

PART 4.0

SCHEDULE OF SCHEDULE OF REQUIREMENTS / MATERIALS (UN PRICED) for Supply, Erection, Testing and commissioning (SETC) of containerized 10 KW (1+1) VHF FM Transmitters, 10 KW (1+1) UHF TV Transmitters and their auxiliary equipment setup, antenna system, tower set up in J&K at Jammu Region, Srinagar Region & Leh Region as per Specification.

{The tenderer must quote all items};

Note: The pre-bid conference will be held on at Hrs. in conference Hall Room No. 346, Directorate General, All India Radio, New Delhi-110001, India.

4.1(A): SCHEDULE OF REQUIREMENTS / MATERIALS (UN PRICED) FOR 10 KW (1+1) MODE VHF FM TRANSMITTER & ACCESSORIES.

S NO.	Description	Unit	Qty Jammu Region	Qty Srinagar Region	Qty Leh Region
4.1.1	SETC of 10kW VHF FM (1+1) broadcast Solid State MOSFET technology transmitter capable of giving ≥ 10 kW Continuous power complete as per AIR Specification.	Set complete	1 Set Complete	1 Set Complete	1 Set Complete
4.1.2	RF Coaxial air dielectric cable as per AIR Specification.[Rates per meter should also be quoted in addition to rates of quantity given in column (3)] *Exact Length will be as per sites requirement	M	75 M*	75 M*	75 M*
	4.1.2.1 EIA flange connectors.	number	2 numbers	2 numbers	2 numbers
	4.1.2.2 EIA flange gas pass connector	number	1 number	1 number	1 number
	4.1.2.3 EIA flange gas stop connector	number	1 number	1 number	1 number
	4.1.2.4 Hoisting stockings.	number	3 numbers	3 numbers	3 numbers
	4.1.2.5 Earthing kits	number	3numbers	3numbers	3numbers
	4.1.2.6 Wall gland	number	1 number	1 number	1 number
	4.1.2.7 Cable clamps with nut, bolt washer (adjustable width) and associated accessories. Note : Actual sets will be intimated at the time of placement of order as per length of RF cable.** Exact sets will be as sites requirement	Sets	75 sets**	75 sets**	75 sets**
4.1.3	Dehydrator with tubing & accessories as per Specification.	Set	1 Set Complete	1 Set Complete	1 Set Complete
4.1.4	Complete installation material as given below for each transmitter as per specification [Rates per meter/number should also be quoted in addition to rates of quantity given in column (3)]				

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Specification no: SETC-10 KW TX (1+1) AIR & DD /J&K /1/ November/ 2010/D (TD/FM)

4.1.4.1	3-1/8" RF coaxial Copper Rigid Line with inners, bullets & insulators	M	18 M	18 M	18 M
4.1.4.2	3-1/8" Elbows with inners, bullets & insulators	number	8 numbers	8 numbers	8 numbers
4.1.4.3	3-1/8" couplings with inners, bullets & insulators	number	12 numbers	12 numbers	12 numbers
4.1.4.4	3-1/8" to N Test Reducer	number	1 number	1 number	1 number
4.1.4.5	3-18" field flange with inners, bullets & insulators	number	6 numbers	6 numbers	6 numbers
4.1.4.6	3-1/8" to 1-5/8" reducer/adopter	number	4 numbers	4 numbers	4 numbers
4.1.4.7	Hanger for 3-1/8" RF coaxial Rigid Line	number	12 nos.	12 nos.	12 nos.
4.1.5	15 kW Dummy Load, 50 Ohm , 3-1/8" EIA flanges including thru line power meter for measuring forward & reflected power along with element 15,000 W and 1,500 W including all accessories , cables complete with Adopter Kit as per specification.	Set	1 set complete	1 set complete	1 set complete
4.1.6	Spare complete set of resistances for Dummy Load for average power rating ≥ 15 kW.	Set	1 Set	1 Set	1 Set
4.1.7 (i)	Automatic change over unit for 10 kW FM Transmitters in (1+1) mode hot stand by with automatic control with transmitters control units complete with all accessories as per specification.	Set	1 Set complete	1 Set complete	1 Set complete
4.1.7 (ii)	Motorized RF co-axial Changeover switch including control panel with 3-1/8" ports & matching flanges for connecting to antenna or dummy load through rigid line complete with all accessories as per specification.	Set	1 Set complete	1 Set complete	1 Set complete
4.1.8	FM Mono and Stereo Mod Monitor to be used in – tandem with RF amplifier as per specification.	Set	1 Set complete	1 Set complete	1 Set complete
4.1.9.1	Complete SETC of Earthing System, Lightning arrestor, feed and accessories for transmitter & associated equipment & separate for audio equipment as per Indenter Specification /IS.The value of earth resistance of each earth system shall be less than 1 Ohm.	Job	4 Jobs	4 Jobs	4 Jobs
4.1.9.2	Supply, Erection, Testing & Commissioning of earthing system complete for Transmitter & RF cable earth. (earthing kits to be earthed) as per	Job	5 Jobs	5 Jobs	5 Jobs

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- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Specification no: SETC-10 KW TX (1+1) AIR & DD /J&K /1/ November/ 2010/D (TD/FM)

	Indenter Specification /IS.The value of earth resistance of each earth system shall be less than 1 Ohm.				
4.1.10	Any other item / accessories for equipment/items at S. No. 4.1.1 to 4.1.9 offered, for the completeness of the system. . Items wise details of the offered material (including part number, if any) are to be given by the tenderer.	Lot	1 Lot	1 Lot	1 Lot
4.1.11	Inspection charges at manufacturer's works of Transmitter equipment as per specification.	Lot	1 Lot	1 Lot	1 Lot
4.1.12	Field Strength measurements as per Part 3.0	Lot	1 Lot	1 Lot	1 Lot

PART 4.1 (B) SCHEDULE OF MATERIAL/REQUIREMENT FOR SETC (UNPRICED) (Stereo FM Digital Audio Broadcast Processor)

SNo.	Description	Unit	Qty Jammu Region	Qty Srinagar Region	Qty Leh Region
1.	SETC of Stereo FM Digital Audio Broadcast processor equipment complete with auto change over unit and all accessories as per Specification.	number	2 Nos. complete	2 Nos. complete	2 Nos. complete
2.	Any other item offered by the firm for the completeness of equipment.(Details to be given)	Lot	1 lot	1 lot	1 lot

