



Bharat Heavy Electricals Limited

(A Govt. Of India Undertaking)

Power Sector, Eastern Region

BHEL BHAWAN, PLOT NO. DJ-9/1 , SECOTR II ,

SALT LAKE CITY, KOLKATA, WEST BENGAL, INDIA

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Sub	TENDER CHANGE NOTICE (TCN-02 dtd 23/07/22)
Job	SUPPLY, INSTALLATION, COMMISSIONING & MAINTENANCE OF SURVEILLANCE SYSTEMS THROUGH IP PTZ CCTV CAMERA AT 5 PROJECT SITES OF BHEL PSER AT BIHAR AND ASSAM.
Ref	TENDER NO.: PSER:PUR:MSX:223(I):029 (ENQ:22:PP:0015:PUR:41) DATE: 07/07/2022

1. With reference to above, following changes/clarifications, relevant to tender, may please be noted and complied with while submitting the offer –

Sl no	Reference clause of tender	Existing provision	Bidder's query	BHEL's clarification/ modified as
1	Page no. 25 of 61, Table-B: Bill of Material (BOM), PART-C: TECHNICAL SCOPE AND SPECIAL TERMS AND CONDITIONS, Sl. No. A.4(a), "Wireless bridge consisting of wireless base station and wireless CPEs operating on RF", Location – NPGCL and Page - 48 of 61, VOLUME-III: PRICE SCHEDULE, SCH-3 : QUANTITY BREAK UP FOR EACH SITE, Sl. No. A.4(a), "Wireless bridge consisting of wireless base station and wireless CPEs operating on RF", Location – NPGCL	Quantity – 1 no	Not applicable	Quantity – 2 nos (Refer attached SCH-2 : PRICE BREAK UP OF MAIN JOB, REV 1 and SCH-3 : QUANTITY BREAK UP FOR EACH SITE, REV 1 for details)
2	Page no. 25 of 61, Table-B: Bill of Material (BOM), PART-C: TECHNICAL SCOPE AND SPECIAL TERMS AND CONDITIONS, Sl. No. A.4(b), "Wireless CPE operating on RF - client station", Location – NPGCL and Page - 48 of 61, VOLUME-III: PRICE SCHEDULE, SCH-3 : QUANTITY BREAK UP FOR EACH SITE, Sl. No. A.4(b), "Wireless CPE operating on RF - client station", Location – NPGCL	Quantity – 5 nos	Not applicable	Quantity – 4 nos (Refer attached SCH-2 : PRICE BREAK UP OF MAIN JOB, REV 1 and SCH-3 : QUANTITY BREAK UP FOR EACH SITE, REV 1 for details)
3	Page no. 36 of 61, ANNEXURE-TS: TECHNICAL SPECIFICATIONS, H. CAT5 or CAT5e STP Cable, Sl. No. 8: Type	Armoured	Not applicable	Armoured or through ISI standard conduit

