

**TENDER NOTICE**

No. 9(2)19/UPS BATTERIES/2014-15/ES/DKC

Dated: 27-01-2015

The Dy. Director General (Engg.), Doordarshan Kendra, Chennai, on behalf of Prasar Bharati, invites tenders for the supply & installation work cited below from reputed contractors, who fulfill the qualification criteria on prescribed under Sl. No. 10 below:-

1. NAME OF WORK : Supply & Replacement of 12Volt, 100Ah, Maintenance Free, VRLA UPS Batteries – 64 Nos. (32X2) for Aplab make 100KVA UPS and 12V,42AH VRLA Batteries of 32 Nos for 20KVA APLAB UPS **on buy-back basis for the old batteries available at Doordarshan Kendra Chennai (Tamil Nadu State)** as per the attached technical specifications (Annexure- I)
2. ESTIMATED COST : Rs. 5,50,000/-
3. EARNEST MONEY DEPOSIT : Rs. 11,000/-
4. TIME ALLOWED FOR COMPLETION OF WORK : 30 days from issue of order.
5. TENDER DOCUMENT FEE : Free of cost. Tender document may be down loaded from the following web-sites:  
a) [ddpodhigai.org.in/tenders.php](http://ddpodhigai.org.in/tenders.php)  
b) [ceszairdd.org.in/Tenders.php](http://ceszairdd.org.in/Tenders.php)
6. LAST DATE AND TIME OF RECEIPT OF BID. : 12.02.2015 up to 12 00 Hrs.
7. DATE AND TIME OF OPENING OF TECHNICAL BID. : 12.02.2015 at 15 00 Hrs
8. DATE AND TIME OF OPENING OF COMMERCIAL BID : Will be intimated latter.
9. VALID PERIOD FOR ACCEPTED : 3 Months.
10. QUALIFICATION CRITERION : Certificate from reputed firm(s) for at least three similar supply and installation works carried out satisfactorily should be enclosed with the application for tender documents. Also document evidence of manufacturer certificate / authorized dealer certificate to be submitted along with the Technical bid. **OEM must have manufacturing & maintenance facility in India.**
11. SPECIAL NOTE : The tenderer has to submit EMD, technical bid and financial bid separately properly sealed by wax in separate envelopes. Tenderers may contact the following telephone numbers for any clarifications, if required: Tel. 044-25361975, 25364921.

**FOR AND ON BEHALF OF THE PRASAR BHARATI**

Prasar Bharati  
(India's Public Service Broadcaster)  
Doordarshan Kendra: Chennai

No. 9(2)19/UPS BATTERIES/2014-15/ES/DKC

Dated: 27-01-2015

1. DESCRIPTION:

Sealed tenders are hereby invited for and on behalf of PRASAR BHARATI from reputed firms for the following supply of material/works: -

a) Supply & Replacement of 12Volt, 100Ah, SMF, VRLA UPS Batteries – 64 Nos. (32X2) for Aplab make 100KVA UPS & 12Volt, 42Ah, SMF, VRLA UPS Batteries – 32 Nos for 20KVA UPS on buy-back basis for the old battery bank installed at Doordarshan Kendra Chennai (Tamil Nadu State) as per the attached technical specifications (Annexure-I)

The tender shall consist of three parts (bids) namely:

i) E.M.D.:- As per clause 7 of this tender document, E.M.D. should be enclosed in a separate sealed envelope. Technical bid will be opened only of those tenderers who have submitted the required E.M.D. Without EMD tender will be liable to rejection.

ii) TECHNICAL BID: Technical bid should contain the confirmation to the enclosed technical specifications. **Tenderer should sign with rubber stamp on every page of the tender document** and the same should be submitted (except Annexure – III) along with technical bid. The envelopes should be super scribed as **“Technical Bid for Maintenance free VRLA Batteries”** and **sealed with red lac or red wax.**

iii) COMMERCIAL BID: The commercial bid should contain the price bid and acceptance of the commercial terms and conditions of these tender documents. Tenderer should quote their rates on **Annexure – III (Schedule of material) Annexure – IV (Commercial bid for old batteries offered on buy-back) and these pages should be removed from the tender document & kept in the commercial bid envelop.** Tenderer should indicate their VAT/ST/CST/TIN registration number. The commercial bid envelopes should be super scribed as **“Commercial Bid for Maintenance free VRLA Batteries”** and **sealed with red lac or red wax.**