PART – 4.2 (A) SCHEDULE OF REQUIREMENTS / MATERIALS (UNPRICED) [FOR ONE SET OF SETC OF 4 BAY VERTICALLY POLARIZED VHF FM ANTENNA]

S NO.	Description	Unit	Qty Jammu Region	Qty Srinagar Region	Qty Leh Region
4.2.1	SETC of 4 bay VHF FM Vertically Polarized Antenna system, including Radome, complete with all accessories as per specification.	Set	1 Set Complete	1 Set Complete	1 Set Complete
4.2.1	Any other item offered by the firm for the completeness of equipment.(Details to be given)	Lot	1 lot	1 lot	1 lot

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

PART 4.3 (A): SCHEDULE OF REQUIREMENT FOR SETC OF RN TERMINAL EQUIPMENT WITH DEICING KIT

S NO.	Description	Unit	Qty Jammu Region	Qty Srinagar Region	Qty Leh Region
4.3.1	Supply of;				
4.3.1.1	6.0 Meter Parabolic Dish Antenna along with civil foundation, proper plat form, Earthing System, Lightning arrestor, feed and accessories including cable tray.	Set	1 Set complete	1 Set complete	1 Set complete
4.3.1.2	LNBC C-Band	number	3 numbers	3 numbers	3 numbers
4.3.1.3	Low loss cable with connectors (length 60M – 2nos) * Exact length will be as sites requirement.	M	2 x60 M*	2x60 M*	2 x60 M*
4.3.1.4	L band line amplifier	number	2 number	2 number	2 number
4.3.1.5	L band digital receiver	number	4 numbers	4 numbers	4 numbers
4.3.1.6	L band 1:4 Power divider – 2 numbers & L band 1:2 Power divider -- 2 numbers along with other accessories like connectors and integration material.	Set	1 set complete	1 set complete	1 set complete
4.3.1.7	Full size wired rack (42U) with jack strip and tag block including accessories connectors integration material.	number	1 number	1 number	1 number
4.3.1.8	Stereo Monitoring Amplifier with set of speakers.	Set	2 Set complete	2 Set complete	2 Set complete
4.3.1.9	Inspection as per approved ATP at site	Job	1Job	1Job	1Job
4.3.1.10	Deicing kit for 6.0 M, C band Dish	Set	1 Set complete	1 Set complete	1 Set complete
4.3.1.11	Charges for Erection/Installation, testing & Commissioning of 4.3.1 Complete	Job	1Job	1Job	1Job
4.3.1.12	Spares for heating element for deicing kit	Set	1 Set complete	1 Set complete	1 Set complete

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- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Part 4.3(C) SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR SETC of EMERGENCY TRANSMISSION FACILITY

S NO.	Description	Unit	Qty Jammu Region	Qty Srinagar Region	Qty Leh Region
4.3.1.16	SETC OF;				
(i)	Digital Transmission console as per AIR Specification.	Set	1 Set Complete	1 Set Complete	1 Set Complete
(ii)	Dynamic Microphone AIR as per Specification.	No	2Nos Complete	2Nos Complete	2Nos Complete
(iii)	Professional CD player as per AIR Specification.	Set	2 Sets Complete	2 Sets Complete	2 Sets Complete
(iv)	Audio work Station with sound card as per AIR Specification.	Set	1 Set Complete	1 Set Complete	1 Set Complete
(v)	Any other item offered by the firm for the completeness of equipment.(Details to be given)	Set	1 Set Complete	1 Set Complete	1 Set Complete

PART 4.4: SCHEDULE OF MATERIAL/REQUIREMENT (UNPRICED) FOR SETC OF Stereo & Digital programme input cum monitoring rack – for each site)

SNo.	Description	Unit	Qty Jammu Region	Qty Srinagar Region	Qty Leh Region
4.4.1	Stereo & Digital Programme Input-Cum-Monitoring Rack broadly comprising of following equipment and Items and as per Indenter specification	Set complete System	1 Set Complete System	1 Set Complete System	1 Set Complete System
i	Stereo programme input selector switch (Solid State based)-1No.				
ii	Digital programme input selector switch (Solid State based)-1No.				
iii	Stereol & Digital metering selector(Solid State based) with D/A convertor for stereo & digital Input.-1Set				
iv	Stereo& Digital monitoring selector(Solid State based) with D/A convertor for stereo & digital				

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

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	Input.-1set				
v	Level display unit/bar graph-1No.				
vi	Stereo& Digital Monitoring amplifier-(1Set) (1+1)				
vii	High quality stereo speaker-1set				
viii	Stereo AF Jack panels of 20 Jacks each-(2 sets)				
ix	Digital AF Jack panels of 20 Jacks each -(2 sets)				
x	RF Patch panel-1No				
xi	Stereo AF patch cords-(4 sets) 3' & 6' (2 each)				
xii	Digital Stereo AF patch cords-(4sets) 3' & 6' (2 each)				
xiii	Stereo Distribution Amplifier-1 no.				
xiv	Digital Distribution Amplifier-1 no.				
xv	Studio Head Phones- 4 Sets				
xvi	Power supply cables, audio cables and connectors for each individual equipment and one spare cord-1 Lot				
4.4.2	SETC of only 19" mounting equipment rack of size 2250 (H) x 550 (W) x 700 (D) for erection, testing & commissioning of emergency transmission facility equipment like Digital Transmission Console, Professional CD Player, Audio Work Station	Set	1 Set	1 Set	1 Set

PART 4.5: SCHEDULE OF MATERIAL/REQUIREMENT (UNPRICED) OF SETC OF MEASURING EQUIPMENT – for each site)

SN0.	DESCRIPTION	Qty Jammu Region	Qty Srinagar Region	Qty Leh Region
4.5.1	SETC of Computer System,UPS,Printer complete with all accessories as per specification	1Set complete	1Set complete	1Set complete
4.5.2	Digital multimeter with accessories as per specification	1 set complete	1 set complete	1 set complete
4.5.3	Clipon meter complete with all accessories as per specification	1 set complete	1 set complete	1 set complete
4.5.4	Logic probe complete with all accessories as per specification	1Set complete	1Set complete	1Set complete
4.5.5	Frequency counter complete with all accessories as per specification	1Set complete	1Set complete	1Set complete
4.5.6	Digital Radio Receiver AM, FM,SW complete with all accessories as per specification	2 sets complete	2 sets complete	2 sets complete
4.5.7	Antenna tester complete with all accessories as per specification	1 set complete	1 set complete	1 set complete

