



**THE STATE TRADING CORPORATION OF INDIA LTD.**  
**(A GOVT. OF INDIA ENTERPRISE)**  
Mogul's Court, 5<sup>th</sup> Floor, Basheerbagh, Hyderabad 500 001, India  
Website: [www.stc.gov.in](http://www.stc.gov.in), Email: [hyderabad@stc.gov.in](mailto:hyderabad@stc.gov.in)  
Telephone: +91-40-2323 7389 / 2329 6460  
Fax: +91-40-2323 6768

**TENDER NO.: STC/HYD/GID/2015-16/01 DATED 13.08.2015**

We have a firm enquiry for import/supply of following item(s) from one of our end user Customers:

Sr No.	Name of the item	Quantity (in nos.)
1	Rescue Tender with equipment(s) as per specifications attached as per Annexure A	1

**TERMS AND CONDITIONS**

You are requested to submit your most competitive offer (In Duplicate) for the above product range separately. Your offer in a sealed cover duly superscribing the Tender No. Item & Name of Item addressed to The Deputy General Manager, STC of India Ltd., Mogul's Court, 5th Floor, Basheerbagh, Hyderabad 500 001 and may be dropped in a Tender Box placed conspicuously on the 5th floor, Mogul's Court, Basheerbagh, Hyderabad 500 001.

Your offer should include the following :-

- 1) FOB Price, CIF Indian Port & FOR Vattinagulapally (Ranga Reddy District, Telangana) price as per Price Bid Format Attached (Schedule C)**

(Break-up of insurance, sea freight, Custom Clearance charges, Inland Insurance and Transportation Charges from Port to (Ranga Reddy District, Telangana) are to be given.

The following will be provided by STC :-

- (i) Authorization in favour of nominated custom clearing handling agent of the supplier,
- (ii) Payment of import custom duty (if and as applicable) (upon receipt of copy of Bill of Entry filed with customs).

In case of local supplies the tenderer should give the FOR Vattinagulapally (Ranga Reddy District, Telangana) Prices giving the break-up of local taxes & levies in the Price Bid format as per Schedule 'C'. In case of goods being offered in foreign currency, the tenderer should give the CIF/CIP Prices, Rate of Import Custom Duty on assessable value for the item quoted with ITC HS Codes and Proof of rate of Import Custom Duty, Custom Clearance charges, Inland Insurance & Transportation charges upto Vattinagulapally etc. in the Price Bid Format as per Schedule 'C'.

- 2) **Country of Origin** (Certificate Duly certified by Chamber of Commerce of the exporting country to be submitted at the time of shipment of goods)
- 3) **Delivery Schedule** – Immediate delivery is required.
- 4) **Payment terms** –

We operate on 100% TT Transfer/LC Basis. In case of LC, LC to be established for 100% value and 90% Payment under LC to be released against submission of documents pertaining to dispatch of goods along with satisfactory certificate of pre-dispatch inspection and balance 10% payment shall be payable on receipt of certificate of satisfactory installation / demonstration of goods from the end – user department. In case of LC, all bank charges (including LC confirmation charges) payable outside India would be to Seller's account. Pre-delivery inspection of the equipment will be undertaken by the end-user department, at the manufacturer's facilities.

**Payment Against the letter of Credit/Wire Transfer for 90% of the value will be available against presentation of the following documents and also on proof of evidencing of shipment.**

- a. Complete set of Original Clean Bill of Lading. The Bill of Lading shall be in the name of **THE STATE TRADING CORPORATION OF INDIA LTD., GENERAL IMPORTS DIVISION, MOGUL'S COURT, 5<sup>TH</sup> FLOOR, BASHEERBAGH, HYDERABAD 500 001, INDIA AND MARKED FREIGHT PREPAID.**
- b. Signed invoice in three copies giving letter of credit No., Order No. and date respectively. The invoice shall be in the name of : **THE STATE TRADING CORPORATION OF INDIA LTD., GENERAL IMPORTS DIVISION, MOGUL'S COURT, 5<sup>TH</sup> FLOOR, BASHEERBAGH, HYDERABAD 500 001, INDIA**

- c. Satisfactory Pre-Dispatch Inspection Report.
- d. Certificate showing goods of **ORIGIN** issued by Chamber of Commerce or Equivalent Body in Duplicate.
- e. Specification and Packing list – three copies.
- f. Manufacturer’s guarantee certificate – three copies.
- g. Certificate from the manufacturer to the effect that the goods conform to the manufacturers standards and are new (Production Month in Year 2015) and free from any latent or patent defects and are strictly as per Specifications mentioned in STC's Order
- h. Insurance Policy/ Certificate showing STC as beneficiary - one original and two copies.
- i. Copy of FAX MESSAGE (Fax No.00-91-040-23236768) marked to General Imports Division, sent by the seller within 24 hours of issuance of Bill of Lading to buyer notifying the details of the BL No., Goods freighted, total invoice value, Name of the Shipping Line loading port and date of departure of the vessel and expected time of its arrival at the Indian Port.
- j. Certificate by the seller that the freightment consists complete requirement as per list of goods given in the Annexure-I enclosed with the order.
- k. Certificate from the seller that one set of non-negotiable documents mentioned under (a) to (l) above has been airtailed/couriered to the following within 10 Days of departure of the vessel in addition to one set of non-negotiable document sent with the vessel to:

**THE STATE TRADING CORPORATION OF INDIA LTD., GENERAL  
IMPORTS DIVISION, MOGUL’S COURT, 5<sup>TH</sup> FLOOR, BASHEERBAGH,  
HYDERABAD 500 001, INDIA**

II. Balance 10 (Ten) Percent payment under the LC shall be released/payable only after receipt of certificate of satisfactory installation, demonstration & training of the vehicle to be issued by the end-user department, after receipt and examination of vehicle at their premises in India.

- 5) **Validity of Price** – Your offer to be valid for acceptance by us up to 90 days from the Tender closing date.
- 6) **Airport/Port of Shipment.**
- 7) **Supplier's RTGS Bank Details**
- 8) **Guarantee Period** – The equipment quoted for shall carry a guarantee for 24 calendar months and the manufacturer shall have to provide after sales service, as and when required at a short notice. The Guarantee period shall start only upon satisfactory Installation & Demonstration of the equipment at the respective end –user's premises.
- 9) **SPECIFICATION AND DRAWINGS.**

Full detailed drawings of the body showing the body construction, lockers, placement of various tools etc. shall be submitted, without which tender will not be considered. The successful tenderer will have to submit three copies of detailed drawing showing detailed dimensions, stowage arrangement fittings, etc. which shall be got approved from end-user department before commencement of fabrication work.

The tender bids without the detailed drawings will be out rightly rejected. The drawings will be scrutinized by the Technical committee.

- 10) The detailed list of consumables and spares with FOR, Vattinagulapally prices, required for smooth functioning of the equipment, shall also be submitted along with tender offer.

**11) Schedule to Tender :-**

- a) **Closing date & time for receipt of Offer : 14.09.2015 at 03.00 PM**
- b) **Opening of Offers , Time & Date : 14.09.2015 at 03.30 PM**

12) **Offers invited under Two Bid System :**

All Bidders are required to submit their item-wise offers in two cover i.e. Technical and Price Bid- (in duplicate). Both the covers should be separately sealed and super – scribed with Tender No. and Date and Date of Opening. The two covers should thereafter be kept in a third cover and sealed. This cover should also be super-scribed with the **Tender No., Item Description and the date of Tender Opening.**

The tenders will be opened on the closing day itself in presence of the Tenderers desirous to be present.

**A. The “Techno Commercial Bid” sealed envelope must contain the following:-**

1. Signed and stamped copy of the complete Tender Document, as a token of your acceptance of terms and conditions in totality.
2. A Pay Order / Demand Draft/Bid Bond equivalent to 2% of total cost of items towards Earnest Money Deposit. No interest will be applicable on the EMD payments
3. An affidavit duly notarized by the company stating that it has not been blacklisted by any central, union territory and state govt./ organization or any Govt. procurement agency as well as convicted by any court of law and the period of blacklisting is not enforced till the date of validity of this offer being submitted.
4. Detailed Technical specifications of the equipment offered to be supplied.
5. Detailed drawings of the Rescue Tender showing the body construction, lockers, placement of various tools
6. Letter of Authority, in case the bid is being submitted by local agent of the foreign supplier, as per Schedule-A
7. No Deviation Certificate & Undertaking in the format as mentioned under Clause – M & N of Other Terms and Condition.

**B. The” Price Bid” sealed envelope must contain Price Bid (Format enclosed) which must be duly signed & stamped.**

The detailed Technical Specifications of all the items have been mentioned in the Tender Notice. The tenders will be opened on the closing day itself in presence of the Tenderers desirous to be present.

- C. Offers having conditions/deviations are liable to be rejected at the sole discretion of STC. Your Price Bids shall be opened only if your Techno Commercial Bid is found in order. Your techno-commercial and price bid shall be valid for at least 90 days.
- D. The bids received in sealed envelope by courier shall also be accepted but same should reach STC office prior to the tender closing date and time. The offers should be sent to The Deputy General Manager (Mktg), STC of India Ltd., Mogul's Court, 5th Floor, Basheerbagh, Hyderabad 500 001 super-scribing the reference No. STC/GID/HYD/2015-16/01 dated 13.08.2015 at the top of the envelope.
- E. Any further Corrigendum/Addendum to the tender documents will be uploaded by STC only on website i.e. [www.stc.gov.in](http://www.stc.gov.in), [www.eprocure.gov.in](http://www.eprocure.gov.in) or [www.tenders.gov.in](http://www.tenders.gov.in) and no press advertisement shall be published for the same

**SPECIAL INSTRUCTIONS TO THE TENDER NOTICE FOR COMPLIANCE OF THE TENDER PARTICIPANTS :-**

- A. All Equipments to be offered with installation, supervision and complete training to operating staff .
- B. Standard Products should be offered, be of latest models and meet **international specifications and norms of safety, environment, pollution etc.** Models and specifications should be clearly spelt out.
- C. It is mandatory to enclose Product literature with the bids.
- D. In case equivalent make/model/brand is offered, a comparative statement with the make/model/brand desired by customer should be enclosed with bid.
- E. Options on all machines to be offered for two year comprehensive warranty (parts, travel and labour included).
- F. Warranty/Guarantee on the items should be spelt out clearly.
- G. Service arrangements in / for India/ site should be mentioned clearly in the bids. Similarly services included in the price offered for equipment/machines should be mentioned.
- H. Specifications are indicative, better specification may be offered as optional.
- I. Names where ever mentioned are for reference purpose, equivalent or better specification/ brand may be offered.
- J. List of essential spares and consumables should be mentioned and prices offered for the same as optional items.

