

**TENDER
FOR THE SUPPLY OF
EQUIPMENTS FOR
DISASTER MANAGEMENT
TO HARYANA POLICE**



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NOTE

- Bidders are requested to ensure that demand drafts for both EMD and NON REFUNDABLE TENDER COST must be made in the name of “HARYANA STATE ELECTRONICS DEVELOPMENT CORPORATION LIMITED” payable at CHANDIGARH, failing which the BID shall be summarily rejected.
- Bidders are required to check link “Tender” on HARTRON WEBSITE i.e. www.hartron.org from time to time for any updates/corrigendum pertaining to the said tender.

Section I

Introduction

1) Scope of work:

Haryana State Electronics Development Corporation Ltd. (HARTRON), a State Govt. undertaking on behalf of Haryana Police invites sealed bids from the companies having requisite experience for the supply of equipments for Disaster Management in accordance to the technical specification given in section 3 of this tender document :-.

The quantity of various equipments for Disaster Management as specified in section 3 of this tender document is tentative and can increase/decrease as per the requirement of the Haryana Police.

Note:- Equipments are required to be delivered to the O/o Inspector General of Police Haryana Armed Police Madhuban, Karnal.

2) Eligibility Criteria for Bidders:

2.1 Bidders General Qualifications

- i) This tender document is open to all firms/companies both from within and outside India, who are eligible to do business in India under relevant Indian laws as in force at the time of bidding.
- ii) Firm/company declared by Haryana Govt., including HARTRON to be ineligible to participate for corrupt, fraudulent or any other unethical business practices shall not be eligible during the period for which such ineligibility is declared.
- iii) Breach of general or specific instructions for bidding, general and special conditions of contract may attract a proceeding to declare a firm/company ineligible for a certain period or certain number of consecutive tender calls

2.2. Minimum Eligibility Criteria

- i) **The bidding** company must be a profit making company for the last two consecutive years i.e 2009-10 & 2010-11. (Audited balance sheets to be enclosed) having a minimum turn over of Rs. One crore each in the last two financial years.
- ii) The bidding company must have supplied similar type of Disaster Management Equipments as mentioned above at (1) to at least three customers, preferably to State Police Department /paramilitary forces/law enforcement agencies of Govt. of India or similar organizations. The copies of such completed purchase orders along with satisfactory reports from these customers are required to be enclosed with the pre qualification cum technical bid.
- iii) The bidding company should have support centers/after sales service centers in Haryana/Chandigarh and Delhi/Gurgaon. In case company does not have support center/after sales service center in Haryana/Chandigarh and Delhi/Gurgaon, it should enclose an undertaking with the bid to set up the support centers within a month in case the contract is awarded to it and the same should be functional till the period of warranty or AMC which ever is later.
- iv) The bidding company must certify that the Technology/equipment quoted is State of the art and latest and the original **vendor shall provide the technology support for at least five years.**

3) Schedule of Tender:

a. Sale of Bid Document

- i) A complete set of Tender document can be purchased by the bidders on submission of written application to the MD, HARTRON and upon payment of a non-refundable fee of Rs. 1000/- (Rupees Five Hundred only) in cash or through Demand Draft from a scheduled bank, drawn in favour of "**Haryana State Electronics Development Corporation Limited**", payable at Chandigarh. The document can also be downloaded from Hartron Web site i.e. www.hartron.org. Such bidders are required to submit the tender fee of Rs. 1000/- along with the EMD as specified at Sr.No. 4 of section 1 of this tender.
- ii) Tender document will be sold on all working days starting from 15.07.11 till 01.08.11. The tender document shall be sold between 1.30AM and 4.00PM or alternatively the bidders can download the same as mentioned at clause no 3 a i) above.
- iii) This Tender document is non-transferable.

b. Submission of Bids

Sealed offers prepared in accordance with the procedures enumerated at Sr. No. 8 under Section I should be submitted to the office of Managing Director, HARTRON, SCO 111-113, Sector-17 B, Chandigarh on or before the last date i.e. upto 2:30 pm on 03.08.11.

c. Opening of Pre-qualification cum Technical Bids

At 3:00 pm on 03.08.11
Haryana State Electronics Development Corporation Ltd.
SCO 111-113, Sector-17 B, Chandigarh.
The bidders or their authorized representatives may be present if they so desire.

d. Advice to the Bidders

Bidders are advised to study this tender document carefully before participating. It shall be deemed that submission of Bid by the bidder have been done after their careful study and examination of the tender Document with full understanding to its implications.

4) Earnest Money Deposit (EMD)

All bidders irrespective of they being registered with the HARTRON or with Police Department, Haryana are required to deposit EARNEST MONEY as given below.

The offer received without required Earnest Money shall be rejected without further reference.

All bids must be accompanied by an earnest money of Rs. 2.00 lacs in the form of Demand draft from a scheduled bank, in favour of '**Haryana State Electronics Development Corporation Limited**' payable at Chandigarh.

No interest shall be payable by Hartron on the Earnest Money deposited by Bidder.

5) Period of Validity of Offer

Offer should remain valid for 180 days after the date of opening of the Pre qualification cum technical bid as prescribed by the Corporation. If the validity of the

offer is extended, the validity of EMD will also have to be extended. An offer valid for a shorter period may be rejected by Hartron as non-responsive.

6) Language of the Bid Proposal

The Language of the bid proposal as prepared by the Bidders shall be English and all further correspondence and documents related to the bid proposal exchange with the corporation shall be English.

7) Amendment of Tender Document

The amendments in any of the Terms and Conditions of this Tender Document will be notified in writing or by fax or by email to all prospective Bidders who have purchased the Tender Documents and will be binding on them.

8) Procedure for Submission of Bid

The Bids should be submitted in two parts i.e. Prequalification cum Technical and commercial bid.

Pre-Qualification cum Technical bid: - The pre qualification cum technical bid should be put in a **single sealed cover super scribing the wordings "Pre-Qualification cum Technical Bid"** for Tender no: **HARTRON:PROJ./Disaster Management/2011-12/08.**

Please note that prices should not be indicated in the Pre-Qualification cum Technical Bid and if price found quoted, the bid will be summarily rejected.

Commercial Bid:- Commercial Bid should be put in a single sealed cover super scribing the wordings **"Commercial Bid"** for Tender no: **HARTRON:PROJ./Disaster Management/2011-12/08.**

Commercial Bid should only indicate prices filled as per Annexure 1 F and 1 G provided in the Tender Document.

The **Pre qualification cum Technical Bid Cover and Commercial Bid Cover** prepared as above are to be kept in a **single sealed cover** superscribed with the wordings **"Tender For Supply of equipments for Disaster Management."** Tender Number, Due Date and the wordings **"DO NOT OPEN BEFORE 3.00 pm on 03.08.11."**

Only authorized person should sign the tender/quotation. His name, designation and address should be given in capital letters.

In the event of bid being submitted by a firm, it must be signed separately by each member thereof, or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorizing him to do so, or in the case of a Company, the quotations should be executed in the manner laid down in the said Company's Articles of Association. The signatures on the quotations shall be deemed to be authorized signatures.

All the columns of the quotation form enclosed at Annexure 1A & 1G of tender document shall be duly, properly and exhaustively filled in. The rates and units shall not be overwritten. Quotations shall always be both in the figures and words. The

words "No quotations" should be written across any or all of the items in the schedule for which a tenderer does not wish to tender.

Any omission in filling the columns of "units" and "rate" shall altogether debar a quotation for being considered.

No tender will be considered unless and until all the documents are properly signed and all corrections must also be signed by the tenderers.

The offers will be regarded as constituting an offer or offers open to acceptance in whole or in part or parts at the discretion of Managing Director, HARTRON.

Late Bid

The cover should also indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "Late".

Bid Prices

- a) The Bidder on the Price Schedule shall indicate the unit prices of each item and total bid prices of the items to be supplied under the Contract.
- b) Prices indicated on the Price Schedule shall be entered separately in the following manner:
 - i. The price of the goods, quoted (ex-works, ex-factory, ex-showroom, ex-warehouse, or off-the-shelf, as applicable), including all duties and sales and other taxes already paid or payable.
- c) Fixed Price quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account. A bid submitted with an variable price quotation will be treated as non-responsive and rejected.

9) Withdrawal of Bid proposal

No bid proposal or any part of it will be permitted to be withdrawn subsequent to the deadline for the submission of the bids.

10) Contents of the Bid

The bids prepared by the bidder shall comprise the following components -

Pre-Qualification cum Technical bid comprising the following are to be filled as per the format provided in tender:-

- I) Duly signed original tender document on each page
- II) Draft for Earnest money
- III) Bidder must be in the business for the last two years for supply of equipments for Disaster Management..
- IV) Audited balance sheets for the last two years i.e. 2009-10 and 2010-11
- V) Manufacturer warranty Annexure-1A
- VI) Bidder's particulars Annexure-1B, Annexure-1C.
- VII) Technical detail Annexure-1D
- VIII) After sales service certificate Annexure 1E
- IX) Customer satisfaction report from at least three customers for successfully supplying them with similar Disaster Management equipments as specified in clause (iii) of 2.2 Section I.
- X) Copies of the minimum three completed supply orders for equipments for Disaster Management preferably by State Police department/law enforcing agencies of Govt. of India.

- XI) An undertaking to comply with the warranty as specified at clause 20 under section I.
- XII) Bidder is to specify the brand name, make and technical specification of all the equipment and accessories quoted under this tender.
- XIII) All the annexure enclosed with this document must be duly filled up and signed.

Commercial Bid: - Commercial bid comprising of bid letter and proforma must be filled in accordance to the proforma given at Annexure-1F,annexure 1F1 and Annexure 1G of this document.

11) Evaluation of Bids:

An evaluation committee consisting of officials from HARTRON, Haryana Police, Haryana will evaluate the bids of all the bidders both technically and commercially as per the following schedule/pattern.

- i) Only Pre-qualification cum Technical bid shall be opened on the day of opening of the bids at 3:00 P.M. on 03.08.11 (see 3.0) in the presence of bidders representatives who intend to attend at their cost. The bidders' representatives who are present shall sign a register evidencing their attendance.
- ii) Conditional bids shall be summarily rejected.
- iii) The pre qualification cum Technical bid document shall be evaluated as per the following:-
 - a) The documentation furnished by the bidder will be examined to see whether the qualifications and specific requirements mentioned in this document are fulfilled.
 - b) The bidders will also be required to make a presentation/demonstration of the equipment, if required any, to the evaluation committee.
 - c) **Bidder may be required to demonstrate/showcase the equipments for the evaluation to Haryana police and Hartron.**
 - d) The Commercial Bid of those bidders who satisfy the parameters laid out in the pre qualification cum technical bid will only be opened. The Place, date and time of the opening of the commercial bid shall be notified separately.

12) Criteria for Disqualification

Hartron may adopt such criteria for disqualification of a Bidder as Hartron may consider appropriate. Such criteria may include, without limitation, the following:-

- a) Failure by any Bidder(s) to provide all of the information required in the Bid Proposal or any additional information as requested by the corporation including any supporting document;
- b) Non Receipt of Bid Proposal on or before the last date and time specified in this document;
- c) Material inconsistencies in the information submitted;
- d) Misrepresentations in the Bid Proposal or any supporting documentation;
- e) Non – payment of Earnest Money deposit and without non refundable tender cost in case the tender has been downloaded from our web site.
- f) Incomplete or conditional bids that do not fulfill all or any of the conditions specified in this tender document **and bids not quoted as per the tender document.**
- g) Use of unfair means

- h) Bids found in unsealed cover, Unsigned bids; Bids signed by unauthorized person and unsigned corrections in the bids.
- i) Offer with price variation clause.
- j) The bid shall contain no erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be authenticated by the person or persons signing the bid.

13) Right to negotiate

- a. The Hartron and Haryana Police jointly or the evaluation committee reserves the right for negotiation with the bidders as per the prevailing purchase procedures/policy of the State.
- b. The negotiation shall be carried out with the technically qualified lowest bidder by the Hartron and Haryana Police, Jointly/any other competent authority/high power purchase committee of the Haryana Govt. as per the procedure/policy of the Haryana Govt. prevailing at that point of time.
- c. The tenderer also reserves the right to chose part or whole of the technical acceptably bids at individual costs quoted in the commercial bids.

14) Acceptance of the Bid

HARTRON do not bind themselves to accept the lowest or any bid and reserves the right to:

- i) Reject any or all bids with/without any reason.
- ii) Accept/prefer any bid or Bidder without assigning any reason and also reduce or extend the period of contract without assigning any reason.

15) Cross Checking

HARTRON on behalf of Police Department, Haryana reserves the right to contact and verify Bidder's information, references and data submitted in the Bid proposal without further reference to the Bidder.

16) Absence of Specifications

The absence of specifications details regarding any equipment to be supplied under this project implies that best general practices will prevail and that first quality material and workmanship will be applied as per the discretion of HARTRON. Certification standards, when available, for the to-be-installed equipments and materials, will prevail.

17) Cost involved in Tendering

The Bidder shall bear all costs associated with the preparation and submission of its Bid, including the cost of presentation for the purposes of clarification of the bid, if so desired by the HARTRON, HARTRON will in no case be responsible or liable for those costs.

18) Earnest Money Refund

- i) The draft of Earnest Money to the bidder(s), who fail(s) to qualify for the Commercial Bid, will be returned back by HARTRON to the authorized representative of the Bidder against a proper receipt or will be sent by the

registered post at the mailing address of the Bidder as specified in the bid within eight weeks after completion of Technical Bid evaluation.