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- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

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4.5.8	Audio Analyzer Test and measurement system complete with all accessories as per specification	1Set complete	1Set complete	1Set complete
4.5.9	Field strength meter with GPS , laptop, software and all accessories as per specification	1 set complete	1 set complete	1 set complete

PART 4.6: SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR {50 M +5 M for TV antenna} HIGH LATTICED STEEL SELF SUPPORTING TOWER (FOR EACH TOWER)

I). SUPPLY AT SITE: (All the following items should conform to detailed AIR Specification)

<u>S.No.</u>	<u>DESCRIPTION</u>	<u>Qty Jammu Region</u>	<u>Qty Srinagar Region</u>	<u>Qty Leh Region</u>	<u>UNIT</u>
4.6.1.	Design of {50 M+ 5M for TV antenna} tower complete <i>as per AIR Specification</i> as required	1 job	1 job	1 job	Job
4.6.2	Supply of 50 M Tower superstructure material including Fabrication, Galvanizing <i>as per AIR Specification</i> complete as required. # Quantity in Metric Ton (MT) offered to be mentioned by tenderer	#MT	#MT	#MT	MT
4.6.3	Accessories:				
i)	Supply of Solid State AOL along with Sun Switch with twin circuit arrangement (of PVC Insulated, PVC sheathed weather proof, suitably rated, <i>Copper conductor</i> , armoured cable), MCB and accessories etc. complete as required.	1 Set Complete	1 Set Complete	1 Set Complete	Set
ii).	a) Supply of 3coreX6sq.mm, Copper conductor (Stranded), PVC Insulated, PVC Sheathed, armoured, Weather proof cable with lug etc. complete as required.	80 M	80 M	80 M	M
	b) Supply of 32 Ampere, SP&N, MCB incoming along with weather proof metal boxes with multipoint power sockets and switches at base and each platforms, earth wire etc. complete as required.	1 set complete	1 set complete	1 set complete	set
iii).	Supply of Clamps etc. for fixing / mounting of Microwave Antenna and Yagi Antenna complete as required.	1 Lot	1 Lot	1 Lot	Lot
iv).	Supply of Vertical ladder material with Free Fall Prevention system and Guard All System etc. complete as required.	1 Lot	1 Lot	1 Lot	Lot
v).	Supply of Horizontal Cable Tray material as per	25M	25M	25M	M

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- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

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	specification complete as required.(Rate per meter should be quoted)				
vi).	Supply of Lightening Arrester material/arrangements including earthing material for ground earth (two nos.) with Copper strip from tower top to ground with lug etc. complete as required.	1 set complete	1 set complete	1 set complete	set
vii)	Supply of Tower earthing system material for {50 M +5 M for TV antenna} tower along with copper earthing strips of suitable size s with complete material etc. as required.	4 sets complete	4 sets complete	4 sets complete	sets
viii)	Supply of 100 mm inner dia category Class C seamless GI pipe of 18 M length with clamps including Supply of material for Mounting provisions for VHF FM Antenna complete as required.	1 job	1 job	1 job	Job
4.6.4	Soil testing with detailed report & document	1 Job	1 Job	1 Job	Job
4.6.5	Submission of SERC /IIT certified Design documents and working Structural drawings of {50 M +5 M for TV antenna }duly signed & stamped by competent authority (For foundation and tower structure) to Zonal Office for approval	2 Set Complete	2 Set Complete	2 Set Complete	Set
4.6.6	Submission of finally approved working Structural and foundation drawings duly signed & stamped by competent authority for {50 M +5 M for TV antenna }tower to: a) Concerned Installation Officer -1 set b) Station -1 set c) Zonal Office -1 set	3 sets Complete	3 sets Complete	3 sets Complete	Set
4.6.7	Completion Report and submission of final tower drawings after erection at site to: a). Installation Officer -1 set b) Station -1 set c) Zonal Office -1 set	3 sets	3 sets	3 sets	Set
4.6.8	Pre-dispatch inspection of tower material	1 job	1 job	1 job	job
	TOTAL OF SUPPLY (A)				

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- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
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- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

(II). ERECTION, INSPECTION, TESTING AND COMMISSIONING AT SITE:

(All the following works should conform to detailed AIR Specification)

<u>S. No.</u>	<u>Description</u>	<u>Qty Jammu Region</u>	<u>Qty Srinagar Region</u>	<u>Qty Leh Region</u>	<u>Unit</u>
4.6.9	Design and casting of tower foundation including Supply of complete raw materials, hardware, labour, site clearance etc. as per AIR specification complete as required.	1 Job	1 Job	1 Job	Job
4.6.10	Erection, testing and commissioning of {50 M +5 M for TV antenna} tower at site as per AIR specification complete as required.	1 Job	1 Job	1 Job	Job
4.6.11	Inspection of Tower at site as per ATP complete as required.	1 Job	1 Job	1 Job	Job
4.6.12	Fixing of clamps etc. for mounting provision of 4 no bay type Antennae and 2 nos. Yagi Antennae complete as required.	1 Job	1 Job	1 Job	Job
4.6.13	Mounting provisions for 3-1/8"RF cables for feeding VHF FM Antennae, & DD Antennae Microwave Dish Antennae and Yagi Antennae complete as required.	1 Job	1 Job	1 Job	Job
4.6.14	Fixing of Solid State Aviation Obstruction lights along with twin circuit arrangement & MCB complete as required.	1 Job	1 Job	1 Job	Job
4.6.15	Painting of tower including paint material complete as required.	1 Job	1 Job	1 Job	Job
4.6.16	Tower Earthing work complete as per AIR specification.	1 Job	1 Job	1 Job	Job
4.6.17	Tower Lightning Arrester installation work complete as required	1 Job	1 Job	1 Job	Job
4.6.18.	Fixing of 100 mm inner dia. Seamless category C GI pipe of 18 M length with clamps including Supply of material for Mounting provisions for VHF FM Antenna complete as required.	1 Job	1 Job	1 Job	Job
4.6.19	Fixing of Vertical ladder with Free Fall Prevention System, Guard All System Etc. complete as required	1 Job	1 Job	1 Job	Job
4.6.20	Fixing of Vertical Cable Tray with clamps complete as required.	1 Job	1 Job	1 Job	Job
4.6.21	Fixing of Horizontal Cable Tray with clamps complete as required	25M	25M	25M	M
4.6.22	Laying of RF Cable complete as required	1 Job	1 Job	1 Job	Job
4.6.23	Hoisting of FM Antenna complete as required	1 Job	1 Job	1 Job	Job
4.6.24	Hoisting of TV Antenna complete as required	1 Job	1 Job	1 Job	Job
4.6.25	Laying and fixing of power supply cable for fixing of	1 Job	1 Job	1 Job	Job

