12.2	Tower type 2DR M20	each	1				
3.13	**Tower type 2DAX**						
3.13.1	Tower type 2DAX Standard	per tower	3				
3.14	Cross-arm Erection	per set of three	3				
3.15	**Galvanized Tower Steel Works**						
3.15.1	Fabricated	per ton	5				
4	**Testing of Foundations**						
	Overland Portion						
4.1	**Individual Pile test including supply,install and test to prove compliance with technical specification, payment for successful test only (applicable for all tower types selected by the Employer's Engineer):**						
(a)	Compression test	per test	3				
(b)	Uplift test	per test	3				
(c)	Pile Integrity test	per test	336				

Item	Description	Unit	Quantity	Unit Price1		Total Price1	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
	Schedule No. A 1.4 Installation and Other Services						
	River Crossing Foundation Portion						
4.2	**Individual Pile test including supply,install and test to prove compliance with technical specification, payment for successful test only (applicable for all tower types selected by the Employer's Engineer):**						
(a)	Compression test	per test	1				
(b)	Uplift test	per test	1				
(c)	Pile Integrity test	per test	6				
5	**Stringing of double/four circuit line, two conductors per phase, 2 OPGW (length approx. Route km)**						
5.1	**Overland Portion**						
5.1.1	Conductor "ACSR Mallard" Phase Conductor (3 Phase, Double Circuit, Twin Conductor per phase on the line)" Installation of insulation strings, compressed dead-ends, compression junction sleeves, suspension clamps, Sagging and clipping, Installation of armour rods and Dampers, Pilot strings and jumpers and any other works required as per specification.	route km	109				
5.1.2	7x4.00mm equivalent , 48 fibres OPGW, including joint box, Tension and semi-tension joints, suspension clamps, armour rods and dampers,Sagging and clipping, Installation of intermediate junction boxes and terminal junction boxes at substation gantries ,Earthing jumpers. Two OPGW on the line.	route km	109				
5.2	**River Crossing Portion**						
5.2.1	Conductor "ACSR Mallard" Phase Conductor (3 Phase, Double Circuit, Twin Conductor per phase on the line)" Installation of insulation strings, compressed dead-ends, compression junction sleeves, suspension clamps, Sagging and clipping, Installation of armour rods and Dampers, Pilot strings and jumpers and any other works required as per specification.	route km	0.49				
5.2.2	19x3.67 20SA equivalent , 48 fibres OPGW, including joint box, Tension and semi-tension joints, suspension clamps, armour rods and dampers,Sagging and clipping, Installation of intermediate junction boxes and terminal junction boxes at substation gantries ,Earthing jumpers. Two OPGW on the line.	route km	0.49				
6	**Documentation**						
6.1	Establishment of as-built drawings, manuals and all requested documents as per specifications	lump sum	1				
7	**Miscellaneous**						
7.1	General and other works and services, not mentioned before	lump sum	1				
7.2	Transport of the material and equipment supplied from Employer's Country	lump sum	1				
7.3	Insurance of material and equipment supplied from Employer's Country during transport	lump sum	1				
7.4	Painting of towers including bottom part of tower	lump sum	1				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. A 1.4 Installation and Other Services							
7.5	Erection of earthwire connection from terminal tower to substation gantry	per wire	2				
7.6	Erection of OPGW connection from terminal tower to substation Gantry/Mast	per wire	2				
7.7	Additional counterpoise earthing in accordance with requirement of the Technical specification	per meter	50				
7.8	Miscellaneous Rates for works certified by the Engineer in accordance with method of Payment						
(a)	Additional Excavation	cu.m	200				
(b)	Additional Concrete	cu.m	200				
(c)	Additional Reinforcement	kg	1200				
(d)	Extra for surface resisting cement per cu.m of concrete	cu.m	100				
(e)	Additional Boring (500mm diameter)	rm	100				
(f)	Additional Boring (600mm diameter)	rm	100				
(g)	Additional Boring (750mm diameter)	rm	100				
(h)	Sand Filling	cu.m	225				
7.9	Environmental and Social Services	lump sum	1				
7.10	STI. STD and HIV/AIDS alleviation program[2]	lump sum	1				
7.11	Costs and Expenses related to test witness[3](Provisional Sum)	lump sum	1		$120,000.00		$ 120,000.00
7.12	Payment of compensation for using private land to construct transmission line towers [based on area of tower footprint]	lump sum	1	211,785,000.00		211,785,000.00	
7.13	Payment of compensation for lines (for affected trees, crops etc. on the Right of Way and at the substation ends)	lump sum	1	235,008,000.00		235,008,000.00	
Total Columns 7 & 8 to be carried forward to Schedule No. 5 - Grand Summary							
8	Total Tax and VAT deductable at source(TDS & VDS) under the schedule 4B(to be quoted in the currency similar as above)[4]						

Name of Bidder ____________

Signature of Bidder ____________

1 Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.
2 As described in SCC 22.2.7
3 These costs are fixed ceiling and will be included in total price. But the payment shall be at actual upon submission of relevant documents.
4.Bidder shall quote the amount considering clause 14.1 of section 8(Special Conditions of Contract), Volume 1 of 3 of the bidding document. The amount quoted by bidder is subject to arithmatic correction by Employer as required.