### OTHER TERMS AND CONDITIONS

- (A) Having regard to STC's Corporate Policy, offers from Principal Manufacturer/Distributor or their Authorized agents with Tender Specific authorization by their principal Manufacturer/Distributor in their favour as per Schedule 'A' enclosed only shall be considered. Offers otherwise submitted, if any, are thus liable to be rejected summarily. Offers can also be sent by Mail/Courier/Speed Post, but to be received before the Tender Closing Time.
- (B) In case of Imported equipment, the Authorized agents may quote the prices for and on behalf of their principal manufacturers in the respective foreign currencies. Accordingly, upon award of order STC shall be entering into direct contract with the Principal Manufacturer.
- (C) All offers shall be submitted along with an Earnest Money Deposit (EMD) of 2% of total offer value in the Form of Pay Order / Demand Draft/ Bid Bond in favour of "The STC of India Ltd., Hyderabad". However, for sake of convenience the foreign suppliers may submit the requisite EMD through their Indian Agents in equivalent Indian Currency, should they so desire. The EMD DD/Payorder/Bid Bond to be placed in envelope containing Technical Bid. The Bidders are also requested to provide the RTGS Bank details for future refunds/Payments. EMD's paid by Cheques are not acceptable. The format of Bid Bond is attached. (Schedule-D)
- (D) For the purpose of equitable comparison and evaluation of the offers, prices quoted in different currencies will be converted to a single currency viz., Indian Rupees as per the TT Selling Rate established by the State Bank of India as on the date of Price Bid Opening. The Comparison of prices & identification of L1 Bidder would be on FOR Destination Basis, duly delivered, commissioned etc. as the case may be on the date of opening of Price Bid.
- (E) The Financial Bids of the Tenderers whose Technical Bids are approved shall be opened subsequently.
- (F) Upon award of the Tender/Order to the successful bidder, a Performance Guarantee for due performance of the Contract, **valid up to the guarantee period** of the equipment, equivalent to 10% of the order value shall be submitted by the awardee in the prescribed format in favour of end-user department through a Nationalized Bank in India. As per Schedule B enclosed.
- (G) STC would be selling the goods on High Seas Sales basis to the end user Department. All the custom Clearance documents including High Seas Sales Agreement along

with Invoice etc. shall be submitted to the supplier's nominated Custom Clearing Agent.

- (H) The offers received (other than conditional offers) after opening of bid(s) shall be forwarded to the end-user department for their evaluation.
- (I) You are also requested to kindly give the details of after sales service arrangements in India. The name of your Service representative in India along with his complete address and contact numbers may also be informed to us along with the offer so that the same could be notified to the end-user.
- (J) The participating tenderers will sign and stamp each page of the tender document in token of their acceptance of STC's tender terms and conditions unconditionally & unequivocally and submit same along with the offer (Technical Bid). The offer, not accompanied by STC's tender terms duly co-accepted, shall be summarily rejected.
- (K) INSPECTION :The vehicle will be subjected to inspection and testing prior to dispatch of vehicle at the factory premises of manufacturer by the three officials of Fire Services Department as nominated by Director General State Disaster Response and Fire a Services Department. The inspection and testing will also include all the tools and equipments supplied with vehicle for their performance test. The cost towards inspection will be borne by the contractor which includes traveling expenses, accommodation charges etc. The inspection period will be of one week.
- Inspection shall also be conducted by the Committee of Officers nominated by the Director General, Telanagana State Disaster Response and Fire Services Department at Telangana State Fire a Service & Defence Training Institute, Hyderabad on receipt of the vehicle and final acceptance of the vehicle will be on the satisfactory recommendation of the Inspection Committee.
- (L) All the tools and facilities required for the inspection shall be arranged by the contractor free of cost.
- (M) No deviation, whatsoever, shall be acceptable. The tenderer has to certify that by duly signing and stamping the following certificate:





CERTIFICATE

Certified that the enclosed offer against Tender No. STC/GID/HYD/2015-16/01 dated 13.08.2015 is in total conformity with tender terms & conditions including special instructions and specifications without any deviation, whatsoever.

Place: SIGNATURE OF THE TENDERER  
Date: NAME & DESIGNATION OF TENDERER  
COMPANY SEAL

- (N) An undertaking/certificate stating that the rates quoted are uniform for all the Government Institutions in the country is to be provided. This certificate giving the reference of STC's Tender No. and Date along with your quoted item details may be submitted in original and the items if proprietary, a certificate to this effect may also be given.
- (O) In case of delay in supplies beyond the quoted delivery period, liquidated damages to the extent of 0.5% of the cost of the delayed supplies per week is applicable, subject to a maximum of 10%. Beyond this period, we reserve the right to either extend further or to cancel the contract.
- (P) Without any protests or demur, supplier indemnifies STC and its Branches and shall always keep STC fully indemnified and agrees to hold STC and its Branches harmless against any loss, claim, proceedings, damage, demurrage, costs, penalties, taxes, duties liabilities, legal cases, short shipment, quantity/quality/weight/purity, marking/specifications, etc of the material, costs or expenses of whatsoever nature, costs to STC on account of supplier/ handling agent/ omissions /negligence /mistake/misconduct breach or default and or non-fulfilment of terms and conditions of this agreement. The supplier shall keep STC indemnified at all times against any claims/liabilities/proceedings, etc from any third party or otherwise arising out/or in connection with this Tender.
- (Q) Arbitration: Any dispute or difference whatsoever arising between the parties out of or relating to the construction, meaning, scope, operation or effect of this contract or the validity of the breach thereof shall be settled by arbitration in accordance with the Rules of Arbitration of the Indian Council of Arbitration and the award made in pursuance thereof shall be binding on the parties. The supplier hereto agree that the courts and tribunals at Hyderabad, Telangana State shall have exclusive jurisdiction to settle any or all disputes which may arise out of or in connection with the Tender. All



disputes arising out of this tender shall be decided in accordance with the Laws of India.

(R) STC may at its absolute discretion, reserve the right to shortlist, accept, disqualify, elect to abandon, reject any part or whole of the process without giving prior notice to the prospective party. STC reserve the right to cancel this tender in totality without assigning any reason at any point of time.

**HYDERABAD.**  
**13.08.2015**

**DEPUTY GENERAL MANAGER (MKTG)**  
**Tele No. – 040-23237389/23296460**



## Schedule "A"

### **UNDERTAKING TO BE SUBMITTED BY PRINCIPAL MANUFACTURER / DISTRIBUTOR**

It is to certify that M/s \_\_\_\_\_  
(Name & Address of Tenderer) is our Authorised Distributor / Dealer. They are Authorised to submit tender for \_\_\_\_\_ (Name of Item) to the State Trading Corporation of India Ltd., Hyderabad against their Tender Notice No \_\_\_\_\_ Dated \_\_\_\_\_.

The Equipment / Item is Guaranteed for minimum 2 year Comprehensive free onsite Guarantee with Spare Parts from the date of completion of satisfactory testing, commissioning installation and Authorised Distributor / Dealer shall during the Guarantee period replace the parts if any, or rectify any manufacturing defect found during the above period so as to make the machinery operative and in perfect condition.

They are also Authorised to provide Annual Maintenance Contract and repairs contract for the period as desired by the purchase officer after the expiry of 2 year comprehensive Guarantee They will be responsible to ensure adequate regular supplies of spare parts, consumables, non- consumables needed for the same whether AMC or otherwise.

In case of change of Authorised Distributor / Dealer, we will inform the purchase officer accordingly within 15 days of change of authorized distributor/ Dealer. The new Dealer / Distributor will be responsible for after sales & service and annual maintenance and repairs contract as above. In case of failure of Authorised Dealer / Distributor we will be responsible for providing after sales service of the equipment as per terms and conditions of tender and contract.

If there is any defect M/s \_\_\_\_\_ shall replace or upgrade the defective part/faulty which shall also be subject to same guarantee as the original equipment. M/s \_\_\_\_\_ shall bear all costs, travel, labour, material cost which are required on rectification of defects onsite during the guarantee period.

### **SIGNATURE OF THE PRINCIPAL MANUFACTURER/ DISTRIBUTOR WITH RUBBER STAMP**

Note: This Undertaking should be Typed & Signed by Principal Manufacturer/ Distributor on his Original Letter Pad



**Schedule 'B'**

PERFORMANCE BANK GUARANTEE FORMAT

(To be executed by any Nationalised Bank in India having their Branch in the State of End-user Department on stamp paper of Rs.100/-)

Name & Address of the Buyers(End-user Department)

\_\_\_\_\_

1. Against Tender No. \_\_\_\_\_ dated \_\_\_\_\_ and Contract No. \_\_\_\_\_ Dated - \_\_\_\_\_ (hereinafter called the Contract entered into between the STC of India Ltd., Hyderabad which expression shall, unless repugnant to the context or meaning, thereof include its successors, representatives & assigns for and on behalf of \_\_\_\_\_ (hereinafter called the Buyers/End user Department) and M/s. \_\_\_\_\_ (Name and Complete Address) (hereinafter called the Sellers) which expression shall, unless repugnant to the context or meaning, thereof include its successors, representatives & assigns this is to certify that at the request of the Sellers, we \_\_\_\_\_ Bank unconditionally and irrevocably guarantee to pay to the Buyers immediately on first demand, the amount of US \$/Rupees \_\_\_\_\_ (@ 10% of contract value) without any protest or demur or reference to the Sellers if the Sellers fail to perform all or any of their obligations under the said contract. The decision of the Buyer/End user \_\_\_\_\_ or The STC of India Ltd., Hyderabad duly communicated in writing to the bank that the sellers have failed to perform all or any of the obligations under the contract shall not be questioned and be final and conclusive. The said amount of US \$/Rupee \_\_\_\_\_ will accordingly forthwith be paid without any conditions or requirement of our proof whatsoever failing which interest @ 15% p.a. on monthly rest basis shall be payable by the Bank to Buyer.
2. It is fully understood that this guarantee is effective for a period upto \_\_\_\_\_ (24 Months + Delivery Period) and that we \_\_\_\_\_ Bank undertake not to revoke this guarantee during its currency (upto claim period) without the consent in writing of the Buyers.
3. We \_\_\_\_\_ Bank, further agree that the buyer shall have the fullest liberty, without affecting in any manner or obligations hereunder to vary/extend any of the terms and conditions of the said contract or/extend time of performance by the Sellers from time to time or to postpone for any time or from time to time any of the powers

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exercisable by the Buyers against the said sellers and/or forebear to enforce any of the terms & conditions relating to the said contract and we, \_\_\_\_\_ Bank shall not be released from its liabilities under this guarantee by reasons of any such exercise, variations or extension being granted to the said sellers or for any forbearance and/or commission on the part of the buyers, or any indulgence by the Buyers, to the said Sellers or by any other matter or thing whatsoever which under the law relating to the sureties would, but for this provision have the effect of so releasing us from our liability under this performance guarantee. We further agree that the validity period of this Performance Bank Guarantee will be extended by us upon receipt of any such request in writing from the Buyer and any charges on account thereof shall be to the account of seller

4. We \_\_\_\_\_ Bank further agree that the guarantee herein contained shall not be affected / discharged by any change in the constitution of the said Sellers/Buyers/Bank.
5. The Guarantee will be governed by Indian Laws and will be subject to the jurisdiction of competent courts in the State of Buyer / End – user India alone.
6. No claim shall be admissible against the Buyer in respect of interest on Performance Guarantee regardless of the time of release.
7. The Bank further agrees that decision of the Buyer as to the failure on the part of - \_\_\_\_\_ to fulfill their obligations as aforesaid /or as to the amount payable by the bank to the Buyer shall be final, conclusive & binding on the Bank.
8. This Guarantee will remain in force up to \_\_\_\_\_(24 Months + Delivery Period) and any demand in respect thereof should reach Bank not later than 10 (Ten) working days (claim period) from the expiry of above validity date.
9. Notwithstanding anything entered hereto Banks liability under this Performance Bank Guarantee shall not exceed \_\_\_\_\_(in words. Bank is liable to pay the guaranteed amount if Buyer same upon in written claim/demand on of before the expiry date.

FOR \_\_\_\_\_ BANK

ACCEPTED

Witness:-



**Schedule " C "**

**Price Bid**  
**ON THE LETTER HEAD OF THE COMPANY**

Tender No. & Date : .....

Name of the Item Quoted : .....

S.No. of Item in Tender Document : .....

**Price Format for Imported Equipment**

Details	Qty (in Nos.)	Total Amount (in Foreign Currency) (Amount to be provided in words as well)
Ex-Works Price		
FOB (Port /Airport) Price		
Insurance & Airfreight Charges upto Indian Port		
Total CIF Price, Indian Port		
Total FOR, Vattinagulapally (Ranga Reddy District, Telangana) India Price		

We have carefully gone through the Terms and Conditions of the Tender Documents and hereby agree to abide by the same for the fulfillment of the contract. This is to also confirm that I am fully authorized by company for signing and submitting this price bid.