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- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

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	weather proof metal boxes with Multipoint Power sockets and switches at base and each platforms, fixing of 32 Ampere, SP&N, MCB including connections, testing etc. complete as required.				
4.6.26	Errction of AIR,DD, Microwave & Yagi Antenna	1 Job	1 Job	1 Job	Job
	TOTAL OF WORKS (B)				
4.6.27	Additional charges for reduced soil bearing capacity below 8.2 MT /Sq. M for every 0.55 MT/Sq. M decrease.	1 Job	1 Job	1 Job	Job

Part 4.7

TV EQUIPMENT: Please refer part 2.7.

PART 4.8.1: SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR DSETC OF CONTAINER/SHELTER FOR RADIO & TV TRANSMITTERS (FOR EACH SITE)

S NO.	Description	Qty	Qty Jammu Region	Qty Srinagar Region	Qty Leh Region
4.8.1.1	<p>Design, supply of material/ arranging T&P, labour, erection, testing, commissioning, complete as per site requirement of Container/shelter for installation of Radio & TV Transmitters as per Specification including.</p> <p>(i) Heavy duty Base/Flooring (ii) Heat Insulation (iii) Flooring tiles (iv) Doors, windows, false ceiling (v) Finishing, painting (design and shade as per site requirement)</p> <p>Reference Suggestive drawing No.TM:15902 like entrance sliding steel door from out side and sliding aluminum gate from inside, Double glass airtight windows of anodized aluminium with aluminum grill along with glass, handle lock, U-channel etc.</p> <p>Electrical work: Electrical fittings and other accessories etc.</p> <p>The quantities of items may vary as per actual site requirement.</p>	Cubic M	@110 Cubic M	@110 Cubic M	@110 Cubic M

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- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Specification no: SETC-10 KW TX (1+1) AIR & DD /J&K /1/ November/ 2010/D (TD/FM)

	<p>(i) Recessed type twin fluorescent 4'x40 W, mirror optic decorative fitting (ii) Container outside lights/Gate lights (iii) MCBs for Light & power installation (iv) SP&N, MCBs with industrial socket and metal box with steel frames (v) Light points, power points, light sockets etc. (vi) Automatic fire alarm system. Electrical Switch gear etc. along with protection short circuit, over load & earth fault. Rates for above items will be quoted separately item wise by the tenderer.</p> <p>Electrical Wiring: Light Points wiring, power point wiring, circuit wiring, submain wiring and wiring for Ventilation equipment shall be carried out with copper wiring stranded conductor as per IS/ CPWD specification amended upto date 5 Amp light point 8 nos, 2x40 watt 5 Amp plug point 4 nos x 100 watt Cabin floodlight points/ gate light 5 nos x 100 watt 20 Amp MCB with Industrial Socket including Metal box frame complete for ventilating units.</p> <p>{Rate shall be quoted per cubic meter. Dimensions of container i.e. length (mm) X width (mm) X height (mm) shall be given by the tenderer as per regulatory & O&M requirement. @ for ranking purpose }</p>				
4.3.1.2	Complete Earthing System, Lightning arrestor and accessories.	Set	1 Set complete	1 Set complete	1 Set complete

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- .** Exact sets will be as sites requirement
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- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

PART 4.8.2: SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR DSETC OF CONTAINER/SHELTER FOR POWER SUPPLY EQUIPMENT FOR RADIO &TV TRANSMITTERS (FOR EACH SITE)

S NO.	Description	Qty	Qty Jammu Region	Qty Srinagar Region	Qty Leh Region
4.8.2.1	<p>Design, Supply, Erection, testing & commissioning (DSETC) of Container/Shelter for power supply equipment for installation of Radio & TV Transmitters as per Specification including.</p> <p>(i) Heavy duty Base/Flooring (ii) Heat Insulation (iii) Flooring tiles (iv) Doors, windows, false ceiling (v) Finishing, painting (design and shade as per site requirement)</p> <p>Reference Suggestive drawing No.TM:15904 like entrance sliding steel door from out side and sliding aluminum gate from inside, Double glass airtight windows of anodized aluminium with aluminum grill along with glass, handle lock, U-channel etc.</p> <p>Electrical work: Electrical fittings and other accessories etc. The quantities of items may vary as per actual site requirement. (i) Recessed type twin fluorescent 4'x40 W, mirror optic decorative fitting (ii) Container outside lights/Gate lights (iii) MCBs for Light & power installation (iv) SP&N, MCBs with industrial socket and metal box with steel frames (v) Light points, power points, light sockets etc. (vi) Automatic fire alarm system.</p> <p>Electrical Switch gear etc. along with protection short circuit, over load & earth fault. Rates for above items will be quoted separately item wise by the tenderer.</p> <p>Electrical Wiring: Light Points wiring, power point wiring ,circuit wiring, submain wiring and wiring for Ventilation equipment shall be carried out with copper wiring stranded conductor as per</p>	Cubic M	@80 Cubic M	@80 Cubic M	@80 Cubic M

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- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Specification no: SETC-10 KW TX (1+1) AIR & DD /J&K /1/ November/ 2010/D (TD/FM)

	IS/ CPWD specification amended upto date 5 Amp light point 6 nos, 2x40 watt 5 Amp plug point 4 nos x100 watt Cabin floodlight points/ gate light 5 nos x 100 watt 20 Amp MCB with Industrial Socket including Metal box frame complete for ventilating units. {Rate shall be quoted per cubic meter. Dimensions of container i.e. length (mm) X width (mm) X height (mm) shall be given by the tenderer as per regulatory & O&M requirement. @ for ranking purpose}				
4.3.1.2	Complete Earthing System, Lightning arrestor and accessories.	Set	1 Set complete	1 Set complete	1 Set complete