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No. PGCB/AIIB/000308-BGD/TL/Package-2)

B Bangabandhu Hi-Tech City-Kaliakoir 230 kV double circuit transmission line: 4.88 km (using Twin ACSR Mallard conductor)

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
	Schedule No. 2.4 Installation and Other Services						
1	**Survey and soil investigation works**						
1.1	**Survey Work**						
1.1.1	Check survey in accordance with the requirements of the technical specification, incl. Full ground survey with change of route, if any, tower plotting and preparation and submission of route maps, profile drawings, SIMM documents, etc.	Route km	4.88				
1.2	**Geotechnical Investigations incl. taking samples, logging and lab testing**						
1.2.1	Boreholes for geotechnical investigation, incl. laboratory test, borehole logs, sampling and interpretive report as per geotechnical specification						
(a)	Level 2	borehole	1				
(b)	Level 4	borehole	1				
1.2.2	Soil resistivity tests (one per tower)	unit	24				
2	**Foundations for towers/Poles including all setting out, Concrete, Reinforcement, Excavation, Pumping, Stub-Setting, Geotechnical Investigation (Level 2/Level 4), Shuttering, Leveling, Timbering, supply & Installation of foundation steelwork, Earthing Materials,Backfilling, approved Protective Coating & site clearing etc.**						
2.1	**Tower type "2DL"**						
2.1.1	Pile Foundation for Soil Category-2	per tower	1				
2.1.2	Pile Foundation for Soil Category-3	per tower	1				
2.1.3	Pile Foundation for Soil Category-4	per tower	1				
2.1.4	Piled Foundation with 1.0/2.0m raised chimney for any Soil Category	per tower	1				
2.2	**Tower type "2D1" (Any extension)**						
2.2.1	Pile Foundation for any Soil Category	per tower	1				
2.2.2	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.2.3	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				
2.3	**Tower type "2D25"**						
2.3.1	Pile Foundation for any Soil Category	per tower	2				
2.3.2	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.3.3	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				

