

GOVERNMENT OF INDIA
(Ministry of Home Affairs)
DIRECTORATE GENERAL
CENTRAL RESERVE POLICE FORCE
CGO COMPLEX, LODHI ROAD, NEW DELHI - 110003
Tele/Fax: 011-24366630

No. R.XV-4(5)/2014-15-C

Dated, the 05th Nov' 2014

To

Dear Sir,

1. On behalf of the President of India, I invite you to tender online bids for the supply of stores detailed in the schedule.
2. The conditions of contract which will govern any contract made are contained in pamphlet No. DGS&D-68 entitled "Conditions of contract governing contracts, placed by the Central Purchase Organizations of Government of India as amended up to 31-12-91 and those contained in the pamphlet No. DGS&D-229 containing various instructions to tenderers quoting against the tender enquiry issued by the DGS&D read with the amendments enclosed with this tender enquiry. Any special conditions attached to this invitation to tender will also form part of the conditions.
3. The above pamphlets and the lists of corrections thereto can be obtained on payment from the under mentioned officers:-
 - a) The Manager of Publications, Civil Lines, Delhi.
 - b) The Superintendent, Government Printing & Stationary, Allahabad, U.P.
 - c) The Superintendent, Government Printing & Stationary, Mumbai.
 - d) The Superintendent, Government Printing, Gulzargbag, Patna. Bihar.
 - e) DGS&D, New Delhi and its Regional Offices at Mumbai, Chennai, Kolkata and Kanpur.
 - f) Government of India Book Depot, 8-Hastings Street, Kolkata.
4. If you are in a position to quote for supply in accordance with the requirements stated in the attached schedule to tender, all documents attached herewith should be fully filled in, signed and submitted through eProcurement site <http://eprocure.gov.in/eprocure/app>. You must also furnish with your tender all the information called for as indicated in pamphlet No. DGS&D-229 mentioned in para-1 above. Attached list of questionnaire should also be answered and submitted through eProcurement site <http://eprocure.gov.in/eprocure/app>, failing which your tender will be liable to be ignored, and not considered.
5. This tender is not transferable.

Thanking you

Yours faithfully

Sd/- 05/11/2014

(Virendra Agrawal)

DIGP (Equipment)

For and on behalf of the President of India.

SCHEDULE TO TENDER
GOVERNMENT OF INDIA
(Ministry of Home Affairs)
DIRECTORATE GENERAL
CENTRAL RESERVE POLICE FORCE
CGO COMPLEX, LODHI ROAD, NEW DELHI - 110003
Tele/Fax: 011-24366630

Tender Cost : Rs. 1000/- (Rupees One Thousand) only.

Tender Enquiry No	:	R.XV-4(5)/2014-15-C dated 05/11/2014
Time and date of receipt of online tender	:	By 1100 Hrs on 19/12/2014
Time and date of receipt of Manual Documents.	:	By 1100 Hrs on 19/12/2014
Time and date for online opening of tender	:	At 1200 Hrs on 19/12/2014
Validity of offer	:	The tender shall remain open for acceptance till 180 days from the date of opening.

Product reservation/purchase preference/price preference if any shall be as per Govt. policy.

Tenderers are advised to go through the Earnest Money Deposit (EMD) and Two Bid System clause of this Tender Enquiry carefully before filling the tender.

Sl. No	Description of Stores	Quantity	Specifications and Trial Directive	EMD (In Rupees)
01	1-5W (Programmable/Selectable) RF output Digital VHF Transceiver based on DMR (TDMA) technology, with 7.4V 2000 mAH or more Li-ion Battery pack with spring loaded belt clip, Rugged Flexible Helical Antenna, Single unit smart charger, Inbuilt Support GPS & user manual.	2330	As per Appendix- "A" & "C"	Rs. 45,00,000/- (Rupees Forty five Lacs only)
02	7.4V 2000 mAH or more Li-ion Battery Packs	4660		
03	Programming Cable and Software for 1/5 Watt radio set.	25		
04	Technical Service Manual for 1/5 Watt radio set.	25		
05	25W (Programmable/Selectable) RF output Digital VHF Transceiver based on DMR (TDMA) technology with DTMF micro phone, Battery cable, Mounting fixtures, Support GPS & user manual.	630	As per Appendix- "B" & "D"	
06	6dB gain Omni directional antenna with 30 meter Low Loss RF cable for base station	630		
07	Programming Cable and Software for 25 Watt radio set.	25		
08	Technical Service Manual for 25 Watt radio set.	25		

SIGNATURE OF THE TENDERER

All Tender documents attached with this invitation to tender including the specifications are SACROSANCT for considering any offer as complete offer. It is, therefore, important that **Tender Acceptance Letter** which is a written undertaking that all the terms and condition of the tender are understood and accepted should be signed and submitted through e-Procurement site <http://eprocure.gov.in/eprocure/app> as well as manually.

All firms who are not specifically registered with DGS&D or NSIC for the tendered stores as per tender enquiry specifications are required to submit Earnest Money as mentioned above along with their offer as per instructions to bidders for e-Submission of bids. Registration with any other organization will not exempt them from depositing Earnest Money. As per Government policy, PSUs are also not exempted from depositing Earnest Money.

SIGNATURE OF THE TENDERER

1. **Purchaser** : The President of India.
2. **Inspection Authority** : DG, CRPF, New Delhi
3. **Inspecting Officer** : Board of Officers detailed by DG, CRPF or his authorized representative.
4. **Stores required at** : FREE DELIVERY AT CONSIGNEES LOCATIONS (As per **Appendix- "E"**)
Tenderers are required to quote rates on free delivery at Consignee's location basis only. Uniform rates to be quoted for all destinations/consignees. Tenders received on F.O.R Destination Stations/Station of Dispatch basis or different rates for different destinations shall be summarily rejected.
5. **Delivery required by** : i) Within **60 days**.
ii) If the AT placed on any of the participating firms for the part quantity, the delivery period will be fixed keeping in view the quantum of order and the supply capacity quoted by the concerned firm in their tender documents

5.1 **Minimum Quantity offered** : **Full Quantity (Both 5W & 25W)**

Note: If L-1 firm(s) is not able to meet/supply the full quantity, a counter offer will be given to the remaining eligible and technically qualified tenderers in the tender process, asking them to confirm acceptance of L-1 rates. The remaining eligible and technically qualified tenderers will be asked to give their acceptance or otherwise in writing. Depending upon the written confirmation/ acceptance/ denial of acceptance of L-1 rates, the competent authority will take a final decision to order full quantity at L-1 rates to other eligible tenderers who have accepted the counter offer of L-1 rates based on their monetary capacity, production capacity etc but strictly with reference to the delivery period and schedule of delivery including inspection period already disclosed in the tender enquiry documents. It may also be ensured that during this stage none of the eligible tendering firms who have accepted the counter offer will be allowed to give a revised commercial offer.

6. **Dispatch Instructions:** Stores are required to be delivered at consignee place at freight, risk and cost of the supplier.

7. **Payment Terms:** 90% payment will be released on production of inspection report and receipt of stores by the consignees and balance 10% on regularization of the case.

8. **Packing & Marking** : As per relevant clause of Specification.

9. **Technical Literature:** Tenderers should mandatorily submit a technical literature/ brochure with their tenders clearly mentioning the compliance of each and every technical parameter as per specifications mentioned in Appendix-A & B. Compliance statement should clearly indicate the relevant page No. of the brochure/literature.

10. Rate quoted by the firms should be on firm price basis.

11. Firms should quote rates, taxes, duties as per Price Bid (BOQ) format provided.

SIGNATURE OF THE TENDERER

12. Tenderers should disclose the name and full address (along with telephone/ Fax No.) of the place where the stores will be manufactured and offered for inspection. In case the firm is registered with NSIC for the subject stores, they should clarify whether they are registered as a manufacturing unit or in any other capacity. In case the registration is as a manufacturer, they should indicate the full address/phone no of their manufacturing facility.
13. Purchaser reserves the right to increase/decrease the number of consignees and change the consignee(s) and quantity of stores allotted to them.
14. Purchaser reserve the right to get the manufacturing capacity of all firms re-verified irrespective of the registration status.
15. Purchaser reserves the right to cancel/scrap the tender enquiry without assigning any reason at any stage.
16. Purchaser reserves the right to increase or decrease the quantity at any stage.
17. **PLACE OF SUBMISSION OF TENDER DOCUMENTS:** Manual documents, as asked in clause 23, sealed in envelope duly mentioning tender enquiry no. and brief description of store are to be submitted in the **Tender Box (ADM)** kept at Reception, Directorate General, CRPF, Block No-1, CGO Complex, Lodhi Road, New Delhi-03 before specified date and time mentioned in the Schedule of the Tender. **Late/Delayed/Non submission of original documents would result in rejection of bid during online bid opening.**
18. **TENDER SAMPLE FOR TECHNICAL EVALUATION:** Tenderer will be required to produce samples of their quoted model of radio sets with allied accessories (5W-3 Nos & 25W-2 Nos) for Field Trial/Technical Evaluation, as per tender enquiry specification (Appendix- A & B) and trial directive (Appendix- C & D), by board of officers (to be detailed by DG CRPF or his authorized representative). The Tenderers will be given 7 days time to produce their samples for evaluation. Tenderers should produce both type of radio sets i.e 5W & 25W with allied accessories and ensure that items produced by them fully confirm to all the parameters of the T.E specification. Offers of those bidders are liable to be ignored, who will not submit both type of radio sets for evaluation and whose samples are not found as per tender enquiry specification. Price bids of only those bidders will be opened whose technical bids as well as product are found acceptable. After technical evaluation, successful tenderers will be required to deposit the evaluated sample with the Department for comparison with bulk supply which will be returned after completion of supply.
19. The price bids of the bidders whose technical offers are acceptable will be opened and order would be considered on the lowest bid subject to their capacity and performance etc.