PART 4.9 SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR SETC FOR STAND ALONE SILENT TYPE DIESEL GENERATOR SETS 180 KVA (1+1)

SNo.	Description	Unit	Qty Srinagar region	Qty Jammu Region	Qty Leh Region
4.9.1	Supply of 180 KVA (1+1) at site condition Silent type Diesel Generator Set 415 V \pm 1%, 3 phase, 4 wire, 50 Hz \pm 4% as per Indenter Specification with Engine, Alternator, Control Panel including suitable interconnecting LT cables, Self contained Acoustic Enclosure for ready to use basis with Service tank of minimum 285 ltrs. Capacity with fuel pipe, dial type fuel gauge and complete accessories, battery system, standard tools including anti-freezing arrangement of coolant. ##	Set	1 set (1+1) complete #	1 set (1+1) complete #	1 set (1+1) complete #
4.9.2	Insurance, Loading, Transportation and unloading at site of the above DG set. ##	Job	1 job# (1+1)	1 job# (1+1)	1 job# (1+1)
4.9.3	Erection/Installation, Testing & Commissioning, of the above DG set. ##	Job	1 job# (1+1)	1 job# (1+1)	1 job# (1+1)
4.9.4	Supply of Fuel (HSD) and Lubricating Oil and other consumables during testing of DG set at Site for 24 Hrs. of IS-10000, Part IX-1980 amended to date. ##	Job	1 job# (1+1)	1 job# (1+1)	1 job# (1+1)

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- * Exact Length will be as per sites requirement.
- ** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Specification no: SETC-10 KW TX (1+1) AIR & DD /J&K /1/ November/ 2010/D (TD/FM)

4.9.5	Charges for getting CEA / State Electricity Board clearance for complete DG set Installation##	Job	1 job# (1+1)	1 job# (1+1)	1 job# (1+1)
4.9.6	Supply and Fixing of Silencer/ Exhaust pipe (Rate per mtrs length to be quoted)##	M	8 Mtrs.# (1+1)	8 Mtrs.# (1+1)	8 Mtrs.# (1+1)
4.9.7	SETC of heating system for starting as per specification with complete accessories ##	Set	1 Set# (1+1)	1Set# (1+1)	1Set# (1+1)
4.9.8	DG Sets earthing system as per IS complete as required at site.##	Job	6 jobs#	6 jobs#	6 jobs#
4.9.9	SETC of power supply Cables for DG Sets in 1+1 configuration in side the 180 KVA DG Set shed as above as per IS complete with connections with control panel at site complete as required.##	Job	1 job# (1+1)	1 job# (1+1)	1 job# (1+1)
4.9.10	## Design, supply of material/ switchgear / arranging T&P,labour, erection, testing, commissioning, complete as per site requirement (DSETC) of LT control panel in DG Shed 180 KVA comprising of MCCBs for both DG sets, for automatic changeover on load switch, contactors, relays etc. (for feeding power Supply to power supply container for Radio transmitters) including all cabling, connections with suitable lugs earthing as per specification complete as required.	Job	1 Job complete #	1 Job complete #	1 Job complete #

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

PART 4.10: SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR SETC OF ON LINE UNINTERRUPTED POWER SUPPLY SYSTEM (UPS) 120kVA (1+1) (FOR EACH SITE)

(Bill of material must be in the format given below for technical and commercial quotes).

Sl. No.	Description	Unit	Qty Jammu Region	Qty Srinagar Region	Qty Leh Region
	SETC of:				
4.10.1	120 KVA (1+1) at “site condition” IGBT/PWM connected in redundant parallel configuration based (Rectifier & Inverter), Fully DSP based Double Conversion, On Line UPS system with Isolation Transformer. (3 Phase, 4 Wire, input - 3 Phase, 4 Wire Output) as per specs.##	Set	1 Set complete #	1 Set complete #	1 Set complete #
4.10.2	Maintenance Free VRLA type Battery Bank (1+1) suitable to provide 15 minutes (minimum) backup (EOL) with heating system for batteries, as per specification at “site condition” Minimum Battery Capacity: (135000VAH minimum)## Tenderer to give (i). No. of batteries, (ii). Ah of each battery, (iii). Size of the battery bank	Number	No. of battery to be mentioned by tenderer	No. of battery to be mentioned by tenderer	No. of battery to be mentioned by tenderer
4.10.3	Remote Status display panel with interface cables.##	Set	1 Set complete #	1 Set complete #	1 Set complete #
4.10.4	Any other item required for the completeness of the UPS system.##	Lot	1 Lot#	1 Lot#	1 Lot#
4.10.5	UPS control panel with MCCB 4 pole along with interconnecting copper cabling including earthing system as per IS complete as required at site.##	Job	1 job# (1+1)	1 job# (1+1)	1 job# (1+1)

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- * Exact Length will be as per sites requirement.
- . ** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

PART 4.11: SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR DSETC OF VENTILATION EQUIPMENT FOR TRANSMITTERS. (FOR EACH SITE)

S NO.	Description	Unit	Qty Jammu Region	Qty Srinagar Region	Qty Leh Region
4.11.1.	SETC of 1.5 T, Reversible Type air conditioners complete as per specification. ##	Set	7 Sets complete #	7 Sets complete #	7 Sets complete #

PART 4.12 SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR SETC FOR STAND ALONE SILENT TYPE DIESEL GENERATOR SETS 62.5 KVA (1+1)