Place: SIGNATURE OF THE TENDERER  
Date: NAME & DESIGNATION OF TENDERER  
COMPANY SEAL



BID BOND PROFORMA

**Schedule " D "**

(To be executed by any first class international Bank through its branch office in Hyderabad (India) on stamp paper of Rs.100/-).

M/s. State Trading Corporation of India Limited,  
5th Floor, Mogul's Court,  
Basheerbagh,  
Hyderabad-500 001.

Dear Sirs,

1. WHEREAS M/s \_\_\_\_\_ (BIDDER) has offered to supply \_\_\_\_\_ to STC, and the bidder is required to submit a Bid Bond at the rate of US\$ \_\_\_\_\_ along with the offer as a guarantee for fulfillment of all the terms and conditions of subsequent sale. We (Bank with full address) hereby unconditionally and irrevocably guarantee and undertake to pay the amount demanded by STC not exceeding the sum of US Dollars \_\_\_\_\_ only, in case the bidder fails to perform any or all the obligations, undertaken by him as per STC's acceptance, without any demur, protest and without any reference or recourse to the Bidder notwithstanding any dispute raised by the Bidder in any suit proceedings relating there to pending before any court or tribunal our liability under these presents being absolute and unequivocal. The payment shall be made to STC across the Counter of the Bank on the same day of receipt of invocation of this Bid Bond. Any such demand in writing made by STC, shall be final, conclusive and binding on us irrespective of any dispute or difference raised by the bidder.
2. Notwithstanding anything mentioned herein before, our liability under this guarantee is restricted to US\$ \_\_\_\_\_ (US\$ \_\_\_\_\_ only) and it will remain in full force up to (one month from the last date of validity of offer). Unless a claim under the guarantee is filed against us on or before \_\_\_\_\_ all your rights under the said Guarantee shall be forfeited and we shall be relieved and discharged from all the liabilities there under. We, \_\_\_\_\_ (Bank) further agree that the Guarantee hereunder contained shall not be affected by any change in the terms of purchase originally offered by the bidder and any change in the Constitution of said Bidder/ STC/ Bank.
3. This bond will be governed by Indian Laws and will be subject to the jurisdiction of courts at New Delhi in India alone.

DATE

FOR

PLACE

BANK

N.B. Bid Bond to be furnished in US Dollars only. Bid Bond in Indian Rupees will not be accepted.

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## ANNEXURE-A

### SPECIFICATION FOR FABRICATION AND SUPPLY OF RESCUE TENDER

#### FOREWORD

The Rescue tender covered in this standard is designed both for use for fires and special service work, such as:

- a) large fires in cities or large towns, difficult or special fires requiring the use of breathing apparatus, special equipment or illumination;
- b) major electrical fires, for example, in power stations and transformers;
- c) ship fires;
- d) house collapse, lift, road transport, railway and machine accidents, etc, for which special equipment is required and is not available locally; and
- e) major leakages of toxic or dangerous gases or gaseous liquids.

This tender calls for fabrication and supply of Rescue Tender along with accessories on Four wheel drive 4x4 chassis having approx. 4500 mm. Wheel base, full forward control, Diesel Driven Chassis with driver-cum-crew cabin, PTO which will be directly purchased by the successful tenderer on behalf of end user i.e. Telangana Disaster Response and Fire Services Department as per the specifications given below.

No part of the chassis shall be cut or mutilated by the successful tenderer without the prior permission of Chassis manufacturer or the Director General of State Disaster Response and Fire Service Department.

The successful tenderer will be solely responsible for the safe custody and proper maintenance of the chassis or any part thereof till the fabrication is completed and the vehicle is handed over to the end user with satisfactory test.

The successful tenderer will have to complete the work as per specifications stipulated below and complete the vehicle in all respects to put into operation and ready to use.

#### 1. CHASSIS

The chassis shall be 4x4, Right hand drive, **BS IV (Euro IV) having** approx. 4500 mm wheelbase with fully trimmed drive-cum-crew cabin with suitable PTO. The chassis shall be brand new with the following specifications. The chassis shall be of MAN or MERCEDES BENZ or VOLVO or IVECO make or equivalent make.



- 1.1 Engine : The engine shall be six cylinder in line, water cooled, Turbo charged, Inter cooled, diesel engine, developing min.300 HP, with Electronic diesel control system.
- 1.2 Transmission : The vehicle is equipped with automated gearbox, synchronized type with forward and reverse gears. The gearbox can be used by the driver either in fully automatic or in semi- automatic mode. The P.T.O. shall be provide with gear box to drive auxiliary units
- 1.3 Front Axle : Heavy duty live axle for four wheel drive mode.
- 1.4 Rear Axle : Single or Hub reduction, hypoid gears, fully floating axle shaft
- 1.5 Steering : Integral hydraulic power assisted steering.
- 1.6 Brakes : Dual circuit fully air braking system with pneumatically operated parking brakes. The braking system shall be including **ABS** (Anti-lock Braking System) to insure excellent braking performances and safety.
- 1.7 Suspension : Parabolic leaf spring at front and rear with hydraulic double acting shock absorber.
- 1.8 Frame : The chassis frame shall be provided with adequate cross members, so designed and constructed as to support the gross weight of the body and load, power plant, and all other equipment under specified operating conditions. A bumper fitted to the front of the frame structure and a rear bumper is also supplied. Towing eye is integrated with the frame rails one at the front and one at the rear of the vehicle.
- 1.9 Wheels and Tyres : 13R x 22.5 or 385 / 65 R x 22.5 or equivalent (including spare wheel)
- 1.10 Fuel Tank : Minimum 160 litres capacity.
- 1.11 Electrical System : 12/24 volts. With suitable Ah capacity battery with Alternator. Battery main switch for cutting all power from the battery, switch shall be located at suitable location.
- 1.12 Drive-cum-Crew cabin : Specific Fire Fighting forward-control double cab Construction. Self-supporting body fully made of welded sheet steel, hydraulically tilt-able by means of hydraulic jacks for easy access to engine for service and maintenance purposes. Corrosion protection, Cavity

sealing and under body protection. Doors: 4 (2 on each side). Opening angle approx. 90°, with winding windows glasses.

Seats layout 1+5 (1 driver plus 5 crew seats) 1 comfortable and adjustable driver's seat, 1 seat beside the driver's seat and 1 bench for 4 men, at the rear of the cab with B.A. set support bracket integrated in the back of the seats. The cab shall be roomy and offer enough space for the crew member to move in and out easily. The cab shall be adequately insulated against noise and the noise level within the cab does not exceed 85 dBA during normal operational conditions. The cab equipped with rear view mirrors and close proximity mirror.

Fully trimmed with entry assist handles, two piece full width sun blinds, 3 way adjustable driver's seat and fixed with inertial reel lap and diagonal seat belt and heat restraints. Storage space under rear bench seat. The four (4) seats of the fire crew members at rear, are equipped with integrated SCBA brackets, which allow for donning the SCBA sets during driving. A shelf with padded front above BA frames for face masks shall be fitted.

Grab-handles and illuminated access steps to allow fire fighter to mount and dismount in safety. Steps to be of sufficient depth to facilitate safe use. The doors are fitted with electrically/manually roll-down windows. The doors are forward opening (100%) and made of materials as drivers cab. The cab shall offer an excellent all-round vision, One piece windshield made of laminated safety glass. Windows glass Made of toughened safety glass. Cabin Accessories: Grab handles for the crew members. Ceiling light for crew cabin, adjustable padded sun visors. Twin electric road horns, front interior lights, kerb mirror on left side, spot lamp, dual speed windscreen wipers, front fog lamps, switched head lights, locker light switch on dash, wiring to roof for light bar and beacons, wiring to dash for

amplifier. Dashboard: The dashboard is equipped with all necessary gauges, pilot lamps and switches. Alarm system: A separate control box, holding all controls and switches for the Public Address System shall be dashboard mounted within easy reach of the driver or co-driver. This control box holds controls and switches for adjusting the electronic siren to the required signal and for simultaneous operation with the Public Address System. Windshield wipers and washers, Cab interior illumination, 12 Volt electrical supply for radio, through an approved voltage dropper.

#### **Other requirements**

In addition to normal road lights the vehicle Shall be fitted with the following:

- Four side lights (two on each side);
- Two automatically operated reversing lights with back-up alarm;
- Cab light bar: Federal Signal Corporation, All-light system, orange / blue colour mounted on the cabin's roof with model PA 300 electronic siren and light control, plus speakers (microphone).

Rear lamps:

- Adequate lighting are provided in all lockers internally automatically switched on while opening the roller shutter.

**Note: All labels and plates in the cab will be in English language, where pictograms do not serve the purpose.**

- 1.14 GVW : Not more than 16200 Kgs.  
1.15 Tool kit : Standard tool kit with jack.

## **2. GENERAL REQUIREMENT:**

- 2.1 The Rescue Tender shall be fabricated as per prevailing safety standards stipulated under BIS/EN/NFPA or any other relevant standards and as per the following specifications. This specification lays down the requirements regarding the material, design, construction, workmanship, finish, accessories and acceptance test.
- 2.2 The vehicle shall incorporate a drive-cum-crew cabin, rear body, hydraulic winch, light mast, Alternator, and all the equipment and accessories as stipulated herein.

- 2.3 All the tools, gears and accessories shall be stowed in ROLL IN – ROLL OUT trays, shelves, compartments with proper fastening arrangement.
- 2.4 At least 3 lockers shall be provided to the left side and the right side of the vehicle and 1 at the rear of the vehicle. These lockers shall be provided with aluminum shutters with locking arrangements.
- 2.5 The lockers shall be provided on both sides of vehicle and also at the rear. These lockers shall be provided with Aluminium shutters with locking arrangement.
- 2.6 The vehicle shall be designed to be as compact as possible with ease of accessibility to all parts. The arrangement of the locker shall be made in view for proper load distribution on both the axles and to both sides of vehicle. Proper steps shall be provided for easy accessibility to all the gears stowed in the lockers.
- 2.7 Light Mast, Hydraulic Winch, Alternator, and all the tools and accessories shall be of reputed make and complying safety standards stipulated under BIS/EN/NFPA standards.
- 2.8 The vehicle shall be capable of performing all the normal rescue operations in any situation.
- 2.9 The complete rear body shall be made from corrosion resistant light alloy material, having modular design.
- 2.10 The paneling shall be glued to super structural members and the use of rivets and nut bolts shall be minimum to make complete body rattle free.

### **3. DRIVER CUM CREW CABIN :**

- 3.1 The driver cum crew cabin shall be made such as to accommodate driver and officer in the front and four firemen at the rear.
- 3.2 The dimensions of driver-cum-crew cabin shall be mentioned by the tenderer.
- 3.3 The driver cum crew cabin shall be fabricated in continuation and in line. It shall be factory built fully furnished and trimmed by the chassis manufacturer or by fabricator after the written permission of chassis manufacturer.

- 3.4 The cabin shall be provided with four doors i.e. two in the front and two at the rear with inbuilt suitable steps.
- 3.5 The windows shall be provided to all the doors with safety glasses and window regulating mechanism.
- 3.6 The doors shall have automatic door locking mechanism with a facility to open door locks from out side and from inside. The out side door handle shall have inbuilt locks and can be lockable with key.
- 3.7 The complete cabin with doors shall be made from Mild steel sheet, die pressed section and treated for anti corrosive treatment or it shall be made from GRP (Glass Reinforced Plastic) material of suitable thickness considering its use and climatic conditions in India.
- 3.8 The painting of the cabin shall be carried out with latest painting process preferably with by CATAPHORETIC process.
- 3.9 All the MS super structural members and under frame cross members shall be treated with rust preventive paint/coating.
- 3.10 The flooring of the crew cabin shall be fabricated from 3 mm Aluminum anti skid plates rigidly fixed to the under frame. Trap doors shall be provided for topping up wherever necessary
- 3.11 One piece laminated safety wind screen glass shall be provided.
- 3.12 The cabin shall have hydraulic tilting mechanism for access to engine compartment for maintenance purposes.
- 3.13 The driver-cum-crew cabin shall be equipped with full four doors, one for driver, one for officer in the front and two at the rear for the crew members.
- 3.14 All the doors shall be fitted on the super structural members each hung upon invisible hinges and fitted with best quality handles. The automatic door locks shall be provided to all the doors.
- 3.15 The window on all the doors shall be full lift type controlled by glass winding machine.