- ii) The draft of Earnest Money to the bidder(s), who qualify(s) for the Commercial Bid, but do not get the order for the project will be returned back by HARTRON to the authorized representative of the Bidder against a proper receipt or will be sent by the registered post at the mailing address of the Bidder as specified in the bid within one month after the release of purchase order by HARTRON on the successful Bidder.

19) Warranty

- The Vendor will also be responsible for providing comprehensive on site warranty as per the Performa attached in this document
- ii. The said warranty shall be deemed to commence from the date of issue of the letter for successful completion of the supplies by the O/o DGP, Haryana as the case may be.
- iii. The warranty shall cover repair/replacement of all defective parts, if any, with the same or equivalent make for any part removed. Maintenance will be provided at site. Limited/carry in warranty will not be accepted. The supplier will provide after sale service during the warranty period from Chandigarh or from nearest place to installation. The supplier will attend the complaint within 24 hours and not beyond 48 hours, failing which the following penalties shall be imposed.

S.No.	Duration	Penalty
1.	Upto 48 hours from the logging of the complaint with the vendor	Nil
2.	Beyond 48 hours upto 15 days from the logging of the complaint with the vendor	0.2% per day of the total value of that equipment.
3.	Beyond 15 days of the logging of the complaint till rectification of the fault.	0.3% per day of the total value of that equipment.

The penalty, if any shall be deducted from the bank guarantee/EMD/from the invoices pending with HARTRON. In case the vendor does not attend to the complaints during the warranty period, the bank guarantees submitted by the vendor shall be en-cashed.

- iv. After the warranty period is over successfully, the indenting department has the option either to award the AMC with spares as per the Performa attached in this document to the vendor at the rates negotiated at the time of award of the contract or may give it to any third party.
- v. Vendor should have satisfactory arrangement to receive complaints during the period of warranty as well as AMC as the case may be.

20) Release of Order

After Acceptance of a Bid Proposal either by HARTRON or by High Powered Purchase Committee of Haryana Govt., as the case may be, HARTRON on behalf of O/o DGP, Haryana will release the formal order in favour of the successful bidder.

21) Right to vary Quantities at the time of Award

The HARTRON reserves the right to vary the quantities and/ or split the order among the selected bidders and fix a delivery schedule. HARTRON also reserves the right to order additional quantities at a price not more than the price accepted after this tender for a period of one year from the date of order placement.

22) Right to accept any Bid and to reject any or all bids

The HARTRON reserve the right to accept any bid, and to annul the Tender process and reject all or any bids at any time without assigning reason without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the HARTRON's such action.

23) Changes in Technical Specifications

HARTRON reserves the right in consultation with the O/o DGP Haryana to effect changes in the Technical Specifications. Any such change will be notified in writing to all those who have purchased this Document. In case, any of the bidder have submitted the bids before receiving the notification of changes, will be allowed to submit a revised Pre-Qualification cum Technical and Commercial bid.

24) Additional Information/Clarification

HARTRON reserves the right to ask for any additional information and samples, as it may deem necessary to evaluate the Bid Proposal. Bidders that fail to submit additional information or clarification as sought by HARTRON within one (1) week of the receipt of HARTRON's letter requesting for such additional information and/or clarification, their bids will be evaluated based on the information furnished along with the Bid Proposal.

The bidder is expected to examine all the instructions, forms, terms & conditions and specifications in the indenting document. Further to furnish all the information required by the indenting document or submission of a bid in every respect will be at bidders risk and may result in rejection of the bid. In the event of tender being accepted the bid will be converted into contract which will be governed by the conditions specified under section II mentioned at pages 13 to 19.

Read and accepted

Signature on behalf of M/s-----

Section II

Terms and Conditions of ORDER

2.1 Prices

1. The total F.O.R destination prices mentioned in purchase order are inclusive of current excise duty, freight, insurance, Sales Tax / VAT etc. Further if there is any change in the excise duty by Govt. of India then the same shall be applicable on presentation of the proof. No change in any other duties, including Sales Tax/VAT, Custom Duties, affect due to devaluation of Rupees shall be entertained.
2. The prices quoted for the equipments for Disaster Management shall be firm throughout the period of contract and shall not be subject to any upward modification whatsoever.

2.2 Transit Insurance

The supplier has the responsibility to get the transit insurance

2.3 Change in the Minimum Specified Work

- i) In the event of withdrawal or discontinuance of any item or items and consequent ceasing of or reduction in demand the vendor shall not be entitled to any compensation. HARTRON will however, make all reasonable endeavors to give warning of any impending complete withdrawal or of any reduction seriously affecting quantities likely to be required under the order placed as specified in section 1(20).
- ii) If during the currency of execution of order, the specifications of any item or items to be supplied become obsolete, the vendor shall continue to comply with demands for the supply of the said item or items in accordance with the new specifications at rate not higher than already agreed rates at the time of contract, and the vendor will not be entitled for any compensation also.

2.4 Changes in order

Other than the changes, which subject to Section 2.3 above, no modification of the terms and conditions of the order shall be made except by written amendments signed by the both vendor and the HARTRON.

2.5 Delivery Period

- i) Supply, of the disaster management equipments as mentioned in section 1(1) shall be completed within one month from the date of placement of the order by Hartron.
- ii) The supply shall actually be deemed to have been complete on or before the date of completion of the supply of all the disaster management equipments.
- iii) If the vendor fails to deliver the disaster management equipments as specified in the technical section III of this document to Haryana police within the delivery period prescribed at part (i) of Section 2.5, the delayed delivery will be subject to 2% penalty per week recoverable on the total value of the order. In case of non payment by the vendor, recovery will be made from his bills or amount of Earnest Money with the HARTRON provided that:

No recovery of penalty will be made, if HARTRON and Haryana Police accepts the delayed delivery of the fully fitted emergency vehicle by extending the delivery period upto 1 week by recording in writing that the exceptional circumstances were beyond the control of the vendor and there was no loss to the indenting Department.

Where the delay on the part of delivery of the disaster management equipments is more than 2 weeks, the matter of extension of delivery period will be referred by the Indenting Officer to the Committee appointed by MD/HARTRON with a certificate that there are genuine reasons for delay on the part of vendor and that no loss will result to Police Department, Haryana as the case may be in case extension delivery period is allowed. In case the delivery period is extended, no penalty for delivery made during the extended period is recovered from the vendor.

On the failure of the supplier to make supply within the extended period, HARTRON on behalf of and in consultation with Police Department, Haryana as the case may be can affect the Risk purchase. The said purchase at the cost of vendor will be made and delivered by the MD, HARTRON within 6 months of the consent for risk purchase given by Police Department, Haryana to HARTRON by inviting short-term quotations from the registered and other empanelled vendors. And the purchase will be performed in consultation with Police Department, Haryana. The excess cost thus incurred will be recovered from the vendor from his pending bills or Earnest Money or through court of law. This procedure will be adopted after serving a registered notice to the vendor to seek his explanations within 15 days and if the vendor fails to reply or is unable to explain up to the satisfaction of HARTRON as well as the Police Department, Haryana.

- iv) The unexcused delay in the performance of delivery or non supply of items by the vendor in the prescribed period may render him liable to any or all of the following penalties:-
 - a) The penalty as mentioned at part (iii) of Section 2.5 above.
 - b) Forfeiture of earnest money.
 - c) Imposition of liquidated damage and termination of the contract as default.
 - d) The vendor may be Black listed or debarred for the period of 3 years for participating in any tender released by Haryana Govt.
 - e) HARTRON on behalf of and in consultation with Police Department, Haryana can make Risk Purchase as mentioned at Sub-part 'c' of Clause (iii) of Section 2.5.

2.6 Warranty Period and Maintenance Services

- i) The vendor will be responsible for the comprehensive maintenance of all supplied equipments and related accessories free of charge during the warranty period as specified at Clause No. 19 of Section 1.
- ii) It shall be the responsibility of the vendor to keep the equipment in good working condition the necessary repairs/maintenance of equipment on monthly basis during the warranty period, otherwise it shall be treated as a non performance on the part of the vendor for which bank guarantee (equivalent to the 10% of the balance payment) may be forfeited and firm may be black listed for future business. The vendor shall provide free replacement of equivalent part as and when required.

2.7 Price Fall

- i) The prices charged for the Items/Services supplied under the contract by the vendor shall in no event exceed the lowest price at which the vendor sells the Goods or offers to sell Items of identical description to any persons/organizations including the HARTRON, Department of the Central or State Government or any Statutory undertaking of the central or State Government, as the case may be, till the signing of the contract.
- ii) If, at any time during the said period the vendor reduces the sale price, sells, or offers to sell such goods to any person/ organization including HARTRON or any Department/ Organization of State or Central Government or any statutory Undertaking of the Central or State Government as the case may be, at a price lower than the price chargeable under the contract, the Vendor shall forthwith notify such reduction, or sale or offer to sell to the purchaser and the price payable under the contract for the supply of material after the date of coming into force of such reduction or sale or offer to sell shall stand correspondingly reduced.

2.8 Inspection/Tests of the Items/Equipments

- i) The inspection of the disaster management equipments shall be carried out by the O/o DGP, Haryana and shall have the power to inspect/verify the items supplied as per the order before, during or after installation and to reject the same or any part or portion, if he or they be not satisfied that the same is not at par or according to the specifications submitted by the vendor. All the disaster management equipment and their related accessories shall be put to the operational test to see the functionality of these equipments.
- ii) The inspection of the stores to be supplied under this order shall be carried out at Destination or any other place to be specified in the purchase order.
- iii) The vendor shall not be paid for supplies rejected as specified at Clause No. 2.10 of Section 2.
- iv) Vendor shall neither claim nor be entitled to payment for any damage that rejected supplies may suffer from any harm whatsoever incidental to a full and proper examination and test of such supplies.
- v) HARTRON, Haryana Police Department shall be under no liability whatsoever for rejected items and the same will be at the vendor's risk.
- vi) Rejected supplies shall be removed by the vendor at his own expense within 10 days after notice has been issued to him of such rejection, and failing such removal of rejected goods will be at vendor's risk and HARTRON on behalf of and in consultation with Haryana Police Department may charge the vendor the market rent for the space occupied by such rejected goods-
- vii) Super inspection of already inspected disaster management equipments may be carried out at the discretion of the Haryana Police Department after installation, by such officer as may be authorized to do so. The provisions of conditions mentioned at part (i) of Section 2.10 will also apply to the Super Inspection.

2.9 PERFORMANCE BANK GUARANTEE

The successful bidder shall submit a performance bank guarantee in favour of Managing Director Hartron equivalent to the 10% of the total purchase order

value, which will be kept valid for the entire period of three years which ever is later. The said bank guarantee shall be submitted within ten days from the date of the issue of purchase order must be valid for one year in first instance from the date of issue the purchase order and shall be renewed till the completion of the AMC period. If the successful bidder fails to attend the complaints within the scheduled time frame mentioned in clause no (iii) of 19 of section 1, the penalties so accrued shall be deducted from the bank guarantee and in this case the bank guarantee shall be en-cashed and the balance shall be released after the deduction of the accrued penalty on non-performance.

2.10 Invoicing

- i. With every dispatch of goods or materials in the order, the vendor will prepare invoices in triplicate in the name of **O/o DGP Haryana as the case may be (the same shall be clearly defined in the purchase order)**.
- ii. Invoice along with Delivery Challan in duplicate are to be sent by the vendor to the consignee. The duplicate of Delivery Challan to be returned by the respective indenting officers with the quantities or numbers received duly noted and signed thereon to the vendor.
- iii. Second copy to HARTRON along with the duly signed Delivery Challan received by the vendor from the respective intending officers for further necessary action regarding payments, etc. The payment shall be released by HARTRON after the inspection/verification of the materials in accordance to the clause 2.8 above.
- iv. The third copy to be sent by the vendor to the O/o DGP Haryana for records.

2.11 Condition of Items Supplied

- i) This is subject to the condition that the materials are securely packed by the vendor in sound containers and the consignment is accepted by the carriers without any adverse remarks as to the packing or the condition of the containers. In case of any adverse remarks, the responsibility for the losses in transit will rest with the vendor.
- ii) The vendor will not be entitled to charge or be paid for supplies broken, lost or damaged in transit. Such supplies shall be removed by the vendor at his own expense. The decision in this regard taken by HARTRON in consultation with Haryana Police Department shall be binding and final.

2.12 Payment Schedule

- No payment shall be made in advance for any supplies made under this order.
- 90% of payment will be released after inspection and delivery of the all the equipments for disaster management.
- The balance 10% payment will be released after one month from the date of acceptance of the stores by the indenting department and submission of Bank Guarantee equivalent to the balance 10% payment, which will be released after expiry of warranty period.

2.13 Sub-Contracting of the order

The contractor shall not assign or sublet contract without written approval of the officer sanctioning the contract.

2.14 Change in Company Structure

The Membership/Board structure of the Bidder, if changed after the Bidder is selected, the bidder shall accordingly inform HARTRON, Haryana Police Department of such changes.

2.15 Compliance with Laws, Permits

The successful Vendor shall comply with all local, state, and Federal rules, regulations, ordinances, codes, and laws relating to the work or the conduct thereof and shall secure and pay for any permits and licenses necessary for the execution of the work and vender shall be responsible for the same.

2.16 Forfeiture of Earnest Money

- i) If the Bidder withdraws his bid before the expiry of validity or after the acceptance of the bid, the Earnest Money Deposited by the bidder will be forfeited.
- ii) If the vendor fails to comply with any of the terms, conditions or requirement of order and the technical specifications as indicated at Section 3 of the tender document. The Earnest Money deposited by the Bidder will be forfeited.
- iii) In case vendor fails to comply with the delivery period as specified in the Section 2.5 the earnest money deposit will be forfeited.