SNo.	Description	Unit	Qty Srinagar region	Qty Jammu Region	Qty Leh Region
4.12.1	Supply of 62.5 KVA (1+1) at site condition Silent type Diesel Generator Set 415 V \pm 1%, 3 phase, 4 wire, 50 Hz \pm 4% as per Indenter Specification with Engine, Alternator, Control Panel including suitable interconnecting LT cables, Self contained Acoustic Enclosure for ready to use basis with Service tank of minimum 120 ltrs. Capacity with fuel pipe, dial type fuel gauge and complete accessories, battery system, standard tools including anti-freezing arrangement of coolant. ##	Set	1 set (1+1) complete #	1 set 1+1) complete #	1 set (1+1) complete #
4.12.2	Insurance, Loading, Transportation and unloading at site of the above DG set. ##	Job	1 job# (1+1)	1 job# (1+1)	1 job# (1+1)
4.12.3	Installation, Testing & Commissioning, of the above DG set. ##	Job	1 job# (1+1)	1 job# (1+1)	1 job# (1+1)
4.12.4	Supply of Fuel (HSD) and Lubricating Oil and other consumables during testing of DG set at Site for 24 Hrs. of IS-10000, Part IX-1980 amended to date. ##	Job	1 job# (1+1)	1 job# (1+1)	1 job# (1+1)
4.12.5	Charges for getting CEA / State Electricity Board clearance for complete DG set Installation##	Job	1 job# (1+1)	1 job# (1+1)	1 job# (1+1)
4.12.6	Supply and Fixing of Silencer/ Exhaust pipe (Rate per mtrs length to be quoted)##	M	8 Mtrs.# (1+1)	8 Mtrs.# (1+1)	8 Mtrs.# (1+1)

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Specification no: SETC-10 KW TX (1+1) AIR & DD /J&K /1/ November/ 2010/D (TD/FM)

4.12.7	SETC of heating system for starting as per specification with complete accessories ##	Set	1 job# (1+1)	1 job# (1+1)	1 job# (1+1)
4.12.8	DG Sets earthing system as per IS complete as required at site.##	Job	4 jobs#	4 jobs#	4 jobs#
4.12.9	SETC of power supply Cables for DG Sets in 1+1 configuration in side the 62.5 KVA DG Set shed as above as per IS complete with connections with control panel at site complete as required.##	Job	1 job# (1+1)	1 job# (1+1)	1 job# (1+1)
4.12.10	## Design, supply of material/ switchgear / arranging T&P,labour, erection, testing, commissioning, complete as per site requirement (DSETC) of LT control panel in DG Shed 62.5 KVA comprising of MCCBs for both DG sets, for automatic changeover on load switch, contactors, relays etc. (For feeding power Supply to power supply container for ancillary) including all cabling, connections with suitable lugs earthing as per specification complete as required.	Job	1 Job complete #	1 Job complete #	1 Job complete #

PART 4.13: SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR SETC OF 180 KVA AVR

Sl. No.	Description	Unit	Qty Jammu Region
	SETC of:		
4.13.1	180 KVA AVR at "site condition" as per specs. ##	Set	1 Set complete #
4.13.2	Any other item required for the completeness of the AVR system.##	Lot	1 Lot#
4.13.3	AVR control panel with MCCB 4 pole along with interconnecting copper cabling including earthing system as per IS complete as required at site.##	Job	1 job# (1+1)

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

PART 4.14: SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR SETC OF 180 KVA ISOLATION TRANSFORMERS

Sl. No.	Description	Unit	Qty Jammu Region
	SETC of:		
4.14.1	180 KVA Isolation Transformer at "site condition" as per specs.##	Set	1 Set complete #
4.14.2	Any other item required for the completeness of the Isolation transformer system.##	Lot	1 Lot#
4.14.3	Isolation transformer control panel with MCCB 4 pole along with interconnecting copper cabling including earthing system as per IS complete as required at site.##	Job	1 job# (1+1)

PART 4.15: (A) SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR DSETC L.T. BOARDS & LT Cables excluding L.T. control panel & LT Cables inside 180 KVA DG Sets (1+1) shed & 62.5 KVA DG Sets (1+1) shed

I.

S NO.	Description	Unit	Qty Srinagar region	Qty Jammu region	Qty Leh region
i	## Design, supply of material/ switchgear / arranging T&P,labour, erection, testing, commissioning, complete as per site requirement (DSETC) of Main LT board panel in power supply container for feeding power Supply to Radio & TV transmitters & associated equipment including all cabling, connections with suitable lugs earthing as per specification. Reference Suggestive drawing No. TP-16002	Job	1 Job complete #	1 Job complete #	1 Job complete #
ii	## Design, supply of material/ switchgear / arranging T&P, labour, erection, testing, commissioning, complete as per site requirement (DSETC) of Sub distribution LT board panel for ancillaries requirement in power supply container including all cabling, connections with suitable lugs earthing as per specification. Reference Suggestive drawing No. TP-16002	Job	1 Job complete #	1 Job complete #	1 Job complete #
iii	## Design, supply of material/ switchgear /	Job	1 Job	1 Job	1 Job

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Specification no: SETC-10 KW TX (1+1) AIR & DD /J&K /1/ November/ 2010/D (TD/FM)

	arranging T&P,labour, erection, testing, commissioning, complete as per site requirement (DSETC) of Sub distribution LT panel in transmitter container(for feeding power Supply to transmitter & associated equipment from power supply container) in including all cabling, connections with suitable lugs earthing as per specification. Reference Suggestive drawing No. TP-16002		complete #	complete #	complete #
iv	## Design, supply of material/ switchgear / arranging T&P,labour, erection, testing, commissioning, complete as per site requirement (DSETC) of Sub distribution LT panel in transmitter container(for feeding power Supply to AC Units from power supply container) in including all cabling, connections with suitable lugs earthing as per specification. Reference Suggestive drawing No. TP-16002	Job	1 Job complete #	1 Job complete #	1 Job complete #

II.

S.No.	SETC of LT Cables Description	Unit	Qty
1.	Supplying ,laying/installation, testing & commissioning of 1.1KV grade, aluminum conductor, PVC insulated, PVC Sheathed armoured power supply cable in ground/trench/air including arranging labour, T&P ,supply of complete material sand bricks for laying of power cable including, lugs, connections suitable earthing as per CPWD specifications/IS. 4 numbers x size 3-1/2 Core x 300 sq.mm (supply from State Electricity Board from output of transformer to main LT board) (2numbers spare cables)	M	4 x 100 M
2.	----do---- 2 numbers x size 3-1/2 Core x400 sq.mm (supply from 180 KVA DG Shed to power supply container) (1numbers spare cable)	M	2 x 80M
3.	----do---- 2 numbers x size 3-1/2 Core x 70 sq.mm (supply from 62.5 KVA DG	M	2 x 80M

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Specification no: SETC-10 KW TX (1+1) AIR & DD /J&K /1/ November/ 2010/D (TD/FM)