SIGNATURE OF THE TENDERER

20. **LIQUIDATED DAMAGES** : - If the contractor fails to deliver the store or any installment thereof within the period fixed for such delivery or at any time repudiates the contract before the expiry of such period, the purchaser will recover from the contractor liquidated damages including administrative expenses and not by way of penalty a sum equivalent to 2% of the price of any store which the contractor fails to deliver within the period fixed for delivery in the schedule for each month or part of the month during which the delivery of such store may be in arrears where delivery thereof is accepted after expiry of the said period provided that the total damages so claimed shall not exceed 10% of the total contract price.
21. **PERFORMANCE SECURITY:-**
(i) The successful firm shall have to deposit a Security Deposit of 10% of the contract value within 21 days of the placement of supply order for due performance as per provisions contained in Clause 7 of DGS&D-68 (Revised). Failure on the part of the firm to deposit the security deposit, the purchaser reserves the right to cancel the contract at the risk and cost of the supplier.
(ii) The performance Security Deposit submitted by the supplier will remain valid till 60 days beyond guarantee/warranty period.
(iii) If the supplier fails to deliver the stores in a promised period and places and a request for extension of time he will submit an undertaking on non-judicial stamp paper of Rs. 10/-duly attested by Notary Public stating that the performance Security Deposits has already been extended for 60 days beyond the guarantee/warranty period.
22. **SAMPLING AND INSPECTION CRITERIA:** - The successful bidder will have to abide by the sampling and inspection criteria formulated by the purchaser.
23. **TWO BID SYSTEM:** - All bidders are required to submit their offers in two covers as under :-
- A) **FIRST COVER SHOULD CONTAIN THE FOLLOWING:-**
a. Documents to be submitted **in original manually** and to be dropped in the **Tender Box (Adm)** in sealed envelope: -
i. Tender Cost (if applicable).
ii. EMD (if applicable).
iii. *Tender acceptance letter.*
iv. Original/Attested Lab Test report for the required parameters mentioned in Appendix- C & D.
v. Technical detail/leaflets/brochure of subject stores as per specifications.
vi. Any other documents which firm wishes to submit in support of compliance of terms & conditions of the Tender Enquiry.
vii. Copy of all the documents submitted online.
b. **Documents to be submitted online in scanned copy: -**
i. Tender Cost (if applicable).
ii. EMD (if applicable).
iii. *Income tax clearance certificate.*
iv. *Annual turnover support documents.*
v. Form-7, Form 68 (A) and list No. 1.
vi. Questionnaire, Appendix-“F, G & H”
vii. Details of their plant and machinery on the format enclosed along with T.E.

SIGNATURE OF THE TENDERER

B) SECOND COVER SHOULD CONTAIN THE FOLLOWING: - The composite bid i.e. rate indicated in the technical bid "OPENLY" shall be ignored. Prices should be quoted as per BOQ format only provided along with the tender document at e-Procurement site <http://eprocure.gov.in/eprocure/app>. Manual price bid will not be considered.

24. Lab test should have been issued prior to date of tender opening. **Test report for any parameter issued after opening of tender documents will not be entertained.**

25. Tender Documents are available at **CPPP e-Procurement site** <http://eprocure.gov.in/eprocure/app> as well as on CRPF website (www.crpf.gov.in) which can be downloaded by interested firms free of cost. However bidders are required to submit Tender Fee /EMD as applicable, as per tender document while submitting the bids. The Demand Draft for Tender Fee should be drawn in favour of **DIG (Adm) Dte. Genl, CRPF payable at SBI, Service Branch, New Delhi (Code No.7687).**

26. Tenders are not permitted to alter or modify their tenders after expiry of the deadline for receipt of tender till the date of validity of tender and if they do so their earnest money will be forfeited.

27. **MANUFACTURERS:** - Only those firms should respond who are the manufacturer of the tendered store. In countries where manufacturers are authorized to export the store only through their authorized Govt marketing Agency, such Agencies will be allowed to bid. The tenderer must furnish Certificate with their tender from manufacturer and their Govt. certifying authenticity as above failing which their tender will be summarily ignored. The foreign manufacturers of the tendered store will also have to give details in the tender documents of the after sales-service to be provided after expiry of warranty period.

28. The Indian Agents of foreign manufacturers/principal are also allowed to bid in the tender subject to the following conditions:-

(i) The Indian Agent should be enlisted with DGS&D for the tendered store on the date of opening of technical bids. However, those Indian Agents who have applied to DGS&D for registration/enlistment before the time and date of opening of technical bids can also be considered provided the enlistment with DGS&D is operational before opening of the price bid and the Indian agent have informed the purchaser well in advance, of the price bid opening date. Such Indian agents who have applied for DGS&D Enlistment will have to submit proof of application.

(ii) The Indian Agent will submit, along with the tender documents, a copy of the agreement with the foreign manufacturer/principal, giving particulars of precise arrangement with foreign principal and their interest in the business in India. Such agreement with foreign manufacturers/principal should be a long term agreement and not merely for the present tender. If the agreement is only for the present tender the offer received will be liable to be rejected.

iii) The Indian Agent will provide details of the after sale service and post contractual support i.e. repair, maintenance etc.

iv) The Indian Agent will also be required to submit the details of his commission or any other arrangements with foreign manufacturer/principal for providing tendered items.

29. Offer from firms whose business activities are limited to procuring items from manufacturers, both Indian and foreign supplying the same to purchaser having no after sales service back up will not be entertained.

SIGNATURE OF THE TENDERER

30. Tenderers, who desire to quote more than one model, should submit separate EMD and compliance statement for each model.

31. The successful bidder will provide 2 week free of cost training on handling, operation & repair of their radio set.

Note:-

- a) **Full name, Contact No. and status of the person signing the tender documents must be clearly mentioned in the tender documents.**
- b) The firms applying tenders against the subject Tender Enquiry are informed that all relevant details with reference to the Tender Enquiry stipulations are clearly responded to otherwise their offer is liable to be rejected.
- c) Before submission of tender, tenderers will check the Specification compliance sheet (**Appendix- F & G**) & Check List (**Appendix-“H”**) attached to these Tender Documents for compliance on various stipulations of the tender.

Sd/- 05/11/2014

(Virendra Agrawal)
DIGP (Equipment)

For and on behalf of the President of India.

SIGNATURE OF THE TENDERER

CONDITIONS REGARDING DEPOSIT OF EARNEST MONEY

1. All firms who are not specifically registered with NSIC or DGS&D for the stores for which the offers are invited, are required to deposit **EARNEST** money equivalent to the amount as mentioned in the Tender Schedule, failing which their offer will be summarily rejected.
2. For claiming exemption from depositing earnest money, the tenderers should be registered with NSIC or DGS&D specifically for the stores with specification as mentioned in Tender schedule. Firms which are not specifically registered for the stores with specification as mentioned in the Tender Schedule, either with DGS&D or with NSIC shall be treated as unregistered and shall be required to deposit earnest money as above.
3. Similarly the firms, who are specifically registered for the stores as per specified Specifications with DGS&D / NSIC, but with a certain MONETARY **LIMIT**, will be treated as unregistered for their value exceeding their monetary limit of registration. Such firms shall be required to deposit proportionate earnest money over and above the monetary limit. In case such firms fail to deposit Earnest Money, their offer for the tender value exceeding their monetary limit is liable to be ignored.
4. The Earnest Money can be deposited in any of the following alternative forms:-
 - (a) An irrevocable Bank Guarantee (BG)/Fixed Deposit Receipt in the name of DIG (Adm), Dte. Genl., CRPF, Block NO 1, CGO Complex, New Delhi from any nationalized/Scheduled Bank.
 - (b) Foreign bidders should submit Earnest Money in the form of Bank Guarantee only, issued or confirmed by any Nationalized Indian Bank.
 - (c) ***Foreign bidders should have Indian counterpart, who should participate on their behalf in electronic submission of bids.***
5. The earnest money shall be valid and remain deposited with the purchaser for the **period of 240 days from the date of tender opening**. If the validity of the tender is extended, the validity of the BG/or any other alternate document submitted in lieu of Earnest money will also be suitably extended by the tenderer, failing which their tender after the expiry of the aforesaid period shall not be considered by the purchaser
6. No interest shall be payable by the purchaser on the EM deposited by the tenderer.
7. The Earnest Money deposited is liable to be forfeited if the tenderer withdraws or amends impairs or derogate from the tender in any respect within the period of validity of his tender.
8. The earnest money of the successful tenderer shall be returned after the security Deposit as required in terms of the contract is furnished by the tenderer.
9. If the successful tenderer fails to furnish the security deposit as required in the Contract within the stipulated period, the Earnest Money shall be liable to be forfeited by the purchaser.
10. Earnest Money of all the unsuccessful tenderers shall be returned by the purchaser as early as possible after the expiry of bids validity, but not later than 30 days after placement of contract. Tenderers are advised to send a pre receipt challan along with their bids so that refund of Earnest Money can be made in time.
11. Any tender, where the tenderers is required to deposit Earnest Money in terms of Conditions mentioned in preceding paras, not accompanied with Earnest Money in any one of the approved forms acceptable to the purchaser, shall be rejected.