Item	Description	Unit	Quantity	Unit Price1		Total Price1	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. 2.4 Installation and Other Services							
2.4	**Tower type "2DT6"**						
2.4.1	Pile Foundation for any Soil Category	per tower	1				
2.4.2	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.4.3	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				
2.5	**Tower type "2QL"**						
2.5.1	Pile Foundation for any Soil Category	per tower	1				
2.5.2	Piled Foundation with 1.0m/2.0m raised chimney for any Soil Category	per tower	1				
2.6	**Tower type "2Q1"**						
2.6.1	Pile Foundation for any Soil Category	per tower	1				
2.6.2	Piled Foundation with 1.0m/2.0m raised chimney for any Soil Category	per tower	1				
2.7	**Tower type "2Q15"**						
2.7.1	Pile Foundation for any Soil Category	per tower	1				
2.7.2	Piled Foundation with 1.0m/2.0m raised chimney for any Soil Category	per tower	1				
2.8	**Tower type "2Q30"**						
2.8.1	Pile Foundation for any Soil Category	per tower	1				
2.8.2	Piled Foundation with 1.0m/2.0m raised chimney for any Soil Category	per tower	1				
2.9	**Tower type "2QT6"**						
2.9.1	Pile Foundation for any Soil Category with any chimney height	per tower	1				
2.1	**River Crossing Foundation for Normal (Non-River Crossing) Tower**						
2.10.1	Pile foundation for tower type “2QT6”	Per tower	1				
3	**Erection of 230kV double circuit Towers/Poles complete with all stubs, nuts, bolts, locking nuts, washers, phase conductor and earthwire swivels/shackles, step bolts, tower notice and identification plates, ACDs, ptotective coating, earthing etc.**						
3.1	**Tower type "2DL"**						
3.1.1	Tower type 2DL Standard	each	1				
3.1.2	Tower type 2DL+1.5 m	each	NIL				
3.1.3	Tower type 2DL+3 m	each	NIL				
3.1.4	Tower type 2DL+4.5 m	each	NIL				
3.1.5	Tower type 2DL+6 m	each	1				
3.1.6	Tower type 2DL+9 m	each	1				
3.1.7	Tower type 2DL+12 m	each	NIL				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. 2.4 Installation and Other Services							
3.1.8	Tower type 2DL+15 m	each	1				
3.2	**Tower type "2D1"**						
3.2.1	Tower type 2D1 Standard	each	1				
3.2.2	Tower type 2D1 +1.5 m	each	NIL				
3.2.3	Tower type 2D1 +3 m	each	NIL				
3.2.4	Tower type 2D1 +4.5 m	each	NIL				
3.2.5	Tower type 2D1 +6 m	each	NIL				
3.2.6	Tower type 2D1 +9 m	each	1				
3.2.7	Tower type 2D1 +12 m	each	NIL				
3.2.8	Tower type 2D1 +15 m	each	NIL				
3.2.9	Tower type 2D1 +18 m	each	NIL				
3.2.10	Tower type 2D1 +21 m	each	1				
3.3	**Tower type "2D25"**						
3.3.1	Tower type 2D25 Standard	each	1				
3.3.2	Tower type 2D25 +1.5 m	each	NIL				
3.3.3	Tower type 2D25+3 m	each	1				
3.3.4	Tower type 2D25 +4.5 m	each	NIL				
3.3.5	Tower type 2D25 +6 m	each	NIL				
3.3.6	Tower type 2D25 +9 m	each	1				
3.3.7	Tower type 2D25 +12 m	each	NIL				
3.3.8	Tower type 2D25 +15 m	each	1				
3.4	**Tower type "2DT6"**						
3.4.1	Tower type 2DT6 Standard	each	1				
3.4.2	Tower type 2DT6+1.5 m	each	NIL				
3.4.3	Tower type 2DT6+3 m	each	NIL				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. 2.4 Installation and Other Services							
3.4.4	Tower type 2DT6+4.5 m	each	NIL				
3.4.5	Tower type 2DT6+6 m	each	1				
3.4.6	Tower type 2DT6+9 m	each	1				
3.4.7	Tower type 2DT6+12 m	each	NIL				
3.4.8	Tower type 2DT6+15 m	each	NIL				
3.5	**Tower type "2QL"**						
3.5.1	Tower type 2QL Standard	each	NIL				
3.5.2	Tower type 2QL+1.5 m	each	NIL				
3.5.3	Tower type 2QL+3 m	each	NIL				
3.5.4	Tower type 2QL+4.5 m	each	NIL				
3.5.5	Tower type 2QL+6 m	each	1				
3.5.6	Tower type 2QL+9 m	each	1				
3.6	**Tower type "2Q1"**						
3.6.1	Tower type 2Q1 Standard	each	NIL				
3.6.2	Tower type 2Q1 +1.5 m	each	NIL				
3.6.3	Tower type 2Q1 +3 m	each	NIL				
3.6.4	Tower type 2Q1 +6 m	each	1				
3.6.5	Tower type 2Q1 +9 m	each	1				
3.6.6	Tower type 2Q1 +12 m	each	NIL				
3.6.7	Tower type 2Q1 +15 m	each	NIL				
3.6.8	Tower type 2Q1 +18 m	each	NIL				
3.6.9	Tower type 2Q1 +21 m	each	NIL				
3.6.10	Tower type 2Q1 +25 m	each	NIL				
3.7	**Tower type "2Q15"**						
3.7.1	Tower type 2Q15 Standard	each	NIL				
3.7.2	Tower type 2Q15 +1.5 m	each	NIL				
3.7.3	Tower type 2Q15 +3 m	each	NIL				
3.7.4	Tower type 2Q15 +6 m	each	1				
3.7.5	Tower type 2Q15 +9 m	each	1				
3.8	**Tower type "2Q30"**						
3.8.1	Tower type 2Q30 Standard	each	NIL				
3.8.2	Tower type 2Q30+1.5 m	each	NIL				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. 2.4 Installation and Other Services							
3.8.3	Tower type 2Q30+3 m	each	NIL				
3.8.4	Tower type 2Q30+4.5 m	each	NIL				
3.8.5	Tower type 2Q30+6 m	each	1				
3.8.6	Tower type 2Q30+9 m	each	1				
3.9	**Tower type "2QT6"**						
3.9.1	Tower type 2QT6 Standard	each	NIL				
3.9.2	Tower type 2QT6+1.5 m	each	NIL				
3.9.3	Tower type 2QT6+3 m	each	NIL				
3.9.4	Tower type 2QT6+4.5 m	each	NIL				
3.9.5	Tower type 2QT6+ 6 m	each	1				
3.9.6	Tower type 2QT6+ 9 m	each	1				
3.10	Cross-arm Erection	per set of three	3				
3.11	**Galvanized Tower Steel Works**						
3.11.1	Fabricated	per ton	5				
3.11	**Dismantling and By-Pass line Construction**						
3.11.1	Dismantling of existing line section (including tower, conductor, insulator and other accessories) whichever is required for line in/out, storing the dismantled materials at PGCB store (anywhere in Bangladesh)	per span	1				
3.11.2	By passing the required line section with Tower/Pole/ERS. Tower/Pole/ERS for by passing shall be collected from PGCB store (anywhere in Bangladesh)	per span	1				
3.11.3	Dismantling of by pass line after completing line in line out and storing the Tower/Pole/ERS of by pass line as PGCB store (anywhere in Bangladesh)	per span	1				
4	**Testing of Foundations**						
	Overland Portion						
4.1	**Individual Pile test including supply,install and test to prove compliance with technical specification, payment for successful test only (applicable for all tower types selected by the Employer's Engineer):**						
(a)	Compression test	per test	3				
(b)	Uplift test	per test	3				
(c)	Pile Integrity test	per test	14				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
	Schedule No. 2.4 Installation and Other Services						
5	**Stringing of double/four circuit line, two conductors per phase, 1 OPGW and 1 conventional earthwire (length approx. Route km)**						
5.1	**Overland Portion**						
5.1.1	Conductor "ACSR Mallard" Phase Conductor (3 Phase, Double Circuit, Twin Conductor per phase on the line)" Installation of insulation strings, compressed dead-ends, compression junction sleeves, suspension clamps, Sagging and clipping, Installation of armour rods and Dampers, Pilot strings and jumpers and any other works required as per specification.	route km	4.88				
5.1.2	7x4.00mm equivalent , 48 fibres OPGW, including joint box, Tension and semi-tension joints, suspension clamps, armour rods and dampers,Sagging and clipping, Installation of intermediate junction boxes and terminal junction boxes at substation gantries ,Earthing jumpers. One OPGW earthwire on the line.	route km	4.88				
5.1.3	One 7x4.00mm earthwire including Compressed dead-ends, compression junction sleeves suspension clamps, armour rods and dampers,Sagging and clipping, Earthing jumpers, warning sphere(**if required**)	route km	4.88				
6	**Documentation**						
6.1	Establishment of as-built drawings, manuals and all requested documents as per specifications	lump sum	1				
7	**Miscellaneous**						
7.1	General and other works and services, not mentioned before	lump sum	1				
7.2	Transport of the material and equipment supplied from Employer's Country	lump sum	1				
7.3	Insurance of material and equipment supplied from Employer's Country during transport	lump sum	1				
7.4	Painting of towers including bottom part of tower	lump sum	1				
7.5	Erection of earthwire connection from terminal tower to substation gantry	per wire	2				
7.6	Erection of OPGW connection from terminal tower to substation Gantry/Mast	per wire	2				
7.7	Additional counterpoise earthing in accordance with requirement of the Technical specification	per meter	50				
7.8	Miscellaneous Rates for works certified by the Engineer in accordance with method of Payment						