- 3.16 Preferably a peep window of suitable size shall be provided at the officer's side bottom panel above the floor level for the use of driver to see clearly the off side.
- 3.17 For all the above windows toughened safety glasses shall be used as per chassis manufacture's standards.
- 3.18 All the doors and windows shall have long life good quality rubber sealing.
- 3.19 The grab handles shall be provided from inside the cabin for easy ingress and outgress.
- 3.20 The driver and officer seat shall be fully adjustable type and the seat shall be fixed to the flooring by means of nuts and bolts. The seat assembly shall be original chassis manufacturer's design with safety belts.
- 3.21 The seats shall be fully upholstered as per the chassis manufacture's design.
- 3.22 The crew seat shall be suitable for 4 firemen, rigidly fixed to the floor and shall be upholstered suitably. The sufficient legroom shall be provided between the front seats and rear crew seat.
- 3.23 Below the crew seat, two lockers shall be provided, for keeping accessories.
- 3.24 Trap doors and openings shall be provided wherever necessary for topping up or for the maintenance purpose.
- 3.25 The driver-cum-crew cabin shall have all the fittings required as per provision of Motor Vehicle Act 1988 and Central Motor Vehicle Rules 1989 or should confirm to latest ECE or equivalent regulations.

#### **4. REAR BODY:**

- 4.1 The rear body shall accommodate three lockers on each side and one locker at the rear to keep all the accessories, 20 KVA Alternator with control panel, Light mast. Hydraulic Winch, Rescue Tools, Pneumatic Tools, and accessories etc.
- 4.2 The approximate dimensions of the rear body shall be as follows:
- |       |                |   |                          |
|-------|----------------|---|--------------------------|
| 4.2.1 | Length of body | - | 6000 mm approx           |
| 4.2.2 | Width of body  | - | 2480 mm. approx          |
| 4.2.3 | Height of body | - | In line with crew cabin. |

- 4.3 The rear body shall be fabricated in continuation and in line. The under frame cross members shall be fabricated from steel profile suitable sections and size and as per fabricators standards.
- 4.4 If required a full-length runner shall be provided and fixed on the chassis frame by means of suitable arrangement to the chassis frame.
- 4.5 The super structure of the rear body shall be constructed out of corrosion resistant light alloy material (Anodised Aluminium extruded profiles). The super structure shall be adequately strengthened specifically at the members where the doors are fitted and also other members.
- 4.6 The flooring of the lockers shall be fabricated from steel/light alloy sections of suitable sizes taking into consideration the load of all the equipments to be kept in the lockers.
- 4.7 All the under frame cross members and other Mild Steel members shall be painted with coats of rust preventive paint/coating.
- 4.8 The complete external and internal paneling of the rear body, lockers, doors shall be of at least 1.6 mm Aluminium sheet glued to super structural members with all joints riveted and beaded wherever necessary.
- 4.9 The side paneling of lockers shall be made of at least 1.6 mm Aluminium sheet and the flooring shall be made from 3mm anti skid Aluminium sheet.
- 4.10 The complete top deck of the rear body shall be provided with at least 3 mm Aluminium anti skid sheet rigidly fixed to the super structure members by means of solid rivets or nuts and bolts. The complete top deck paneling shall be sealed properly to avoid leakage of rain water in the lockers.

## **5. LOCKERS:**

- 5.1 Minimum three number of lockers shall be provided at both the sides and one locker at the rear body for keeping all the accessories and equipments. The lockers shall be arranged in such a manner that the load distribution shall be equal on both the sides.
- 5.2 The lockers should be provided with drawers as per the latest international standards i.e. ROLL IN-ROLL OUT type with opening in tapered position, vertical hinged walls, vertical slides etc giving very easy & immediate access to all equipments. All equipments should be stowed very scientifically & systematically in the drawers &

each piece of equipment shall have its designated location so that at the time of emergency the required equipment can be very easily located & removed for use. Location of equipment (labels) should be provided on each drawer for immediate identification.

- 5.3 All the equipment should be properly clamped and strapped in the drawers to prevent shifting of the equipments while the vehicle is in motion.
- 5.4 The drawers shall be totally constructed from steel/ Aluminium sheets/Plastic trays & shall have self-locking system to prevent accidental opening while the vehicle is in motion. The bottom edges of the drawers shall be covered with SS angles. The ROLL IN-ROLL OUT drawers should be made according to the required size of the equipment that is to be stowed. The drawer floor shall be covered with good quality rubber sheets or PU sheet of 5 mm thick.
- 5.6 The lockers shall be covered with ALUMINIUM ROLLER SHUTTERS. The Aluminium shutters should be made of extruded Aluminium sections properly anodized or powder coated. The shutter should be roller or sliding type. The opening of the shutters should be done by means of a lift bar provided. This should be of the self locking type so that while the vehicle is moving, the shutters do not open accidentally.
- 5.7 The lockers shall be divided into compartments and shelves as per the requirement. The final design will be decided at the time of approval of drawing.
- 5.8 The Aluminium shutters shall be provided with suitable sealing to avoid ingress of water, dust, and humidity.
- 5.9 Footboard shall be provided in the lower part of the body in order to provide easy access to all the equipments installed in the higher lockers. The footboards shall also serve as a closer for the lower part of the storage locker. The folding footboard shall be provided at the rear wheels.

**6. MISCELLANEOUS:**

- 6.1 Ladders shall be provided and fixed at the rear for access to top deck.
- 6.2 Aluminum pipe railing with sufficient number of brackets or protection foot wall shall be provided to the rear body over the deck.



- 6.3 A towing hook shall be provided and fitted at the rear end by means of nuts and bolts.
- 6.4 Light alloy extension ladder of 10 m extendable height shall be provided over the top deck on suitable ladder gantry with locking arrangement.
- 6.5 Suitable removable wire mesh guard shall be provided for the wind screen glass.

## **7 ALTERNATOR**

- 7.1 There shall be inbuilt Alternator of 20 KVA capacity mounted permanently in the chassis on heavy duty foundation, preferably with rubber mountings. The alternator shall be Self excited, Self-regulating type and of reputed make and shall comply following specifications.
- 7.2 The alternator shall be driven by hydraulic motor through hydraulic pump which will be driven by Vehicle P.T.O. The P.T.O. can be engaged or disengaged from driver's cabin. There shall be engine throttle adjustment facility at control panel.
- 7.3 The alternator rating shall be 415 volts, 3 phase, 50 Hz., 0.8 power factor at 40 degree centigrade temp.
- 7.4 The voltage regulation shall be +/- 1% at nominal speed.
- 7.5 The terminal voltage adjustment shall be 340 – 540 volts.
- 7.6 The voltage dip recovery time shall be less than 20% on application of full load at 0.8 PF and recovers within 500 milliseconds.
- 7.7 The total Harmonic distortion shall be less than 4% under distorting loads.
- 7.8 The short circuit withstand capability shall be three times the rated current for a duration of 10 seconds.
- 7.9 The alternator shall have suitable IP encloser and should not be less than IP 23.
- 7.10 The alternator shall have “Automatic Voltage Regulator” with excellent dynamic response for the following functions:
  - 7.10.1 Maintain the set terminal voltage within +/- 1%.
  - 7.10.2 Built in load module to reduce the load on engine under impact loads.
  - 7.10.3 Under speed protection.

- 7.10.4 Quadrature droop compensation for parallel protection.
- 7.10.5 Protection against over excitation.
  
- 7.11 The control panel containing all the switches, gauges, sockets, etc. shall be provided in one of the locker which is easily accessible to the operator for use standing on ground.
  
- 7.12 The control panel shall be illuminated adequately for night operation and shall have IP 54 protection.
  
- 7.13 The control panel shall have following controls:
  - 7.13.1 Heavy duty main switch.
  - 7.13.2 Ammeter.
  - 7.13.3 Voltmeter.
  - 7.13.4 Frequency meter.
  - 7.13.5 Voltage Stabilizer.
  - 7.13.6 Three Pin socket 5 Amp – 2 nos. with switch
  - 7.13.7 Three Pin socket 15 Amp. – 2 nos. with switch.
  - 7.13.8 Three phase socket and plug – 3 nos with switch.
  - 7.13.9 Phase indicating Lamps.

## **8 TELESCOPIC LIGHT MAST.**

- 8.1 A compact, low profile, roof mounted Telescopic Light Mast, fitted with 4 X 1000 watts waterproof Halogen/Xenon lamps or equivalent capacity LED lamps shall be provided. The light mast shall be elevated and extended vertically upto minimum 4.5 mtrs from the rooftop. The mast shall be of reputed make preferably of “FIRECO” make or equivalent.
  
- 8.2 The mast shall be operated pneumatically and reached minimum 4.5m from the rooftop of the vehicle.
  
- 8.3 The light mast shall operate in temperatures range of -25 deg.C up to 50 deg C, with anti-twist lock, with safety valve and drainage outlet valve.
  
- 8.4 The mast shall be installed on the roof of the vehicle and shall be stowed in tilted condition in protected encloser.
  
- 8.5 The telescopic mast should be extremely resistant and designed with a minimum of 4 sec with internal spiraled Electrical cable. Each section of the mast should have a

water drainage outlet. The folded and stowed height should not be more than 1800mm. The Light mast will have Halogen/Xenon floodlight and reflectors in weatherproof casing. The floodlights on the top should have a minimum electrical rotation of 355° and Suitable connections for taking permanent Power Supply from generator set through an internal spiral wire mounted inside the mast should be provided. Each set of halogen/Xenon lights should have the possibilities to be switched independently through individual switches. All the functions of the mast, including extension and return to the original position, lights on/off, automatic restore should be possible through a wire remote control. In addition the mast should have the facility to be operated with wireless remote control.

- 8.6 The remote control unit shall allow a person to operate all the functions of the light mast & accurately aim for complete directional positioning.
- 8.7 In addition to the above, a one-button command system shall be provided which should automatically retract the light mast, turn out the lights and stow the entire system to the transport position. This system shall be included in the remote controller.

## **9 HYDRAULIC CABLE WINCH**

- 9.1 Hydraulically operated cable winch of minimum 11-ton line pull (top layer of rope) shall be provided.
- 9.2 The winch drum shall be driven through planetary gear system with all the necessary fittings.
- 9.3 The rope of minimum of 16 mm dia, galvanized wire rope with replaceable self locking clevis hook shall be provided
- 9.4 It should be mounted in the chassis so that the winch can be used either from the front or from the rear of the vehicle. Suitable reinforcement shall be provided to chassis frame to withstand the torsional forces coming on the chassis frame when the load is pulled.
- 9.5 The winch should be controlled by directional control valve provided at suitable place. There shall be Pneumatic or hydraulic free spooling mechanism.
- 9.6 There shall be in built over load protection when the pulling load is exceeding the rated load of 11 ton.

- 9.7 The hydraulic motor to drive the winch shall be provided and fitted in the gear mechanism of drum. The hydraulic power shall be taken from hydraulic pump which will be driven by vehicle P.T.O. The hydraulic pump shall also drive hydraulic motor for inbuilt alternator and hence shall have sufficient flow and pressure to drive winch and alternator simultaneously.
- 9.8 The system shall be provided with Oil Tank of suitable capacity, Oil cooler, Connections and hoses, Control unit, winch bracket and rope guides.
- 9.9 The winch shall be of reputed make and shall be of Rotzler or Ramsey or Sepson make.
- 9.10 Additional pulling ropes made from galvanized wire rope having load capacity of 10 ton and 1m, 2m & 3m in length with thimble at both the ends with 3 Nos. galvanized shackle and pin having load capacity of 10 ton shall also be provided.