4	Page - 25 of 61, Table-B Bill of Material, SI A.10 and Page - 36 of 61, ANNEXURE-TS: TECHNICAL SPECIFICATIONS, H.	CAT5 / CAT5e STP cable	Not applicable	CAT5 / CAT5e / Cat-6 STP cable
5	Page - 34 of 61, ANNEXURE-TS: TECHNICAL SPECIFICATIONS, D. Wireless bridge consisting of wireless base station and wireless CPEs operating on RF, sl no - 15	With POE injector for interconnection with switch and RF device through STP Cat5 / Cat5e cable	Not applicable	With POE injector for interconnection with switch and RF device through STP Cat5 / Cat5e/ Cat-6 cable
6	Page - 25 of 61, Table-B: Bill of Material, SI A.16	CAT 6 STP RJ45 connectors	Not applicable	CAT5 / CAT6 STP RJ45 connectors
7	Page - 47 of 61, VOLUME-III: PRICE SCHEDULE, SCH-2: PRICE BREAK UP OF MAIN JOB, SI No – A. 16 and Page - 48 of 61, VOLUME-III: PRICE SCHEDULE, SCH-3 : QUANTITY BREAK UP FOR EACH SITE, SI No – A. 16	CAT 5 STP RJ45 connectors	Not applicable	CAT5 / CAT6 STP RJ45 connectors
8	Page no. 28 of 61, PART-C: TECHNICAL SCOPE AND SPECIAL TERMS AND CONDITIONS, Section: I. Other Terms and Condition, Point no. 13	OEM Warranty should cover replacement / repair of devices from OEM. Vendor has to be provided undertaking or certification from OEM for availability of spare during the warranty period.	Not applicable	OEM Warranty should cover onsite replacement / repair of devices from OEM with all risk (including lightening & electrical burn). Vendor has to be provided undertaking or certification from OEM for availability of spare during the warranty period.
9	Page 38 of 61, ANNEXURE-TS: TECHNICAL SPECIFICATIONS, N. Weather Proof Outdoor Box, SI. No. 10 : General	The box should be able to house the UPS and Switch and should include accessories like loaded jackplane, power distribution box, mounting hardware etc.	Not applicable	The box should be able to house the UPS and Switch and should include accessories like power distribution box, mounting hardware etc
10	Page 39 of 61, , ANNEXURE-TS: TECHNICAL SPECIFICATIONS, O. 9U Rack, SI. No. 10, 11, 12 and 14	10. Power Distribution inside the rack. 11. The rack should with Cat 6 I/O. 12. The rack of 6 core fiber cable 14. For the termination as per certification from Indenting Department	Not applicable	10. DELETED 11. DELETED 12. DELETED 14. DELETED (refer attached Technical Specification of 9U Rack)
11	Page 39 of 61, ANNEXURE-TS: TECHNICAL SPECIFICATIONS, O. 9U Rack, SI. No. 13	At least 3 years from the date of installation as per certification from Indenting Department.	Not applicable	At least 3 years warranty from the date of installation as per certification from Indenting Department.

12	Page – 2 of 61, SI no 4	Submission of EMD	As per the government norms EMD is exempted for MSME vendors, bidder requested here to exempt the EMD for MSME vendors. (Snap shot attached)	As per tender. Refer Page no – 5, SI no – 29 of the tender.
13	Page 32 of 61, , ANNEXURE-TS: TECHNICAL SPECIFICATIONS, A. IP outdoor PTZ Camera (Dome Type), SI. No. 44	Certification – CE, FCC, UL, BIS.	As mentioned in the specification Certifications are required FCC, CE, UL FCC certification or FCC mark is a certification mark employed on all electronic products manufactured and sold in the United States. CE Certification - Conformité Européenne Mark (CE Mark) The Conformité Européenne (CE) Mark is defined as the European Union's (EU) mandatory conformity marking for regulating the goods sold within the European Economic Area (EEA) since 1985. UL certification - To ease access the products into the broader North American. All These certifications (excepting BIS Certification) are promoting for foreign Country's Products and considering the make in India products, bidder requested to allow any one out of all the certifications so that only BIS approved products vendors can also participate.	As per tender. (All the International certification as mentioned in the technical specification are required along with BIS approval).
14	Page 32 of 61, , ANNEXURE-TS: TECHNICAL SPECIFICATIONS, A. IP outdoor PTZ Camera (Dome Type), SI. No. 46: Range of Make	Bosch, Pelco, Axis, Hikvision, Prama, Honeywell, Mobiteck, Infinova	As approved makes are mentioned in the specifications, only those make will be able to participate which is mentioned in the approved make, but other make which are being fully complied they will not be able to participate due to the boundation of approved make so bidder requested to allow equivalent with all the makes.	As per tender.
15	Page - 34 of 61, ANNEXURE-TS: TECHNICAL SPECIFICATIONS, D. Wireless bridge consisting of wireless base station and wireless CPEs operating on RF, SI. No. 7	Wireless bridge consisting of wireless base station and wireless CPEs operating on RF	As mentioned in technical Specifications of Wireless bridge about all the parameter but not mentioned about throughput, so kindly provide the throughput detail, what will be required in Wireless bridge.	As per tender. Refer Page - 34 of 61, ANNEXURE-TS: TECHNICAL SPECIFICATIONS, SI. No. D 7 of the tender.
16	Page - 25 of 61, Table-B Bill of Material, SI A.17	HDPE pipe (Local make)	As the mentioned in the technical Specifications about HDPE Pipe and there is not mentioned Size of HDPE Pipe so kindly confirm for required size of HDPE Pipe .	As per tender. (The size of the HDPE pipe shall be suitably chosen by the bidder to lay UTP / STP / OFC cables according to the planned layout and cabling routes in easy & conventional way).
17	Page - 25 of 61, Table-B Bill of Material, SI A.21	GI pipe - for road crossing	As the mentioned in the technical Specifications about GI Pipe and there is not mentioned Size of GI Pipe so kindly confirm for required size of GI Pipe .	As per tender. (The size of the GI pipe shall be suitably chosen by the bidder to lay UTP / STP / OFC cables according to the site condition & cabling routes in easy & conventional way).