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. 2.4 Installation and Other Services							
(a)	Additional Excavation	cu.m	200				
(b)	Additional Concrete	cu.m	200				
(c)	Additional Reinforcement	kg	1200				
(d)	Extra for surface resisting cement per cu.m of concrete	cu.m	100				
(e)	Additional Boring (500mm diameter)	rm	100				
(f)	Additional Boring (600mm diameter)	rm	100				
(g)	Additional Boring (750mm diameter)	rm	100				
(h)	Sand Filling	cu.m	225				
7.9	Environmental and Social Services	lump sum	1				
7.10	STI. STD and HIV/AIDS alleviation program[2]	lump sum	1				
7.11	Costs and Expenses related to test witness[3](Provisional Sum)	lump sum	1				
7.12	Payment of compensation for using private land to construct transmission line towers [based on area of tower footprint]	lump sum	1	80,028,000		80,028,000.00	
7.13	Payment of compensation for lines (for affected trees, crops etc. on the Right of Way and at the substation ends)	lump sum	1	3,752,000.00		3,752,000.00	
Total Columns 7 & 8 to be carried forward to Schedule No. 5 - Grand Summary							
8	Total Tax and VAT deductable at source(TDS & VDS) under the schedule 4B(to be quoted in the currency similar as above)[4]						

Name of Bidder ____________

Signature of Bidder ____________

1 Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2 As described in SCC 22.2.7

3 These costs are fixed ceiling and will be included in total price. But the payment shall be at actual upon submission of relevant documents.

4.Bidder shall quote the amount considering clause 14.1 of section 8(Special Conditions of Contract), Volume 1 of 3 of the bidding document. The amount quoted by bidder is subject to arithmatic correction by Employer as required.

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No. PGCB/AIIB/000308-BGD/TL/Package-2)							
C. Cox's Bazar (North)-Teknaf 132 kV double circuit transmission line: 65 km (using Single ACSR Grosbeak Conductor)							
Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. 3.4 Installation and Other Services							
1	**Survey and soil investigation works**						
1.1	**Survey Work**						
1.1.1	Check survey in accordance with the requirements of the technical specification, incl. Full ground survey with change of route, if any, tower plotting and preparation and submission of route maps, profile drawings, SIMM documents, etc.	Route km	65				
1.2	**Geotechnical Investigations incl. taking samples, logging and lab testing**						
1.2.1	Boreholes for geotechnical investigation, incl. laboratory test, borehole logs, sampling and interpretive report as per geotechnical specification						
(a)	Level 2	borehole	1				
(b)	Level 4	borehole	1				
1.2.2	Soil resistivity tests (one per tower)	unit	237				
2	**Foundations for towers/Poles including all setting out, Concrete, Reinforcement, Excavation, Pumping, Stub-Setting, Geotechnical Investigation (Level 2/Level 4), Shuttering, Leveling, Timbering, supply & Installation of foundation steelwork, Earthing Materials,Backfilling, approved Protective Coating & site clearing etc.**						
2.1	**Tower type "1DL"**						
2.1.1	Pile Foundation for Soil Category-2	per tower	30				
2.1.2	Pile Foundation for Soil Category-3	per tower	34				
2.1.3	Pile Foundation for Soil Category-4	per tower	30				
2.1.4	Piled Foundation with 1.0m raised chimney for Soil Category-2	per tower	7				
2.1.5	Piled Foundation with 1.0m raised chimney for Soil Category-3	per tower	8				
2.1.6	Piled Foundation with 1.0m raised chimney for Soil Category-4	per tower	7				
2.1.7	Piled Foundation with 2.0m raised chimney for Soil Category-2	per tower	7				
2.1.8	Piled Foundation with 2.0m raised chimney for Soil Category-3	per tower	8				
2.1.9	Piled Foundation with 2.0m raised chimney for Soil Category-4	per tower	7				
2.2	**Tower type "1D1" (Any extension)**						
2.2.1	Pile Foundation for Soil Category-2	per tower	1				
2.2.2	Pile Foundation for Soil Category-3	per tower	1				
2.2.3	Pile Foundation for Soil Category-4	per tower	1				
2.2.4	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.2.5	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				