2.17 Cancellation of Order

- i) In the event of the vendor failing duly and properly to fulfill the order or committing breach of any of the terms and conditions of this order or repeatedly supplying goods liable to rejection hereunder or failing, declining, neglecting or delay to comply with any demand or requisition or otherwise not executing the same in accordance with terms of this contract or if the bidder or his agent or servants being guilty of fraud in respect of this contract or any of his partners or representatives found directing, giving, promising or offering any bribes, gratuity, gift loan, perquisite, reward or advantage pecuniary or otherwise to any person in the employment of Government in any way relating to such officers or person or persons, officer or employment or if the bidder or any of his partners become insolvent or apply for relief as insolvent debtor or commence any insolvency proceedings or make any composition with his/their creditors or attempts to do so, then without prejudice to HARTRON's as well as Haryana Police Department rights and remedies otherwise, HARTRON on behalf of and in consultation with Haryana Police Department, Haryana shall be entitled to cancellation of order forth with and to blacklist the bidder and may claim back all or part of the money already paid to the bidder.
- ii) If during the currency of execution of order, the Vendor becomes bankrupt or otherwise insolvent or is likely to become insolvent or bankrupt, HARTRON on behalf of and in consultation with Haryana Police Department may, at any time, cancel the order by giving written notice to the Vendor. Notwithstanding the above, such termination will not prejudice or affect any right of action or

remedy which has accrued or will accrue thereafter to HARTRON, Haryana Police Department.

2.18 Consequences of Cancellation of Order

- i) Upon cancellation of order, the Vendor shall deliver or cause to be delivered all works carried out for and on account of the indenting department and all data and records required from or on account of the Haryana Police Department.
- ii) Cancellation of order shall not affect any continuing obligations of the Vendor under the Contract Agreement, which, either expressly or by necessary implication, are to survive its expiry or termination such as confidentiality obligations of the Vendor.
- iii) Upon cancellation of order for any reason whatsoever, the Vendor shall return to the Haryana Police Department, any and all confidential information and any other property of the Haryana Police Department.
- iv) HARTRON on behalf of and in consultation with Haryana Police Department may procure services similar to those undelivered, upon such terms and in such manner, as it deems appropriate, at the risk and responsibility of the Vendor and the vendor shall be liable for any additional costs for such services.
- v) The Vendor shall continue the performance of the order to the extent not terminated.
- vi) Upon cancellation of order for whatsoever, HARTRON on behalf of and in consultation with Haryana Police Department shall have the right to perform the following penalties:-
 - a) Forfeiture of earnest money
 - b) Imposition of liquidated damage.
 - c) Black listing of the Vendor

2.19 Un-avoidable Circumstances

If the Vendor is prevented from performing any of its services under the Contract Agreement due to causes such as fire, Acts of God, or elements, embargoes, governmental orders, the Vendor shall be excused from the non-performance of its obligations during the period that such cause continues to exist, but if such cause continues to exist and prevents performance by the Vendor of its obligations for more than 60 days, HARTRON may terminate the Contract Agreement in whole or part thereof effective upon delivery to the Vendor of written notice of such termination. Upon termination of the Contract Agreement under this Section, the provisions regarding consequences of cancellation set out in Section 2.17 shall apply.

2.20 Arbitration

If any question, difference or objection whatsoever shall arise, in any way connected with or arising out of this contract or the meaning or operation of any part thereof or the rights, duties or liabilities of either party than save in so far as the decision of any such matter is here in before provided for and has been so decided every such matter including whether its decision has been otherwise provided for and/or whether it has been finally decided accordingly in whether the contract should be terminated or has been rightly terminated in whole or part and as regards the rights and obligations of the parties as the result of such termination, shall be referred for arbitration to the DGP Haryana Police or any other officer/official appointed by him and his decision shall be final and binding. And where the matter involves a claim of the amount if any awarded in such arbitration shall be recoverable in respect of the matters so referred. All disputes will be settled within the jurisdiction of Chandigarh.

2.21 Acquaintance with All Conditions

The bidder acknowledges that he has made himself fully acquainted with all the conditions and circumstances under which the supplies required under the contract will have to be made or furnished and with all the terms, clauses, conditions, specifications and other details of the contract and the bidder shall not plead ignorance of any of those as excuse in case of complaint against or on rejection of supplies tendered by him or with a view either to asking for encashment of any rates agreed to in the contract or to evading any of his obligations under the contract.

Section III

3. Technical Specifications

The Technical Specifications specified in this section are minimum suggestive Technical Specifications. The vendor will supply of the below mentioned equipment that will best accommodate and meet the present and future requirements of Haryana Police Department. Bids not meeting these minimum Technical Specifications are liable to be rejected. In case the equipment quoted exceeds/differ the Tender Technical Specifications, the same should be clearly defined by the bidder.

3.1 BILL OF MATERIAL

Sr. No.	Name of the item	Qty.
1.	Fire Proximity suit	2
2.	Fire entry suit	3
3.	Oxygen Concentrator	1
4.	Nebulizer	4
5.	ECG machine with analyser	2
6.	PORTABLE ULTRASOUND MACHINE	1
7.	AUTOMATIC BLOOD ANALYSER	1
8.	Under Water Video Camera with accessories	1
9.	Walkie Talkie Sets/ Portable Radio Set	33
10.	Base Stations 25 watts'	4
11.	Victim Location Equipment and Breaching System	1
12.	Explosive Meter	2
13.	Satellite Phones	4
14.	Multi Gas Detector	1
15.	Portable Defibrillator with recorder	1
16.	Multi Para Meter Monitor	1
17.	Personal Diving Kit (Diving Suit, Breathing Apparatus, Weight Belt, Gloves, Diving Fins	2
18.	Under Water Communications set	1
19.	High Pressure Breathing Air Compressors	1
20.	Thermal Imaging Camera	1
21.	Digital Video Camera	1
22.	Leak Tester for testing respiratory equipment	1

23.	Breathing apparatus set with spare cylinders	6
24.	Life Detector	1
25.	Deluxe OB Mannequin	2

3.2 Detailed specifications

The bidder is required to shall furnish a clause-by-clause compliance statement for each item as mentioned under this section. In case there is and deviation the same should be clearly brought out in the offer.

3.2.1 Fire Proximity suit

a. SPECIFICATION OF FIRE PROXIMITY SUIT/APPROACH SUIT SCOPE

This standard lays down the recruitments regarding performance of materials and design and testing of fire proximity/ Approach suit used for the following class of fires.

i. **Class I**

Radiant heat and occasional flame lick, for example inside Klin, rescue work and knockdown fire fighting operation in proximity to flame.

ii. **Class II**

Radiant heat, for example close approach to fire and furnaces.

iii. **Class III**

Radiant heat and pockets of flames, for example inside klin rescue work and knockdown fire fighting operation in proximity to flame.

b. General requirements

- The fire proximity and approach suit shall be of such design that it allow the wearer to reach the proximity of at least the proximity of at least 60cm, near to the flame for fire fighting rescue and other lied work without getting any adverse effect of heat.
- The suit shall allow the wearer to pose himself and withstand point sources approximately at 900 degree Celsius for 4-5 minutes, 700 degree Celsius of 15 minutes and 500 degree Celsius for 5 hours without adversely affecting the wearer.
- It shall additionally withstand boiling water, molten metal and have impermeable and resistance capabilities to acids/alkalis including withstanding

upto 1500 degree Celsius momentary to suit shall not soften, melt, drib, combust and support flame while subjected the suit to temperatures indicated above.

- The suit shall be designed to have a back notch for housing a breathing apparatus underneath and the headgear shall be designed to accommodate the face piece overall, hear gear hand gear and footwear respectively.
- All individual garments of the suit shall have the same heat resistance capabilities as referred it here in above.

c. Material

- The fabrication of fire proximity/approach shall be made out of nonflammable, lightweight, and non toxic, flexible and heat reflecting material the fire suit shall be of impermeable aluminized coated oxidized manotox carbon fiber and shall have thermal insulation lining capable of resisting high temperature not less than 900 degree Celsius the material having asbestos properties in it shall be used.
- Stitching threads shall be of best equality, stainless steel. The material to be used shall have an uniformed maximum weight of 500gm per sq/mt.
- Necessary flame retardant treatment shall be given to the fiber used for fabrication of fire proximity/approach suit. The treatment shall be such that while the wearer has retreated from the fire zone the fiber shall not disintegrate its properties following the exposure to flame.
- The material shall be durable and shall retain 1st original strength in position after intensive use in fire.
- The material shall be of such nature that the garment could be used repeatedly and cleaning and maintenance of garment shall be easy.
- The whole clothing shall contribute to the thermal resistance. The thermal resistance of the clothing depends on thickness, density, moisture contents capacity of the fiber. The fiber shall have thermal resistance of notless then 500 degree Celsius for a minimum period of 5 hours.
- The fiber used shall have additional capacity to withstand splash of boiling water molten metal with affecting the wearer.
- The fiber used for fabrication of the proximity/ approach suit shall have moisture absorbing capabilities from 5 to 10%
- The fiber used for fabrication of the suit shall have resistance to chemical viz, acids, alkalis and chemical except nitric acids.

- The materials use for construction of head wearer hand wears, footwear shall be of some materials used in the case of overall suit. However, the shoe shall have not-slippery soles of rubber held with non-ferrous metal screw the visor of the head gear shall be made of superior transparent plastic sheet with gold vaporized lining on outer surface of the sheet.
- The material used for visor shall be shutter proof and heat reflective types. The hood of head gear shall of the same material as used in the case of overall suit. Head wearer and hand wearer and hand wears shall also be made of same material used for other gears.
- The bidder shall clearly provide details of materials was obtained from Manufacture shall clearly etc with the tender documents.

3.2.2 Fire entry suit

Specifications:-

a) INTRODUCTION

The fire entry suit is meant for momentary use in flame and should be capable of protecting the wearer from ambient heat, conductive heat and radiant heat.

b) CONSTRUCTION OF FABRIC

It should be made by the texturised, silica glass yarn that are twice as steel wire of same diameter.

c) HEAT/FLAME RESISTANC CAPACITY

The fire entry shall be capable of with standing at least ambient heat of 800 degree Celsius , radiant heat of 1600 degree Celsius and total flame of 1000 degree Celsius.

d) HOOD

Designed to be used with air mask inner drape flame seals. Under arm adjustment straps. Built shell for structural support hard cap with ratchet headgear with adequate thermal protection and should provide view in fire station. Speedy clip for hard copy support. Hardened aluminum window frame with adequate thermal protection and should provide clear view in fire situation.

e) COAT

Designed to be wornwith breathing apparatus.

f) PANT

Highwaist design 2-inch wide adjustable suspenders. Adjustable straps on leg bottoms.

g) BOOTS

Designed to fit over work shoes Rear entry with overlap snap closure and adjustable take up straps insulated wire reinforced sole for flame resistant.

h) APPROVAL

For the fabric used for the suit shall have one of more of following approvals

Listed by under writer laboratories UL 214

U.S. Coast guard spec No. 164009

U.S. Military spec. MIL-C-0020079 H

U.S. Military spec. MIL-124244C

Meets or exceeds BFPA Spec. No. 701

UL 723 FLAME SPREAD: Smoke density: 0 Fuel contributed: 0

3.2.3 Oxygen Concentrator

Dimension	28"h x 16"w x 14" d
weight	52 lbs
Delivery Rate	½-liters (1/2 Liter increments)
Oxygen %	93 % @ 1-5 liters (1/2 Liter increments)
Electric Requirement	115v, 60 Hz
Power Consumption	400 watts average

- Pressure-Relief valve and thermal protection on the compressor.
- Filtration for longer bed life and better oxygen purity.
- Increased flow rates, decreased operating temperatures and longer life with less cup seal wear.
- Double- insulated unit: Two prong plug.
- Humidifier port helps prevent humidifier bottle and connection breakage.
- The opening is wide to make it easy to connect tubing or humidifiers.
- High/ Low pressure alarms and power failure alarm.
- Long cannula while maintaining an accurate flow setting (maximum 50 feet).
- Audible and visual sensing device for low pressure, power fail and power on.

3.2.4 Nebulizer

- Aerosol with piston Electro compressor.
- Main: osomg speed: lcc in 3 minutes
- Pressure 1: 1 bar
- Air flow 15 liter/minute
- Noise Level : 60 db
- Granulmetric size of medication: 1-10 microns by means of multi PIPSER Component.

3.2.5 ECG machine with analyser

- Multi Channel ECG recording
- Storage memory for storing ECG for later printing
- Automatic and manual recording modes.
- Dual power supply-main and battery operation
- Built in rechargeable battery.
- Power supply range-AC 230 V+ 10 %
- Power consumption- less than 12 W
- Battery (built-in) Rechargeable Ni MH batteries 10 x 1.2 volts , 1500 mah
- Battery Capacity-Minimum 01 Hrs.
- Battery indicator- Yes
- Battery low indicator-Yes
- Operating temperature – 10 to 40 Deg. C
- Safety Standard – Complaint to class 1 type CF, CE 0470.
- ECG Acquisition- 11bits 1000 samples/ sec/channel printing and filters
- ECG leads- Standard 12 leads
- Recording sensitivity Manual mode 2.5-05-10-20mm/m V \pm 5%
- Filters-Main and muscle interference modified digital notch 50-60 Hz
- Anti Drift Filter-Digital 0.5 Hz anti Drift high pass linear phase filter always enabled and cannot be switched off.
- Input Dynamics- \pm 300m V @ oHz \pm 5mV in the pass band.
- Input impedance >100 M ohms.
- Time constant >3.2sec
- CMRR> than 100 db @ 50 Hz
- DF Protection – Built in
- Recording system- Thermal printer 8dots/mm 110mm usable print width Thermal paper compatible with system-100Nos.