#### 10. SCHEDULE OF EQUIPMENT TO BE CARRIED ON THE APPLIANCE

Sl.No.	Item	Quantity
1.	Breathing apparatus, open circuit positive pressure type with cylinder made of carbon composite material, having water capacity of 6 ltrs, 300 bar, 45 mnts duration, back plate, face mask, lung demand regulator, pressure reducer complete with harness with spare cylinder	4 sets
2.	Fire proximity suits - The suit should be a two piece design (Jacket & Trouser) garment and should have an outer layer made of Inherent FR material followed by a Moisture Barrier and Thermal Liner (three layers minimum). It should have FR reflective tape on both garments for reflection in dark / smoky environment. Should be CE marked and certified to EN-469 standard. Should be supplied complete with a Multi Layer Fire Fighter Gloves CE marked and certified to EN659 standard; a Balaclava Style Hood made of Inherent FR material – CE marked and certified to EN-13911 standard; A pair of Fire Fighter Gum Boots made of FR Rubber or Leather with pull-up loops, Steel Toe, Mid-Steel Sole. Boots should be CE marked and Certified to EN-345-2 standard; A Fire Fighter Helmet with visor and Neck Protector, CE marked and Certified to EN-443 standard.	2 nos
3.	Paratech Percussive rescue tool kit Model – PRT – comprising of one Ram Bar and 5 different chisels	2 sets
4.	Portable, electrically operated, circular saws, 220 – 250V, single phase	

	min 2500 W, 4500 RPM, with Disc Diameter max - 300 mm [12"], Arbor size - 22.2 mm, Weight – not more than 12kg, With soft start technology built in within electronic control box, Diamond Tip Blade of 12” dia, 5000 RPM, Arbor size - 22.2 mm, Thickness - 3.5mm – 2 Nos and Composite Blade of 12” dia 5000 RPM, Arbor size - 22.2 mm, Thickness - 3.5mm with a set of 5 blades having capability of cutting various material such as Rails, Aircraft alloys, vehicle panels, metal roller doors, wooden frames, etc.	1 nos
5.	Portable, electric drill with different size drill bits from 1mm to 12 mm, single phase, 220 V with 3 mtrs long electrical cable with plug.	1 set
6.	<b>Polyester Rope Ladder</b> Ladder made of polyester ropes. Round hardwood rungs fixed to the ropes with screws. Length 10 meters	1 No
7.	<b>DECENT CONTROLLER 32 to 35 MTRS WITH PARAFET ANCHORAGE</b> The equipment will be used for vertical rescue from hills and high-rise buildings. The equipment should consist of 32 to 35 mtrs. decent controller with all the accessories. The device shall consist of: a) Automatic cable rewind. b) Self control speed of 1.20 per sec. c) Equipped with centrifugal brake d) Load carrying capacity 34 to 141 kgs. e) Metallic casing dully painted f) Confirming to EN 341 class ‘B’ or OSHA The cable shall be stainless steel of 5 mm dia. The hook shall be made from high strength steel, electro zinc plated having strength of 2500 daN and opening of 18 mm. The length of unit shall be approximately 640 mm without hook and strap and shall be about 825 mm with hook and strap. The width of the unit shall be about 140 mm and the breath shall be about 286 mm. The rescue strap shall be made from polyamide having min. width of 45 mm and the strength of 2000 daN. The breaking strength of the system shall be 1200 daN. The weight of the unit shall be about 30 kgs. and the range shall be 34 mtrs. The parapet wall anchor shall have adjustment range 1” to 14” wide for installing on the building. It should be light weight and portable and shall not be more than 15 kgs. The device shall be able to mount on the	2 Nos

	wall without any tools. The anchor shall be made of Zinc plated steel with min. breaking strength of 5000 LBS. The device shall be of reputed make such as PROTECTA, DBI SALA, TRACTEL, OR EQUIVALENT. The device shall be CE certified.	
8.	100 ft long 16 mm dia BOB rope	2 lengths
9.	40 ft long 12 mm dia BOB lashing lines	2 lengths
10.	Spades ( <i>see IS 2238:1979</i> )	2 nos
11.	Shovel ( <i>see IS 274(Part 1 and 2):1981</i> )	4 nos
12.	Mattocks, handle	2 nos
13.	Picks, with handle ( <i>see IS 273:1973</i> )	6 nos
14.	Axes, felling ( <i>see IS 703:1966</i> )	4 nos
15.	Crow bars, 1 m long ( <i>see IS 704:1968</i> )	4 nos
16.	Sledge hammer 10 kg ( <i>see IS 841:1968</i> )	2 nos
17.	Hammer, 5 kg ( <i>see IS 841:1968</i> )	2 nos
18.	Rake, 3 prong ( <i>see IS 5991:1971</i> )	2 no
19.	Rubber, gloves tested to 25,000 volts ( <i>see IS 4770:1968</i> )	2 pair
20.	Shears, bolt cropper, large with handle, 900 mm	2 pair
21.	Shears, bolt cropper, small with handle 600 mm	2 pair
22.	Fire mans Axe with carrying pouch	2 nos
23.	Electric drill with spare bits Battery operated 2 mm to 10mm (rechargeable)	1 no.
24.	Circular saw with diamond blade, Power consumption - 1750 W Voltage - 230 V, RPM – 3400, Light in weight not more than 7.5kg Automatically adjustable blade guard, Required accessories and electrical cord of about 3 mtrs, Circular Saw Carbide Tip Blade, Dia - 235mm / Arbor - Compatible to circular saw suitable RPM - 5500 to 6000 / Thickness - 2 to 4mm – 2 Nos , Provision of expansion slot .	1 no.
25.	Electrically operated chain saw, Power consumption - 1600 W minimum, Voltage - 220 - 250 V, Amperage - 7 Amp [Approx], Guide Blade Length - Arm length - 18 inches minimum, Light weight, shock proof body, reservoir for lubricating for chain. With required accessories and electrical cord, Chain with 34/36 numbers of cutting tips. Compatible with chain saw of 18 inch. Guide bar, chain should be in closed ring form – 2 Nos	1 nos
26.	Petrol engine operated chain saw, min. 94 CC, 2 stroke petrol driven IC engine, max. of load engine speed 9800 rpm +/- 300, 4.5 KW (6.1hp) power, min, Trigger, trigger lock and safety inter lock must be provided, Chain Saw with fast start segment design having min. 350mm deep cutting capacity., Fuel Tank Capacity – 1 liter, Should be capable of	1 no.

	cold manual pull cord start, Should be provided with choke arrangement, Cutting depth 390mm, Weight not more than 12 kg with chain & bar, Guide bar length 18" min, Chain of 32 segment, sealpro, with ELC 45 grade. with Spare Chain- 2 nos.																
27.	Concrete Breaker having power input of not more than 1400 W, Impact rate 42 joules, full load impact 1400 / min, bit shank size 30 mm hexagonal, weight not more than 17 kgs with accessories like carrying case, bull point and hexagon bar wrench m8 size.	1 no.															
28.	High pressure pneumatic lifting bags, working pressure 8 bar, made of Kevlar reinforced nitrile rubber with 3 layers aramide reinforcement, non slip design, Blue colour, capable of being interlocked when 2 bags are placed on top of each other, quick connection with automatic double locking system, centering cross on both sides, reflecting labels, CE- icons for safety insertion thickness not more than 25 mm including profile, resistant to ozone and range of chemicals etc of the following capacities :-	1 set															
	<table border="1"> <thead> <tr> <th>Lifting capacity</th> <th>Min. Inflation height (mm)</th> <th>Min dimensions (mm)</th> <th>Weight (not more than) kgs.</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>20 tons</td> <td>275</td> <td>500 X 500</td> <td>7</td> <td>2 nos</td> </tr> <tr> <td>40 tons</td> <td>400</td> <td>700 x 700</td> <td>16</td> <td>2 nos</td> </tr> </tbody> </table>	Lifting capacity	Min. Inflation height (mm)	Min dimensions (mm)	Weight (not more than) kgs.	Quantity	20 tons	275	500 X 500	7	2 nos	40 tons	400	700 x 700	16	2 nos	
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29.	Jumping Air cushions type as per specs given below  The jumping rescue cushions should have high reliability and shall be easy to handle and shall be capable of being fully erected by 4 to 6 persons. The possible jumping height shall not be less than 30 mtrs. It shall have illumination for night operations and shall be capable of being used in dusty conditions. The detailed technical specifications are as	1 no.															

	under:-	
	Shape	8 corner shape (octagonal)
	Outer Dimensions	Not less than 5.50 X 5.50 mtrs
	Usable jumping area	Not Less than 4.50 X 4.50 mtrs
	Jumping angle (30m height)	9.74°
	Tube diameter of the inflatable frame	22 cm ( 0,22 meters)
	Material of frame	Natural rubber reinforced with polyester fabric 940 dtex, black
	Material of outer cover	Fire retardant special PVC-coated polyester fabric, orange
	Material of jumping area	Fire retardant special PVC-coated polyester fabric, white with black markings
	Compressed air cylinders	2 x 6l/300bar or equivalent steel cylinders
	Erection time	Not more than 75 sec. (depending on the used cylinders)
	Re-erection after a jump	Not more than 10 sec.
	Weight of the complete device (with charged cylinders)	Not more than 150 kg
	Packing	It Shall be packed in a valise with handles for 6 persons
30.	<p><b>Hydraulic Spreader as per the following specs</b></p> <p>Spreading force on the open arm - not less than 35 Tons,          Spreading distance – not less than 720 mm,          Spreading force arm closed – not less than 5 Ton (measured at 25mm from the tips),          Squeezing force – not less than 12 Tons,          Pulling distance – not less than 600mm,          Pulling force – not less than 6 Ton.          Weight approx 17 kgs,          Working temp. range -20 +55 deg.</p> <p>It should have well serrated tips for perfect grip during spreading &amp; squeezing, sharp cutting tips with optimal angle, Slim arms &amp; Yoke design for easy penetration in confined spaces, accurate spring return to neutral position, maximum rotation to the right &amp; to the left only 22</p>	1 no



	degree, built in double check valves, full protection against overload with all accessories like pulling chains, chain adaptors with a maintenance kit. The carrying handle should preferably have integrated lighting. The equipment & accessories should be new, unused & should conform to latest design & specifications. The tool should have only 1 quick coupler directly connected to the tool without hoses	
31.	<p><b>Hydraulic Cutter as per the following specs</b></p> <p>Cutting force in the recess – not less than 140 Ton          Capable of cutting round bar – not less than 40mm dia steel rod of 500 – 550 mpa strength          Blade opening – not less than 175 mm          Weight - not more than 16 kgs</p> <p>The deadmans handle should have accurate spring return to neutral position, maximum rotation to the right and to the left only 22 degree, built in double check valves, full protection against overload. The tool should preferably have slim bolt design for easy penetration in confined places and the carrying handle should preferably have integrated lighting. The maintenance kit should have spare blade, tool kit to change the blade etc. The tool should have only 1 quick coupler directly connected to the tool without hoses</p>	1 no
32.	<p><b>Hydraulic Combi Tool as per the following specs</b></p> <p>Spreading force on the open arm – not less than 20 Ton          Spreading distance – not less than 350mm          Spreading force arm closed – not less than 3.5 Ton measured 25 mm from the tips,          Squeezing force – not less than 7.5 Ton          Pulling length – not less than 400 mm,          Pulling force – not less than 5 Ton,          Maximum cutting force in recess – not less than 35 ton          Cutting opening – not less than 225 mm,          Capable of cutting round bar – not less than 32 mm dia.          Weight approx 15 kgs,</p> <p>It should have well serrated tips for perfect grip during spreading &amp; squeezing, sharp cutting tips with optimal angle. The tool should preferably have Slim arms, Yoke &amp; slim bolt design for easy penetration in confined places and the carrying handle should preferably have</p>	1 no.