Item	Description	Unit	Quantity	Unit Price1		Total Price1	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
	Schedule No. 3.4 Installation and Other Services						
2.3	**Tower type "1D25"**						
2.3.1	Pile Foundation for Soil Category-2	per tower	9				
2.3.2	Pile Foundation for Soil Category-3	per tower	11				
2.3.3	Pile Foundation for Soil Category-4	per tower	9				
2.3.4	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	6				
2.3.5	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	5				
2.4	**Tower type "1DT6"**						
2.4.1	Pile Foundation for Soil Category-2	per tower	12				
2.4.2	Pile Foundation for Soil Category-3	per tower	12				
2.4.3	Pile Foundation for Soil Category-4	per tower	12				
2.4.4	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	5				
2.4.5	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	5				
2.5	**Tower type "1QL"**						
2.5.1	Pile Foundation for any Soil Category	per tower	1				
2.5.2	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.5.3	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				
2.6	**Tower type "1Q15"**						
2.6.1	Pile Foundation for any Soil Category	per tower	1				
2.6.2	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.6.3	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				
2.7	**Tower type "1Q30"**						
2.7.1	Pile Foundation for any Soil Category	per tower	1				
2.7.2	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.7.3	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				
2.8	**Tower type "1QT6"**						
2.8.1	Pile Foundation for any Soil Category	per tower	1				
2.8.2	Piled Foundation with 1.0m raised chimney for any Soil Category	per tower	1				
2.8.3	Piled Foundation with 2.0m raised chimney for any Soil Category	per tower	1				
2.9	**River Crossing Foundation for Normal (Non-River Crossing) Tower**						
2.9.1	Pile foundation for tower type “1DT6”	Per tower	2				
2.9.2	Pile foundation for tower type “1D1” (Any extension)	Per tower	2				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
	Schedule No. 3.4 Installation and Other Services						
2.10	**Pole Foundation**						
2.10.1	Pile Foundation for any Soil Category- Pole type 1DLP	per tower	1				
2.10.2	Pile Foundation for any Soil Category-Pole type 1D1P	per tower	1				
2.10.3	Pile Foundation for any Soil Category-Pole type 1D25P	per tower	1				
2.10.4	Pile Foundation for any Soil Category-Pole type 1DT6P	per tower	1				
2.10.5	Pile Foundation for any Soil Category-Pole type 1DT9P	per tower	1				
3	**Erection of 132kV double circuit Towers/Poles complete with all stubs, nuts, bolts, locking nuts, washers, phase conductor and earthwire swivels/shackles, step bolts, tower notice and identification plates, ACDs, ptotective coating, earthing etc.**						
3.1	**Tower type "1DL"**						
3.1.1	Tower type 1DL Standard	each	20				
3.1.2	Tower type 1DL+1.5 m	each	16				
3.1.3	Tower type 1DL+3 m	each	18				
3.1.4	Tower type 1DL+4.5 m	each	20				
3.1.5	Tower type 1DL+6 m	each	32				
3.1.6	Tower type 1DL+9 m	each	32				
3.2	**Tower type "1D1"**						
3.2.1	Tower type 1D1 Standard	each	1				
3.2.2	Tower type 1D1 +1.5 m	each	1				
3.2.3	Tower type 1D1 +3 m	each	1				
3.2.4	Tower type 1D1 +4.5 m	each	1				
3.2.5	Tower type 1D1 +6 m	each	1				
3.2.6	Tower type 1D1 +9 m	each	1				
3.2.7	Tower type 1D1 +12 m	each	1				
3.3	**Tower type "1D25"**						
3.3.1	Tower type 1D25 Standard	each	5				
3.3.2	Tower type 1D25 +1.5 m	each	7				
3.3.3	Tower type 1D25+3 m	each	10				
3.3.4	Tower type 1D25 +9 m	each	18				
3.4	**Tower type "1DT6"**						
3.4.1	Tower type 1DT6 Standard	each	5				
3.4.2	Tower type 1DT6+1.5 m	each	5				
3.4.3	Tower type 1DT6+3 m	each	5				
3.4.4	Tower type 1DT6+4.5 m	each	9				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
	Schedule No. 3.4 Installation and Other Services						
3.4.5	Tower type 1DT6+6 m	each	12				
3.4.6	Tower type 1DT6+9 m	each	12				
3.5	**Tower Type 1QL**						
3.5.1	Tower Type 1QL Standard	each	1				
3.5.2	Tower Type 1QL+1.5 m	each	NIL				
3.5.3	Tower Type 1QL+3.0 m	each	1				
3.5.4	Tower Type 1QL+4.5 m	each	NIL				
3.5.5	Tower Type 1QL+6.0 m	each	1				
3.5.6	Tower Type 1QL+9.0 m	each	NIL				
3.6	**Tower Type 1Q15**						3
3.6.1	Tower type 1Q15 Standard	each	1				
3.6.2	Tower type 1Q15 +1.5 m	each	NIL				
3.6.3	Tower type 1Q15 +3.0 m	each	1				
3.6.4	Tower type 1Q15 +4.5 m	each	NIL				
3.6.5	Tower type 1Q15 +6.0 m	each	1				
3.6.6	Tower type 1Q15+9.0 m	each	NIL				
3.6.7	Tower type 1Q15 +12.0 m	each	NIL				
3.6.8	Tower type 1Q15 +15.0 m	each	NIL				
3.7	**Tower Type 1Q30**						3
3.7.1	Tower type 1Q30 Standard	each	1				
3.7.2	Tower type 1Q30 +3.0 m	each	1				