2. The technical bid (1 No.), commercial bid (1 No.) and EMD (1 No.) will be submitted in sealed envelopes separately with the names of the supply of Material/Work, date of opening and the bid enclosed written on the envelopes. The above mentioned **three envelopes** should be enclosed and submitted in another large size envelope duly sealed with red lac or red wax and super scribed with the name of supply of material/work, date of opening. The completed tender in all aspects shall be addressed to:

The Dy. Director General (Engg),  
(By Name: Shri. R.Srinivasan, DDE)  
Doordarshan Kendra,  
Swamy Sivananda Salai,  
Chennai – 600 005.

The tender will be received at this office by post or in person up to **12 00 Hrs on 12.02.2015**. The technical bid and E.M.D. will be opened on the same day at **15 00 hrs**. The date of opening of commercial bid will be intimated latter to the technically qualified tenderers latter.

### 3. VALIDITY:

The tender shall be kept valid for three months from the date of opening of commercial bid.

### 4. PRICES, DUTIES AND TAXES :

A. PRICES: The prices quoted should be firm and for free delivery at DDK Chennai, inclusive of transit insurance, excise duty and entry tax if any. Tenderers should quote in figures as well as in words the amounts tendered by them. In the case of illiterates, the rates or the amounts tendered should be attested by a witness.

#### B. DUTIES AND TAXES:

##### i) Excise Duty:

The prices should contain an element of Excise Duty which should be indicated separately. Any statutory variation in the excise duty-taking place after acceptance of tender within the delivery date will be adjusted by the purchaser on production of documentary proof.

##### ii) SALES TAX:

The prevailing rate of ST/CST/VAT should be clearly mentioned in the tender separately. The following certificates are to be submitted by the supplier along with the bills.

“Certified that the goods on which the sales tax has been charged have not been exempted under central sales tax act of the rules made there under”. The amount charged on account of sales tax on these goods is not more than what is payable under provision of the relevant Act or the rules made there under.

Certified that we are registered as dealers in the State under registration No. for the purpose of Sales Tax. “Any statutory variation in ST/CST/VAT taking place after acceptance of tender within the delivery date will be adjusted by the purchaser”.

**L1 will be arrived by considering total amount of both batteries 12V,100AH and 12V,42AH and deducting the buyback amount of old batteries. Before quoting the rates the tenders are requested to visit this Kendra to ascertain the present condition of the old batteries offered on buy-back.**

### 5. TERMS OF DELIVERY :

F.O.R. Destination at DDK, Chennai.

### 6. DELIVERY PERIOD: -

Tenderers may note that the entire supply shall be completed within 30 days from the date of the order.

### 7. EARNEST MONEY DEPOSIT:

Earnest Money amounting Rs.11,000/- (Rupees Eleven thousand only) in the form of Demand Draft on a Nationalized bank drawn in favour of Additional Director General (Engg.) (SZ), AIR & TV, Chennai-5 should accompany the tender in a separate envelope superscribed with the name of supply/work, opening date, etc., E.M.D. by means of Bank guarantee or any other mode of payment other than DD shall not be accepted. Tenders without EMD shall be summarily rejected and their technical cum commercial bid will not be opened at all.

EMD of all the tenderers other than first & second lowest tenderers will be returned back within 10 days of opening of tenders. EMD of the L-2 tenderer will be returned after finalizing the contract. EMD of the successful tenderer will be returned after receipt of performance guarantee as mentioned in the Clause 5 of General Terms and Conditions of the tender.

### 8. EXPERIENCE:

The tenderers should give documentary proof for having supplied similar systems and equipments to other customers and should enclose the user list clearly mentioning the name of the users / installations.