- Paper transport speed 5-25-50mm/sec/±05 Sec.
- Patient cable – 01 No.
- Chest electrodes- 06 Nos.
- Limb electrodes- 04 Nos.
- Gel Bottle- 25 Nos.
- User Manual- 01 No
- Battery charger- 01 Nos

3.2.6 PORTABLE ULTRASOUND MACHINE

Specification :

1. Should have AC Mains adaptor/battery charger.
2. It should have in built full alphanumeric keyboard.
3. Latest Technology all-Digital Hand Held ultrasound System suitable for adult & Pediatric ultrasound.
4. Should have Broad Band Frequency Transducer Technology.
5. Should have B Mode, M- Mode Ultrasound angio.
6. Should have a very high System Dynamic Range of at least 125dB
7. Should have inbuilt rechargeable Lithium Ion Battery and the system should operate for at least 90 minutes on battery
8. Should have integrated display screen size of at least 5 inches
9. Should have high frame rate of more than 90 frames/ sec
10. Should have standard calculation package.
11. Should have image storage facility for at least 100 images.
12. Should have cineol memory. Power Doppler
13. Should be light weight system weighing less than 4 kg for hand carrying
14. System should be supplied complete with the following.
15. 60 mm broadband 5-2 MHz curved array for general purpose. Abdominal, obstetric and gynecologic applications transducers.
16. B/W Thermal Printer.
17. System should have the capability to be upgraded to higher frequency Broad Band probe having a frequency range of 4 to 7 MHz for Pediatric Echocardiography Applications.
18. System should also have the capability to be upgraded to a Linear Broad Band Probe Having a frequency range of 5 to 10 MHz for vascular imaging.
19. Upgradeable to pulsed Wave Doppler Mode, Continuous Wave Doppler Mode of Imaging.

3.2.7 AUTOMATIC BLOOD ANALYSER

Sr. No.	Specifications
1.	Dual mode flow cell and cuvette
2.	Built in voltage stabilizer.
3.	Specially designed cuvette block with peltier control for temperature regulation.
4.	Capable of saying 200 tests with QC Graph.
5.	Option to enter Patient ID
6.	Monochromatic and Bi-chromatic readings.
7.	Selectable temperature :37^oC,3^oC or 25_oC ± 0.1_o C.
8.	Calculation of results either by factor or by standard concentration.
9.	Versatile software to calculation the Delta OD on screen.
10.	Built in Thermal Printer high resolution, 320 dots per line with full graphic facility.
11.	Automatic sensing of cuvette insertion.
12.	Built in real time clock.
13.	Operator interface: Touch panel & mouse.
14.	Linear measurement range :0.000 to 3.000 absorbance units (A)
15.	Optical measurement
16.	Type of filter: Interference
17.	Wave Length: 340,405,510,546,578,630 nm & two optional positions ± 1nm
18.	Half Bandwidth: 10nm ± 2nm.
19.	Filter Selection: Automatic.
20.	Cuvette/Flow cell: Supports both cuvette and flow cell.
21.	Flow Cell sipping Volume: 500 microlitres.
22.	Flow cell volume 500 Microlitres
23.	Sipping mode Automatic by specially designed planetary gear pump.
24.	Cuvette volume:500 Microliters.

-
25. **Temperature control of Cuvette/flow Cell Block: By Selectable peltier elements.**
 26. **Light Source: Tungsten Halogen 6V, 10 W with life saving features.**
 27. **Display:50 graphic LCD**
 28. **Analysis Mode Kinetic differential, ratio: Absorbance, end point, fixed time**
 29. **Memory capacity: 64KB non volatile RAM with battery backup report generation for last 1000 sample stored and obtained by date, ID both by date & ID.**
 30. **RS 232 serial port: 9600 band, 1 start, 8 data, 1 stop.**
 31. **Wattage-50 Watts or as per the instruments load.**
 32. **Operational Temperature: from 10° C to (+) 37 ° C**
 33. **Relative Humidity: UP to 85%**
 34. **Semi micro Cuvetts: 25 Nos with each unit**
 35. **Paper Roll (Thermal): 25 No's with each unit**
 36. **Variable volume pipette**
2 ul to 20 ul: 01No. with each unit
50 ul to 100 ul: 01 No. with each unit
100 ul to 1000 ul: 01 No. with each unit
 37. **Compatible: UPS for the system**

3.2.8 Under Water Video Camera with accessories

1. **ROLE:** For use during diving: operations for high quality underwater image recording
2. **MAIN COMPONENTS 'OF VIDEO' CAMERA:** The video systems being offered should have following components.
 - a) Underwater colour Video Camera.
 - b) Surface Camera control unit with video color monitor.
 - c) LEDs
 - d) Camera Mounting Brackets
 - e) Umbilical
 - f) Digital Video recorder'
 - g) Tool kit.

3. Features

- a) Video Camera should work up to depth of 10 meters in water.
- b) Weight of the Video Camera (excluding surface unit) should not be more than 700 gms.
- c) Umbilical- Covering of umbilical should be abrasion resistant.
- d) Length of the Umbilical should not be less than 50 mtrs.
- e) Cable should rugged neutrally.

4. GENERAL SPECIFICATS/ CHARACTERISTICS:-

- a) The video system should have built in digital video recording system.
- b) The system should have in built power back up for at least 1 hours.

5. Temperature Range- The Video Camera should operate between temperature ranges of 40°C – 50°C

6. Documentation:- Operational and technical manual should be supplied with the equipment

3.2.9 Walkie Talkie Sets/ Portable Radio Set

Tran receivers VHF Hand Held 1 W/5 W synthesized

General

1.	Frequency Range	68-88 MHz, 136-174 MHz (split band or full band)
2.	No. of channels	16 channel or more channels 1 & 3 should be programmed to cover end frequencies and channel 2 for the mid frequencies spread. Remaining channels should also be programmed to cover the quoted frequency spread.
3.	Channel spacing	12.5 KHz
4.	Frequency spread	5 MHz or more without degradation in Tx/Rx specification
5.	Frequency Stability	5 PPM or better
6.	Type of Emission	11 KOF3
7.	Type of Operation	Simplex, press to talk with built

			in condenser mic. and Speaker
8.	Type of Antenna		Helical Antennas suitable for the frequency spot specified in supply order
9.	Speaker Impedance		To be specified by the firms both at internal and external speaker point
10.	Output Impedance/Termination		50 Ohms and the aerial terminal should have BNC female Socket of appropriate adapter should be provide sets for DCPW for testing/evaluation
11.	Protection	i)	Reverse polarity protection should be provided
		ii)	The final transistor should be protected against high VSWR
12.	Weight		600 g Max with battery
13.	Power Source		1400 mAH 7.2V/7.4V, Ni-Li-polymer Battery
14.	Voltage		Test voltage to be indicated by the tenderers.
Transmitter			
1.	RF Power Output		1W/5W+/-0.5 dB switch able/programmable
2.	Frequency Deviation channel		+/-2.5 KHz Max. (For 100% at 1 KHz) for 12.5 KHz Spacing
3.	Modulation sensitivity		1 to 10 m V at 1 KHz at mic input for +/-1.5 KHz (for 12.5 KHz

		channel spacing) standard deviation
4.	Modulation Distortion	Less than 5% at 1 KHz reference for +/-1.5 KHz channels spacing) standard deviation
5.	Modulation Fidelity	+1,-3db of 6db/ Octave pre-emphasis Characteristics from 350 Hz to 2700 Hz with 1 KHz as reference
6.	Spurious & Harmonics Suppression	Better than 60 db.
7.	VSWR	Batter than 1.5.

Receiver

1.	Sensitivity	0.30 micro V for 12 db SINAD
2.	Squelch Sensitivity	0.25 micro V or better at threshold
3.	Selectivity	Better than 60 db
4.	Image Rejection	Better than 65db
5.	Audio Output	250mW/500mW with less than 5% distortion at 1 KHz reference measured at specified AF output
6.	Audio Response	+1,3 db of 6 db/ Octave de-emphasis characteristics from 350Hz to 2700 Hz. With 1 KHz as reference

Feature wise Configurations**Configuration VH1**

1. simple Press to talk
2. Protection against high VSWR
3. CTCSS
4. Low Battery Alert

Configuration VH2

All features of Configuration VH1 (except CTCSS) and

1. Capable of VOX for hands free operation
2. PTT ID Encode
3. CTCSS or DCS
4. Busy Channel Lockout
5. Channel Scanning with call quieting facility
6. Any one of 2 Tone/Sone/ DTMF signaling

Configuration VH3

All features of Configuration VH2 and

1. Selective Call Decode
2. Any one of 2 Tone /5 Tone/ DTMF/ Digital Signaling
3. Capable of being Killed/Unkilled

3.2.10 Base Stations 25 watts

Tran receivers VHF Mobile 25W Synthesized

General

- | | | |
|----|----------------------------|--|
| 1. | Frequency Range | 68-88 MHz, 136-174 MHz (split band or full band) |
| 2. | No. of channels | 16 channel or more channels 1 & 3 should be programmed to cover end frequencies and channel 2 for the mid of the quoted frequency spread. |
| 3. | Channel spacing | 12.5 KHz |
| 4. | Frequency spread | 5 MHz or more without degradation in Tx/Rx specifications |
| 5. | Frequency Stability | 5 PPM or better |
| 6. | Type of Emission | 11 KOF 3 |
| 7. | Type of Operation | Simplex, press to talk with built in condenser mic. and Speaker |
| 8. | Type of Antenna | Suitable Antenna may be submitted as accessories |

9.	Speaker Impedance	To be specified by the firms both internal and external speaker point
10.	Speaker	Internal / socket for external for external speaker to be provided (The internal speaker should be cut off when external speaker is used)
11.	Output Impedance/Termination	50 Ohms and the aerial terminal should be UHF female socket of appropriate adopter should be Provided with the setts
12.	Protection	(i) Reverse polarity protection should be provided (ii) The final transistor should be protected against high VSWR
13.	Weight	Max.2.5 kg.
14.	Power Supply	12 V dc nominal
15.	Test voltage	Specify DC test voltage at which specifications are Compiled

Transmitter

RF Power Output

1.	RF Power Output	25W +/-0.5db
2.	Frequency Deviation	+/-2.5KHz Max. (For 100% at 1 KHz) for 12.5 KHz channel spacing
3.	Modulation Sensitivity	1 to 10m V at 1 KHz at Mic. Input for +/-1.5 KHz (for 12.5 KHz

		channel spacing) standard deviation
4.	Modulation Distortion	Less than 5% at 1 KHz reference +/-1.5 KHz (for 12.5KHz channels spacing) standard deviation
5.	Modulation Fidelity	+1,3db of 6 db/ Octave de-emphasis characteristics from 350Hz to 2700 Hz. With 1 KHz as reference
6.	Spurious & Harmonics Suppression	Better than 60 db.

Receiver

1.	Sensitivity	0.30 micro V for 12 db SINAD
2.	Squelch Sensitivity	0.25 micro V or better at threshold
3.	Selectivity	Better than 60 db
4.	Image Rejection	Better than 65 db
5.	Audio Output	1W with less than 5% distortion at 1KHz reference measured at specified audio output
6.	Audio Response	+1,-3db of 6 db/ Octave de-emphasis Characteristics from 350 HZs to 2700 HZ with 1KHz as reference

Feature wise configurations

Configuration VM1

1. Simple press to talk
2. Protection against high VSWR
3. Channel spacing (12.5 KHz)
4. CTCSS

Configuration VM2

1. All features of Configuration VM1 (Except CTCSS) and

2. PTT ID Encode
3. CTCSS/DCS
4. Busy Channel Lockout
5. Channel Scanning with call quieting facility
6. 2- tone /DTMF signaling /5-Tone-any one
7. Capable of being Killed/ Unkilled

Configuration VM4

1. All features of Configuration VM3, and Emergency SOS/Siren
2. LCD Display (Min 4 Characters)
3. ANI
4. Talk-around
5. DTMF Microphone

3.2.11 Victim Location Equipment and Breaching System

Specifications:-

a. Purpose:

- Victim location system to be acquired are designed for location and rescue of victim trapped under debris during natural calamities or in mine collapses or confined spaces disasters.
- The system should enable insertion below the debris of a telescopic probe which mounts, at head, a sensitive articulable video camera, supported by appropriate illumination, whose images can be viewed by the operator and other rescue personnel on remote display monitors.
- The system also integrates a two-way audio system which can pick up life sound from the victim and also permits the passage of spoken instructions or assurances to him from the rescue team. Since a rigid telescopic probe has limitations on how far it can be inserted, the camera, light and sound system can also be mounted on one end of a cable which can be used to reach greater depths.
- The required Breaching System is a heavy duty drill used for making an entry hole for the probe of the victim location system through debris at the disaster site, or other overlying material required to be breached to enable the search camera to access underlying void spaces.