Sd/- 05/11/2014

(Virendra Agrawal)
DIGP (Equipment)

For and on behalf of the President of India.

SIGNATURE OF THE TENDERER

Form 68-A

Tender No. R.XV-4(5)/2014-15-C

DATED 05/11/2014

Full name and address of the Tenderer in addition to Post Box No. if any, should be quoted in all communication to this office.

Contractor's Telegraphic address_____

Telephone No._____

Fax No._____

From.

Dear Sir,

1. I/We hereby offer to supply the stores detailed in the schedule here to or such portion thereof as you may specify in the acceptance of tender at the price given in the said schedule and agree to hold this offer open till _____ I/we shall be bound by a communication of acceptance within the prescribed time.

2. I/We have understood the instructions to Tenderers in the booklet DGS&D-229 and conditions of contract in the Form No-68 (Revised) including in the pamphlet entitling conditions of contract governing contracts placed by the Central Purchases Organization of the Government of India read with the amendments annexed herewith and have thoroughly examined the specification quoted in the schedule hereto and am/are fully aware of the nature of the stores required and my/our offer is to supply stores strictly in accordance with the requirements.

The following pages have been added to and form part of this tender_____

Yours faithfully

(Signature of the Tenderer)

Address_____

Dated_____

(Signature of the Witness)

Address_____

Dated_____

Instructions to the Bidders to submit the bids online thro' the Central Public Procurement Portal for e Procurement at <http://eprocure.gov.in/eprocure/app>

- 1) Possession of valid Digital Signature Certificate (DSC) and enrollment/registration of the contractors/bidders on the e-procurement/e-tender portal is a prerequisite for e-tendering.
- 2) Bidder should do the enrollment in the e-Procurement site using the "Click here to Enroll" option available on the home page. Portal enrollment is generally free of charge. During enrollment/registration, the bidders should provide the correct/true information including valid e-mail id. All the correspondence shall be made directly with the contractors/bidders through e-mail id provided.
- 3) Bidder need to login to the site thro' their user ID/ password chosen during enrollment/registration.
- 4) Then the Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by SIFY/TCS/nCode/eMudra or any Certifying Authority recognized by CCA India on eToken/SmartCard, should be registered.
- 5) The DSC that is registered only should be used by the bidder and should ensure safety of the same.
- 6) Contractor/Bidder may go through the tenders published on the site and download the required tender documents/schedules for the tenders he/she is interested.
- 7) After downloading / getting the tender document/schedules, the Bidder should go thro' them carefully and then submit the documents as asked, otherwise bid will be rejected.
- 8) If there are any clarifications, this may be obtained online thro' the tender site, or thro' the contact details. Bidder should take into account the corrigendum published before submitting the bids online.
- 9) Bidder then logs in to the site through the secured log in by giving the user id/ password chosen during enrolment/registration and then by giving the password of the eToken/SmartCard to access DSC.
- 10) Bidder selects the tender which he/she is interested in by using the search option & then moves it to the 'my tenders' folder.
- 11) From my tender folder, he selects the tender to view all the details indicated.
- 12) It is construed that the bidder has read all the terms and conditions before submitting their offer. Bidder should go through the tender schedules carefully and upload the documents as asked; otherwise, the bid will be rejected.
- 13) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can be in PDF/xls/rar/zip/dwf formats. If there is more than one document, they can be

Clubbed together and can be provided in the requested format. Each document to be uploaded through online for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced through zip/rar and the same can be uploaded, if permitted. Bidders Bid documents may be scanned with 100 dpi with black and white option. However of the file size is less than 1 MB the transaction uploading time will be very fast.

- 14) If there are any clarifications, this may be obtained through the site, or during the pre-bid meeting if any. Bidder should take into account the corrigendum published from time to time before submitting the online bids.
- 15) The Bidders can update well in advance, the documents such as certificates, annual report details etc., under My Space option and these can be selected as per tender requirements and then send along with bid documents during bid submission. This will facilitate the bid submission process faster by reducing upload time of bids.
- 16) Bidder should submit the Tender Fee/ EMD as specified in the tender. The original should be posted/couriered/given in person to the Tender Inviting Authority, within the bid submission due date & time for the tender. Scanned copy of the instrument should be uploaded as part of the offer.
- 17) While submitting the bids online, the bidder reads the terms & conditions and accepts the same to proceed further to submit the bid packets.
- 18) The bidder has to select the payment option as offline to pay the Tender FEE/ EMD as applicable and enter details of the instruments.
- 19) The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise submitted bid will not be acceptable.
- 20) The bidder has to digitally sign and upload the required bid documents one by one as indicated. Bidders to note that the very act of using DSC for downloading the bids and uploading their offers shall be deemed to be a confirmation that they have read all sections and pages of the bid document including General conditions of contract without any exception and have understood the entire document and are clear about the requirements of the tender requirements.
- 21) The bidder has to upload the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid will be rejected.
- 22) If the price bid format is provided in a spread sheet file like BoQ_xxxx.xls, the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Price Bid/BOQ template must not be modified/replaced by the bidder, else the bid submitted is liable to be rejected for this tender.
- 23) The bidders are requested to submit the bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission end date & time (as per Server System Clock). The TIA will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour.

- 24) After the bid submission (i.e. after Clicking “Freeze Bid Submission” in the portal), the acknowledgement number, given by the system should be printed by the bidder and kept as a record of evidence for online submission of bid for the particular tender and will also act as an entry pass to participate in the bid opening date.
- 25) The time settings fixed in the server side & displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system. The bidders should follow this time during bid submission.
- 26) All the data being entered by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered will not be viewable by unauthorized persons during bid submission & not be viewable by any one until the time of bid opening.
- 27) Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 28) The confidentiality of the bids is maintained since the secured Socket Layer 128 bit encryption technology is used. Data storage encryption of sensitive fields is done.
- 29) The bidder should logout of the tendering system using the normal logout option available at the top right hand corner and not by selecting the (X) exit option in the browser.
- 30) For any queries regarding e-tendering process, the bidders are requested to contact as provided in the tender document. Parallely for any further queries, the bidders are asked to contact over phone: 1-800-233-7315 or send a mail over to – cppp-nic@nic.in.

Signature of the tenderer

IMPORTANT INSTRUCTIONS

1. OPTION CLAUSE:

a) The purchaser reserves the right to place order on the successful tenderer for additional quantity upto 25% of the quantity offered by them at the rates quoted at the time of placement of contract or during the currency of the contract.

b) The purchaser reserves the right to place order on the next higher successful firms if the firms quoting lower rates do not meet the whole demand due to their limited capacity/Monetary limit etc.

2 **TENDER SAMPLE:** - Tenderer will be required to produce samples of their quoted model of radio sets with allied accessories (5W-3 Nos & 25W-2 Nos) for Field Trial/Technical Evaluation, as per tender enquiry specification (Appendix- A & B) and trial directive (Appendix- C & D), by board of officers (to be detailed by DG CRPF or his authorized representative). The Tenderers will be given 7 days time to produce their samples for evaluation.

i) Tender samples are required as per the instructions incorporated below:-

Analysis report on Tender Samples will not be furnished (Clause 11 of form DGS&D-230). Tenderers should note that samples of what they offer to supply should not be less than the quantity necessary for test as per specifications, if any, or in the schedule to Tender. In case the quantity of sample required for the test is given either in the specifications or in the schedule of Tender, this should be adhered to. Each sample should have card affixed to it giving particulars of:-

a) Firms name and address.

b) Tender Number.

c) Date and time of opening of Tender

d) Item Number of schedule against which Tender Sample submitted and

e) Any other description, if necessary, written clearly on it.

3. The contract to be concluded will be governed by condition of contract contained in form No DGS&d-68(revised) as amended upto 31-12-91 and those contained in pamphlet No DGS&D-229.