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18	Page 25 of 61, Table-B: Bill of Material (BOM) SI. No. B.1, and Page - 47 of 61, VOLUME-III: PRICE SCHEDULE, SCH-2: PRICE BREAK UP OF MAIN JOB, SI No – B.1 and Page - 48 of 61, VOLUME-III: PRICE SCHEDULE, SCH-3 : QUANTITY BREAK UP FOR EACH SITE, SI No – B.1	Laying of CAT 6 UTP cable (through casing / conduit / HDPE)	As mentioned in the technical Specification for laying of CAT 6 UTP Cable and in the boq of supply portion the CAT5 / CAT5e STP cable quantity is mentioned so supply and laying of cable will be same or different, Kindly confirm.	Laying of all category of STP cable (through casing / conduit / HDPE)
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2. Due date of submission of offer against the subject tender is hereby extended from **25/07/2022** (14:00 hrs. IST) to **27/07/2022 (14:00 hrs. IST)**. Techno-commercial bid shall be opened on **27/07/2022 (16:30 hrs. IST)**.
3. 'No deviation certificate' is attached. Bidder to submit their offer along with stamped & signed copy of this TCN & 'No deviation certificate' as per attached format only.
4. All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

Manager (Purchase)

(Signature, date & seal of authorized representative of the contractor)

VOLUME-III : PRICE SCHEDULE				
JOB: SUPPLY, INSTALLATION, COMMISSIONING & MAINTENANCE OF SURVEILLANCE SYSTEMS THROUGH IP PTZ CCTV CAMERA AT 5 PROJECT SITES OF BHEL PSER AT BIHAR AND ASSAM.				
TENDER NO. PSER:PUR:MSX:223(I):029 (ENQ:22:PP:0015:PUR:41) DATE: 07/07/2022				
SCH-2 : PRICE BREAK UP OF MAIN JOB, REV 1				
SL NO.	ITEM DESCRIPTION	UNIT	TOTAL QTY. (for 5 sites)	WEIGHTAGE
A	SUPPLY OF ITEMS FOR SURVEILLANCE SYSTEM			0.80
1	IP outdoor PTZ camera with mount bracket, power supply unit and mounting kit , supported POE injector	Numbers	17	
2	Surveillance class common micro SD 128 GB	Numbers	17	
3	Network Video Recorder 16 channel with 4X6TB SATA surveillance class HDD	Numbers	5	
4(a)	Wireless bridge consisting of wireless base station and wireless CPEs operating on RF with supported POE Injector	Numbers	7	
4(b)	Wireless CPE operating on RF - client station supported POE Injector	Numbers	14	
5	8 port Gigabit switch	Numbers	17	
6	32 inches surveillance monitor	Numbers	5	
7	9U Rack - indoor (NVR section)	Numbers	5	
8	Outdoor weather proof box (for camera locations)	Numbers	16	
9(a)	1 kVA line interactive / offline UPS	Numbers	5	
9(b)	0.6 kVA line interactive / offline UPS	Numbers	16	
10	CAT5 / CAT5e STP cable	Box	5	
11	Optical fiber cable	Meters	5000	
12	Fiber optic patch cord	Numbers	8	
13	LIU for rack 12 port fully loaded with SCSM adapter / pigtail	Numbers	11	
14	SFP Module SM	Numbers	6	
15	CAT 6 UTP patch cord	Numbers	36	
16	CAT5 / CAT6 STP RJ45 connectors	Numbers	108	
17	HDPE pipe (Local make)	Meters	400	
18	Casing / Conduit (Local make)	Meters	2000	
19	Safety Accessories for road and overhead works (Local make)	Lot	5	
20	1.5 sq. mm 3 core power cable	Meters	600	
21	GI pipe - for road crossing	Meters	30	
B	INSTALLATION, COMMISSIONING, TESTING, STABILIZATION, DEMONSTRATION, TRAINING OF SURVEILLANCE SYSTEM			0.10
1	Laying of all category of STP cable (through casing / conduit / HDPE)	Meters	2500	
2	Laying of Optical Fiber with out of casing / conduit	Meters	4200	
3	Laying of Optical Fiber (through casing / conduit / HDPE)	Meters	800	
4	Termination of OFC in LIU and OFC Splicing	Lot	2	
5	One time Installation, commissioning, testing, stabilization, demonstration and training etc. charges for complete system as per scope	Lot	5	0.10
C	MAINTENANCE OF SURVEILLANCE SYSTEM			
1	Labour charge (which will be paid quarterly) for Maintenance of the setup for a period of 2 years as per scope (Referred as Maintenance Period)	Quarters	40	0.10
TOTAL				1.00
Note:	1. Refer. SCH-3 for Site-wise break-up of the items mentioned above. 2. Quantities mentioned under Sl. No. A-10 to A-21 and B-1 to B-4 are variable (Increase or Decrease) and they will be paid on the basis of actual execution. Quoted Rates shall remain firm within the variation of (+/-) 30 (Thirty percent) percent of the total contract value.			