	integrated lighting, accurate spring return to neutral position, maximum rotation to the right and to the left only 22 degree, built in double check valves, full protection against overload with all accessories like pulling chains, chain adaptors, with a maintenance kit. The equipment & accessories should be new, unused and should conform to latest design and specifications. The tool should have only 1 quick coupler directly connected to the tool without hoses	
33.	<p><b>BATTERY OPERATED COMBI TOOL</b></p> <p>The tool shall be portable, battery operated suitable for Spreading - Cutting Pulling &amp; Squeezing Operation.</p> <p>The Unit Must be made from Lightweight materials for maximum portability Total weight of the unit Including battery should not exceed 14 kgs.</p> <p>The Battery Tool should be cordless to avoid any obstruction to the operator.</p> <p>The Battery shall be approx. 5 Ah Lithium Ion rechargeable battery. The battery shall be click ON / click OFF type for quick changing of battery.</p> <p>The unit shall be supplied with 2 batteries and Mains Power connector to connect the tool to any 220 V source and 230 volts AC Battery Charger.</p> <p>It shall be possible to fully charge the battery quickly.</p> <p>A Tool Carrying Belt &amp; Battery Pouch shall be supplied with the unit</p> <p>The opening shall be a minimum of 265 mm,</p> <p>Spreading Force Arms closed 25mm from Tip shall be 26kN</p> <p>Cutting Force shall be MIN. 215 kN,</p> <p>Cutting capability of round bar shall be min 22 mm</p> <p>Pulling force of 60 kN min.</p> <p>The unit shall be fitted with LED's to indicate that the system is ready for use The unit shall have a dead mans handle. The design of the tool shall be based on EN 13204.</p> <p>The tools shall be of reputed make such as LUKAS, HOLMATRO OR EQUIVALENT</p> <p>Operation and maintenance manual.</p>	1 No.
34.	<p><b>Hydraulic Telescopic Ram as per the following specs</b></p> <p>Spreading force of 1<sup>st</sup> plunger – not less than 20 Ton</p> <p>Spreading force of 2<sup>nd</sup> plunger – not less than 8 Ton,</p> <p>Length retracted including cross head – less than 600 mm</p> <p>Total Length including cross head – not more than 1300 mm,</p>	1 no.

	<p>Stroke of 1<sup>st</sup> plunger – not less than 375 mm Stroke of 2<sup>nd</sup> plunger – not less than 350 mm</p> <p>It should have rotating cross head for easy positioning &amp; perfect grip in every positioning, accurate spring return to neutral position, maximum rotation to the right and to the left only 22 degree, full protection against overload, with all accessories like maintenance kit. The equipment &amp; accessories should be new, unused and should conform to latest design and specifications. The tool should have only 1 quick coupler directly connected to the tool without hoses</p>	
35.	<p><b>Rescue Ram as per the following specifications :-</b></p> <p>Minimum spreading force – 16 Ton, Minimum length retracted including cross head – less than 1000 mm, Maximum length including cross head – less than 1750 mm Pulling force not less than – 5 tons, Stroke – min 2 X 325 mm, No. of Plungers – 2</p> <p>It should have rotating cross head for easy positioning &amp; perfect grip in every positioning, accurate spring return to neutral position, maximum rotation to the right and to the left only 22 degree, full protection against overload, with all accessories like a maintenance kit. The equipment &amp; accessories should be new, unused and should conform to latest design and specifications. . The tool should have only 1 quick coupler directly connected to the tool without hoses</p>	1 set.
36.	<p><b>Hydraulic light weight aluminium jack as per the following specifications :-</b></p> <p>Lifting Capacity - Not less than 50 tons Closed Height - Approx 150 mm Stroke - Approx 50 mm Weight - Not more than 7.5 kg</p>	1 no
37.	<p><b>Hydraulic light weight aluminium jack as per the following specifications :-</b></p> <p>Lifting Capacity - Not less than 50 tons Closed Height - Approx 200 mm Stroke - Approx 100 mm Weight - Not more than 9.5 kg</p>	1 no

38.	<p><b>Hydraulic TOE jack with accessories</b> - It should be Single acting hydraulic tool suitable for lifting heavy vehicles; trams or machines to free victims or objects that are trapped after an accident.</p> <p>Max. centric force on the saddle : not less than 11 tons  Max. force on toe : not less than 9 tons  Closed height : not less than 440 mm  Extended height : not less than 685 mm  Weight : not more than 21 kg</p>	1 no
39.	<p><b>COME ALONG</b>  Capacity - 1.5 ton  Chain length - 1 to 1.5 mtrs  Anchor hooks on both side of the chain  Handle length 1.5 feet  Three positions for working to come along should be clearly marked at travel lever as lift, lower &amp; neutral.  Operation and maintenance manual  Make- Reputed.</p>	1 No
40.	<p>Hydraulic Door Opener as per the following specs:-</p> <p>The door opener shall be hydraulically operated with two toes, one fixed and one moving and it shall be suitable to force open doors of building that open to the inside and that can be reinforced or blocked.</p> <p>The spreading force shall be 100 kN [10.2 ton].</p> <p>The door opener shall be single acting, spring return type, driven by hand - or foot pump, working on non - toxic mineral based hydraulic oil.</p> <p>The insertion height up to the first groove shall not be more than 3mm, whilst the stroke length of the door opener shall not be less than 128 mm.</p> <p>The back of the fixed toe shall be designed with a flat face to be used a hammering base. The door opener must be available with a carrying and positioning handle that automatically keeps the tool from twisting when positioning the tools. The carrying and positioning handle would be finished with a black epoxy layer for optimal grip.</p> <p>The door opener must be available with a swivel connection that must</p>	1 no

	<p>be mounted on the back of the tool for optimal maneuverability of the tool and hydraulic connection hose.</p> <p>Dimension of the tool shall be [l X w X h] 300 X 120 X 105 mm approx. &amp; weight would not be more than 7 kg.</p> <p>The door opener shall be supplied with the accessories such as 30 cm pigtail hose and quick coupler, that can also fitted with the additional positioning &amp; carrying handle with a 360 degree rotation elbow, 30 cm pigtail hose and quick coupler, supplied in a synthetic storage box.</p> <p>The door opener shall be able to be operated by a two stage hand pump which shall be supplied along with the door opener with 5 mtrs of suitable hose.</p>																																		
41.	<p><b>Hydraulic pump for 2 tools simultaneous operation</b> with 15 mtrs long hose as per the following specifications :-</p> <p>Engine - Petrol engine</p> <p>Capacity oil tank (effective / usable) - Not less than 4 litres</p> <p>Pump type - 3 stage axial pump</p> <p>Weight - Not more than 25 kgs</p> <p>No. of tools connected - Two</p> <p>No. of tools to be operated simultaneously – Two</p>	1 no																																	
42.	<p>Hydraulic foot / hand operated pump with 10 mtrs long hose. The pump shall have two-stage operation having min 1800 cc oil capacity and shall be capable of developing adequate pressure for operating all the tools including the telescopic ram upto their full capacity. The weight of the pump shall not exceed 8 kgs</p>	1 no																																	
43.	<p>Power Shoring system comprising of the following :-</p> <table border="1" data-bbox="349 1396 1117 1843"> <tr> <td>1</td> <td>Manual Locknut strut</td> <td>2 nos.</td> </tr> <tr> <td>2</td> <td>Hydraulic Locknut strut</td> <td>2 nos</td> </tr> <tr> <td>3</td> <td>Hand pump</td> <td>2 nos</td> </tr> <tr> <td>4</td> <td>Pneumatic Auto-lock strut</td> <td>2 nos</td> </tr> <tr> <td>5</td> <td>Extension piece 125 mm</td> <td>4 nos</td> </tr> <tr> <td>6</td> <td>Extension piece 250 mm</td> <td>4 nos</td> </tr> <tr> <td>7</td> <td>Extension piece 500 mm</td> <td>4 nos</td> </tr> <tr> <td>8</td> <td>Extension piece 1000 mm</td> <td>4 nos</td> </tr> <tr> <td>9</td> <td>Double female connector</td> <td>2 nos</td> </tr> <tr> <td>10</td> <td>2-way block</td> <td>1 no</td> </tr> <tr> <td>11</td> <td>3-way swivel head</td> <td>1 no</td> </tr> </table>	1	Manual Locknut strut	2 nos.	2	Hydraulic Locknut strut	2 nos	3	Hand pump	2 nos	4	Pneumatic Auto-lock strut	2 nos	5	Extension piece 125 mm	4 nos	6	Extension piece 250 mm	4 nos	7	Extension piece 500 mm	4 nos	8	Extension piece 1000 mm	4 nos	9	Double female connector	2 nos	10	2-way block	1 no	11	3-way swivel head	1 no	1 set
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	12	Base support plate	4 nos		
	13	Cross head	4 nos		
	14	V-block head small	2 nos		
	15	Tilting head with nailing plate	2 nos		
	16	Swivel head	4 nos		
	17	Tilting head	4 nos		
	18	V-block head large	2 nos		
	19	Pointed head	2 nos		
	20	Cone head	2 nos		
	21	Flat head	2 nos		
	22	Hook wrench	2 nos		
	23	Tensioning strap	6 nos		
	24	Rope	2 nos		
	25	Flat head with nailing plate	2 nos		
	26	L-support head	2 nos		
	27	Beam support head 100 mm	2 nos		
	28	Beam support head 150 mm	2 nos		
	29	Pressure reducer 200/300 bar to 8 bar	1 no		
	30	Double control unit	1 no		
	31	Air hose 10 mtrs	1 no		
	32	Air hose 5 mtrs	1 no		
	33	Anti-roll block	32 nos		
	34	Storage bag struts & extensions	2 nos		
	35	Storage bag accessories	2 nos		
44.	Evacuation system (rope rescue with tripod and descenders etc) consisting of a Tripod with rope rescue modular evacuation device ratio 3:1. The weight of the Tripod should not be more than 15 kgs and should have 4 point SS anchoring system on the top with Aluminium die cast locking system. All the three sides of the tripod should allow entry of the person without obstacles like chain etc. The load carrying capacity shall be 500 kgs. and the breaking strength of 1000daN. There shall be 8 adjustable index positioning. A harness shall be provided consisting of 1 Dorsal attachment D ring / 1 Rescue D ring (rear), 2 Lateral attachment D rings, Positioning belt, Fully adjustable shoulder and thigh straps, net weight 1.6 Kg., and Rescue strap with hooks for 2 <sup>nd</sup> person. It shall also have a ascending / descending device of 100 operating range with 400 mtrs braided rope of polyamide material of 9 mm dia. The braking of descending load shall be by the friction of the rope on the drum, while a ratchet gear facilitates ascension Control and Descent Speed. The Permissible Load shall e 250 Kgs. with pulley				1 set