3.7.3	Tower type 1Q30 +4.5 m	each	NIL				
3.7.4	Tower type 1Q30 +6.0 m	each	1				
3.7.5	Tower type 1Q30 +9.0 m	each	NIL				
3.8	**Tower Type 1QT6**						3
3.8.1	Tower type 1QT6 Standard	each	1				
3.8.2	Tower type 1QT6+1.5 m	each	NIL				
3.8.3	Tower type1QT6+3.0 m	each	1				
3.8.4	Tower type 1QT6+4.5 m	each	NIL				
3.8.5	Tower Type 1QT6+6.0 m	each	1				
3.8.6	Tower Type 1QT6+9.0 m	each	NIL				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
	Schedule No. 3.4 Installation and Other Services						
3.9	**Pole Erection**						
3.9.1	Pole type 1DLP	per tower	1				
3.9.2	Pole type 1D1P	per tower	1				
3.9.3	Pole type 1D25P	per tower	1				
3.9.4	Pole type 1DT6P	per tower	1				
3.9.5	Pole type 1D9P	per tower	1				
3.10	Crossarm erection for pole type 1DT6P	per set of three	1				
3.11	Crossarm erection for tower type 1DT6	per set of three	3				
3.12	**Galvanized Tower Steel Works**						
3.12.1	Fabricated	per ton	5				
4	**Testing of Foundations**						
	Overland Portion						
4.1	**Individual Pile test including supply,install and test to prove compliance with technical specification, payment for successful test only (applicable for all tower types selected by the Employer's Engineer):**						
(a)	Compression test	per test	3				
(b)	Uplift test	per test	3				
(c)	Pile Integrity test	per test	11				
5	**Stringing of double/four circuit line, two conductors per phase, 1 OPGW and 1 conventional earthwire (length approx. Route km)**						
5.1	**Overland Portion**						
5.1.1	Conductor "ACSR Grosbeak" Phase Conductor (double circuit line, both circuits erected, one conductors per phase) including: Installation of insulation strings, compressed dead-ends, compression junction sleeves, suspension clamps, Sagging and clipping, Installation of armour rods and Dampers, Pilot strings and jumpers and any other works required as per specification.	route km	65				
5.1.2	One optical fibre ground wire, 24 fibres 7×3.25 steel earthwire equivalent OPGW shield wire, including joint box, including:Tension and semi-tension joints, suspension clamps, armour rods and dampers,Sagging and clipping, Installation of intermediate junction boxes and terminal junction boxes at substation gantries ,Earthing jumpers	route km	65				
5.1.3	One 7x3.25mm earthwire including Compressed dead-ends, compression junction sleeves suspension clamps, armour rods and dampers,Sagging and clipping, Earthing jumpers, warning sphere(**if required**)	route km	65				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
	Schedule No. 3.4 Installation and Other Services						
6	**Documentation**						
6.1	Establishment of as-built drawings, manuals and all requested documents as per specifications	lump sum	1				
7	**Miscellaneous**						
7.1	General and other works and services, not mentioned before	lump sum	1				
7.2	Transport of the material and equipment supplied from Employer's Country	lump sum	1				
7.3	Insurance of material and equipment supplied from Employer's Country during transport	lump sum	1				
7.4	Painting of towers including bottom part of tower	lump sum	1				
7.6	Erection of OPGW connection from terminal tower to substation Gantry/Mast	per wire	2				
7.7	Additional counterpoise earthing in accordance with requirement of the Technical specification	per meter	50				
7.8	Miscellaneous Rates for works certified by the Engineer in accordance with method of Payment						
(a)	Additional Excavation	cu.m	200				
(b)	Additional Concrete	cu.m	200				
(c)	Additional Reinforcement	kg	1200				
(d)	Extra for surface resisting cement per cu.m of concrete	cu.m	100				
(e)	Additional Boring (500mm diameter)	rm	100				
(f)	Additional Boring (600mm diameter)	rm	100				
(g)	Additional Boring (750mm diameter)	rm	100				
(h)	Sand Filling	cu.m	225				
7.9	Environmental and Social Services	lump sum	1				
7.10	STI. STD and HIV/AIDS alleviation program[2]	lump sum	1				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. 3.4 Installation and Other Services							
7.11	Costs and Expenses related to test witness[3] (Provisional Sum)	lump sum	1		$90,000.00		$ 90,000.00
7.12	Payment of compensation for using private land to construct transmission line towers [based on area of tower footprint]	lump sum	1	40,033,000.00		40,033,000.00	
7.13	Payment of compensation for lines (for affected trees, crops etc. on the Right of Way and at the substation ends)	lump sum	1	95,413,000.00		95,413,000.00	
Total Columns 7 & 8 to be carried forward to Schedule No. 5 - Grand Summary							
8	Total Tax and VAT deductable at source(TDS & VDS) under the schedule 4B(to be quoted in the currency similar as above)[4]						