The tenderers without the user list shall be rejected out rightly. Also the firm should submit the documentary proof of Original Equipment Manufacturer Certificate / Authorized Dealership Certificate along with the Technical bid.

9. TECHNICAL SPECIFICATIONS AND GENERAL TERMS AND CONDITIONS:

For technical specifications see Annexure-I and for other general terms and conditions see Annexure-1I.

10. ACCEPTANCE / REJECTION OF TENDER:

The acceptance of a tender will rest with The Deputy Director General (Engg), Doordarshan Kendra, Chennai – 600005, who does not bind himself to accept the lowest tenderer and reserves to himself the authority to reject any or all of the tenders received without assigning any reason.

11. A point by point compliance statement, in respect of all the points, sub-points in the specification is to be enclosed along with the offer. **Compliance statement in the format as mentioned in clause 5 of the Technical Specification only shall be accepted. Offers without the compliance statement or incomplete compliance statement will be rejected with the sole responsibility of the tenderer.**

12. GENERAL:

Canvassing in connection with tender is strictly prohibited and the tenders submitted by tenderers who resort to canvassing will be rejected.

13. PERFORMANCE GUARANTEE:

The successful bidder required to submit performance guarantee an amount equivalent to 10% of the basic cost, in the form of Demand Draft drawn in favour of “Additional Director General (Engg.) (SZ), AIR & TV, Chennai” or Bank guarantee. The performance guarantee will be released after 10<sup>th</sup> day of successful completion of guarantee period.

For DEPUTY DIRECTOR GENERAL (ENGG)  
DOORDARSHAN KEDRA, CHENNAI

Encl:

1. Technical specifications, Annexure-I.
2. General Terms and Conditions – Annexure-II
3. Schedule of Material – Annexure – III
4. List of Defective Batteries-Annexure-IV

**Supply & Replacement of Maintenance free VRLA Batteries for Doordarshan Kendra, Chennai**

**1. SCOPE:**

a. The specification aims at the procurement of **Maintenance free VRLA batteries on buyback basis** for the UPS installed in studios of Doordarshan Kendra, Chennai. The scope of the supply of maintenance free VRLA Batteries envisaged in this tender should consist of 12Volt, 100Ah, SMF, VRLA Batteries - 64 Nos. (32X2 Sets) & 12Volt, 42Ah, SMF, VRLA batteries – 32 Nos.

b. The offered Batteries should be meeting the specification and field proven. The OEM/bidder should enclose the client list and the contact details where similar products have been supplied. **The bidder should essentially enclose the authorization certificate issued by the OEM for the offered products.** Local service support must be available for optimum upkeep of the system.

**c) The existing battery racks to be used for erection of new batteries.**

**2(a). TECHNICAL SPECIFICATION FOR 12V, 100Ah SMF, VRLA BATTERY:**

Sl.No.	Description	Specification
1	Positive Plate	It must resist corrosion and provide longer cyclic life.
2	Negative Plate	It should have maintenance free characteristics
3	Voltage	12V
4	Capacity	100 AH – (2x32 Total 64 batteries)
5	Container	Should be high impact Polypropylene co-polymer / ABS, with low permeability, ribbed jar design for better heat dissipation and strength. Flame-retardant polypropylene UL 94 V/028% LOI is optional.
6	Separator	Should be Low resistance, high porosity and highly absorbent type glass mat separator (AGM)
7	Electrolyte	Should be in High purity Sulfuric acid to maximize shelf life.
8	Terminals	Should be Lead/Tin plated Copper inserts for high Conductivity
9	Safety Valve	Should be Self resealing, pressure regulated and explosion Proof
10	Container and Cover sealing	Should be Heat Sealing Method for better joint strength. Should have higher surface area with ribs facilitating superior thermal conductivity, thermal seal and uniform cell compression results leak proof.
11	AH Efficiency	Should be above 95%
12	W H Efficiency	Above 85%
13	Cycle Life of Battery @ 27°C	1200 – 1400 Cycles
14	Dimension	L – Should be less than 442mm W – Should be less than 175mm H- Should be less than 236mm
15	Internal Resistance at 25°C	Should be less than 6 m
16	Self Discharge at 27°C	<b>After 3 months: should be 90%</b> <b>After 6 months: should be 80%</b>