	<p>reduction ratio of 3:1 The weight of this unit shall not be more than 1.75 kgs. A ascending and locking handle made of light alloy shall also be provided with special gear belt for rope rescue and sit harness.</p> <p>A descent control device for mass evacuation from high rise buildings and public places consisting of 250 feet. Descent controller with all the accessories The features should include Automatic cable rewind, Self - control speed of 3ft per sec., Equipped with centrifugal brake, Load carrying capacity 136 kgs.</p> <p>Provides emergency rescue and evacuation from a wide variety of elevated work areas</p> <p>Fully automatic controlled descent, Bidirectional design enables multiple rescues, Utilises 8mm galvanized wire core polyester rope lifeline, Pre-rigged system is extremely simple to use, Compact and lightweight design, Kit also contains 2 rescue restraint straps, 1 karabiner and carrying bag, With special collapsible type anchorage systems for the window and balcony area adjustable size 10 to 12 feet height with horizontal D ring anchorage for Rescue 2 feet approx., Device capable of descent more then 50 person one by one at single point of use. Device weight not more then 4.5 kg without cable.</p> <p>Controller Device should be CE or OSHA approved</p> <p>It shall be of reputed make such as PROTECTA, DBI SALA, TRACTEL, HONEYWELL OR EQUIVALENT.</p>	
45.	<p><b>RESCUE &amp; FALL ARREST HARNESS</b></p> <p>The harness shall consist of 1 Dorsal attachment D ring / 1 Rescue D ring (rear), 2 Lateral attachment D rings, Positioning belt, Fully adjustable shoulder and thigh straps, net weight 1.6 Kg., Conforms to CE Standards EN 361 &amp; EN 1497.</p> <p>Rescue strap with hooks for 2<sup>nd</sup> person Conforms to CE Standards EN1498 class B.</p> <p>It shall be of reputed make such as PROTECTA, DBI SALA, TRACTEL, HONEYWELL OR EQUIVALENT.</p>	1 No
46.	<p><b>FALL ARRESTER WITH 36 METER CABLE WITH KEVLAR HARNESS</b></p> <p>The Fall Arrester Device shall have a range of 36 mtrs.</p> <p>The cable shall be Stain steel of 5 mm dia. and 36 mtrs. in length.</p> <p>The unit shall have a integrated brake system with impact force</p>	1 No

	<p>reduction of 4 to 6 kN, double friction lining.</p> <p>The casing of the unit shall be anti corrosion, Aluminium and Stain less steel.</p> <p>The upper connector shall be self closing and self locking carabineer , opening 50 mm, made from Stain less steel.</p> <p>The lower connector shall be double locking snap hook, opening min. 18 mm and made from steel and coated electro zinc plated.</p> <p>The unit shall be sealed and all the moving parts shall be lubricated for life.</p> <p>The braking strength of the unit shall be 1200 daN.</p> <p>The unit shall be suitable for vertical use.</p> <p>The weight of the unit shall be 28 kgs. approx.</p> <p>The harness shall be full body harness made from Kevlar webbing, having front and back attachment</p> <p>It shall be of reputed make such as PROTECTA, DBI SALA, TRACTEL, HONEYWELL OR EQUIVALENT.</p> <p>The device shall be CE certified.</p>	
47.	<p><b>Polyester Rescue Lines, 30m long</b></p> <p>In full accordance with DIN 14920, made of high-quality polyester. 10mm diameter. Breaking strength 1000 kg.</p> <p>One end is fitted with a light alloy carabiner hook, the other end is provided with aaaaa loop. Comes complete with polyester carrying bag.</p>	1 No
48.	<p><b>Collapsible First Aid Stretcher</b></p> <p>This stretcher serves at transporting sick or wounded persons. The frame rods are made of seamless aluminium square tubes. Cover made of coated synthetic material. The stretcher is collapsible, length-wise only with carrying bag</p>	1 No
49.	<p><b>Scoop type Stretcher.</b></p> <p>Made of Anodised aluminium. Attendants can readily uncouple an end of the stretcher and gently “scoop” the victim onto the stretcher by means of a scissors leverage action. suitable for difficult body pick-ups. After the scoop stretcher has been applied, the scoop stretcher should be placed into a basket type stretcher, thus achieving full immobilization of the patient.</p> <p>Length of the stretcher can be adjusted to fit any size patient. Each Stretcher is provided with three 2” belts. Weight of stretcher appx. 9.1 kg.</p>	1 No
50.	<p><b>Collapsible First Aid Stretcher</b></p> <p>This stretcher serves at transporting sick or wounded persons. The frame rods are made of seamless aluminium square tubes. Cover made of</p>	1 No



	coated synthetic material. The stretcher is collapsible, length-wise only with carrying bag	
51.	<p><b>Search Camera</b> - The systems primary configuration should be based on a video camera built at one end of a telescopic boom which can reach out into depths and void spaces up to a distance of 2m. This boom shall be extended telescopically and shall have 4 sections giving a total length of 2m and shall be fitted with minimum 5m of cable. Provision should also be made to manually lock the telescopic boom at the distance required.</p> <p>The video camera shall have a colour display with a sensitivity of 0.5 lux and shall have 6 white LED lights which will allow visibility in pitch black conditions to a distance of 4 m. The camera head shall be able to rotate 360° without stop (infinitely). A speaker and a microphone shall be built into the body of the video camera, which will allow communication with the trapped person through a head-set.</p> <p>The system shall have a control box for the operator which will be fitted with a minimum 7-inch, LCD colour screen, TFT active matrix, and shall be stored in a leather protective case with adjustable shoulder strap.</p> <p>The system shall also be provided with mono headphones fitted with dynamic microphone with anti-disconnection plug which will allow the operator to communicate with the victims via the speaker and microphone built in the video camera. The cable length shall be minimum 1.5 mtrs</p> <p>There should be provision for attachment of an additional headset for use by a third person like an interpreter or a doctor etc</p> <p>The system design shall be such that it would not require more than 2 persons to operate, one operator to handle the probe, and the second for the control box: of the probe to see and search through the screen, communicate with victims.</p> <p>The system shall have an inbuilt battery, 12V - 4.5 Ah battery, Ni-MH technology with an intelligent charger. The battery shall allow minimum 4.5 hours of continuous usage of the system and should be able to be fully charged in 4 hours. The system shall be equipped with an audible alarm which will warn the operator when the battery is low. A suitable</p>	1 no

	<p>Cigar-lighter adapter shall be provided to enable the charge the battery in a vehicle if necessary</p> <p>An additional water proof camera capable of being used at a depth of 60 mtrs with 60 mtrs cable mounted on reel shall be provided. The camera shall be IP 67 compliant and shall give colour display. The camera should rotate 360 deg. and shall have integrated LED lights. Speaker and microphone shall be integrated in the body of the camera</p> <p>The system shall be capable of being operated in temperature range <math>-10^{\circ}</math> to <math>+60^{\circ}\text{C}</math></p>	
52.	<p><b>Acoustic based victim location unit</b> - The equipment is an acoustic listening device, light weight and easy to carry. Designed especially to detect and locate trapped, live victims in collapsed structure caused by earthquake, explosions, landslides, construction cave-ins or mine disasters. The slightest noise the victim makes should be detected by this device and so the sensitivity is exceptional. It is fitted with an adjustable filter to deaden the effect of dull noises like pneumatic drills, lorries passing...</p> <p><u>Capabilities required:</u></p> <ul style="list-style-type: none"> <li>• <b>Housing/Amplifiers &amp; filters:</b> IP66 housing with bar-graph for adjustment with IP 68 connectors.</li> </ul> <p>Two very high gain, low noise amplifiers.</p> <p>Two frequency filters "high pass and band pass" infinitely variable, filters activated by 2 keys (the chosen frequency is infinitely variable using the + and - keys)</p> <p>Filter 1: High pass filter" significantly reduces all frequencies below its adjustment point, which may be between 50Hz and 5 kHz which correspond respectively to the low and the high points on the liquid crystal scale. It will eliminate bass sounds such as lorry movements, dull noises...</p> <p>Filter 2: " "Band pass filter" significantly reduces low and high frequencies on either side of its turning point. It will filter an incoming signal.</p>	1 no

	<ul style="list-style-type: none"> <li>• <b>Sensors:</b> Two ultra-high sensitivity black vibration sensors with 8m of cable One white sound sensor fitted with a microphone and a loud speaker with 8m of cable.</li> <li>• <b>Headset:</b> One stereo head-set with microphone</li> <li>• <b>Batteries:</b> One pack of 6 rechargeable Ni/Mh batteries type LR6/AA (operating life 30h) One accumulator charger (usable at 50/60Hz 100v to 240v) One cigarette lighter charger plug with wire to be use in a vehicle.</li> <li>• <b>Spécifications:</b> Operating temperature: -10° to +60°C Storage temperature: -25°to +70°C Total weight: 2kg (in use) / 8 kg (with carrying case)</li> <li>• <b>Carrying case:</b> One carrying strap, one shock proof carrying case, dimensions L475 x P415 x H215 mm</li> </ul>	
53.	<p><b>MEGA PHONE</b> Power output - 16 watt rated / 20 watt max. Voice range - 0.4 km [01 km in quite area] Power Source – with suitable battery Microphone - unidirectional Dimension - Horn Dia - 220 mm Length - 370 mm Weight - 2 kgs. [approx] Dry cell &amp; 12 V Car Battery operation All ABS Body, sturdy yet lightweight. Built in siren</p>	1 No.

	Microphone with volume control and press to talk switch Or equivalent to above specifications of reputed make.	
54.	BA compressor 100 LPM - The Compressor should be a 3 or 4 stage air cooled high pressure compressor for filling SCBA or SCUBA cylinders at a pressure of 200 or 300 bar with switch-over device for the same. It should have capacity / FAD of 100 lpm for standard filling norm and should come with two hoses – one each for 200 and 300 bar. The compressor should be light weight, portable design, driven by a Petrol Engine so that it can be used on disaster sites without power supply also. Air quality should be as per DIN 3188 / CGA-E / EN12021 and should have been tested by one International and one Indian Laboratory. The compressor should be supplied with one spare filter cartridge. Weight should be less than 50 kgs.	1 no
55.	Thermal Imaging Camera capable of seeing thru zero visibility conditions/ darkness suitable for fire fighting and rescue applications. The Thermal Camera should be of latest technology with advanced features such as capability of viewing in atleast 4 different colour modes, working in zoom mode as well as the capability of capturing / storing thermal images, which can be downloaded on computer for subsequent report preparation. The thermal camera should be lightweight weighing less than 1.50 kgs and the Camera should have provision of showing both the ambient temperature as well as spot/ direct temperature measurements. The Camera should be supplied complete with accessories such as remote control, software , rechargeable battery pack & user manual	1 no.
56.	<b>RECHARGEABLE TORCH SMALL</b>  Rechargeable battery of Lithium ion charge in 5 Hrs , C4 LED Ultra Bright with 50,000 Hrs life , Made from High Impact ABS Thermoplastic housing, with rubberized impact bumpers, and scratched resistant lens cushion grip handle, 3 hrs on high & 7 Hrs on low mode continuous run time, ATEX or FM approved and approx Weight 1.5 kg with AC & DC Charger with mounted Rack and shoulder strap. Orange or yellow colour, Streamlight, Pelican, wolf make or equivalent.	2 nos
57.	<b>RECHARGEABLE TORCH BIG</b> Six C4® LED and wide reflectors produce a uniform flood pattern Three user-selectable outputs: High for a super-bright flood beam: 3,600 lumens, 31,000 candela, runs 5 hours. Medium for an intense beam and longer run time: 2,400 lumens, 20,000 candela, runs 9 hours. Low for when a less intense beam is ideal	2 nos