VOLUME-III: PRICE SCHEDULE								
JOB: SUPPLY, INSTALLATION, COMMISSIONING & MAINTENANCE OF SURVEILLANCE SYSTEMS THROUGH IP PTZ CCTV CAMERA AT 5 PROJECT SITES OF BHEL PSER AT BIHAR AND ASSAM.								
TENDER NO. PSER:PUR:MSX:223(I):029 (ENQ:22:PP:0015:PUR:41) DATE: 07/07/2022								
SCH-3 : QUANTITY BREAK UP FOR EACH SITE, REV 1								
MAIN SCOPE / ITEMS								
SL. NO.	ITEM DESCRIPTION	UNIT	QTY. BREAK UP FOR EACH SITE					TOTAL QTY.
			Barh	BRBCL	NPGCL	KAHAL GAON	BONGAI GAON	
A	SUPPLY OF ITEMS FOR SURVEILLANCE SYSTEM							
1	IP outdoor PTZ camera with mount bracket, power supply unit and mounting kit, supported POE injector	Numbers	5	2	5	3	2	17
2	Surveillance class common micro SD 128 GB	Numbers	5	2	5	3	2	17
3	Network Video Recorder 16 channel with 4X6TB SATA surveillance class HDD	Numbers	1	1	1	1	1	5
4(a)	Wireless bridge consisting of wireless base station and wireless CPEs operating on RF with supported POE Injector	Numbers	2	0	2	2	1	7
4(b)	Wireless CPE operating on RF - client station supported POE Injector	Numbers	5	0	4	3	2	14
5	8 port Gigabit switch	Numbers	5	2	5	3	2	17
6	32 inches surveillance monitor	Numbers	1	1	1	1	1	5
7	9U Rack - indoor (NVR section)	Numbers	1	1	1	1	1	5
8	Outdoor weather proof box (for camera locations)	Numbers	5	2	4	3	2	16
9(a)	1 kVA line interactive / offline UPS	Numbers	1	1	1	1	1	5
9(b)	0.6 kVA line interactive / offline UPS	Numbers	5	2	4	3	2	16
10	CAT5 / CAT5e STP cable	Box	1	1	1	1	1	5
11	Optical fiber cable	Meters	3000	2000	0	0	0	5000
12	Fiber optic patch cord	Numbers	2	6	0	0	0	8
13	LIU for rack 12 port fully loaded with SCSM adapter / pigtail	Numbers	7	4	0	0	0	11
14	SFP Module SM	Numbers	2	4	0	0	0	6
15	CAT 6 UTP patch cord	Numbers	10	4	10	6	6	36
16	CAT5 / CAT6 STP RJ45 connectors	Numbers	30	12	30	18	18	108
17	HDPE pipe (Local make)	Meters	300	100	0	0	0	400
18	Casing / Conduit (Local make)	Meters	500	300	600	300	300	2000
19	Safety Accessories for road and overhead works (Local make)	Lot	1	1	1	1	1	5
20	1.5 sq. mm 3 core power cable	Meters	150	100	150	100	100	600
21	GI pipe - for road crossing	Meters	20	10	0	0	0	30
B	INSTALLATION, COMMISSIONING, TESTING, STABILIZATION, DEMONSTRATION, TRAINING OF SURVEILLANCE SYSTEM							
1	Laying of all category of STP cable (through casing / conduit / HDPE)	Meters	300	100	900	600	600	2500
2	Laying of Optical Fiber with out of casing / conduit	Meters	2500	1700	0	0	0	4200