## **2(b). TECHNICAL SPECIFICATION FOR 12V, 42Ah SMF, VRLA BATTERY:**

Sl.No.	Description	Specification
1	Positive Plate	It must resist corrosion and provide longer cyclic life.
2	Negative Plate	It should have maintenance free characteristics
3	Voltage	12V
4	Capacity	42 AH – (32 batteries)
5	Container	Should be high impact Polypropylene co-polymer / ABS, with low permeability, ribbed jar design for better heat dissipation and strength. Flame-retardant polypropylene UL 94 V/028% LOI is optional.
6	Separator	Should be Low resistance, high porosity and highly absorbent type glass mat separator (AGM)
7	Electrolyte	Should be in High purity Sulfuric acid to maximize shelf life.
8	Terminals	Should be Lead/Tin plated Copper inserts for high Conductivity
9	Safety Valve	Should be Self resealing, pressure regulated and explosion Proof
10	Container and Cover sealing	Should be Heat Sealing Method for better joint strength. Should have higher surface area with ribs facilitating superior thermal conductivity, thermal seal and uniform cell compression results leak proof.
11	AH Efficiency	Should be above 95%
12	W H Efficiency	Above 85%
13	Cycle Life of Battery @ 27°C	1200 – 1400 Cycles
14	Dimension	L – Should be less than 199mm W – Should be less than 167mm H- Should be less than 175mm
15	Internal Resistance at 25°C	Should be less than 8 m
16	Self Discharge at 27°C	<b>After 3 months: should be 90%</b> <b>After 6 months: should be 80%</b>

### **OPERATION (for both 100Ah & 42Ah)**

1	Type of Charging	Should be Constant potential, current limited to 20% of the rated capacity (0.2 C 10 Amp)
2	Float Voltage	13.50V/ at 77° F/at (27° C)
3	Boost Voltage	13.80V/ at 77° F/(25° C)
4	RC Ripple	Ripple content shall not exceed 3% RMS

### **3. GENERAL**

Following general conditions are applicable to all tenderers. These conditions have to be complied for consideration of their offer(s).

3.1 Other essential item(s), if any, which have not been mentioned in this specification, but are necessary to complete the system for its full exploitation, should also be quoted as optional item. The firm should provide the sufficient details of such item(s) to decide about its utility.

3.2 The tenderer/manufacturer should ensure the completeness of the system in their offer.

3.3 All the essential accessories and technical manual should be included in this offer.

3.4 The bidder have to produce the OEM Authorization Certificate and must have their own branch office at Chennai with stocking & servicing facilities.

**3.5 OEM should have manufacturing plant based at India with stocking & serving centre at Chennai.**

3.6 Client list with satisfactory working performance certificate need to be enclosed.

3.7 The OEM of he offered product should be of a reputed make and the make & model should be time tested at customers end for the past five years.

#### **4. COMPLIANCE**

**A point by point compliance statement from the principal manufacturer in respect of all the points laid down in this specification is to be submitted along with the technical bid in the format given on pages starting from 16 to 18. Mere signature on the copy of our specification shall not be accepted as a compliance statement.**

Compliance statement in the format given on pages from 16 to 18 only be accepted. The manufacture should also record the performance figures of their equipment offered in the quote for which the compliance statement is enclosed. The figures so mentioned should be supported by record of these in the technical literature enclosed with the tender. Offers without the compliance statement or incomplete compliance statement will be rejected with the sole responsibility of the tenderer. **Any deviation from the specification detailed in the compliance statement is to be highlighted separately.**

#### **5. PRICE**

The tenderer must quote separately item wise unit price for all the items that constitutes the system. Prices of all optional items essentially required for the completeness of the system should also be quoted separately. Payment conditions will be as per the General Terms & Conditions mentioned in Annexure- II.