- It should allow rescue teams to breach most common construction materials with only one system. Its coring bits, carbide tipped diamond studded should be able to core through wood, nails, sheet metal and roofing materials and reinforced concrete.
- The system should have a collar for attachment of coring bits as well as for cooling water to be delivered to the spinning carbide tipped diamond studded bits when used.
- The system's primary configuration should be based on a video camera mounted at one end of a rigid telescopic probe which can reach out into depths and void spaces upto distance greater than 9 ft.
- The colour video camera should be minimum, 1/3" double scan colour CCD with 4, 70,000 pixel or more with low light sensitivity to better than 0.1 Lux. The camera head should have travel articulation of 180° total, right to left, with a viewing area not less than 120 °. Illumination to be provided by a 16 element LED/ xenon lamp integrated into the camera head which can illuminate up to 6m or more in total darkness.
- The System will be provided with two display monitors, one at the operator level and the second for remote viewing by other rescue personnel at a distance not less than 20m from the operator position,. The monitors should be flat screen LCD active matrix of minimum size 6" measured diagonally.
- The system will be provided with a two-way audio system. Maximum Gain will be better than 90 dB. The camera will also house a speaker. The operators' headset will incorporate noise attenuating earphones and a boom microphone through which messages or instructions may be passed to the victim through the speaker housed in the camera piece.
- The system should not require more than two persons to operate, one operator to handle and control the probe and the second operator for the system functions, as well as viewing of the monitor. The probe operator will be provided ergonomic controls.
- The Probe should not weight more than 5 Kgs.
- Two rechargeable dry batteries and a charger should be provided. The batteries should enable 3 hours continuous use and the charger should recharge these to 90% in less than two hours.
- The system should be capable of operation in a temperature range of -10 °to50 ° C.
- Humidity-10% to 90% relative
- Water resistant – High water resistant

b. Capabilities_Required (Breaching System)

- Power head weight –not more than 12 Kgs.
- Boring speed- not less than 5 cms per minute in standard construction grade concrete.
- Breaching depth-150 cm.
- Bits – carbide tipped diamond stubbed bits (min dia-52 mm) capable coring hole of minimum diameter of 55 mm (55 mm).
- Cooling- pressurized water can, 2 gallon capacity with not less than 3 m hose with quick connect fittings.
- Field service kit- Canvas storage pouch, spare fuel tank cap, starter recoil assembly Allen key set for starter assembly, spark plug spark wrench, copper washer garden hose to water collar adaptor.

c. **Scope of Supply**

- Complete victim location system with camera mounted on rigid telescopic frame extendable to length > 6 mm alongwith video display monitor, two-way audio system incorporating search microphone and communication speakers in camera housing a under-helmet headset with earphones and boom microphones, operator consoles all packed in an appropriate water tight dust proof carry case.
- Separate remote hard-wired display monitor with extension cable to 20m.
- Two batteries and charger
- Complete Breaching System in appropriate carry case with two additional diameter and coring bits each.
- bidder if required can recommend additional accessories and spares separately along with their costs.
- They shall produce the relevant BIS/EN/DIN/UL certificate of the product offer applicable.
- Technical manual comprising of servicing details shall be supplied with system

3.2.12 Explosive Meter

Specifications:-

- Explosive meter should be a portable instrument for continuously measuring present explosive gases or vapour and giving the digital display of the level of V-GAS and also Vibrating alarm once the gas concentration exceed the set alarm threshold.

INSTRUMENT A SINGLE, GAS INSTRUMENT FOR EX MEASUREMENT.

MEASURING RANGE 0 TO 100% 0 TO 100 Vol %FOR CH4

RESOLUTION	1% LEL & 1 VOL % CH4
SENSOR	CATALYTIC COMBUSTION & THERMAL CONDUCTIVITY FOR EX GAS
WARRANTY	NOT LESS THAN 2 YEARS FOR THE EX SENSOR
ALARMS	2 ALARMS LEVELS BOTH AUDIO & VISUAL AT LEASE 85 DB FOR EX GAS LOW BATTERY ALARM WITH OR WITHOUT VIBRATING ALARM
DISPLAY	DIGITAL LCD/LED BACKLIT DISPLAY
OPERATING TEMP	-25 DEG. TO+ 55 DEG. C
HUMIDITY	10 TO 95% R.H.
POWER SOURCES	RECHARGEABLE BATTERY OPERATING TIME >12 HOURS CHARGING TIME < 4 HOURS
SOFTWARE	MICROPROCESSOR BASED OPERATION WITH PASSWORD PROTECTION FOR CALIBRATION & ALARM SETTING. INSTRUMENT GIVES 4 HOUR TWA READOUT FOR EX GAS AND HAS AN INBUILT DATALOGGER
OPTIONAL	AN EXTERNAL PUMP AVAILABLE TO DRAW SAMPLE FROM A DISTANCE OF 10 METERS
APPROVALS	ATEX/CSA/UL/CCE

1. Technical manual comprising of servicing details shall be supplied with system.
2. Relevant Test certificates shall be provided from a Govt. approved laboratory or from the manufacturer, along with their offer.
3. the bidder shall also mention the relevant ATEX/CSA/UL/CCE certificates of the product offered

3.2.13 Satellite Phones

Specifications:-

Sr. No.	General Characteristics	Required specifications
------------	-------------------------	-------------------------

1	Service capability	Voice, FAX, DATA
2	Interfaces	ANTENNA:- Lid of the system should be elegant and contain built in antenna and RF stage are in such a way that the satellite link can be established any where in India. ETHEERNET, USB, BLUETOOTH (As per international standards) should support the following profiles:- i) Cordless hand set ii) Serial port (RS 232) iii) Dial up Net working iv) Head set
3	Weight	Less than 2 kgs.
4	Physical connectivity	Port-RJ-11 (For FAX and Telephone RJ-45 for PC USB (Any additional advance provisions are also preferable)
5	Uses access	SIM card (3G compatible)
6	Connectivity requirement	The terminal should have the capacity provide broad band connectivity using broad band global area net work (BGAN) launch, pad built in wave or by better interface.
7	Tracking tools	Audio, LCD pointing aids and LED indicate be available.

Technical Characteristics

1.	Power voltage	AC and DC
2.	Operating voltage	10-20 Volt DC, 100-240 Volt AC 50 Hz
3.	Battery Type	Lithium-Ion,/NI-MH re-

		chargeable Bty
4.	Battery life (Typical user)	Transmit time-minimum 1 hours at 128 Kbps Receive minimum 3 hours at 128 Kbps Standby time 36 hours
5.	Environment Operating Temp	0°C to 55°C
6.	Relative humidity	95% non condensing at 40°C
7.	Water and dust protection	IP 54 (dust and spray proof) or better

RADIO SPECIFICATIONS

1.	Maximum radiated power	(EIRP)+dbw+/-1 db
2.	Supported operating system	System should support standard operating software including windows and linux
3.	Data capabilities	Standard ID Send: 400kbps or higher over a shared channel Receive: 400kbps or higher over a shared channel Streaming IP: Guaranteed quality of service Send: not less than 128 kbps Receive: not less than 128 kbps SMS: 160 character or higher

3.2.14 Multi Gas Detector

Specification for remote standoff chemical detector

a. Scope:-

Standoff chemical detector required which can be mounted on the highest point of the site. The equipment should be capable to monitor a range of hazardous chemical agents in the atmosphere 24 x 7 up to the distance of 5000 meters radius.

b. General Requirements:

1. Equipment should be sturdy and must have uninterrupted operation in Indian

metrological conditions with wide range of temperature.

2. Equipment should be User-friendly.
3. Accuracy of the equipment should be such that it provides minimum false alarm.
4. Automatic adaptation to the varying natural background levels.
5. It should be possible to integrate with other equipment, networking, command and control stations, etc. wherever required.
6. Remote access must be provided.
7. Wide range of measurement of chemical agents.

c. Operational Requirement

1. Chemical detector must be compatible with communication capable of transferring the real time data.
 2. Chemical agent detector must be capable to reprogram for the up gradation of new khraries.
 3. The chemical agent detector must be capable to store the data.
 4. Chemical agent detector must be able to withstand environmental condition arising due to sand, dust, rain, fog etc.
 5. Chemical agent detector must be able to withstand environment parameters up to the landscape.
 6. Instrument should operate with background information.
 7. Chemical detector must be able to detect all chemical warfare agents and toxic industrial chemicals.
 8. Chemical agent detector must be highly sensitive and identify the chemical agents in real time.
 9. Detect ability up to a distance of 5000 meters and must cover 360 degree.
 10. Surveillance capability for chemical agent detector must be 24 x 7.
1. The system should allow software up gradation.
 2. System should give minimum false alarms and should be easy to operate.
 3. Chemical agent detector must be fully automated and have self calibrating in built system.
 4. The detector should indicate the direction and extent cloud on graphical computer display and should forward the report through external networks.

d. Technical Specifications:-

1. Range:- Minimum 5000 meters radius.
2. Sensitivity: Detectable level 10 mg/cubic or less for a chemical cloud of 80 to 150 meter at 250C for a distance of 1 Km.
3. Specificity: Chemical agent should be displayed.

4. integration with monitoring system must be there.
5. False positively/False alarm: As minimum as possible (1-2 in 150 hrs)
6. Response time: Real time/instantaneous.
7. Power supply: 200-250 V 50 Hz uninterruptible
8. Continuous operation: 24x7
9. Operating temperature range: 5 to + 500C
10. Storage temperature range:-20 to + 700C.
11. The chemical detector must be capable of networking with comprehensive communication links such as RS-232, RS-422, Ethernet, Fiber optic and RF options.
12. The chemical agent detector must withstand the vibrations up to 1.58.
13. The chemical agent detector must be able to provide concentration Quantitatively and the chemical agent.
14. Alarm: Audio and visual both.

e. Other requirements

1. The bidder shall be responsible for the successful supply, installation and commissioning of the said item.
2. Power backup minimum four hours
3. Zero down time during operational requirement: for replacement of any defective/faulty/malfunctioning equipment/spare parts.
4. The bidder shall give a performance demonstration against live agents and stimulants at manufacturers place and also on site by the bidder using its own resources.
5. Both on and offsite hands on training
6. Any expandable item which ever are applicable should be offered.
7. one set of standard spare parts.

3.2.15 Portable Defibrillator with recorder

1. The AED should have automated voice prompts with CG display, light weight, weighting less than 3 kgs
2. Should have biphasic technology and should deliver shocks with energy of 150 joules for all shocks.
3. Should confine to latest standards of AHA or equivalent body.
4. Should have options to connect 03-lead ECG cable.
5. Long life disposable battery should be standard with the unit with life of atleast 300 shocks or 04 years on stand-by-mode.

6. Should be supplied with rechargeable battery compatible to the unit with accessories to charge it in addition to the disposable battery.
7. Should do self test automatically. In case of any fault with the unit it should automatically indicate.
8. Easy availability of multifunction disposable pads and other spares and disposables.
9. Should have a data card as memory tool.
10. Should have international testing certificate with large installation base in India.
11. Should provide onsite training to our Para Medical staff and Doctors.

3.2.16 Multi Para Meter Monitor

1. Six channel multi Parameter, Multi-colored patient monitor
2. Should have 12" screen display
3. Should have ECG, NIBP, Spo 2, IBP, ET CO2 & Anesthetic agent.
4. Should have 5 head ECG, 42
5. Should have MASIMO Pulse Oximetry incorporated in monitor for motion artifact.
6. Should have 2 channel temperature
7. Should have automatic anesthetic agent ID and measurement 5 Anesthetic agent with O2
8. Should have 2 IBP Channel
9. Should have audio and visual alarms.
10. Should have 24 hours trending
11. Should have 2 channel thermal recorder
12. Should have battery Backup of 2 hours
13. Should be ESU Protected
14. Should be able to select :lead of ECG
15. Should be FDA & CE approved

3.2.17 Personal Diving Kit (Diving Suit, Breathing Apparatus, Weight Belt, Gloves, Diving Fins)

a) Specifications of Diving Suit (Diving Kit)

-
- S. Technical Specification
- No.
- 1 **The diver wet suit proposed is for use by the divers operating underwater, which can be easily-seen whilst on the surface of water. The basic design should be of one piece with sleeves up to the length of arm and the portion below torso up to ankle level (Below Knee).**
- 2 **The wet suit provided should be without hood. As far as possible the suit to have a cut designed to avoid under arm-seams.**
- 3 **The lower part of the suit should fully cover the legs stopping just above feet/ankle.**
- 4 **As far as possible, the suit is to be entirely non-magnetic.**
- 5 **The diver should be able to don the suit very easily and feel comfortable**
- 6 **The above wet suit should be made from macro cellular neoprene with**
- 7 QUANTITY
- (a) **Wet Suit smallest (Extra Small) : 04**
- (b) **Wet Suit Medium : 04**
- (c) **Wet Suit Large : 04**
- 8 DESCRIPTION OF BOOT DIVER NEOPRENE (DIVER'S SOCKS)
- The socks used in conjunction with above-mentioned wet suit should be made from double lined neoprene with non-slip sole, which reduces, wear and prevents sliding on wet or slippery surfaces. Thickness of the socks should be 3 mm.**
- 9 QUANTITY
- (a) **Boot diver neoprene Bile (Diver Socks) Smallest (Extra small) : 04**
- (b) **Boot diver neoprene (Diver Socks) ;Medium : 04**
- (c) **Boot diver neoprene (Diver Socks): large : 04**

b) Specification of Breathing Apparatus Set (Diving Kit)

1. ROLE: The self-contained underwater breathing apparatus (SCUBA) proposed is for carrying out underwater diving.

2. GENERAL: The apparatus should be rugged, lightweight suitable for carrying by a single person. The set should have its standard and optional equipments and should comprise of following:-

- a) Comprise air cylinder pack
- b) Harness (Basic structure on which the cylinders are mounted and other accessories for donning the set are fitted)
- c) Face mask with breathing/demand valve
- d) A regulator unit
- e) Air supply system
- f) Pressure indicating gauge
- g) Buoyancy compensating device if any
- h) Test Kits
- i) Tool Kit

3. DIMENSIONS: A variation of 5% to 10% is acceptable.

- | | |
|--|---|
| a) Nominal Capacity of Set | - 8-12 liters |
| b) Charging Pressure | - 200-300 bars |
| c) Capacity of set after charging | - At least 2400 liters |
| d) Weight of the set | - Not more than 20 Kg |
| e) Weight in water | - Not more than 03 Kgs |
| f) Cylinders make | - As far as possible to be composite Material with unlimited life. |

4. SPECIFICATIONS

- (a) As far as possible the set to have wide vision full-face mask. The straps provided should form an effective seal on to the face.
- (b) Re-breathing of carbon dioxide enriched exhaled air must be eliminated and the breathing resistance must be as low as possible whilst the equipment must have sufficient capacity to cater for even an extremely hard work rate.