3	Laying of Optical Fiber (through casing / conduit / HDPE)	Meters	500	300	0	0	0	800
4	Termination of OFC in LIU and OFC Splicing	Lot	1	1	0	0	0	2
5	One time Installation, commissioning, testing, stabilization, demonstration and training etc. charges for complete system as per scope	Lot	1	1	1	1	1	5
C	MAINTENANCE OF SURVEILLANCE SYSTEM							
1	Labour charge (which will be paid quarterly) for Maintenance of the setup for a period of 2 years as per scope (Referred as Maintenance Period)	Quarters	8	8	8	8	8	40
OPTIONAL SCOPE / ITEMS								
SL. NO.	ITEM DESCRIPTION	UNIT	Barh	BRBCL	NPGCL	Kahal gaon	Bongai gaon	TOTAL QTY.
D	OPTIONAL							
1	30 Mtr. self-supported mast	Numbers	2	0	1	0	0	3
2	Lump sum price for shifting of camera location within site – Excluding of any material.	Lot	1	1	1	1	1	5
3	Lump sum price for shifting of camera location across site – Excluding of any material.	Lot	1	1	1	1	1	5

TECHNICAL SPECIFICATION OF 9U Rack (Revised)

O. 9U Rack				
Make and model to be quoted by vendor				
Sl.	Feature	Parameter & Specification	Complied (Yes/No)	Remarks
1		The Rack Size Should be of 9U (16.6- 19 inches) of dimension.		
2		Rack should be lockable from all the sides for security		
3		The rack should be provided with cable access roof and bottom cover for routing cables inside the cabinet		
4		The rack should be able to carry load of 40 Kgs		
5		Rack Should be powder Coated.		
6		Should have removable side panel for easy access.		
7		Fan Unit: - For Air Ventilation and Heat Sink should be mounted on the top end of the rack.		
8		Wall Mounting Hardware :- Set of 2 Mounting Hardware Unit for Assembling the Rack and mounting Device along with at least 1 tray		
9		Cable Manager: - Vertical and Horizontal Cable Manager should be provided for easy cable management.		
10		DELETED		
11		DELETED		
12		DELETED		
13		At least 3 years warranty from the date of installation as per certification from Indenting Department.		
14		DELETED		
		DELETED		
		DELETED		
		DELETED		
		DELETED		
		DELETED		
15	Power Distribution strip / Box	Should have sufficient nos of PORT to cater all active device connected to the UPS (Devices within BOM) along with POE Injector. Active devices means RF and Camera, switch POE injector, NVR, Monitor etc. Should be installed inside the rack		
	Make	Reputed make		

NO DEVIATION CERTIFICATE(TO BE SUBMITTED IN BIDDER'S LETTERHEAD)

To
BHARAT HEAVY ELECTRICALS LIMITED,
Power Sector - Eastern Region,
Plot no 9/1, DJ Block, Sector – II, Salt Lake City,
Kolkata – 700 091

Sub	NO DEVIATION CERTIFICATE	
Job	SUPPLY, INSTALLATION, COMMISSIONING & MAINTENANCE OF SURVEILLANCE SYSTEMS THROUGH IP PTZ CCTV CAMERA AT 5 PROJECT SITES OF BHEL PSER AT BIHAR AND ASSAM.	
Ref	1.0	TENDER NO - PSER:PUR:MSX:223(I):029 (ENQ:22:PP:0015:PUR:41) DATE: 07/07/2022, TCN-01 dtd 16/07/22 & TCN-02 dtd 23/07/22
	2.0	Other references (if any).

Dear Sir,

With reference to above tender, this is to confirm you that we have gone through each and every terms and conditions mentioned in the enquiry (Terms and Conditions) and we offer our unqualified acceptance of the same. This is also to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc.

We also confirm that we have not changed/modified the tender documents as appeared in the website/newspapers and in case of observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT *and confirm our acceptance to **reverse auctioning process*** and we hereby convey our unqualified acceptance to all terms and conditions as stipulated in the tender and NIT.

It is also confirmed that the price has been quoted in the format received with the enquiry. We confirm that, we do not have any objections to splitting the quantity among the different bidders by BHEL and price shall remain firm till the completion supply of full ordered quantity.

Any deviation found subsequently at any time during execution of order shall be treated null and void.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorised
representative of the contractor)