	<p>and for longer run time: 1,100 lumens, 11,000 candela, runs 18 hours          Selectable diffuser settings for two beam widths Optimum peripheral illumination for scene lighting; 90° Swivel neck allows you to aim the beam where you need it for task lighting, Sealed lead acid batteries, rechargeable up to 500 times ,Batteries will continue charge while operating directly from an AC or DC power source so you can be confident that you will always have a light when you need it, Indefinite run time on AC or DC external power with the supplied power cords, Integral D-rings allow attachment of the included shoulder strap, Design allows for the light to be used in confined spaces and rugged terrain, Balanced design and easy setup:          Less than 30 seconds for full deployment          Pole extends to 72”, Cord built into the pole to avoid snags, Stabilization legs provide balance on uneven surfaces,Lead acid batteries provide ballast and stability, 25 lbs (11.3 kg) provides weight stabilization, but is light enough to carry,Packs to a compact size (22”; 55.88cm) for easy stowage,High-impact thermoplastic housing; weatherproof construction,IP67 rated; dust-tight and waterproof to 1 meter for 30 minutes. Designed to resist 40mph wind continuous in all directions with head fully extended,Available in Safety Yellow          CE approved. It shall be of STREAMLIGHT OR NIGHTSEARCHER MAKE .</p>	
58.	<p><b>HEAD LAMP</b>          Div. 1 headlight that provides you with the broadest range of lighting applications, the multi-purpose HAZ-LO provides a good mix of light for both distance and up-close work.          Meets lighting needs for both close-up and distance work          Features center or equivalent type of LEDS and three ultra-bright white 5mm LEDs with two output modes:          3 ultra-bright white 5mm LEDs for intense brightness and longer run time: 30 lumens; 300 candela peak beam intensity; 35m beam distance; runs 24 hours          C4 LED for super-bright light with strong beam distance: 85 lumens; 2,600 candela peak beam intensity; 102m beam distance; runs 8 hours          Push-button switch is easy to use when wearing gloves and is recessed to protect it from inadvertent activation          Powered by 3 “AAA” alkaline batteries (included)          90° tilting head features a robust ratcheting system; prevents neck fatigue          Durable, thermoplastic construction with elastomer over mold</p>	7 No

	<p>IPX4 rated for water resistance; 2 meter impact resistance tested Includes elastic head strap and rubber hard hat strap 5.5 oz. (156 g) approx. Orange or yellow colour, CE approved Streamlight, Pelican, wolf, make or equivalent.</p>	
59.	<p><b>All Rubber Junction Box</b> Feed: 3m wire 5x2.5mm<sup>2</sup> with CEE all-rubber plug 5x16 A, 400 Volt. Outlets: Two all rubber CEE sockets 5x16A, 400 Volt Four 1 phase sockets 16A, 230 Volt All sockets fitted with aaaaa fault current circuit breaker. Weight approx. 5.3 kg.</p>	1 No.
60.	<p><b>Traffic Warning Beacons</b> Gives an amber colored or white light. Switch for continuous or flashing light. Can either be used for repair jobs, or as a warning flasher in traffic accidents. with 5 batteries 1.5 Volt</p>	2 Nos.
61.	<p><b>Traffic Control Cones</b> Soft Plastic traffic cone, red/white/red 510mm high</p>	10 Nos
62.	<p><b>Barrier Ropes for Traffic and Crowd Control</b> Made of Polyethylene, 500m long, with 6 each white and red marker. <b>Metal/Plastic supports, suitable for barrier rope</b> <b>Base plates for barrier support</b></p>	10 Nos. 10 Nos. 5 Nos.
63.	<p><b>SCENE TAPE ROLL 100 M</b> 2" wide with red and white strip (Red color preferably in fluorescent color) with "Danger /Khatra" written in bold letters.</p>	3 Nos.
64.	<p><b>SPECIAL ADJUSTABLE SPANNERS AND WRENCHES SET</b> Solsons spanner model SP622D suitable for 6 to 22 mm Solsons spanner model SP1541D suitable for 15 to 41 mm Solsons pipe wrench model PW1030ALD suitable for 10 to 30 mm dia. Solsons pipe wrench model PW2060ALd suitable for 20 to 60 mm dia. Solsons ratchet wrench model RWMM12D suitable for mm and SAE sizes Solsons ratchet wrench model RWSAE12D suitable for MM &amp; SAE sizes. All the above tools shall be supplied in suitable carrying bag.</p>	1 No.
65.	<p><b>VENTILATOR AND SMOKE EXTRACTOR</b> The unit will be used for extracting smoke, harmful gases and vapours. Also suitable for supplying fresh air to areas filled with harmful gases, i.e. during maintenance works in tanks,. Powered by a 3-Phase electric motor 2.5 kw, 400 V, 50 cycles. The motor is explosion proof according to EEx e II T3, protection class IP54 and can therefore be</p>	1 No.

	<p>used in danger zones 1 and 2. The motor protection switch is also explosion proof. Complete with a 5 core connecting cable 20m long, with explosion proof plug EEx-CEE, 16A, 400 Volt.</p> <p>Air hose connections: 400mm diameter.</p> <p>Volume of air or smoke removed at free discharge: 6000 m<sup>3</sup>/hr.the unit can easily be stored in one of the locker with sliding arrangement.</p> <p>Flexible suction hose 7.5m long, 400mm. approx weight 22kg.- 1 Nos.</p> <p>Flexible delivery hose 20m long, 400mm. approx. weight 16kg.- 1 Nos.</p> <p>Quick action connection clamps. - 2 Nos.</p> <p>The unit shall be of reputed make such as SCORPE or equivalent.</p>	
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## **11 ELECTRICAL SYSTEM :**

- 11.1 All the important electrical circuit shall have separate fuses suitably indicated and shall be grouped into a common fuse box located at an accessible position. The wiring shall be single pole with negative earth.
- 11.2 The suitable size wire shall be selected for different circuits considering the current consumption for that circuit.
- 11.3 The light bar with rotating lights of Orange color with integrated traffic warning system and PA system shall be provide and fitted on the roof of the vehicle. The control amplifier shall be provided in the driver's cabin. The light bar shall be of reputed make such as FEDERAL SIGNAL or equivalent.
- 11.4 The other lights, pump cabin light, locker lights shall be of approved make.
- 11.5 All the controlling switches of lights on dashboard shall be approved make.
- 11.6 Two fog lamps of approved make shall be provided and fitted on front-bumper with controlling switch on dashboard.
- 11.7 Adjustable search light assembly shall be provided at a convenient position on the top of rear body deck with 30 mtrs Cable drum with Rexene cover.
- 11.8 All the lockers shall be provided lamps with light operating automatically when the shutter is opened.

**12. PAINTING:**

- 12.1 The driver cum crew cabin, rear body shall be painted RED color RAL 3000.
- 12.2 The complete external and internal aluminum paneling of rear body shall be painted with primer.
- 12.3 The complete exterior of the vehicle shall be painted with two finish coats of “RED” RAL 3000.
- 12.4 The internal painting of lockers etc. shall be suitable shade.
- 12.5 The Aluminium shutters shall be hard Anodised or powder coated.
- 12.5 The words “TELANGANA STATE DISASTER RESPONSE AND FIRE SERVICES DEPARTMENT” shall be painted on both sides of vehicle in yellow shade.
- 12.6 The “EMBLEM” of the department shall be painted on both sides of vehicle in natural colours at suitable place in consultation with ADDITIONAL DIRECTOR OF TELANGANA FIRE SERVICES.

**13. LADDER GALLOWS:**

- 13.1 The gallows shall be provided to carry aluminum ladder of 10.5 mtrs height.
- 13.2 The design of the gallows shall be such that the ladder can be released without difficulty from a reasonably accessible position.
- 13.3 The Aluminium ladder of 10.5 mtrs extendable height shall be provided confirming to EN standards.
- 13.4 Means shall be provided for locking the ladder when stowed.

**14. ACCESSORIES :**

The following accessories shall be provided.

- 14.1 Six aluminum hooks for keeping the uniform clothing shall be provided in crew compartment.

**15 WIRELESS SET BOX :**



Suitable box for fitting the wireless set shall be provide in driver's cabin at suitable place with 12 volts electrical supply.

**16. STABILITY :**

The stability of the vehicle shall be such that when fully equipped and loaded (but excluding crew) the surface of which are appliances stand is tilted to either side, the point at which overturning occurs shall not be less than 27 degree angle or as recommended by vehicle manufacturer from the horizontal.

**17. WORKMANSHIP AND FINISH :**

The vehicle shall be fabricated, painted etc. with standard workmanship, acceptable to the Chief Fire Officer.

**18. TRAINING**

The successful tenderer has to arrange a training for the personnel of fire Services department in handling, operation and maintenance of the above equipment. The training period shall consist of min. two weeks at Telangana State Fire Service & Civil Defence Training Institute, Vattinagulapally, Ranga Reddy District, Telangana.

The training shall cover operation, handling and maintenance of all the tools equipment and gears listed under this tender.

All the expenses towards the training shall be included in the cost in addition to training material and the cost of tools and equipment and consumable required at the time of training. The training program shall be chalked out in consultation with Director General State Disaster Response and Fire Services Department.

**19. INSTRUCTION BOOKS :**

Instruction books for the guidance of the user including both operation and normal maintenance shall be supplied for all the equipments in English language. The books shall include an item wise and illustrated spare parts list giving reference numbers of all the possibly swearing parts. The workshop manual and spare parts catalogue of chassis shall also be supplied with vehicle preferably with soft copy.

**20. GENERAL REQUIREMENTS :**

20.1 **R.T.O. Requirements :** The vehicle shall conform in all respect of the provisions contained in the M.V. Act 1988 and M.V. Rules 1989 or to any other statutory modifications or replacements thereon from time to time. All the equipment necessary for R.T.O.'s passing shall be provided on vehicles.

20.2 **Guarantee :**

- a) The successful tenderer will have to furnish a maintenance guarantee, undertaking for service, repairs, replacement, maintenance etc. against any defects in the material used, for 24 calendar months commencing from the date of acceptance of the appliance
- b) The tenderer shall guarantee the supply of spare parts and service for minimum period of 15 years from the date of supply of vehicles.

**21. DELIVERY :**

21.1 Free delivery of the vehicle shall be given at Telangana State Fire Service & Civil Defence Training Institute, Vattinagulapally, Ranga Reddy District, Telangana. Delivery period should be specifically mentioned in the tender.

21.2 The responsibility of vehicle will be upon the tenderer while vehicle is being transported and when under fabrication work.

**22. SPECIFICATION AND DRAWINGS :**

**Full detailed drawings of the body showing the body construction, lockers, placement of various tools etc. shall be submitted, without which tender will not be considered.** The successful tenderer will have to submit three copies of detailed drawing showing detailed dimensions, stowage arrangement fittings, etc. which shall be got approved from Director General State Disaster Response and Fire Services, Telangana, Hyderabad before commencement of fabrication work.

The tender bids without the detailed drawings will be out rightly rejected. The drawings will be scrutinized by the Technical committee.

**23. WORKMANSHIP AND MATERIAL:**

- 23.1 Workmanship executed shall be of the highest order. All rivets and bolt holes shall have a coat of approved paint on both surface before riveting or bolting or welding. All steel screws, bolts, nuts, rivets etc. shall be zinc coated or shall have rust proof coats by recognized process.
- 23.2 The roof joints shall be subjected to rigid water test at the tenderer's working in the presence of the Director General State Disaster Response and Fire Services. All the directions and instructions (oral or written) on all points related to the fabrication shall be executed whenever given by the Chief Fire Officer for quality workmanship with quality.
- 24.3 All the material to be used in the fabrication of the body work shall be of reputed make and good quality or approved make and type. All equipment and material shall comply with the requirements of the latest relevant standards. The structure of vehicle shall be rattle free and noiseless while in motion.

**24. INSPECTION :**

The vehicle will be subjected to inspection and testing prior to dispatch of vehicle at the factory premises of manufacturer by the three officials of Fire Services Department as nominated by Director General State Disaster Response and Fire Services Department. The inspection and testing will also include all the tools and equipments supplied with vehicle for their performance test. The cost towards inspection will be borne by the contractor which includes traveling expenses, accommodation charges etc. The inspection period will be of one week.

Inspection shall also be conducted by the Committee of Officers nominated by the Director General, Telanagana State Disaster Response and Fire Services Department at Telangana State Fire a Service & Defence Training Institute, Hyderabad on receipt of the vehicle and final acceptance of the vehicle will be on the satisfactory recommendation of the Inspection Committee.

All the tools and facilities required for the inspection shall be arranged by the contractor free of cost.