- (c) In case the diver does not want to use the full-face mask then the breathing valve with mouthpiece should suffice for the use underwater.
- (d) Mouth piece to have separate inhale and exhale channels so that the moisture from the dive cannot get deposited in the inlet section of the breathing valve. This avoids risk of valve freezing in open positions.
- (e) There should be a mechanism to have a reserve air in the set and indication to that effect available
- (f) As far as possible the set should be designed for use in temperatures range of minus 10 degree Celsius to 50 degree Celsius
- (g) The set should withstand separate upto 5

5. SPARES:

- (a) Complete list of one year on Board Spares to be provided
- (b) Complete list of five year spares to be provided
- (c) Documentation of full range of spare along with paper particulars.

6. Documentations: The following documents are to be provided:

- a) General Arrangement drawing giving overall and all-important dimension and with sufficient details so that all standard equipment can be identified.
- b) Operational Manual giving details of maintenance and repair instructions
- c) Test and trial report, if any along with inspection certificate

7. Preservation: Firms is to furnish preservation procedure of the diving set of any

Specifications of weight belt, Dive Fins, Gloves

i) Weight Belt

- **Role** – to attach lead weights of 1 Kg (04 numbers) to a diver to adjust buoyancy during a diving operations.
- **Main Features:-**
 - a) Waist belt made of poly propylene/nylon fabric should have a quick release non-breaks buckle of plastic/fibre/non-corrosive soft metal of adjustable size of tightening.
 - b) Four polypropylene fabric pouched moulded o the weight belt to put weights of 1 Kg numbers) inside. The pouch opening independently on top to have built mechanism/Velcro.
 - c) The belt shold be of adjustable 30" – 45: range in length, 3mm thick and 2" br (approx)
 - d) Colour: Black

- e) Weight – 1 Kg lead (04 numbers)
- ii) Fins Swim (Dive Fins)**
- **Role** – Assist Diver in hands free swimming on surface and underwater. These fins are for use during Combat/long distance/against current
 - **Main Features**
 - a) Description – Colour black. Length not less than 17", Width Not less than 4" (top) 8.8 (Bottom). Dimension tolerance-+ Material – Thermoplastic rubber/Nature rubber. Should not skid
 - b) Even on a wet metal deck
- Hydrodynamic shape – The shape of the fin to facilitate:-
- a) Max propulsion whilst swimming in water using flutter and frog kick.
 - b) Suitable for swimming for long duration without causing undue fatigue.
- Shoe Pocket – Pocket should be 7"-8" deep with an adjustable back strap (not less than inch in width). Inner part should be made of soft rubber for use with bare feet.
- Additional back strap should be supplied with the fins.
- Buoyancy – Approximately 10% negatively buoyant.
- iii) Gloves**
- Gloves should be made of neoprene
 - The palm of the Gloves should be made up of anti-slippery polyurethane.
 - The thickness should be not less than 5 mm
 - Gloves should be suitable at a depth of not less than 50 Mtrs.

3.2.18 Under Water Communications set

a) Essential Parameters

1. **Introduction**: The equipment should have a carrying case for ease of handling and should be rugged and reliable for continuous use for more than 2 hours and meet the specifications mentioned in the succeeding paragraphs.
2. **Roll**: Wireless communications during diving operations between divers and surface team.
3. **General**: The apparatus should be rugged, light, weight suitable for carrying by a single person. The set should comprise of following:-
 - a) Should allow clear voice communication between the surface supervisors and at least 4 divers as well as between the divers.
 - b) The surface panel should have volume control and-squelch facility.
 - c) Communication should be of wireless with a minimum range of 400 mtrs..
 - d) Should be battery powered with an endurance of at least 05 hours before recharge is needed.
 - e) Surface unit should have a head set and microphone. It should also held mike for supervisor.

- f) The surface unit should have a head set and microphone. It should also have hand held mike for supervisor.
 - g) The Equipment should work up to depth of 10 mtrs in water.
4. Supervisor Head Set and Panel: The supervisor headset should permit hands free use of the headset on the diving site and permit free movement in a radius of at least 01 meter on the diving site.
5. **Scope of Supply**: The composition of each WUCS are as follows:-
- a) Surface Headset and Microphone – 01
 - b) Portable Surface Unit with Transducer and Cable – 01
 - c) Diver Receiver with Microphone – 04

3.2.19 High Pressure Breathing Air Compressors

1. **GENERAL:-** The self contained, positive pressure and open circuit air breathing apparatus shall be certified for use by the firefighter for 45 minutes total working duration.
2. **TECHNICAL SPECIFICATION:**
- a) **Back Plate and Body Harness:** This shall be made of non-metallic, antistat impac chemical & fire resistant material and orthopedically designed and manufactured in conformity to EN/DIN/US standards and certified for use by the fire fighters. It shall facilitate mounting of air cylinder through cam lock. The body harness shall be wearer friendly and safe for carrying load while all buckles shall be quick release type.
 - b) **Pressure Reducer:** This shall be so designed so as to meet the air demand to us simultaneously at a stable pressure on the outlet with inlet pressure varying from 800 bars to bars and shall conform to provisions in prEN137-2002 class II
 - c) **Face Mask:** This shall be reverted edge seal type and made of flame resistant mater conforming to EN 136. The reflex seal on the outer mask shall be so designed so as to facilitate excellent sealing to the wearer face contour. It shall also be provided integral inner facemask reduce dead space, speech transmitter for clear voice reproduction and a wide angle panorama vision visor made of polycarbonate material and shall be self de misting type. The head strap shall be easy to lighten and quick to release.
 - d) **Demand valve:** The lung operated demand valve design shall either be

diaphragm Nix piston type. This shall be provided on the facemask and connected to the pressure reducer with the help of rubber hose through quick connector. The demand valve shall be rated for minimum 500 lpm airflow and shall activate with the first breath.

- e) **Pressure Gauge:** This shall be bourdon pressure gauge with luminescent dial with pressure marking in bar and encased in the fire resistant rubber cover. The gauge shall be connected (pressure reducer through non-metallic rubber hose).
- f) **Hoses:** The low pressure hoses shall be flexible and non kinking type and suitably reinforced to withstand 30 bar air pressure while the high pressure hoses shall either be flexible or non metallic tube suitably secured to the back plate so as not to obstruct the movement of the wearer.
- g) **Warning Whistle:** This shall be fitted either on the back plate or provided along pressure gauge assembly and shall be automatic in operation giving audible alarm of minimum 90 dB intensity at 1 meter distance of low cylinder pressure in the range of 50±5 bar.
- h) **'Y' manifold for additional connections:** The set shall have provision through suitable placed 'Y' manifold to facilitate receiving air from a different source and supplying additional facemask.
- i) **Air Cylinder:** This shall be corrosion and impact resistant and made of light alloy wrapped. The size of the cylinder shall be such that it can hold sufficient quantity of air (not less than 1800 liters) for providing 45 minutes total working duration when charged at 300 pressure. The cylinder shall be provided with cross flow valve and EN 14442 compliant. cylinder shall be duly approved by the Chief Controlled Explosive Nagpur and shall be capable withstanding a minimum hydraulic testing pressure of 450 bars.
- j) **Weight:** The weight of the ready to use set shall not be more than 12.5 kgs.
- k) **Approval:** The complete set shall have relevant EN or equivalent approval and certificate this effect shall be furnished along with the offer.

3. Technical Evaluation: The Technical Evaluation of the SCBA shall be subject to the following:-

- a) Meeting the requirements as mentioned from Sr. No. 1 to 3 above and
- b) Design in conformity to EN/DIN/US standards, conformity certificate and CCOE certificate be submitted along with the offer.

3.2.20 Thermal Imaging Camera

1. **Specifications:-**

THERMAL IMAGING CAMERA SHOULD BE CAPABLE OF VIEWING OBJECT AND PERSONS IN TOTAL DARKNESS OR SMOKE FILLED CONDITIOS SUCH AS DURING NIGHTS AND FIRE /DISASTER CONDITIONS. IT SHOULD ALSO HAVE INTEGRATED TEMPERATURE MEASSUREMENT WITH DIGITAL DISPLAY.

2. **QUALITY:-** the camera must be manufactured by an ISO 9001 organization.

3. **WATER RESISTANCE & ELECTOR MAGNETC COMPATIBILITY:-**

Documentation should be submitted illustrating tests that have been conducted to certify water resistance and elector- magnetic compatibility.

4. **PHYSICAL CONFIGURATION:-** the thermal image camera should be hand held design with battery, viewing optics, side straps, neck strap lanyard and the optional choice of grips.

Weight of camera should not exceed 2 Kgs.

(The camera should be supplied in a storage case)

5. **TURN ON TIME:-** The camera should provide on image within nominally five (5) seconds of power being applied.

6. **TECHNOLOGY:-** The imaging technology should be amorphous silicon 320 x240 or better micro bolometer free of export restrictions into India.

Sensitivity of the detector should be the minimum of 0.05 degree Celsius for temperature definition.

The image should exhibit an ability to avoid with out or blooming conditions when subjected direct to flame or sun. Clarity of the image must not deteriorate by either type of exposure during normal operation.

The imager should have Minimum three colour to aid clear identification of be burning matter.

The unit should have a Direct Temperature Measurement facility with a digital read-out.

Temperature measurement to be from 0-500(Minimum) Degree Centigrade.

7. **OUTER SHELL CASE:-** The imaging unit should be ergonomically designed with heat resistant material of construction .

The unit color should be yellow or bright color.

The unit should be capable of withstanding a 1.5 meter drop.

8. **VIEW OPTICS:-** By high resolution not less than 90 min (3. inch color Liquid Crystal Display LCD.

9. **LENS:-** The unit should have a lens fabricated of germanium with a diagonal field of view of not less than 50 degree. The lens focus range should be 1.0m to infinity.

10. **VISUAL INDICATORS:-** All thermal imaging unit shall be equipped with the following on screen displays:

1. Battery level indicator
2. Digital temperature read out.
3. All indicators shall be visible on the viewing screen.

11. **SWITCHES:** (A single ON/ OFF switch)

12. **SIDE STRAPS/LANYARD:**

The die straps and lanyard should be of sturdy fire retardant construction and be field replaceable.

Side straps should be on both sides of the unit enabling it to be used by both left and right handed operators.

The Lanyard should be attached to the unit by a "D" ring.

An optional removable pistol grip handle or action grip should be available.

13. **POWER SUPPLY:**

Each unit should be supplied with two rechargeable dry batteries each having a continuous operating time of 3 hours:

Each unit should be supplied complete with a battery charger capable of operating on both mains 220/ 240 AC or 12V DC.

14. **VIDEO OUTPUT:**

The thermal image camera should have a video output or BNC connector.

15. **TRAINING:**

Product familiarization should be available through the manufacture distributor. Each unit shall be shipped with a user manual.

Authority letter form OEM should be attached with the bid.

3.2.21 Digital Video Camera: Canon Leria FS305 records movies straight to SD or SDHC memory cards-easy to carry and ideal for sharing. 37X optical Zoom/1800x(movie mode only) Electronics Image Stabilizer Dynamic mode, pre recording function, USB 2.0 Hi-Speed, LCD screen 2.5 inch

3.2.22 Leak Tester for testing respiratory equipment

a. **DESCRIPTION**

- The Mask Leak tester shall consists of two dummy heads fixed on a base plate, a micro suction generator generates a suction, which is applied to the dummy head

through a rubber tube.

- The M.L.T. shall consist of two fixed headed on a based plate. A Micro suction generator that could be attached to dummy through a rubber tube through a micro flow meter. \
 - The tester shall be capable of attending a steady stage reading within 40 sec. & shall be powered with a built in timer that stop and the circulated freezes the displays after 40 Second. The test result shall be shown by glomming red or green LED there by meaning Fail or Pass status of the mask tested. The tester shall be ready *for* next operation by pressing a reset switch.
 - The materials used the communication of components *of* leak tester shall conform to international standard and a certificate to this effect from an independent test lab orating of repeat shall be submitted along with offer. The trait shall be marked with the relevant speed Name of the manufacture, Year of Manufacturing of the operating materials.
 - The complete Leak Tester not shall be provided in a carrying case pre fabarable water & dust resistant type.
 - The suction generated by the micro suction generator is further reduced using a needle valve and passed through a micro flow meter and applied to the cavity of the dummy head.
 - The mask to be tested is fitted on the dummy head by tightening the strap. The suction generator supplies a known amount of the suction to the cavity of the mask.
 - The steady state reading is attained in a time of less than 40 seconds. There is built-in timer, which stops the circuit and freezes the displays after 40 seconds. The operator can decide whether the mask passed or fails seeing the criteria given. A decision marking circuit is also incorporated which automatically compares the test values with admissible values and declares the result by glowing green/red LED meaning pass/fail.
 - By pressing the RESET switch the tester is ready for testing the next mask.
- b. Materials: The materials used in the manufacture of the leak tester set shall be as under:-

1. **Dummy heads F.R.P. 2.**
2. **Base Gr. HE. 9.ISI 9500**
3. **Top cover Gr. HE. 91 ISI 9500**
4. **Flow sensor Poly Carbonate**

5. Suction sensor Gr. HE 15,733
6. Suction controller
7. Flow controller
8. Needle valve SS 314
9. Suction Generator
10. Tubing PVC
11. Timer controller
12. Solenoid Valves Aluminum Base

MARKING Each leak tester set shall be embodied with a label, conforming to details as given in this specification. The manufacturer shall legible and indelibly write the descriptions of the stores, stores reference. Number and the name of the manufacturers. The year of manufacture shall be legibly and indelibly marked by stamping or engraving. The words open this side up and top shall be marked on left and right hand edges of Racking case respectively.