4. **GUARANTEE/ WARRANTY:** - Except as otherwise provided in the invitation to the tender, the contractor hereby declares that the goods, stores, articles sold/ supplied to the purchaser under this contract shall be of the best quality and workmanship and new in all respects and shall be strictly in accordance with the specification and particulars contained/mentioned in the contract. The contractor hereby guarantees that the said goods/store/articles would continue to conform to the description and quality aforesaid for a period of **24 months for wireless sets and 12 months for accessories** from the date of delivery of the said goods/stores/articles to the purchaser and notwithstanding the fact that the purchaser (Inspector) may have inspected and/or approved the said goods/stores/articles. If during the aforesaid period of 24/12 months, the said goods/stores/articles be discovered not to conform to the description and quality aforesaid or not giving satisfactory performance or have deteriorated, the entitled to call upon the contractor to rectify the goods stores/ articles or such portion thereof as is found to be defective by the purchaser within a reasonable period or such specified period as may be allowed by the purchaser in his description on/an application made thereof by the contractor and in such an event, the above mentioned warranty period shall apply to the goods/articles/stores/ rectified from the date of rectification thereof. In case of failure of the contractor to rectify or replace the goods etc. within specified time, the purchaser shall be entitled to recover the cost with all expenses from the contractor for such defective stores.

Signature of the Tenderer

5. In the event of contract being cancelled for any breach committed and the purchaser affecting repurchase of the stores at the risk and the cost of the contractor, the purchaser is not bound to accept the lower offer of Benami or allied or sister concern of the contractor.

6. Purchaser will not pay separately for transit insurance and the supplier will be responsible till the entire stores contracted for arrive in good condition at the destination. The consignee, as soon as possible, but not later than 30 days of the date of arrival of the stores at destination notify to the contractor any loss or damages to the stores that may have occurred during the transit.

7. Those firms, who are not specifically registered for the items with DGS&D/NSIC as per schedule to tender should submit the following along with their quotation, failing which their offer will be ignored:

- i) Name and full address of the banker.
- ii) Equipment & quality control statement in the prescribed form as enclosed.

8. Tenderes who are past suppliers of the item as per T/E Specification should submit their performance statement in enclosed Performa. In case, it is found that information furnished is incomplete or incorrect, their tender will be liable to be ignored.

9. Tenderers who are registered with DGS&D/NSIC for this particular item should submit the photocopy of registration certificate with all subsequent amendments.

10. **Prices should be quoted as per BOQ format provided along with the tender document at eProcurement site <http://eprocure.gov.in/eprocure/app>.**

Yours faithfully

Sd/- 05/11/2014

(Virendra Agrawal)
DIGP (Equipment)

For and on behalf of the President of India.

SIGNATURE OF THE TENDERER

1. The following amendments may be carried out in the pamphlet entitled conditions on contract governing the contracts placed by Central Purchase Organization of Government of India 1991 edition bearing Symbol DGS&D-39 Form No. DGS&D Form No. DGS&D-68 (Revised).

- 1.1 The definition of "Government" provided in clause 1 (f) page 2 of DGS&D Conditions of Contract may be amended as under:-
"Government" means the Central Government.
- 1.2 The definition of Secretary in clause I (k) page 3 of DGS&D Conditions of Contract may be modified as under:
"Secretary" means Secretary of Min. of Home Affairs for the time being in administrative charge of the subject matter of contract and includes Additional Secretary, Special Secretary, Joint Secretary, or Director or Dy. Secy. In such Ministry, DG, ADG, IGP (Comn), DIG (Eqpt) of CRPF and every other officer authorized for the time being to execute contracts relating to purchase and supply of stores on behalf of the President of India.
- 1.3 Under Clause 2(c) page 5 of DGS&D conditions of contract, the word "Director General of Supplies and Disposals or heads of his concerned regional offices" may be replaced by IGP (Comn) CRPF.
- 1.4 Clause 24 i.e. Arbitration:-
For: The existing entries.
Read: Arbitration.

In the event of any question, dispute or difference arising under these conditions or any special conditions of contract, or in connection with this contract (Except as to any matters, the decision of which is specifically provided for by these or the special conditions), the same shall be referred to the sole arbitration of an officer in the Min. of law, appointed to be arbitrator by Director General CRPF. It will be no objection that the arbitrator is a Government servant that he had to deal with the matters to which the contract relates or that in the course of his duties as a government servant he has expressed views on all or any of the matters in dispute or difference. The award of the arbitrator shall be final and binding on the parties to this contract, it is term of this contract that:-

- a. If the arbitrator be a person appointed by the DG CRPF:-
In the event of his dying, neglecting or refusing to act, or resigning or being unable to act, for any reason or his award being set aside by the court for any reason, it shall be lawful for Secretary, Min. of Home Affairs either to proceed with the reference himself or to appoint another person as Arbitrator in place of the outgoing Arbitrator in every such case, it shall be lawful for the DG CRPF in place of the outgoing Arbitrator, as the case may be to act on record of the proceeding as then taken in arbitration, or to commence the proceedings denovo as he may at his discretion decide.

Signature of the tenderer

- b. It is further a term of this contract that no person other than the person appointed by him should act as Arbitrator and that if for any reason that is not possible, the matter is not to be referred to arbitration at all.
 - c. The arbitrator may with the consent of all the parties to the contract enlarge the time from time to time for making and publishing the award.
 - d. Upon every and any such reference, the assessment of the cost incidental to the reference and award respectively shall be in the discretion of the Arbitrator.
 - e. Subject as aforesaid, the Arbitration Act, 1940 and the rules there under and any statutory modification thereof for the time being in force shall be deemed to apply the arbitration proceedings under this clause.
 - f. The venue of arbitration shall be the place where the contract is concluded or such other place as the DG CRPF at his discretion may determine.
 - g. In this clause the expression the DG CRPF means the DG CRPF of the Ministry of Home Affairs for the time being and includes, if there be no DG, the Officer who is for the time being the administrative head of the CRPF, whether in addition to other functions or otherwise.
- 1.5 Similarly, the reference to DGS&D wherever appearing may be suitably modified.
2. Following amendments may be carried out in the Pamphlet No. DGS&D-229 containing various instructions to tenderers.

FORM NO. DGS&D-230

Reference to DGS&D wherever appearing in clause No. 14, 33, 34, 35, 39 and 40 and Appendix- A for Form No. DGS&D-96 may be amended to read as IGP (Comn) CRPF.

Signature of the Tenderer.

TENDER ACCEPTANCE LETTER
(To be given on Company Letter Head)

Date:

To,

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: _____

Name of Tender / Work: -

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organization too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. In case any provisions of this tender are found violated , then your department/ organization shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

QUESTIONNAIRE

(Please Mark in appropriate Box and fill the answer correctly. Tenders leaving the box unmarked and questionnaire unanswered shall be rejected)

1. Name and address of Contractor

2. a) Whether registered with DGS&D for subject store?

YES

NO

b) If yes, Monetary limit
(Enclose Photocopy
of Regn. Certificate)

(Lakh)

(Without Limit)

c) Validity Date

3 a) whether registered with NSIC for subject stores?

YES

NO

b) If yes, Monetary limit
(Enclose Photocopy
of Regn. Certificate)

(Lakh)

(Without Limit)

c) Validity Date

4. Whether past supplier of subject store to DGS&D or
Min. of Home Affairs during the last 3 years.
(If yes, submit performance report in enclosed proforma)

YES

NO

5. Terms of delivery: **Free delivery at consignee's locations**

YES

NO

6. Offer validity: -

Signature of the tenderer

7. a) Delivery period from date of placement of firm order _____
 b) Monthly rate of supply _____
 c) Quantity offered _____

8. a) Whether stored fully conforms to tender schedule specifications in all respects? YES NO

b) If answer to 8(a) is No. Indicate the details of deviation in separate sheet.

9. Acceptance to conditions of contract as contained in DGS&D-68 (Revised) amended up to 31.12.91 and those contained in Pamphlet No. DGS&D-229 read with Annexure attached. YES NO

10. Have you enclosed required EMD? (Should be valid upto 240 days from date Of tender opening) YES NO

11. Do you accept tolerance clause? YES NO

12. Do you accept Liquidated Damage clause? YES NO

13. Do you accept Arbitration clause? YES NO

14. Do you accept the Warranty clause? YES NO

Signature of the Tenderer_____

Name in Block Letters_____

Capacity in which Tender signed_____

Full Address. _____

LIST NO-1

TENDERERS SHOULD FURNISH SPECIFIC ANSWERS TO ALL THE QUESTIONS GIVEN BELOW. TENDERERS MAY PLEASE NOTE THAT IF THE ANSWER SO FURNISHED ARE NOT CLEAR AND / OR ARE EVASIVE, THE TENDER WILL BE LIABLE TO BE IGNORED.