#### **6. GUARANTEE**

The equipment should be guaranteed for **minimum two years** of trouble free operation from the date of commissioning. Any failure within two years after the delivery of equipment should be replenished free of cost.

#### **7. DOCUMENTATION**

One set of the technical literature/ leaflet for the battery quoted in the bill of quote should be enclosed along with the tender for technical evaluation. **Offers without the necessary literature/ leaflet for evaluation will be rejected with sole responsibility of the tenderer.** The successful tenderer has to supply two sets of printed user manual along with as erected drawing, along with the battery bank. No extra payment shall be made for documentation. If required shall be quoted by the vendor at the time of tendering itself.

#### **8. INSPECTION**

The stores shall be subjected to inspection before & after supply by officials of DDK, Chennai.

#### **9. ENCLOSURES**

The firm must submit the following enclosures along with the tender to facilitate technical evaluation.

- a) Point to point compliance statement duly signed by the OEM / Authorized Dealer.
- b) Technical manuals/Detailed technical literature/catalogues for all the offered item of the product, for substantiating the technical specification.
- c) Major Client list of the offered product/system in India.
- d) Any other document mentioned elsewhere in the tender document.

The tender is liable to rejection in the absence of the above enclosures with the sole responsibility of the tenderer.

**Indicative Bill of Material (BOM)**

Sl.No.	Description of Item	Quantity
1	a)12Volt, 100Ah. Maintenance free, VRLA Batteries.	(2X32) Total 64 nos.
	b)12V,42AH,Maintenance free, VRLA Batteries	32 nos
2	Interconnecting cu. Strips / Cables	As required
3	Operation & Maintenance Manuals	2 Sets
4	Any other items essentially required	1 Job
5	Charges towards erection of the batteries	1 Job
6	Charges for packing, forwarding & unloading	1 Job
7	Charges for connecting the batteries	1 Job



GENERAL TERMS AND CONDITIONS

1. NAME OF PURCHASER : The Addl. Director General (SZ)  
AIR & DOORDARSHAN, Chennai for  
PRASAR BHARATI.

2. PAYING AUTHORITY : The Addl. Director General (SZ),  
All India Radio & Doordarshan  
Swamy Sivananda Salai  
CHENNAI-600005.

3. PAYMENT TERMS:

i) 90 % of the contract price for the equipments/Materials inclusive of excise duty and sales tax shall be paid on initial inspection, delivery of material and installation of the same at DDK Chennai in good condition.

ii) 10 % of the contract price for materials /equipments shall be paid after two weeks of successful completion of guarantee period. This 10% amount will be retained as performance guarantee.

iii) If the firm is ready to submit Bank Guarantee equivalent to 10% of the order value as performance guarantee, then 100% payment will be released on receipt & successful testing of the stores.

4. BILLS.

All the supplies shall be in conformity with the order and all the part bills shall be prepared in triplicate in the same format as that of the order. All those part bills shall be submitted to the consignee for necessary certificates and onward transmission to the paying authority.

5. PERFORMANCE GUARANTEE.

The contractor shall furnish the performance guarantee within 2 weeks of placement of order at the rate of 10% of the contract value subject to a maximum of Rs 5 lakhs at the time of signing the contract. The performance guarantee shall be furnished in favour of Addl. Director General (SZ), AIR & DOORDARSHAN, CHENNAI in any one of the forms mentioned below.

a) Cash in full.

b) DD payable at Chennai

c) Bank Guarantee from any nationalized bank valid up to the end of guaranty / warranty period as per contract.

The Earnest Money Deposit received will be returned after receipt of performance guarantee. The performance guarantee shall be refunded in full on completion of successful guarantee/warranty period. If no performance guarantee is furnished, then an amount equivalent to the 10% of the order value will be deducted from the firm's bill and the same will be released after successful completion of guarantee period.