	Shed to power supply container) (1numbers spare cable)		
4.	----do--- 2 numbers x size 3-1/2 Core x 240 sq.mm (supply from power supply container to transmitter container (1number spare cables) for transmitter equipment	M	2 x 40M
5.	----do--- 2 numbers x size 3-1/2 Core x 35 sq.mm (supply from power supply container to transmitter container (1number spare cables) for AC Units	M	2 x 40M
6.	----do---- 2 numbers x size 3-1/2 Core x 25 sq.mm (supply from Power supply container to Office block) (1numbers spare cable)	M	2 x 40M
7.	----do---- 2 numbers x size 3-1/2 Core x 35 sq.mm (supply from Power supply container to Hostel block) (1numbers spare cable)	M	2 x 40M
8.	----do---- 2 numbers x size 4 Core x 16 sq.mm (supply from From Power supply container to Pump room)(1numbers spare cable)	M	2 x 70M
9.	----do---- 2 numbers x size 4 Core x 16 sq.mm (supply from power supply container to transmitter container (1numbers spare cable) Power supply container to AGD	M	2 x 70M
10.	----do---- 2 numbers x size 4 Core x 10 sq.mm (supply from power supply container to 180 KVA DG Set shade (1numbers spare cable)	M	2 x 80M
11.	----do---- 2 numbers x size 4 Core x 10 sq.mm (supply from power supply container to 62.5 KVA DG Shade (1numbers spare cable)	M	2 x 80M
12.	Supplying ,laying/installation, testing & commissioning of 1.1KV grade , copper conductor, PVC insulated, PVC Sheathed armoured power supply cable in ground/trench/air including arranging labour, T&P ,supply of complete material sand bricks for laying of power cable including, lugs, connections suitable earthing as per CPWD specifications/IS. 2 numbers x size 4 Core x 10 sq.mm stranded copper conductor	M	2 x 80M

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Specification no: SETC-10 KW TX (1+1) AIR & DD /J&K /1/ November/ 2010/D (TD/FM)

	Remote control cable from Transmitter container to 180 KVA DG Set shed (1 number spare cables)		
13.	Supplying ,laying/installation, testing & commissioning of 1.1KV grade , copper conductor, PVC insulated, PVC Sheathed armoured power supply cable in ground/trench/air including arranging labour, T&P ,supply of complete material sand bricks for laying of power cable including, lugs, connections suitable earthing as per CPWD specifications/IS. 2 numbers x size 4 Core x 6 sq.mm stranded copper conductor Remote control cable from Transmitter container to 62.5 KVA DG Set shed (1 number spare cables)	Metre	2 x 80

PART 4.15 (B): SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR SETC OF EARTHING SYSTEM

Tenderers are requested to quote against the concerned Serial number of earthing Items for the respective Equipment in Part 4.0 of Specification.

S NO.	Description	Unit	Qty Srinagar region	Qty Jammu region	Qty Leh region
1.1	Copper plate earthing as per IS for audio -2 Nos, The value of earth resistance of each earth system shall be less than 1 Ohm. Complete earthing system shall include supply of all materials, arranging T&P & labour, Installation/erection, testing, commissioning complete as per site requirement of earthing system.	Job	1Job	1Job	1Job
1.2	Copper plate earthing as per IS 2 Nos. for power supply equipment LT Boards, A/C plant Complete earthing system shall include supply of all materials, arranging T&P & labour, Installation/erection, testing, commissioning complete as per site requirement of earthing system.	Job	1Job	1Job	1Job
1.3	Copper plate earthing as per IS 2 Nos for lightning Arrestor Complete earthing system shall include supply of all materials, arranging T&P & labour,	Job	1Job	1Job	1Job

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Specification no: SETC-10 KW TX (1+1) AIR & DD /J&K /1/ November/ 2010/D (TD/FM)

	Installation/erection, testing, commissioning complete as per site requirement of earthing system.				
1.4	Copper plate earthing as per IS 6 Nos for Power supply transformer Complete earthing system shall include supply of all materials, arranging T&P & labour, Installation/erection, testing, commissioning complete as per site requirement of earthing system.	Job	1Job	1Job	1Job

Note: For Transformer, RF Cables & Tower, earthing has been included in respective schedule of material/requirement (Unpriced)

PART 4.16: SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR SETC OF FOR TECHNICAL MANUALS, FURNISHING & MISCELLANEOUS ITEM/EQUIPMENT FOR TRANSMITTERS SETUPS (FOR EACH SITE)

(A) TECHNICAL MANUALS

S NO.	Description	Unit	Qty Srinagar region	Qty Jammu region	Qty Leh region
1.A.	Technical manuals for Installation, testing, commissioning, Operation & Maintenance, including Theory of operation and fault diagnosis printed and duly bound for 10kW VHF FM (1+1)transmitter, Automatic change over unit for 10 kW FM Transmitters in (1+1) mode hot stand by with automatic control with transmitters control units complete, 15 kW Dummy Load and thru line power meter etc., RF Coaxial air dielectric feeder cable system, dehydrator system, RF coaxial Copper Rigid Line with all hardware accessories,RF Coaxial copper rigid lines, Motorized RF coaxial Changeover switch, Stereo & Digital Programme Input-Cum-Monitoring Rack, Stereo FM Digital Audio Broadcast processor equipment, FM Mono and Stereo Mod Monitor to be used in – tandem with RF amplifier, 4 bay VHF FM Vertically Polarized Antenna system, including Radome, complete with all accessories, Digital Transmission console, Dynamic Microphone, Professional CD player/DVD Player, Hard disk based audio system (SOUND CARD), Complete Measuring equipment as per specification in Part 2.5, Digital Radio Receiver AM, FM,SW, C Band terminal, DTH, Power supply equipment 180 KVA(1+1) DG Set, 62.5 KVA (1+1)				

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Specification no: SETC-10 KW TX (1+1) AIR & DD /J&K /1/ November/ 2010/D (TD/FM)