1. Tender No. _____
2. Whether the stores offered fully conform to the Technical particulars and specification drawings, specified by the purchaser in the schedule to tender. If not, mention here details of deviations. :
3. Model No. & Brand of store offered. :
4. Name and address of manufacturer. :
5. Station of manufacture :
6. Please confirm that you have offered packing as per tender enquiry requirements. If not indicate deviations. :
7. Gross weight of consignment (Net weight of each item) :
8. What is your permanent Income Tax A/C No.? :
9. Status.
 - a) Indicate whether you are LSU or SSI :
 - b) Are you registered with DGS&D for the item Quoted? If so, indicate whether there is any monetary limit on registration. :
 - c) If you are a small scale unit registered with NSIC under Single Point Registration scheme, whether there is any monetary limit. :
 - d) In case you are registered with NSIC under Single Point Registration Scheme for the item quoted, confirm whether you have attached a photocopy of the registration certificate indicating the items for which you are registered. :
10.
 - a) If you are not registered either with NSIC or with DGS&D, please state whether you are registered with Directorate of Industries of State Government concerned. :
 - b) If so, confirm whether you have attached a copy of the certificate issued by Director of Industry. :

Signature of the Tenderer

11. Please indicate name & full address of your banker. :
12. Business name and constitution of the firm.
Is the firm registered under: - :
- i) The Indian Companies Act 1956,
 - ii) The Indian Partnership Act 1932 (Please also give name of partners)
 - iii) Any Act; if not, who are the owners. (Please give full names and address.)
13. Whether the tendering firm is/are:-
1. Manufacturer :
 2. Manufacturer's authorized agents :
 3. Holders in stock of the stores tendered for :

N.B.: If manufacturer's agents, please enclose with tender the copy of manufacturer's authorization on properly stamped paper, duly attested by a Notary Public.

14. If stores offered are manufactured in India, please state whether all raw materials components etc. used in their manufacture are also produced in India. If not give details of materials components etc, that are imported and their breakup of the indigenous and imported components together with their value and proportion it bears to the total value of the store :
15. State whether raw materials are held in stock sufficient for the manufacture of the stores. :
16. Please indicate the stock in hand at present time:-
1. Held by you against this enquiry. :
 2. Held by M/s. _____ over which you have secured an option.
17. Do you agree to sole arbitration by an officer of Ministry of Law, appointed by the Secretary, Ministry of Home Affairs or by some other person appointed by him as provided in clause 24 of the general conditions of contract form DGS&D-68 (Revised). (Your acceptance or non-acceptance of this clause will not influence the decision of the tender. It should, however, be noted that an omission to answer the above question will be deemed as an acceptance of the clause.) :

Signature of the Tenderer

18. 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 :

1. 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 tender. :

2. If the answer to (1) is in the negative, whether there is any general power of attorney executed by all the partners of the firm authorizing the partner who has signed the tender to refer disputes concerning business of the partnership to arbitration. :

3. If the answer to either (1) or (2) 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 tender a copy of either document on which reliance is placed for authority of partners of the partner signing the tender to refer disputes to arbitration. The copy should be attested by a Notary Public or its execution should be admitted by Affidavit on a properly stamped paper by all the partners.

2. Whether authority to refer disputes to arbitration has not been given to the partner signing the tender the tenders must be signed by every partner of the firm.

19. Here state specifically.

1. Whether the price tendered by you is to the best of your knowledge and belief, not more than the price usually charged by you for stores of same nature/class or description to any private purchaser either foreign or as well as Govt. purchaser. It not state the reasons thereof. If any, also indicate the margin of difference. :

2. In respect of indigenous items for which there is a controlled price fixed by law, the price quoted shall not be higher than the controlled price and if the price quoted exceeds the controlled price the reasons thereof should be stated. :

20. Are you:-

1. Holding valid Industrial License(s) Registration Certificate under the Industrial Development and Regulation Act, 1981. If so, please give particulars of Industrial income Registration Certificate. :

Signature of the Tenderer

2. Exempted from the licensing provisions of the Act, for the manufacture of item quoted against this tender. If so, please quote relevant orders and explain your position. :
3. Whether you possess the requisite license for Manufacture of the stores and/or for the procurement of raw materials belonging to any controlled category required for the manufacture of the store? In the absence of any reply it would be assumed that no license is required for the purpose of raw materials and/or that you possess the required license. :
21. State whether business dealings with you have been banned by Min/Deptt. Of Supply/Min. of Home Affairs? :
22. Please confirm that you have read all the instructions carefully and have complied with accordingly. :

Signature of Witness.

Signature of Tenderer

Full name and address of witness
(in Block Letters)

Full name and address of the
persons signing (in Block Letters)

Whether signing as
Proprietor/Partner/ constituted
Attorney /duly authorized by the
Company.

FORM-7
PROFORMA FOR EQUIPMENT AND QUALITY CONTROL

1. Tender No. & Date _____ for the supply of _____
2. Name and Address of the firm :
3. I) Telephone No. Fax/Office/Factory/Works:
II) Telegraphic address:
4. Location of manufacturing works/Factory. Factories owned by you (Documentary). In case you do not own the factory but utilize the factory of some other firm for the manufacture/ fabrication of the stores for which you apply for registration on lease or other base you should furnish a valid legal agreement of the factory of _____ (Here indicate the name of the firm whose factory is being utilized) has been put at your disposal for the manufacture/ fabrication of the stores for which registration has been applied for.
5. Brief description of the factory (e.g. area covered accommodation, departments into which it is divided, laboratory etc.).
6. Details of plant and machinery erected and functioning in each department (Monograms and descriptive pamphlets should be supplied if available).
7. Whether the process of manufacture in factory is carried out with the aid of power or without it.
8. Details and stocks or raw material held (state whether imported or indigenous) against each item.
9. Production capacity of each item with the existing plant and machinery:
 - a) Normal _____
 - b) Maximum _____
10. Details of arrangements for quality control of products such as laboratory etc.
11. (a) Details of Technical/supervisory staff incharge of production and quality control.
 - (b) Skilled labour employed.
 - (c) Unskilled labour employed.
 - (d) Maximum no. of workers (skilled and unskilled) employed on any day during the 18 months preceding the date of application.
12. Whether stores were tested to any standard specification, if so copies of original test certificate should be submitted in triplicate.

Place _____

Date _____

Signature and designation of the Tenderer

N.B.: Details under column 6 to 11 inclusive need to be restricted to the extent they pertain to the item(s) under reference.

PROFORMA FOR BANK GUARANTEE
FOR SUBMITTING EARNEST MONEY
(ON BANKS LETTER HEAD WITH ADHESIVE STAMP)

To
The DIG (ADM). Dte Genl,
C.R.P.F., CGO Complex, Lodhi Road,
New Delhi. Pin – 110003

Dear Sir,

In accordance with your invitation to Tender No _____ M/s. _____ here in after called the Tenderer with the following Directors on their Board of Directors/Partners of the firm.

1. _____ 2. _____
3. _____ 4. _____ ; wish to participate in the said tender enquiry for the supply of _____ as a bank guarantee against Earnest Money for a sum of Rs. _____ (in words) Rupees _____.

Valid for 240 days from the date of tender opening viz. up to _____ is required to be submitted by the Tenderer as condition for the participation, this bank hereby guarantees and undertakes during the above said period of 240 days, to immediately pay on demand by _____ in writing the amount of without any reservation and recourse if,

1. the Tenderer after submitting his tender, modifies the rates or any of the terms and conditions thereof, except with the previous written consent of the purchaser.
2. the Tenderer withdraws the said tender within 180 days after opening of tenders OR
3. the Tenderer having not withdrawn the tender, fails to furnish the contract security deposit imposed for due performance of the contract within the period provided in the general conditions of the contracts.

The guarantee shall be irrevocable and shall remain valid up to-----

“We _____ Lastly undertake, not to revoke this Bank Guarantee, during its currency period except with the previous consent of the Government/Purchaser, in writing .Otherwise, the Guarantee shall remain revoked after 45 days, in case the Government does not present a request, in writing to the Bank, with reasons, during the currency period of the Guarantee or 30 days thereafter, to extend this guarantee up to such specific date or period as required by the Government/purchaser.”

Date. _____

Signature

Place _____

Printed

Name _____

Witness _____

(Designation) _____

Signature of the Bank Manager

With office seal

Full name of the signatory and full address of the Bank

Signature of the tenderer

PERFORMANCE STATEMENT FOR LAST THREE YEARS
(For the Tendered Store only)