6. DESPATCH INSTRUCTIONS:

The packing and marking of goods shall be as laid down in clause-12 of general conditions of contract DGS & D69 (revised).

a) The contractor shall arrange to despatch the goods duly insured direct to the consignee after prior intimation for delivery at site by whichever mode of transport he may choose, to ensure safe delivery of goods at site. Unloading shall be done at site at the contractor's expense.

b) The contractor must submit his challans in triplicate to the consignee sufficiently in advance of the actual arrival of the stores at the destination failing which he will be held responsible for any subsequent discrepancies between the actual receipt and the material detailed in the challan received later. The challans must also contain the following information:

1. Brief description of stores.
2. Railway / Lorry receipt No. & Date.
3. Purchase order no. No.& Date.
- 4 Inspection note No & date.

c) The consignment received at site shall be opened and checked for shortages / damages by the contractor himself. He shall show all the materials received at site to the consignee to enable him to certify receipt of stores in good condition. However, in exceptional circumstances, the contractor may request the consignee to check the consignment on his behalf. In such cases the consignee shall notify the contractor of the shortage/ damages immediately on receipt of consignment at site. Expenses incurred, if any, in checking the consignments shall be debitable to the contractor's account.

#### 7. INSPECTION:

- i) Pre-Inspection: The material shall be offered for pre-inspection at manufacturer / suppliers premises in India, if required.
- ii) Final Inspection: Batteries along with its accessories to be supplied against the supply order of this office will be offered for inspection at site also. The necessary drawings, wiring/connection diagram, etc., which are required for installation of battery bank has to be submitted by the firm at the time of inspection. All the measuring equipments, tools, etc., required for satisfactory testing of the battery bank has to be arranged by the firm at site.
- iii) Inspecting Officer: Authorized representative of the Deputy Director General (Engg), Doordarshan Kendra, Chennai-5.

#### 8. INSURANCE:

The contractor shall arrange for the insurance covering the risk during transit. All the charges for such insurance shall be borne by the contractor.

#### 9. ADDITIONAL QUANTITIES:

The purchaser reserves the right to place order for additional quantity up to 100% of the ordered quantity at the same rates and terms and condition during the currency of the contract.

#### 10. PENALTY FOR DELAY:

If the contractor is unable to complete the supply within the stipulated time limit the purchaser may at his option allow such additional time as may be considered justified with/without penalty and without altering terms and conditions of the order. In the event of failure of the contractor to complete the supply within the stipulated time or the extended time, the purchaser has the right to impose penalty of Rs.350/- per week or part thereof for every Rs.1,00,000/- of the contract price. The Contractor's liability for delay, however, shall not exceed 5% of the total contract price.

#### 11. GUARANTEE/ WARRANTY:

The battery bank and all other accessories to be supplied against this office order shall be guaranteed against any manufacturing defects & unsatisfactory performance for a period of minimum **24 months** from the date of delivery. Any parts failing during the guarantee period shall be repaired free of cost by the contractor at site.

#### 12. CONDITIONS OF CONTRACT:

The contractor shall sign a contract agreement form in triplicate in the prescribed proforma and submit the same along with performance guarantee within 15 days. The complete form with the purchaser's signature shall be sent back to the contractor. No supplies will be made start unless the agreement is signed by the contractor and the purchaser.

### 13. SPECIAL CONDITIONS:

In addition to the terms and conditions contained in the clause 12 above, the contract would also be governed by the following special conditions

i) In case where only a portion of the stores ordered is tendered for inspection at the end of the delivery period the purchaser reserves the right to cancel the balance quantity not found acceptable after carrying out the inspection at the risk and expense of the contractor. If however, the stores tendered for inspection are found acceptable the purchaser may grant an extension of the delivery period subject to the following conditions: -

a) That no increase in price on account of any statutory increase in or fresh imposition of customs duty, excise duty, sales tax or on account of any other tax or duty leviable in respect of the stores specified in the supply order shall be admissible on such of the stores as are delivered after the expiry of the delivery period stipulated in the supply order.

b) That notwithstanding any stipulation in the contract for increase in price or any other grounds no such increase which takes place after the date of delivery stipulated in the supply order shall be admissible on such of the stores as are ordered after the expiry of the delivery period stipulated in the supply order.