	DG Set, 120 KVA (1+1) UPS on line, Ventilation equipment etc as per distribution given below along with one soft copy on CD.				
1.A.1	For DE (Proj.) P&D Unit, DG:AIR {Within Two Months of Supply order) (irrespective of number of transmitters to be ordered)	Set	1 set complete	1 set complete	1 set complete
1.A.2	For Consignee Technical manuals are to be supplied) {To be supplied along with the equipment}. (irrespective of number of transmitters to be ordered)	Set	2 sets complete	2 sets complete	2 sets complete
1.A.3	For following offices: Technical manuals are to be supplied) {To be supplied along with the equipment}. (irrespective of number of transmitters to be ordered)				
i	DE((Proj.),P&DUnit,DG:AIR (1 set)				
ii	Zonal Office (Project Wing) (1 set)				
iii	Zonal Office (Maintenance Wing) (1 set)				
iv	DE(Transmitter Maintenance), DG:AIR (1 set)				
	Total (4 sets)	Set	4 sets	4 sets	4 sets
2.A.	Technical manuals for Installation, testing, commissioning, Operation & Maintenance, including Theory of operation and fault diagnosis printed and duly bound for 10kW UHF TV(1+1) transmitter complete along to all associated equipment , measuring equipment, RF feeder cable system, antenna system as per Part 2.7 of Specification as per distribution given below along with one soft copy on CD.				
1.A.1	For DE (TD) , DG:Doordarshan {Within Two Months of Supply order) (irrespective of number of transmitters to be ordered)	Set	1 set complete	1 set complete	1 set complete
1.A.2	For Consignee Technical manuals are to be supplied) {To be supplied along with the equipment}. (irrespective of number of transmitters to be ordered)	Set	2 sets complete	2 sets complete	2 sets complete
1.A.3	For following offices: Technical manuals are to be supplied) {To be supplied along with the equipment}. (irrespective of number of transmitters to be ordered)				
i	DE (TD) , DG:Doordarshan (1 set)				
ii	Zonal Office (Project Wing) (1 set)				
iii	Zonal Office (Maintenance Wing) (1 set)				
iv	DE(Transmitter Maintenance), DG:AIR (1 set)				
v	STI (T), Delhi (1 Set)				
vi	R & D , Delhi (1 Set)				
	Total (6 sets)	Set	6 sets	6 sets	6 sets

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

PART 4.16 (B) SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR TECHNICAL FURNITURE FOR TRANSMITTERS (FOR EACH SITE)

(B). Technical Furniture:

S. No.	Description	Unit	Qty Srinagar region	Qty Jammu region	Qty Leh region
(i)	Revolving chair for transmitter container	number	1 number	1 number	1 number
(ii)	Table for transmitter container	number	1 number	1 number	1 number
(iii)	Chairs for transmitter container	number	2 numbers	2 numbers	2 numbers
(iv)	Revolving chair	number	1 number	1 number	1 number
(v)	Cup board for transmitter & power supply container	number	2 numbers	2 numbers	2 numbers
(vi)	Table for power supply container for general purpose	number	1 number	1 number	1 number

PART 4.17 SCHEDULE OF REQUIREMENT/MATERIAL (UNPRICED) FOR

Operation & Comprehensive Maintenance including salary of staff & requirement of spares etc.of containerized 10 KW (1+1) VHF FM Transmitters, 10 KW (1+1) UHF TV Transmitters and their auxiliary equipment setup antenna sustum along with tower set up , power supply & ancillary Civil/Electrical works on turnkey basis in J&K one each in Jammu, Srinagar and one Leh Region). **(FOR EACH SITE)**

(Initial Operation & Comprehensive Maintenance including salary of staff & requirement of spares etc.order will be placed by Directorate like initial spares and later every year this order for O& M will be given by Central stores /Maintenance Wing of Directorate /Zonal office on annual basis like purchase of spares of equipment and requirements may be reviewed every year as per actual)

S NO.	Description	Unit	Qty Srinagar region	Qty Jammu region	Qty Leh region
	For one year : separate rate shall be quoted for 1.1 to 1.16				
1	Operation & Maintenance (O&M) of containerized 10 KW (1+1) VHF FM Transmitters, 10 KW (1+1) UHF TV Transmitters and their auxiliary equipment setup along with tower and ancillary works on turnkey basis in				

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- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter

Specification no: SETC-10 KW TX (1+1) AIR & DD /J&K /1/ November/ 2010/D (TD/FM)

	J&K				
1.1	Men power for operation	1 job	1 job complete	1 job complete	1 job complete
1.2	Diesel oil with anti freeze	1 job	1 job complete	1 job complete	1 job complete
1.3	Special requirements for O&M men power like first aid, clothing, food, drinking water, daily transport, recreation, welfare, air lifting of personnel in emergency	1 job	1 job complete	1 job complete	1 job complete
1.4	Annual maintenance of civil works	1 job	1 job complete	1 job complete	1 job complete
1.5	Annual maintenance of electrical works	1 job	1 job complete	1 job complete	1 job complete
1.6	Development/horticulture maintenance	1 job	1 job complete	1 job complete	1 job complete
1.7	Annual maintenance of sanitary works	1 job	1 job complete	1 job complete	1 job complete
1.8	All official miscellaneous maintenance	1 job	1 job complete	1 job complete	1 job complete
1.9	Annual maintenance of water supply tanks and distribution system	1 job	1 job complete	1 job complete	1 job complete
1.10	Annual maintenance of Radio Transmitter equipment	1 job	1 job complete	1 job complete	1 job complete
1.11	Annual maintenance of TV transmitter equipment	1 job	1 job complete	1 job complete	1 job complete
1.12	Annual maintenance of 180 KVA DG sets	1 job	1 job complete	1 job complete	1 job complete
1.13	Annual maintenance of 62.5.KVA DG Sets	1 job	1 job complete	1 job complete	1 job complete
1.14	Annual maintenance of 120 KVA UPS system	1 job	1 job complete	1 job complete	1 job complete
1.15	Annual maintenance of Fire fighting and fire alarm system	1 job	1 job complete	1 job complete	1 job complete
1.16	Annual for security men power for Prasar Bharti Set up	1 job	1 job complete	1 job complete	1 job complete
1.17	Annual maintenance of 180kVA AVR	1 job	1 job complete	1 job complete	1 job complete
1.18	Annual maintenance of 180kVA Isolation Transformer	1 job	1 job complete	1 job complete	1 job complete

24th December, 2010

- * Exact Length will be as per sites requirement.
- .** Exact sets will be as sites requirement
- # Rate shall be quoted per Item wise per number/per meter/ per job along with each quantity by the tenderer)
- ## (Item wise details along with each quantity to be given by the tenderer)
- ^ Items are to be supplied by tenderer including lugs, connectors etc.
- @ Volume of container/ Shelter