Name of Firm: _____

1. Contract Nos. :

2. Description of Stores :

3. Quantity on order :

4. Value :

5. Original D.P. :

6. Quantity supplied within original D.P. :

7. Final Extension D.P. :

8. Last supply position :

9. Reasons for Delay in supplies (if any) :

Signature of the Tenderer

**TECHNICAL SPECIFICATIONS/QRs FOR DIGITAL HAND HELD VHF TRANSCEIVER SET
(1/5 WATT)**

Sl No	Parameters	Specifications
1	General	
	i) Frequency Range	136-174 MHz (Full Band)
	ii) No. of channel	255 or higher
	iii) Channel Spacing	12.5 KHz or better
	iv) Frequency Stability	± 1.5 PPM or better
	v) Protocol & Technology	Digital TDMA (DMR) Technology
	vi) Type of Emission (Modulation)	Analog ; 11K0F3E Digital;4FSK or equivalent technique complying to open standard/non proprietary Digital Protocol as defined by an international standards body like ETSI / FCC etc.
	vii) Type of Operation	Simplex, press to talk
	viii) Type of Antenna	Rugged flexible Helical Antenna
	ix) Weight	Less than 450 grams with battery.
	x) Power Source	Lithium-ion battery pack of 2000 mAH or more with belt clip
	xi) Protection	(i) Reverse polarity protection (ii) Protection against high VSWR
2	Transmitter	
	i) R.F Power output	1/5 Watt (Programmable /Selectable)
	ii) FM Hum / Noise	-40 dB or better
	iii) Modulation Limiting	± 2.5 KHz @ 12.5 KHz
	iv) Adjacent Channel Power	-60 db or better
	v) Audio Distortion	Less than 3%
3	Receiver	
	i) Sensitivity	i) Analog: 0.30µV for 12 dB SINAD or better ii) Digital: 0.30µV at 5% BER or better
	ii) Selectivity (Adjacent channel)	60 dB or better
	iii) Inter Modulation	60 dB or better
	iv) Audio Output	500 mW
	v) Audio Response	+1,-3 dB
	vi) Rated Audio Distortion	Less than 3%
4	Environmental Specification	
	i) Operating Temperature	-30°C to + 60 °C
	ii) Storage Temperature	-40°C to + 70 °C
	iii) Humidity	Max. 95% @ +40°C non- condensing
	iv)Environmental standard (i.e) Low & High Temperature, Low pressure, Temperature Shock, Solar Radiation, Rain, Salt Fog, Vibration, Dust & Shock	As per MIL 810 C, D, E, F
	v) Dust & Water Intrusion	IP 57 or better

SIGNATURE OF THE TENDERER

5	Accessories	
	i) Battery Charger	Single unit smart charger
	ii) Programming kit	All necessary software and hardware required for programming of the set
	iii) Literature	i) Users manual with each radio sets should be provided free of cost in soft as well as hard copy. ii) Technical repairing manual with complete block diagram, circuit layout etc should be provided as per users' requirement in soft as well as hard copy.
iv) Battery	Two extra Lithium -ion batteries with each Radio Set	
6	Configuration	
	i) Caller ID display	Should be available
	ii) Facility for locking the channel or key pad locking	Should be available
	iii) Scan with priority	Should be available
	iv) Transmitter Time Out Timer (TOT)	The time should be programmed to best suit the application
	v) LCD Display	Should be available
	vi) Mode of calls	Selective Call, Group Call, Inter and Intra Group call facility
	vii) Remote Radio Kill/Stun /Revive facility	Should be available
	viii) Mode of operation	Radio should operate in analog mode and digital mode. (Compatible with existing all type of VHF analogue radio sets viz : Motorola, Icom, Kenwood, Vertex etc)
	ix) Emergency Button	Allows a user to obtain help in critical situations.
	x) SMS Texting	Should be capable of sending pre defined messages & short messages from keypad as Optional.
	xi) Programming	Front panel programming with password protection or PC programming.
	xii) DTMF front panel key pad with back lit	Should be available
	xiii) Battery strength bar	Should be available
xiv) Support GPS	Inbuilt GPS system with accuracy of less than 10 meters.	

SIGNATURE OF THE TENDERER

**TECHNICAL SPECIFICATIONS / QRs FOR DIGITAL VHF MOBILE/BASE
TRANSRECEIVER SET (25 W)**

SI No	Parameters	Specifications
1	General	
	i) Frequency Range	136-174 MHz (Full Band)
	ii) No. of channel	255 or higher
	iii) Channel Spacing	12.5 KHz or better
	iv) Frequency Stability	± 1.5 PPM or better
	v) Protocol & Technology	Digital TDMA (DMR) Technology
	vi) Type of Emission (Modulation)	Analog ; 11K0F3E Digital; 4FSK or equivalent technique complying to open standard/non proprietary Digital Protocol as defined by an international standards body like ETSI / FCC etc.
	vii) Type of Operation	Simplex, press to talk
	viii) Weight	Less than 2000 grams.
	xi) Power Source	13.8 Volt DC ± 15%
	x) Protection	(i) Reverse polarity protection (ii) Protection against high VSWR
2	Transmitter	
	i) R.F Power output	25 Watt (Programmable /Selectable)
	ii) FM Hum / Noise	-40 dB or better
	iii) Modulation Limiting	± 2.5 KHz @ 12.5 KHz
	iv) Adjacent Channel Power	-60 db or better
	v) Audio Distortion	Less than 3%
3	Receiver	
	i) Sensitivity	i) Analog: 0.30µV for 12 dB SINAD or better ii) Digital: 0.30µV at 5% BER or better
	ii) Selectivity (Adjacent channel)	60 dB or better
	iii) Inter Modulation	70 dB or better
	iv) Audio Output	3 W or more
	v) Audio Response	+1,-3 dB
	vi) Rated Audio Distortion	Less than 3%
4	Environmental Specification	
	i) Operating Temperature	-30°C to + 60 °C
	ii) Storage Temperature	-40°C to + 70 °C
	iii) Humidity	Max. 95% @ +40°C non- condensing
	iv) Environmental standard (i.e) Low & High Temperature, Low pressure, Temperature Shock, Solar Radiation, Rain, Salt Fog, Vibration, Dust & Shock	As per MIL 810 C, D, E, F
	v) Dust & Water Intrusion	IP 54 or better
	5	Accessories
i) Microphone		DTMF Microphone should be supplied with Radio
ii) Battery cable & Mounting fixtures		Should be supplied with Radio

SIGNATURE OF THE TENDERER

	iii) Antenna	6dB gain Omni Directional antenna with 30 meter RF Cable for base station should be provided.
	iv) Programming kit	All necessary programming software and hardware required for the set will be provided as per user's requirement.
	v) Literature	i) Users manual with each radio sets should be provided free of cost in soft as well as hard copy. ii) Technical repairing manual with complete block diagram, circuit layout etc should be provided as per users' requirement in soft as well as hard copy.
6	Configuration	
	i) Caller ID display	Should be available
	ii) Busy channel lock out	Should be available
	iii) Scan with priority	Should be available
	iv) Transmitter Time Out Timer (TOT)	The time should be programmed to best suit the application
	v) LCD Display	Should be available
	vi) Mode of calls	Selective Call, Group Call, Inter and Intra Group call facility
	vii) Remote Radio Kill / Stun /Revive facility	Should be available
	viii) Mode of operation	Radio should operate in analog mode and digital mode. (Compatible with existing all type of VHF analogue radio sets viz : Motorola, Icom, Kenwood, Vertex etc)
	ix) Emergency Button	Allows a user to obtain help in critical situations.
	x) SMS Texting	Should be capable of sending pre defined messages & short messages from keypad as Optional.
	xi) Programming	Front panel programming with password protection or PC programming.
	xii) Support GPS	Inbuilt GPS system with accuracy of less than 10 meters.

SIGNATURE OF THE TENDERER

TRIAL DIRECTIVE OF DIGITAL HAND HELD VHF TRANSCEIVER SET (1/5 WATT)

Sl No	Parameters	Specification	Trial/Test Procedure
1.	General		
	i) Frequency Range	136-174 MHz (Full Band)	Functional check ; B.O.O will check operation of radio set by programming lowest, highest and any random frequency in 136-174 MHz range with the help of measuring instruments.
	ii) No. of channel	255 or higher	B.O.O will check all these parameters one by one with the help of standard testing instruments. If the standard test instruments are not available then firm must produce certificate of any Govt. accredited lab or National Accreditation Board for Testing and Calibration Laboratories (NABL) approved laboratory or International Laboratory Accreditation Corporation (ILAC) approved laboratory.
	iii) Channel Spacing	12.5 KHz or better	
	iv) Frequency Stability	± 1.5 PPM or better	
	v) Protocol & Technology	Digital TDMA (DMR) Technology	B.O.O will check all these parameters with the help of standard testing instruments. If the standard test instruments are not available then firm must produce certificate of any Govt. Accredited lab or National Accreditation Board for Testing and Calibration Laboratories (NABL) approved laboratory or International Laboratory Accreditation Corporation (ILAC) approved laboratory.
	vi) Type of Emission (Modulation)	Analog ; 11K0F3E Digital; 4FSK or equivalent technique complying to open standard/non proprietary Digital Protocol as defined by an international standards body like ETSI / FCC etc.	B.O.O will check all these parameters with the help of standard testing instruments. If the standard test instruments are not available then firm must produce certificate of any Govt. Accredited lab or National Accreditation Board for Testing and Calibration Laboratories (NABL) approved laboratory or International Laboratory Accreditation Corporation (ILAC) approved laboratory.
	vii) Type of Operation	Simplex, press to talk	Simplex means set either work in receive mode or in transmit mode. Same will be checked practically.
	viii) Type of Antenna	Rugged flexible Helical Antenna	B.O.O will check Physically and Practically to assess fitment, flexibility & ruggedness of antenna.
	ix) Weight	Less than 450 grams with battery.	B.O.O. will check practically to measure weight by weighing machine.
	x) Power Source	Lithium-ion battery pack of 2000 mAH or more with belt clip	Physical check to assess type, make & voltage/ capacity of battery and it should be as per specification. In addition Firm must produce certificate of any Govt. accredited Lab. or NABL or ILAC approved laboratory.