c) But, nevertheless the purchaser shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, excise duty, sales tax on account of any other ground stipulated in the price variation clause which takes place after the expiry of the date of delivery stipulated in the supply order.

d) The contractor shall not dispatch the stores till such time extension in delivery period is granted by the purchaser and accepted by the supplier before and extension letter as aforesaid is issued by the purchaser, the same are deemed to be subject to the conditions set out in proceeding paragraph.

ii) In case where the entire quantity has not been tendered for inspection within the delivery period stipulated in the supply order and the purchaser chooses to grant an extension of delivery period, the same would be subject to conditions mentioned in (i) above.

iii) The contractor shall refund any advance/part payment issued to him in respect of the rejected stores within 14 days of the receipt of intimation from the consignee about the rejection of such prices. This is strictly without prejudice and in addition to the rights provided in the clause-17(8) of form DGS & D-67.

iv) The contractor is required to replace the rejected stores forthwith but in any event not later than a period of 14 days from the date of rejection and the contractor shall bear all the costs of such replacement including freight, if any, but without being entitled to any extra payment or any other account.

v) Where under the contract, price payable is fixed F.O.R. dispatching station, the contractor shall, if the stores are rejected at destination by the consignee, be able to, in addition to his other liabilities (including refund of price recoverable in respect of the stores rejected) to re-imburse to the purchaser the freight and all other expenses incurred by the purchaser in this regard.

### 14. FORCE MAJUERE:

If any time during the continuance of the contract the performance in whole or in part by the contractor shall be prevented or delayed by reason of any war, hostility acts of the public enemy, Civil commotion, sabotage, fires, floods, explosions, epidemics, guarantee restrictions, strikes, lock-outs or acts of God (therein after restrictions refer to as events and provided notice of happenings of any such eventuality is given by the contractor within 21 days from the date of occurrence thereof, the purchaser shall by reason of such event, neither be entitled to cancel this order nor shall have any claim for damages

against the contractor in respect of such non-performance or delay in performance and delivery shall be resumed as soon as practicable after such events have come to an end or ceased to exist. Provided further that if the performance in whole or part or any obligation under this order is prevented or delayed by reasons of any such event for a period exceeding 180 days, the purchaser and the contractor shall meet to find a natural agreement to any effect resulting the reform or the purchaser may at his option cancel order provided also that if the order is cancel the order provided also that if the order is cancelled under this clause, the purchaser shall be at liberty to take over from the contractor at order prices all unused, undamaged and acceptable material bought out components and stores in course of manufacture in the possession of the supplier at the time of such cancellation or such portion thereof as the purchaser may deem fit accepting such material, bought out components and stores as the supplier may with the concurrence of the purchaser elect to retain.

#### 15. TECHNICAL MANUALS & DRAWINGS

Contractor shall furnish two copies of comprehensive technical manuals for use by the operation staff at DDK, Chennai. One set of technical manuals, drawings etc., should be submitted to this office also. Such manuals shall contain instructions from the preventive as well as routine maintenance of the battery bank and accessories. The contractor shall also furnish copies of approved wiring diagrams, schematics, etc., for various items of equipment.

#### 16. CANCELLATION:

The purchaser reserves the right to cancel the order in the event of non-performance / delay in performance or unsatisfactory performance by the contractor and recover payment already made if any, along with losses/ damages incurred. In such case, the performance guarantee / EMD submitted from the supplier end will be forfeited.