3.2.23 Breathing apparatus set with spare cylinders

- a. **General:** The self contained, positive pressure and open circuit air breathing apparatus shall be certified for use by the fire fighters for 45 minutes total working duration.
- b. **Technical Specification:-**
 - I. Back Plate and Roby Harness: This shall be made of non-metallic, antistatic impact, chemical & fire resistant material and orthopedically designed and manufactured in conformity to EN/DIN/US standards and certified for use by the fire fighters. It shall facilitate mounting of air cylinder through cam lock. The body harness shall be wearer friendly and safe for carrying load while all buckles shall be quick release type.
 - II. Pressure reducer :- This shall be so designed so as to meet the air demand for two users simultaneously at a stable pressure on the outlay with inlet pressure varying from 300 bars to 20 bars and

shall confirm to provisions in prEN 137-2002 class II.

- III. Face Mask: - This shall be reverted edge seal type and made of flame resistant material confirming to EN 136. The reflex seal on the outer mask shall be so designed so as to facilitate excellent sealing to the wearer's face contour. It shall also be provided with integral inner facemask to reduce dead space, speech transmitter for clear voice reproduction and a wide angle panoramic vision visor made of polycarbonate material and shall be self-de-misting type. The head straps shall be easy to tighten and quick to release.
- IV. Demand valve:- The lung operated demand valve design shall either be titling diaphragm type or piston type, this shall be provided on the facemask and connected to the pressure reducer with the help of rubber hose through quick connector. The demand valve shall be rated for minimum 500 lpm airflow and shall activate with the first breath.
- V. Pressure gauge:- This shall be bourdon pressure gauge with luminescent dial with pressure marking in bar and encased in fire resistant rubber cover. The gauge shall be connected to pressure reducer through non-metallic rubber hose.
- VI. Hoses:- the low pressure hoses shall be flexible and non-kinking type and suitably reinforced to withstand 30 bar air pressure while the high-pressure hoses shall either be flexible or rigid metallic tube suitably secured to the back plate so as not to obstruct the movement of the wearer.
- VII. Warning whistle: This shall be fitted either on the back plate or provided along with the pressure gauge assembly and shall be automatic in operation giving audible alarm of minimum 90 dB intensity at 1 meter distance of low Cylinder pressure in the range of 50±5 bar.
- VIII. 'Y' manifold for additional connections: this set shall have provision through suitably placed 'Y' manifold to facilitate receiving air from a different source and supplying air for additional facemask.
- IX. Air Cylinder: this shall be corrosion and impact resistant and made of light alloy fully wrapped. The size of the cylinder shall be such that it can hold sufficient quantity of air (not less than 1800 liters) for providing 45 minutes total working duration when charged at

300 bars pressure. The cylinder shall be provided with cross flow valve and EN 144+2 compliant. The Cylinder shall be duly approved by the Chief Controller Explosive Nagpur and shall be capable of withstanding a minimum hydraulic pressure of 450 bars.

X. Weight: the weight of the ready to use, set shall not be more than those 12.5 kgs.

c. **APPROVAL:** The complete set shall have relevant EN or equivalent approval and certificate this effect shall be furnished along with the offer.

- a) Meeting the requirement as mentioned from Sri No.1 to 3 above and
- b) Design in conformity to EN/NIN/US standards, conformity certificate and CCOL certificate to be submitted along with the offer.

3.2.24 Life Detector

Specifications:- LIFE DETECTOR TYPE-II

a. Purpose

1. The Human Life Detection System will be used by Rescue Workers to determine without risking lives by entering; whether anyone is trapped inside a burning or collapse building.
2. It should help to locate trapped or marooned victims in a disaster area, reduce both search times and danger to rescuers and to find lost or injured people faster in host terrain, bad weather, collapsed trenches, even underwater. The system should have discrimination capability for: detecting only living human beings and not decease humans living animals. The principle of working-is based on the equipment's capability of detect living human beings by detect the distinctive electro-magnetic field created by the heartbeat. This is achieved by use of the special hand held equipment.

b. Required Capabilities and Specifications

The instrument should be in full compliance with following specifications:-

- It should be capable of passively detecting the presence of living humans behind thick barriers such as concrete walls, steel gates, trees, and upto 500 meters in the open air
- It should be capable of passively detecting the non-uniform electric fields of living humans. It should not detect animal life.

- Field of view:
 - Horizontal Plane at least -2 to +2 degrees
 - Vertical Plane:
 - At least -60 to +60 degrees in the open air
 - At least -40 to +40 degrees in a composite structure
 - -20 to +20 degrees on an all-metal grounded platform
 - Detection range: It will come with two range adjustment 6 devices (RADs) as follows:
 - All metal RAD Upto 500 meters
 - Composite RAD upto 20 meters
- Target tracking- in detection mode, one the Life Detector has fixed on the target, even if it is moving, the Life Detector will continue tracking the target.
- It will have a built-in Red laser (used to show direction in dark areas) and will be eye safe. The laser environment parameters for optimum performance will be:-
 - Operating temperature -10 to +45 degrees Celsius
 - Storage temperature -40 to +85 degree Celsius
- Instrument will be water resistant
- Power: (Internal) — rechargeable 8.4 V DC battery for the laser.
- Operating time : 3 hours in continuous operation.
- Charging time : 14 to 16 hours — charger should be provided.
- Weight: <1Kg
- Hard carrying case or bag accommodating the instrument will be provided
- Instrument environmental parameters for optimum performance.

Operating temperate -40 to +85 degree Celsius
 Storage temperature -40 to +85 degree Celsius

3. The supplier will provide full-training on the set to the user for a minimum of three days. This training will include on day in house classroom training on theoretical subject including troubleshooting maintenance and two days of field training and techniques in ease detection.

3.2.25 Deluxe OB Mannequin

Specifications:-

It is used to import training of normal delivery and childbirth complications. It should have a model of female abdomen with abdomen layer as a non transparent flap, which should have an arrangement to attach with the remaining portion of the model by press button.

Consists of 07parts

1. Main Body

- Should be made up of rubber showing the landmark of lumber, sacrum, spine, public symphysis, pelvic girdle, with oval shaped perineum opening with a dia of 13-15 cms.
- Both the thigh should be upward raised and apart.

- The main body should be covered from abdomen to perineum.
- Length of the main body- 35 to 40 cms
- Depth of the main body showing abdomen 10 to 12 cms

2. Abdomen Layer

- It should be meant to cover the hollow abdominal space of the main body.
- It should be made up of non transparent rubber flap which should have an arrangement to attach with the main body with press buttons.
- It should have the provision for the cavity so that uterus and foetus can be placed abdominal layer to simulate the pregnancy.

3. Uterus

- It should be a hollow plastic bag containing a fetus shaped baby made up of rubber.
- It should be a shape that it could be placed inside the abdominal layer to look like a pregnant lady.
- There should be preservative inside the uterus.

4. Infant

- It will be used to show simulated delivery.
- It should be hollow.
- Made up of rubber with a facility for filling air with valve attach with foot.
- A provision to attach umbilical cord cover navel point.
- A separate manual air filling pump should be provide to fill air in the infant.
- Length of infant-50 to 60 cms

5. Umbilical Cord

- It should be made up of flexible plastic tube.
- Length of the tube: 65 to 75 cms
- Dia of the tube: 2 to 2.5 cms
- It should contain a facility to attach with the navel of the infant at one end and to attach with placenta at the other end.

6. Placenta

- A disc shaped placenta should be made up of good quality of rubber.

Training :-The bidder is also required to impart the hands on training to the officials of the Haryana Police Department Haryana on the operation, preventive maintenance etc of all the Disaster Management Equipments to be supplied under this tender.

Performa for comprehensive warranty and AMC with spares

Sr. No.	Name of the item	Qty.	Comprehensive warranty	AMC with spares
1.	Fire Proximity suit	2	One year	Two years
2.	Fire entry suit	3		
3.	Oxygen Concentrator	1		
4.	Nebulizer	4		
5.	ECG machine with analyser	2	Five years	Five years
6.	PORTABLE ULTRASOUND MACHINE	1	One year	Two years
7.	AUTOMATIC BLOOD ANALYSER	1	Five years	Five years
8.	Under Water Video Camera with accessories	1	One year	
9.	Walkie Talkie Sets/ Portable Radio Set	33	Three years for radio sets and 18 months for accessories such as batteries, chargers, antenna etc.	
10.	Base Stations 25 watts'	4		
11.	Victim Location Equipment and Breaching System	1	One year	
12.	Explosive Meter	2	2 years	
13.	Satellite Phones	4	One year	
14.	Multi Gas Detector	1	2 years	
15.	Portable Defibrillator with recorder	1	One year	Two years
16.	Multi Para Meter Monitor	1		
17.	Personal Diving Kit (Diving Suit, Breathing Apparatus, Weight Belt, Gloves, Diving Fins)	2		
18.	Under Water Communications set	1		
19.	High Pressure Breathing Air Compressors	1		
20.	Thermal Imaging Camera	1	Two years	
21.	Digital Video Camera	1	One year	
22.	Leak Tester for testing respiratory equipment	1		
23.	Breathing apparatus set with spare cylinders	6		
24.	Life Detector	1		
25.	Deluxe OB Mannequin	2		

ANNEXURE – 1-A

(To be enclosed with Pre qualification cum Technical bid)

MANUFACTURE WARRANTY

We, M/S_____ warrant that **Disaster Management Equipments** and their related accessories to be supplied by us hereunder shall be brand new, free from all encumbrances, defects and faults in material, workmanship and manufacture shall be of the highest grade and quality and consistent with the established and generally accepted standards for materials of the type ordered shall be in full conformity with the specifications, drawings or samples, if any, and shall operate properly.

We, M/S_____ also undertake that in case **Disaster Management Equipments** and their related accessories supplied by us found to be defected, faulty, or used at any stage, it shall be replaced by us at our cost.

Signature of the Witness

Signature of the Bidder

on & behalf of M/s

Full Name _____

Full Name _____

Full address _____

Full address_____

Dated:

(To be enclosed with Pre qualification cum Technical bid)

Annexure – 1-B

BIDDERS PARTICULARS

BIDDERS SHOULD FURNISH ANSWERS TO ALL THE QUESTIONS BELOW.

BIDDERS MAY PLEASE NOTE THAT IF THE ANSWER SO FURNISHED ARE NOT CLEAR AND/OR ARE EVASIVE, THE ENTRY WILL BE LIABLE TO BE IGNORED.

1. **Name of the Bidder**

2. **PAN No. of the Bidding company:-**

3. **Please indicate:-**

Name & full address of your Banker

4. **Business name and Constitution of the firm.**

Is the firm registered under:-

(a) The Indian Companies Act, 1956 (b) The India Partnership Act, 1932
(Please also give name of partners) (c) Any act, if not who are the
owners. (Please give full names and address).

5. **State whether required equipment and related accessories held in stock sufficient for the execution of the job.**

6. **We M/s _____ have enclosed EMD for Rs. 2,00,000/- (Rs. Two Lacs only) drawn in favour "Haryana State Electronics Development Corporation Limited" vide Draft No. _____ dated: _____ drawn on _____ Bank payable at Chandigarh.**

7. **For Partnership firms state whether they are registered or not registered under Indian Partnership Act, 1932. Should the answer to this question by a Partnership firm be in the affirmative, please state further:-**

(a) Whether by the Partnership agreement, authority to refer disputes concerning the business of the partnership to arbitration has been conferred on the partner who has signed the offer.

(b) If the answer to (a) is in the negative, whether there is any general power of attorney executed by all the partners of the firm authorizing the partners who signed the bid/offer to refer dispute concerning business of the partnership to arbitration.

- (c) If the answer to either (a) or (b) is in the affirmative furnish a copy of either the partnership agreement or the general power of attorney as the case may be.

N.B.:

- (1) Please attach to the offer a copy of either document on which reliance is placed for authority of partners or the partners signing the offer to refer disputes to arbitration. The copy should be attested by a Notary Public or its execution should be admitted by Affidavit on a property stamped paper by all the partners.
- (2) Where authority to refer disputes to arbitration has not been given to the partners signing the offer the offers must be signed by every partner of the firm.

8. Here state specifically that whether the price offered by you is to the best of your knowledge and belief, not more than the price usually charged by you for the job of the same nature. If not state the reasons thereof, if any, also indicate the margins of difference.

9. Please confirm that you have read all the terms & conditions carefully and have complied with accordingly.

Signature of Witness:

Full name & address of
Witness in Block letters

Signature of Bidder

(1) Full name and address of the persons
Signing **(In BLOCK letters)**

(2) Whether signing as Proprietor/Partner
Constituted Attorney/duly authorized
by the Company.