Name of Bidder ______________

Signature of Bidder ______________

1 Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2 As described in SCC 22.2.7

3 These costs are fixed ceiling and will be included in total price. But the payment shall be at actual upon submission of relevant documents.

4.Bidder shall quote the amount considering clause 14.1 of section 8(Special Conditions of Contract), Volume 1 of 3 of the bidding document. The amount quoted by bidder is subject to arithmatic correction by Employer as required.

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No. PGCB/AIIB/000308-BGD/TL/Package-2)

D. 132 kV Line-In-Line-Out (LILO) at Cox's Bazar (North) substation from Dohazari - Cox's Bazar 132 kV double circuit transmission line: 1.55 km (using Single ACSR Grosbeak equivalent ACCC conductor)

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
	Schedule No. 4.4 Installation and Other Services						
1	**Survey and soil investigation works**						
1.1	**Survey Work**						
1.1.1	Check survey in accordance with the requirements of the technical specification, incl. Full ground survey with change of route, if any, tower plotting and preparation and submission of route maps, profile drawings, SIMM documents, etc.	Route km	1.55				
1.2	**Geotechnical Investigations incl. taking samples, logging and lab testing**						
1.2.1	Boreholes for geotechnical investigation, incl. laboratory test, borehole logs, sampling and interpretive report as per geotechnical specification						
(a)	Level 2	borehole	1				
(b)	Level 4	borehole	1				
1.2.2	Soil resistivity tests (one per tower)	unit	6				
2	**Foundations for towers/Poles including all setting out, Concrete, Reinforcement, Excavation, Pumping, Stub-Setting, Geotechnical Investigation (Level 2/ Level 4), Shuttering, Leveling, Timbering, supply & Installation of foundation steelwork, Earthing Materials,Backfilling, approved Protective Coating & site clearing etc.**						
2.1	**Tower type "1DT6"**						
2.1.1	Pile Foundation for any Soil Category with 1/2 m raised chimney	per tower	1				
2.2	**Tower Type "1QL"**						
2.2.1	Pile Foundation for any Soil Category with 1/2 m raised chimney	per tower	1				
2.3	**Tower Type "1Q15"**						
2.3.1	Pile Foundation for any Soil Category with 1/2 m raised chimney	per tower	1				
2.4	**Tower Type "1Q30"**						
2.4.1	Pile Foundation for any Soil Category with 1/2 m raised chimney	per tower	1				
2.5	**Tower Type "1QT6"**						
2.5.1	Pile Foundation for any Soil Category with 1/2 m raised chimney	per tower	1				
3	**Erection of 132kV double circuit Towers/Poles complete with all stubs, nuts, bolts, locking nuts, washers, phase conductor and earthwire swivels/shackles, step bolts, tower notice and identification plates, ACDs, ptotective coating, earthing etc.**						
3.1	**Tower type "1DT6"**						
3.1.1	Tower type 1DT6+6 m	each	1				
3.1.2	Tower type 1DT6+9 m	each	1				
3.2	**Tower Type "1QL"**						
3.2.1	Tower type 1QL+9 m	each	1				
3.3	**Tower Type "1Q15"**						
3.3.1	Tower type 1Q15+9 m	each	1				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. 4.4 Installation and Other Services							
3.4	**Tower Type "1Q30"**						
3.4.1	Tower type 1Q30+9 m	each	2				
3.5	**Tower Type "1QT6"**						
3.5.1	Tower type 1QT6+9 m	each	3				
3.6	Cross-arm Erection	per set of three	4				
3.7	**Dismantling and By-Pass line Construction**						
3.7.1	Dismantling of existing line section (including tower, conductor, insulator and other accessories) whichever is required for line in/out, storing the dismantled materials at PGCB store (anywhere in Bangladesh)	per span	1				
3.7.2	By passing the required line section with Tower/Pole/ERS. Tower/Pole/ERS for by passing shall be collected from PGCB store (anywhere in Bangladesh)	per span	1				
3.7.3	Dismantling of by pass line after completing line in line out and storing the Tower/Pole/ERS of by pass line as PGCB store (anywhere in Bangladesh)	per span	1				
4	**Testing of Foundations**						
	Overland Portion						
4.1	**Individual Pile test including supply,install and test to prove compliance with technical specification, payment for successful test only (applicable for all tower types selected by the Employer's Engineer):**						
(a)	Compression test	per test	1				
(b)	Uplift test	per test	1				
(c)	Pile Integrity test	per test	6				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
	Schedule No. 4.4 Installation and Other Services						
5	**Stringing of double/four circuit line, two conductors per phase, 1 OPGW and 1 conventional earthwire (length approx. Route km)**						
5.1	**Overland Portion**						
5.1.1	Conductor "ACSR Grosbeak equivalent ACCC" Phase Conductor (double circuit line, both circuits erected, one conductors per phase) including: Installation of insulation strings, compressed dead-ends, compression junction sleeves, suspension clamps, Sagging and clipping, Installation of armour rods and Dampers, Pilot strings and jumpers and any other works required as per specification.	route km	1.55				
5.1.2	One optical fibre ground wire, 48 fibres 7×3.25 steel earthwire equivalent OPGW shield wire, including joint box, including:Tension and semi-tension joints, suspension clamps, armour rods and dampers,Sagging and clipping, Installation of intermediate junction boxes and terminal junction boxes at substation gantries ,Earthing jumpers	route km	1.55				
6	**Documentation**						
6.1	Establishment of as-built drawings, manuals and all requested documents as per specifications	lump sum	1				
7	**Miscellaneous**						
7.1	General and other works and services, not mentioned before	lump sum	1				
7.2	Transport of the material and equipment supplied from Employer's Country	lump sum	1				
7.3	Insurance of material and equipment supplied from Employer's Country during transport	lump sum	1				
7.4	Painting of towers including bottom part of tower	lump sum	1				
7.6	Erection of OPGW connection from terminal tower to substation Gantry/Mast	per wire	2				