Deputy Director General (Engg)  
Doordarshan Kendra  
Swami Sivananda Salai  
Chepauk, Chennai – 600005

**SCHEDULE OF MATERIAL/WORKS**

Sl.No.	Description of Item	Rate	Quantity	Amount
1	12Volt, 100Ah. Maintenance free, VRLA Batteries – 2 Sets.		(2x32) Total 64 nos.	
2	12Volt, 42Ah. Maintenance free, VRLA Batteries		32 Nos.	
3	Interconnecting cu. Strips / Cables		As required	
4	Operation & Maintenance Manuals		2 Sets	
5	Any other items essentially required		1 Lot	
6	Charges towards erection of the batteries		1 Job	
	TOTAL			
	Tax if any			
	Reduction / Discount if any			
	GRAND TOTAL			
	Buy-back value for the existing 12V, 100Ah(64Nos),12V,42Ah(32Nos)(List of Batteries Enclosed in Annexure-IV			
	NET AMOUNT			

**Commercial bid for old batteries offered on buy-back**

Sl.No.	Description	Rate	Quantity	Amount
1	EXIDE POWERSAFE 12V,100AH		64Nos	
2	EXIDE SMF 12V,42AH		32 Nos.	
	TOTAL		96 Nos.	

### COMPLIANCE REPORT

Sl.No.	Description	DD Specification	Compliance (Yes/No)	Parameters of the Eqpt. offered.	Deviations, in case of noncompliance	items if any required to make the system Compliant to DD specs.	Features in the system offered which exceed DD specs.
1)	<b>SCOPE:</b>						
a)	The specification aims at the procurement of 12V, 100Ah & 42Ah, SMF, VRLA Battery bank for UPS of Doordarshan Kendra, Chennai.						
b)	The scope of the supply & replacement of UPS Batteries envisaged in this tender should consist of 12Volt, 100Ah SMF, VRLA Batteries – 64 Nos. & 12V, 42Ah VRLA Batteries – 32 Nos.						
c)	The offered system should be of reputed make, meeting the specification and field proven. The OEM/bidder should enclose the client list and the contact details where similar products have been supplied. The bidder should essentially enclose the authorization certificate issued by the OEM for the offered products. Local service support must be available for optimum upkeep of the system.						

Sl.No.	Description	DD Specification	Compliance (Yes/No)	Parameters of the Eqpt. offered.	Deviations, in case of noncompliance	items if any required to make the system Compliant to DD specs.	Features in the system offered which exceed DD specs.
2)	<b><u>Design &amp; Construction:</u></b>	Should be alloy grid to resist corrosion and provide longer cyclic life and facilitating high rate of discharge and quick charge.					
a)	Positive Plate	Should be Flat pasted type with Lead-calcium High Tin alloy grid to resist corrosion and longer life					
b)	Negative Plate	Should be Flat pasted type with Lead-calcium alloy grid for maintenance free characteristics					
c)	Voltage	12V					
d)	Capacity	100 AH – 64 Batteries, 42AH – 32 Batteries.					
e)	Container	Should be high impact Polypropylene copolymer, ribbed jar design for better heat dissipation and strength. Flame- retardant poly propylene UL 94 V/028% LOI is optional					
f)	Separator	Should be Low resistance, high porosity and highly absorbent type glass mat separator (AGM)					
g)	Electrolyte	Should be in High purity Sulfuric acid to maximize shelf life					
h)	Terminals	Should be Lead / Tin plated Copper inserts for high conductivity					
i)	Safety Valve	Should be Self resealing, pressure regulated and explosion proof					
j)	Container & Cover sealing	Should be Heat Sealing Method for better joint strength. Should have higher surface area with ribs facilitating superior thermal conductivity, thermal seal and uniform cell compression results leak proof.					
k)	AH Efficiency	Should be above 95%					
l)	WH Efficiency	Above 85%					
m)	Cycle life of Battery at 27 Degree Celsius	1200-1400 Cycles					



Sl.No.	Description	DD Specification	Compliance (Yes/No)	Parameters of the Eqpt. offered.	Deviations, in case of noncompliance	items if any required to make the system Compliant to DD specs.	Features in the system offered which exceed DD specs.
3)	<b><u>Operation</u></b>						
	Type of Charging	Should be Constant potential, current limited to 20% of the rated capacity (0.2 C 10 Amp)					
	Float Voltage	13.50V/77° F/(25o C)					
	Boost Voltage	13.80 to 14.7V/77° F/(25o C)					
	RC Ripple	Ripple content shall not exceed 3% RMS					