SIGNATURE OF THE TENDERER

	xi) Protection	(i) Reverse polarity protection (ii) Protection against high VSWR	i) B.O.O will check it by connecting Radio set with DC supply in reverse polarity and switch the set to "ON" position. There should not be any harm to the Radio Set. ii) B.O.O will check by switching "ON" Radio set and removing antenna/ dummy load and PTT be pressed. In such a condition there should not be any harm to Radio set.
2.	Transmitter		
	i) R.F Power output	1/5 Watt (Programmable /Selectable)	B.O.O will check all these parameters in the entire frequency range mentioned in the QR with the help of standard testing instruments. If the standard test instruments are not available then firm must produce certificate of any Govt. accredited lab or National Accreditation Board for Testing and Calibration Laboratories (NABL) approved laboratory or International Laboratory Accreditation Corporation (ILAC) approved laboratory.
	ii) FM Hum / Noise	-40 dB or better	
	iii) Modulation Limiting	± 2.5 KHz @ 12.5 KHz	
	iv) Adjacent Channel Power	-60 db or better	
	v) Audio Distortion	Less than 3%	
3.	Receiver		
	i) Sensitivity	i) Analog: 0.30µV for 12 dB SINAD or better ii) Digital: 0.30µV at 5% BER or better	B.O.O will check all these parameters in the entire frequency range mentioned in the QR with the help of standard testing instruments. If the standard test instruments are not available then firm must produce certificate of any Govt. accredited lab or National Accreditation Board for Testing and Calibration Laboratories (NABL) approved laboratory or International Laboratory Accreditation Corporation (ILAC) approved laboratory.
	ii) Selectivity (Adjacent channel)	60 dB or better	
	iii) Inter Modulation	60 dB or better	
	iv) Audio Output	500 mW	
	v) Audio Response	+1,-3 dB	
	vi) Rated Audio Distortion	Less than 3%	
4	Environmental Specification		Firm must produce certificate of any Government accredited Lab. or NABL or ILAC approved laboratory.
	i) Operating Temperature	-30°C to + 60 °C	
	ii) Storage Temperature	-40°C to + 70 °C	
	iii) Humidity	Max. 95% @ +40°C non-condensing	
	iv) Environmental standard (i.e) Low & High Temperature, Low pressure, Temperature Shock, Solar Radiation, Rain, Salt Fog, Vibration, Dust & Shock	As per MIL 810 C, D, E, F	Firm must produce certificate of any Government accredited Lab. or NABL or ILAC approved laboratory for the desired or better MIL standard.
	v) Dust & Water Intrusion	IP 57 or better	Firm must produce certificate of any Government accredited Lab. or NABL or ILAC approved laboratory.

SIGNATURE OF THE TENDERER

5	Accessories		
	i) Battery Charger	Single unit smart charger	B.O.O will check it practically by charging the batteries from smart charger and note down whether the batteries are charge properly or otherwise.
	ii) Programming kit	All necessary software and hardware required for programming of the set	Check Practically to assess that all necessary software and hardware required for programming of the set is available and working properly.
	iii) Literature	i) Users manual with each radio sets should be provided free of cost in soft as well as hard copy. ii) Technical repairing manual with complete block diagram, circuit layout etc should be provided as per users' requirement in soft as well as hard copy.	Physically check to confirm that User and Technical manual are available in Hard as well as in Soft Copy.
	iv) Battery	Two extra Lithium -ion batteries with each Radio Set	Physical/Practical check to assess that extra battery is as per specification, compatible with Radio set and working properly.
6.	Configuration		
	i) Caller ID display	Should be available	B.O.O will check it by programming two radio sets on same frequency and different ID. Make call from one radio and check display in another radio set, ID of caller radio should be displayed.
	ii) Facility for locking the channel or key pad locking	Should be available	Program locking channel or key pad facilities in radio set and check whether the channel or key pads locked or otherwise.
	iii) Scan with priority	Should be available	Radio sets programmed with priority scanning on pressing the scan button, will starts scanning channels with the priority.
	iv) Transmitter Time Out Timer (TOT)	The time should be programmed to best suit the application	PTT of Radio set pressed continuously. Radio set comes automatically in reception mode after completion of time programmed for TOT option.
	v) LCD Display	Should be available	Practical /Physical check by switching on the radio set, there should be display on the LCD screen.
	vi) Mode of calls	Selective Call, Group Call, Inter and Intra Group call facility	B.O.O. will check it practically by making call.
	vii) Remote Radio Kill / Stun /Revive facility	Should be available	B.O.O. will check it practically by sending kill command to particular radio. Radio set received kill command will get killed. Similarly, Set should revive if we send the revive command to killed radio.

SIGNATURE OF THE TENDERER

	viii) Mode of operation	Radio should operate in analog mode and digital mode. (Compatible with existing all type of VHF analogue radio sets viz : Motorola, Icom, Kenwood, Vertex etc)	B.O.O will check practically by making call from existing analog sets to digital set after setting it in Analog mode and vice –versa. For checking interoperability with existing digital radio system, if available, make calls between them and the proposed radio sets (in digital mode) and verify. Proper communication should happen if both digital radio systems are based on same technology.
	ix) Emergency Button	Allows a user to obtain help in critical situations.	B.O.O. will check it practically by pressing emergency button.
	x) SMS Texting	Should be capable of sending pre defined messages & short messages from keypad as Optional.	B.O.O. will check it practically by sending pre-defined messages from one radio to another. Message should be displayed on the screen of receiving radio.
	xi) Programming	Front panel programming with password protection or PC programming.	B.O.O. will check it practically by programming radio from front panel having password protection. Similarly, Board will also program radio with the help of PC. Radio set should be programmed from front panel as well as from PC also.
	xii) DTMF front panel keypad with back lit	Should be available	B.O.O. will check it Physically/ Practically that radio set is having DTMF keypad with back lit.
	xiii) Battery strength bar	Should be available	B.O.O. will check it practically that battery strength bar indicates the strength bar as increasing / decreasing when battery is charged/ discharged.
	xiv) Support GPS	Inbuilt GPS system with accuracy of less than 10 meters.	Firm will demonstrate features related with GPS to Board of Officers during the trial and all function should work as per requirement.
7	Field Trial	The actual performance of the radio set will be assessed.	Field trial of equipment will be conducted by a Board of Officers in the operational area of the force in the presence of Vendor/representative of firms to ascertain the user satisfaction before the proposal is accepted. Radio equipment with all required accessories will be provided by the participating firm's on " No Cost No Commitment " basis at the indenter discretion.

SIGNATURE OF THE TENDERER

TRIAL DIRECTIVE OF DIGITAL VHF MOBILE/BASE TRANSRECEIVER SET (25 W)

Sl No	Parameters	Specification	Trial/Test Procedure
1.	General		
	i) Frequency Range	136-174 MHz (Full Band)	Functional check: B.O.O will check operation of radio set by programming lowest, highest and any random frequency in 136-174 MHz range with the help of measuring instruments.
	ii) No. of channel	255 or higher	B.O.O will check all these parameters one by one with the help of standard testing instruments. If the standard test instruments are not available then firm must produce certificate of any Govt. accredited lab or National Accreditation Board for Testing and Calibration Laboratories (NABL) approved laboratory or International Laboratory Accreditation Corporation (ILAC) approved laboratory.
	iii) Channel Spacing	12.5 KHz or better	
	iv) Frequency Stability	± 1.5 PPM or better	
	v) Protocol & Technology	Digital TDMA (DMR) Technology	B.O.O will check all these parameters with the help of standard testing instruments. If the standard test instruments are not available then firm must produce certificate of any Govt. accredited lab or National Accreditation Board for Testing and Calibration Laboratories (NABL) approved laboratory or International Laboratory Accreditation Corporation (ILAC) approved laboratory.
vi) Type of Emission (Modulation)	Analog: 11K0F3E Digital: 4 FSK or equivalent technique complying to open standard / non proprietary Digital Protocol as defined by an international standards body like ETSI / FCC etc.	B.O.O will check all these parameters with the help of standard testing instruments. If the standard test instruments are not available then firm must produce certificate of any Govt. accredited lab or National Accreditation Board for Testing and Calibration Laboratories (NABL) approved laboratory or International Laboratory Accreditation Corporation (ILAC) approved laboratory..	
vii) Type of Operation	Simplex, press to talk	Simplex means set either works in receive mode or in transmit mode. Same will be checked practically.	
viii) Weight	Less than 2000 grams	B.O.O. will check practically to measure weight by weighing machine.	
ix) Power Source	13.8 Volt DC ± 15%	Apply 13.8V DC ±15% from power supply and check that whether set is working properly or otherwise.	
x) Protection	(i) Reverse polarity protection (ii) Protection against high VSWR	i) B.O.O will check it by connecting Radio set with DC supply in reverse polarity and switch the set to “ON” position. There should not be any harm to the Radio Set. ii) B.O.O will check by switching “ON” Radio set and removing antenna/ dummy load and PTT be pressed. In such a condition there should not be any harm to Radio set.	