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
Schedule No. 4.4 Installation and Other Services							
7.7	Additional counterpoise earthing in accordance with requirement of the Technical specification	per meter	50				
7.8	Miscellaneous Rates for works certified by the Engineer in accordance with method of Payment						
(a)	Additional Excavation	cu.m	200				
(b)	Additional Concrete	cu.m	200				
(c)	Additional Reinforcement	kg	1200				
(d)	Extra for surface resisting cement per cu.m of concrete	cu.m	100				
(e)	Additional Boring (500mm diameter)	rm	100				
(f)	Additional Boring (600mm diameter)	rm	100				
(g)	Additional Boring (750mm diameter)	rm	100				
(h)	Sand Filling	cu.m	225				
7.9	Environmental and Social Services	lump sum	1				
7.10	STI. STD and HIV/AIDS alleviation program[2]	lump sum	1				
7.11	Costs and Expenses related to test witness [3](Provisional Sum)	lump sum	1				
7.12	Payment of compensation for using private land to construct transmission line towers [based on area of tower footprint]	lump sum	1	5,048,000.00		5,048,000.00	
7.13	Payment of compensation for lines (for affected trees, crops etc. on the Right of Way and at the substation ends)	lump sum	1	8,445,000.00		8,445,000.00	
Total Columns 7 & 8 to be carried forward to Schedule No. 5 - Grand Summary							
8	Total Tax and VAT deductable at source(TDS & VDS) under the schedule 4B(to be quoted in the currency similar as above)[4]						

Name of Bidder ______________

Signature of Bidder ______________

1 Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2 As described in SCC 22.2.7

3 These costs are fixed ceiling and will be included in total price. But the payment shall be at actual upon submission of relevant documents.

4.Bidder shall quote the amount considering clause 14.1 of section 8(Special Conditions of Contract), Volume 1 of 3 of the bidding document. The amount quoted by bidder is subject to arithmatic correction by Employer as required.

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No.PGCB/AIIB/000308-BGD/TL/Package-2)			
Schedule No. 5 Grand Summary			
Item	**Description**	**Total Price[1]**	
		Local Currency Portion [BDT]	**Foreign Currency Portion [xxx]**
	A. Anwara-Cox's Bazar (North) 230 kV double circuit transmission line (Initially charged at 132 kV): 109 km with 0.49 km river crossing portion (using twin ACSR mallard Conductor)		
	Schedule No. A1.1 Plant and Mandatory Spare Parts Supplied from Abroad		
	Schedule No. A1.2 Plant and Mandatory Spare Parts Supplied from Within the Employer's Country		
	Schedule No. A1.4 Installation and Other Services		
	Sub-Total		
	B Bangabandhu Hi-Tech City-Kaliakoir 230 kV double circuit transmission line: 4.88 km (using Twin ACSR Mallard conductor)		
	Schedule No. B2.1 Plant and Mandatory Spare Parts Supplied from Abroad		
	Schedule No. B2.2 Plant and Mandatory Spare Parts Supplied from Within the Employer's Country		
	Schedule No. B2.4 Installation and Other Services		
	Sub-Total		
	C. Cox's Bazar (North)-Teknaf 132 kV double circuit transmission line: 65 km (using Single ACSR Grosbeak Conductor)		
	Schedule No. C3.1 Plant and Mandatory Spare Parts Supplied from Abroad		
	Schedule No. C3.2 Plant and Mandatory Spare Parts Supplied from Within the Employer's Country		
	Schedule No. C3.4 Installation and Other Services		
	Sub-Total		
	D. 132 kV Line-In-Line-Out (LILO) at Cox's Bazar (North) substation from Dohazari - Cox's Bazar 132 kV double circuit transmission line: 1.55 km (using Single ACSR Grosbeak equivalent ACCC conductor)		
	Schedule No. D4.1 Plant and Mandatory Spare Parts Supplied from Abroad		
	Schedule No. D4.2 Plant and Mandatory Spare Parts Supplied from Within the Employer's Country		
	Schedule No. D4.4 Installation and Other Services		
	Sub-Total		
3	Schedule No. 3 Design Services (A+B+C+D)		
	GRAND TOTAL		

Name of Bidder ____________________

Signature of Bidder ____________________

1. Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.

2. Taxes and/or duties from Schedule 1 and 2 may be added to the contract price in accordance with GCC 14 (Taxes and Duties) but excluded from bid evaluation in accordance with ITB 39.2" 3. All sections, considered here is for one single project. If an item (alongwith unit price) is not available in a section but available in another section of this contract; during execution, if such item (alongwith unit price) is needed to be used in the section where the item is not available then such item (alongwith unit price) can be used in the section where it in not available. If the same exists

Design, Supply, Installation, Testing & Commissioning of 230 kV and 132 kV Transmission Lines for Southern Area of Chattogram Division & Bangabandhu Hi-Tech City at Kaliakoir on Turnkey Basis (Contract No. PGCB/AIIB/000308-BGD/TL/Package-2)

Schedule No. 6. Recommended Spare Parts

Item	Description	Unit	Quantity	Unit Price[1]		Total Price[1]	
				Local Currency Portion [BDT]	Foreign Currency Portion [xxxxx]	Local Currency Portion [BDT]	Foreign Currency Portion [xxx]
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6

Name of Bidder ________________

Signature of Bidder ________________

1. Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for up to a maximum of three foreign currencies, if so required.