Date:
Place:

(seal)

Annexure-1-C**(To be enclosed with Pre qualification cum Technical bid)****BUSINESS DETAILS**

1. **Date of Incorporation/Agreement/Partnership :** _____
 2. **Particulars of Business:**

Name of Office	:	
Name of Premises/Building/Village	:	
Area/Locality/Sub-Division	:	
Town/City/District	:	
State/Union Territory	:	
No. of Branches	:	
Nature of Business	:	

3. **Names, Addresses etc. of Partners/Members/Directors(For Information about more persons, please add separate sheet(s) in the format given below) ***

Details of Partners/Members/Directors	:	
No. of Partners/Members/Directors	:	
Full Name	:	
Name of Premises/Building/Village	:	
Area/Locality/Taluka/sub-Division	:	
Town/City/District	:	
State/Union Territory	:	
Telephone No.	:	
Fax No	:	

Email ID	:	
Income Tax PAN No.#	:	

4. Detail of turn over

Financial year	Turnover in Rs	Profit	Page no of the balance sheets enclosed with the bid
2008-09			
2009-10			

Date:**Signature of Bidder**Name :
Status/ Designation:**(Seal)****Note :** Furnish separate profiles, if desired.

(Enclose with Prequalification cum Technical Bid)

Annexure- 1-D

TECHNICAL OFFER

Managing Director
Haryana State Electronics Dev. Corpn. Ltd., (HARTRON)
SCO 111-113, Sector 17-B,
Chandigarh.

We M/s _____ offer to supply install and commission the following **Disaster Management Equipments** to the office of the O/o DGP Haryana in conformity with this offer as may be ascertained in accordance with the Schedule of Prices provided in the Commercial Bid.

Sr. No.	Name of the item	Qty.	Comprehensive warranty	AMC with spares	Make & model
1.	Fire Proximity suit	2	One year	Two years	
2.	Fire entry suit	3			
3.	Oxygen Concentrator	1			
4.	Nebulizer	4			
5.	ECG machine with analyser	2	Five years	Five years	
6.	PORTABLE ULTRASOUND MACHINE	1	One year	Two years	
7.	AUTOMATIC BLOOD ANALYSER	1	Five years	Five years	
8.	Under Water Video Camera with accessories	1	One year		
9.	Walkie Talkie Sets/ Portable Radio Set	33	Three years for radio sets and 18 months for accessories such as batteries, chargers, antenna etc.		
10.	Base Stations 25 watts'	4			
11.	Victim Location Equipment and Breaching System	1	One year	Two years	
12.	Explosive Meter	2	2 years		
13.	Satellite Phones	4	One year		
14.	Multi Gas Detector	1	2 years		
15.	Portable Defibrillator with recorder	1	One year		
16.	Multi Para Meter Monitor	1			
17.	Personal Diving Kit (Diving Suit, Breathing Apparatus, Weight Belt, Gloves, Diving Fins)	2			
18.	Under Water Communications set	1			

- | | | | |
|-----|---|---|-----------|
| 19. | High Pressure Breathing Air Compressors | 1 | |
| 20. | Thermal Imaging Camera | 1 | Two years |
| 21. | Digital Video Camera | 1 | One year |
| 22. | Leak Tester for testing respiratory equipment | 1 | |
| 23. | Breathing apparatus set with spare cylinders | 6 | |
| 24. | Life Detector | 1 | |
| 25. | Deluxe OB Mannequin | 2 | |

* The bidder is required to give make and model of all the individual items

We undertake to provide the warranty of each item as mentioned in clause no 19 and against each item specified under technical specifications in section 3.

We undertake, if our bid is accepted, to commence the work immediately and to complete the supply, installation and commissioning as the case may be within the stipulated time frame as mentioned in the tender document unless otherwise specified in the contract agreement to be executed from the date of receipt of your Notification of Award.

We agree to abide by this bid for a period of 180 days from the date fixed for bid opening and it shall remain binding upon us and may be accepted at any time before expiration of that period. Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.

We have enclosed demand draft no----- Dated ----- drawn in favour of **"Haryana State Electronics Development Corporation Limited"** for Rs 2,00,000/- as EMD.

We understand that you are not bound to accept the lowest or any bid you may receive. We also understand that you have the right to vary the quantities.

Dated _____ Day of _____ 2011.

Signature & Seal

(in the Capacity of)

Only Authorized to sign bid for and on behalf of _____

Full Name : _____

Full address : _____

ANNEXURE- 1 E

(Enclose with Prequalification cum Technical Bid)

AFTER SALE SERVICE CERTIFICATE

From:

To

Managing Director,
HARTRON, SCO-111-113,
Sector 17-B,
Chandigarh

Whereas, we M/s _____ are having service offices at Delhi, Chandigarh and in the state of Haryana. Details are as under:

Sr.No.	Address of Service Centre	Phone No.	Number of Engineers

Or

Whereas, we M/s _____ undertakes to setup service offices in Haryana/Chandigarh and Delhi/Gurgaon with in one month of the award of the contract.

We do hereby confirm that:

We will attend all the complaints/service calls within 24 hours. Down time will not exceed beyond 48 hours. In case, down time exceeds 48 hours then we will extend the warranty period of that item(s) double of the down time.

Dated: this _____ day of _____ 2011
(Signature)

Name :
Designation :
(Head or Senior Executive of Firm)
Address :
Phone/Mobile/Fax No :

(Enclose with Commercial Bid)**ANNEXURE – 1-F****BID LETTER****Commercial offer part 1****To**

Managing Director
 Haryana State Electronics Dev. Corpn. Ltd.,(HARTRON)
 SCO 111-113, Sector 17-B,
 Chandigarh.

We declare that we M/s _____ offer to supply the Disaster Management Equipments to the O/o DGP Haryana in conformity with the said offer as per the following

Sr.no	Name of the item	Qty	Make/model	Unit Cost	Total landed cost
1.	Fire Proximity suit	2			
2.	Fire entry suit	3			
3.	Oxygen Concentrator	1			
4.	Nebulizer	4			
5.	ECG machine with analyser	2			
6.	PORTABLE ULTRASOUND MACHINE	1			
7.	AUTOMATIC BLOOD ANALYSER	1			
8.	Under Water Video Camera with accessories	1			
9.	Walkie Talkie Sets/ Portable Radio Set	33			
10	Base Stations 25 watts'	4			
11	Victim Location Equipment and Breaching System	1			
12	Explosive Meter	2			
13	Satellite Phones	4			
14	Multi Gas Detector	1			
15	Portable Defibrillator with recorder	1			
16	Multi Para Meter Monitor	1			

17	Personal Diving Kit (Diving Suit, Breathing Apparatus, Weight Belt, Gloves, Diving Fins)	2			
18	Under Water Communications set	1			
19	High Pressure Barething Air Compressors	1			
20	Thermal Imaging Camera	1			
21	Digital Video Camera	1			
22	Leak Tester for testing respiratory equipment	1			
23	Breathing apparatus set with spare cylinders	6			
24	Life Detector	1			
25	Deluxe OB Mannequin	2			
26	Sales tax				
27	Total landed cost				

* the bidder is required to quote for each item separately.

1. Period of Delivery: We do hereby undertake, that in the event of acceptance of our bid, the job will be completed within one month unless other wise specified in the purchase order.
2. Terms of Delivery: The landed prices quoted are inclusive of current Excise Duty, Freight, Insurance, Sales Tax, etc.
3. We agree to abide by our offer for a period of 180 days from the date fixed for opening of the Technical bids and that we shall remain bound by a communication of acceptance within that time.
4. We hereby certify that we have read and understood the terms and conditions applicable to the bidder and we do hereby undertake to supply as per these terms and conditions.
5. Certified that the Bidder is:
A sole proprietorship firm and the person signing the bid/offer is the sole proprietor/constituted attorney of the sole proprietor.

Or

A partnership firm, and the person signing the bid/offer is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the

partnership by virtue of the partnership agreement/by virtue of general power of attorney.

Or

7. A company and the person signing the bid/offer is the constituted attorney.
NOTE: Delete whatever is not applicable. All corrections/deletions should invariably be duly attested by the person authorized to sign the bid/offer document.
8. We do hereby undertake that until a formal Contract is prepared and executed, this bid, together with your written acceptance thereof and placement of letter of intent awarding the Contract shall constitute a binding Contract between us.

Dated: this _____ day of _____ 2011.

Signature of Bidder

Details of enclosures

Full Name :

Full address : _____

Tel. No. _____

Fax no _____

E-mail: _____

(Enclose with Commercial Bid)**ANNEXURE – 1-F1****BID LETTER****Commercial offer part 2****To**

Managing Director
Haryana State Electronics Dev. Corpn. Ltd.,(HARTRON)
SCO 111-113, Sector 17-B,
Chandigarh.

We declare that we M/s _____ offer to provide the AMC charges with spares for the Disaster Management Equipments offered to be supplied by us to the O/o DGP Haryana in conformity with the said offer as per the following

Sr. No.	Name of the item	Qty.	Comprehensive warranty	AMC	AMC charges with spares to be given on per year basis after the respective warranty period
1.	Fire Proximity suit	2	One year	Two years	1st year 2nd year
2.	Fire entry suit	3			1st year 2nd year
3.	Oxygen Concentrator	1			1st year 2nd year
4.	Nebulizer	4			1st year 2nd year
5.	ECG machine with analyser	2	Five years	Five years	1st year 2nd year 3rd year 4th year 5th year
6.	PORTABLE ULTRASOUND MACHINE	1	One year	Two years	1st year 2nd year
7.	AUTOMATIC BLOOD ANALYSER	1	Five years	Five years	1st year 2nd year 3rd year 4th year 5th year
8.	Under Water Video Camera with accessories	1	One year		1st year 2nd year
9.	Walkie Talkie Sets/ Portable Radio Set	33	Three years for radio sets and		1st year 2nd year
10.	Base Stations 25 watts'	4	18 months for accessories such as batteries, chargers, antenna etc.	Two years	1st year 2nd year

11.	Victim Location Equipment and Breaching System	1	One year	1 st year 2 nd year
12.	Explosive Meter	2	2 years	1 st year 2 nd year
13.	Satellite Phones	4	One year	1 st year 2 nd year
14.	Multi Gas Detector	1	2 years	1 st year 2 nd year
15.	Portable Defibrillator with recorder	1	One year	1 st year 2 nd year
16.	Multi Para Meter Monitor	1		1 st year 2 nd year
17.	Personal Diving Kit (Diving Suit, Breathing Apparatus, Weight Belt, Gloves, Diving Fins)	2		1 st year 2 nd year
18.	Under Water Communications set	1		1 st year 2 nd year
19.	High Pressure Breathing Air Compressors	1		1 st year 2 nd year
20.	Thermal Imaging Camera	1	Two years	1 st year 2 nd year
21.	Digital Video Camera	1	One year	1 st year 2 nd year
22.	Leak Tester for testing respiratory equipment	1		1 st year 2 nd year
23.	Breathing apparatus set with spare cylinders	6		1 st year 2 nd year
24.	Life Detector	1		1 st year 2 nd year
25.	Deluxe OB Mannequin	2		1 st year 2 nd year
26.	Total AMC charges			
27.	Service tax			
28.	Total AMC with service tax			

6. Period of Delivery: We do hereby undertake, that in the event of acceptance of our bid, the job will be completed within one month unless other wise specified in the purchase order.
7. Terms of Delivery: The landed prices quoted are inclusive of current Excise Duty, Freight, Insurance, Sales Tax, etc.
8. We agree to abide by our offer for a period of 180 days from the date fixed for opening of the Technical bids and that we shall remain bound by a communication of acceptance within that time.
9. We hereby certify that we have read and understood the terms and conditions applicable to the bidder and we do hereby undertake to supply as per these terms and conditions.

10. Certified that the Bidder is:

A sole proprietorship firm and the person signing the bid/offer is the sole proprietor/constituted attorney of the sole proprietor.

Or

A partnership firm, and the person signing the bid/offer is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney.

Or

7. A company and the person signing the bid/offer is the constituted attorney.

NOTE: Delete whatever is not applicable. All corrections/deletions should invariably be duly attested by the person authorized to sign the bid/offer document.

9. We do hereby undertake that until a formal Contract is prepared and executed, this bid, together with your written acceptance thereof and placement of letter of intent awarding the Contract shall constitute a binding Contract between us.

Dated: this _____ day of _____ 2011.

Signature of Bidder

Details of enclosures

Full Name :

Full address : _____

Tel. No. _____

Fax no _____

E-mail: _____

To be enclosed with the commercial bid

ANNEXURE 1 G

UNDERTAKING OF RATES

To

Managing Director,
HARTRON, SCO-111-113,
Sector 17-B,
Chandigarh

We M/s _____ do hereby confirm that:

The rates quoted against this offer are lowest possible and as on date we have not quoted less rates to any other customer than the rates quoted herein. In case, we quote less rates than this offer to any other customer within 1 month of the due date of this offer, then double of the difference in amount will be refunded to HARTRON. We also confirm that in case our Company/principal officially reduce the price before the delivery or within 15 days from the date of delivery, then the benefit for the same will be passed to HARTRON.

We M/s _____ further undertake

that any price benefit on account of providing higher capacity Disaster Management Equipments and their related accessories than the required/specified in this offer shall not be claimed by us either from Hartron or from the O/o DGP Haryana.

Dated: this _____ day of _____ 2011.

(Signature)
Name :
Designation :
(Head or Senior Executive of Firm)
Address :
Phone No :
Fax No :
Mobile No :