SIGNATURE OF THE TENDERER

2.	Transmitter		B.O.O will check all these parameters in the entire frequency range mentioned in the QR with the help of standard testing instruments. If the standard test instruments are not available then firm must produce certificate of any Govt. accredited lab or National Accreditation Board for Testing and Calibration Laboratories (NABL) approved laboratory or International Laboratory Accreditation Corporation (ILAC) approved laboratory.
	i) R.F Power output	25 Watt Programmable /Selectable)	
	ii) FM Hum /Noise	-40 dB or better	
	iii) Modulation Limiting	± 2.5 KHz @ 12.5 KHz	
	iv) Adjacent Chanel power	-60 db or better	
	v) Audio Distortion	Less than 3%	
3.	Receiver		B.O.O will check all these parameters in the entire frequency range mentioned in the QR with the help of standard testing instruments. If the standard test instruments are not available then firm must produce certificate of any Govt. accredited lab or National Accreditation Board for Testing and Calibration Laboratories (NABL) approved laboratory or International Laboratory Accreditation Corporation (ILAC) approved laboratory.
	i) Sensitivity	i) Analog: 0.30 μV for 12 dB SINAD or better ii) Digital: 0.30μV at 5% BER or better	
	ii) Selectivity (Adjacent channel)	60 dB or better.	
	iii) Inter Modulation	70 dB or better	
	iv) Audio Output	3 W or more	
	v) Audio Response	+1,-3 dB	
	vi) Rated Audio Distortion	Less than 3%	
4.	Environmental Specification		Firm must produce certificate of any Government accredited Lab. or NABL or ILAC approved laboratory.
	i) Operating Temperature	-30°C to + 60 °C	
	ii) Storage Temperature	-40°C to + 70 °C	
	iii) Humidity	Max. 95% @ +40°C non-condensing	Firm must produce certificate of any Government accredited Lab. or NABL or ILAC approved laboratory for the desired or better MIL standard.
	iv) Environmental standard (i.e) Low & High Temperature , Low pressure, Temperature Shock, Solar Radiation, Rain, Salt Fog, Vibration, Dust & Shock	As per MIL 810 C, D, E, F	
	v) Dust &Water Intrusion	IP 54 or better	Firm must produce certificate of any Government accredited Lab. or NABL or ILAC approved laboratory.
5.	Accessories		
	i) Microphone	DTMF Microphone should be supplied with Radio	B.O.O. will check physically and practically that DTMF Microphone supplied with radio and is working properly.
	ii) Battery cable & Mounting fixtures	Should be supplied with Radio	Physically check by connecting battery cable & mounting fixtures with radio.
	iii) Antenna	6dB gain Omni Directional antenna with 30 meter RF Cable for base station will be provided as per user's requirements.	Physically check by connecting antenna with all its accessories with radio set and check serviceability whether antenna matched or not.
	iv) Programming kit	All necessary programming software and hardware required for the set will be provided as per user's requirements.	Practically check to assess that all necessary software and hardware required for programming are available and working properly.

SIGNATURE OF THE TENDERER

	v) Literature	i) Users manual with each radio sets should be provided free of cost in soft as well as hard copy. ii) Technical repairing manual with complete block diagram, circuit layout etc should be provided as per users' requirement in soft as well as hard copy.	Physically check to confirm that User and Technical manual are available in Hard as well as in Soft Copy.
6	Configuration		
	i) Caller ID display	Should be available	By Programming two radio sets with same frequency and different ID and making call from one radio and check display in another radio set. ID of caller radio should be displayed.
	ii) Busy channel lock out	Should be available	Programmed one radio with busy channel lock out option and make call from another radio on same frequency. In the mean time if we want to make call from first radio, its transmitter will remain disable till PTT of second radio is released.
	iii) Scan with priority	Should be available	Radio sets programmed with priority scanning on pressing the scan button will start scanning channels with the priority.
	iv) Transmitter Time Out Timer (TOT)	The time should be programmed to best suit the application.	PTT of Radio set programmed with TOT option be pressed continuously. Radio set comes automatically in reception mode after completion of time programmed for TOT option.
	v) LCD Display	Should be available	Practical/Physical check by switching on the radio set, there should be display on the LCD screen.
	vi) Mode of calls	Selective Call, Group Call, Inter and Intra Group call facility	B.O.O. will check it practically by making call.
	vii) Remote Radio Kill / Stun /Revive facility	Should be available	B.O.O. will check it practically by sending kill command to particular radio. Radio set received kill command will get killed. Similarly, Set should revive if we send the revive command to killed radio.
	viii) Mode of operation	Radio should operate in analog mode and digital mode. (Compatible with existing all type of VHF analogue radio sets viz ::Motorola, Icom, Kenwood, Vertex etc)	B.O.O will check practically by making call from existing analog sets to digital set after setting it in Analog mode and vice -versa. For checking interoperability with existing digital radio system, if available, make calls between them and the proposed radio sets (in digital mode) and verify. Proper communication should happen if both digital radio systems are based on same technology.
	ix) Emergency Button	Allows a user to obtain help in critical situations.	B.O.O. will check it practically by pressing emergency button.
	x) SMS Texting	Should be capable of sending pre defined messages & short messages from keypad as Optional.	B.O.O. will check it practically by sending pre-defined messages from one radio to another. Message should be displayed in the screen of receiving radio.

SIGNATURE OF THE TENDERER

	xi) Programming	Front panel programming with password protection or PC programming.	B.O.O. will check it practically by programming radio from front panel having password protection. Similarly Board will also programmed radio with the help of PC. Radio set should be programmed from front panel as well as from PC also.
	xii) Support GPS	GPS system with accuracy of less than 10 meters.	Firm will demonstrate features related with GPS to Board of Officers during trial).
7.	Field Trial	The actual performance of the radio set will be assessed.	Field trial of equipment will be conducted by a Board of Officers in the operational area of the force in the presence of Vendor/ representative of firms to ascertain the user satisfaction before the proposal is accepted. Radio equipment with all required accessories will be provided by the participating firm's on " No cost No Commitment " basis at the indenter discretion.

SIGNATURE OF THE TENDERER

CONSIGNEE LIST

Sl No	Name and address of Consignees	QTY & Type of store	
		Description of Store	QTY
01	Commandant, 1 Signal BN CRPF, Jharodakalan, New Delhi. Pin-110072 Tele Phone No. 011-25315378	1-5W (Programmable/Selectable) RF output Digital VHF Transceiver based on DMR (TDMA) technology, with 7.4V 2000 mAH or more Li-ion Battery pack with spring loaded belt clip, Flexible Helical Antenna, Single unit smart charger, Inbuilt Support GPS & user manual.	658
		7.4V 2000 mAH or more Li-ion Battery Packs	1316
		Programming Cable and Software for 1/5 Watt radio set.	07
		Technical Service Manual for 1/5 Watt radio set.	07
		25W (Programmable/Selectable) RF output Digital VHF Transceiver based on DMR (TDMA) technology with DTMF micro phone, Battery cable, Mounting fixtures, Support GPS & user manual.	208
		6dB gain Omni directional antenna with 30 meter Low Loss RF cable for base station	208
		Programming Cable and Software for 25 Watt radio set.	07
		Technical Service Manual for 25 Watt radio set.	07
02	Commandant, 2 Signal BN CRPF, Keshogiri Post, Chandrayangutta, Hyderabad (A.P) Pin-500005 Telephone No. 040-24440042	1-5W (Programmable/Selectable) RF output Digital VHF Transceiver based on DMR (TDMA) technology, with 7.4V 2000 mAH or more Li-ion Battery pack with spring loaded belt clip, Flexible Helical Antenna, Single unit smart charger, Inbuilt Support GPS & user manual.	562
		7.4V 2000 mAH or more Li-ion Battery Packs	1124
		Programming Cable and Software for 1/5 Watt radio set.	06
		Technical Service Manual for 1/5 Watt radio set.	06
		25W (Programmable/Selectable) RF output Digital VHF Transceiver based on DMR (TDMA) technology with DTMF micro phone, Battery cable, Mounting fixtures, Support GPS & user manual.	167
		6dB gain Omni directional antenna with 30 meter Low Loss RF cable for base station	167
		Programming Cable and Software for 25 Watt radio set.	06
		Technical Service Manual for 25 Watt radio set.	06

03	Commandant, 3 Signal BN CRPF, Sector-V, Salt Lake, Kolkata (W.B) Pin-700091 Tele hone No.033- 23674639	1-5W (Programmable/Selectable) RF output Digital VHF Transceiver based on DMR (TDMA) technology, with 7.4V 2000 mAH or more Li-ion Battery pack with spring loaded belt clip, Flexible Helical Antenna, Single unit smart charger, Inbuilt Support GPS & user manual.	644
		7.4V 2000 mAH or more Li-ion Battery Packs	1288
		Programming Cable and Software for 1/5 Watt radio set.	06
		Technical Service Manual for 1/5 Watt radio set.	06
		25W (Programmable/Selectable) RF output Digital VHF Transceiver based on DMR (TDMA) technology with DTMF micro phone, Battery cable, Mounting fixtures, Support GPS & user manual.	129
		6dB gain Omni directional antenna with 30 meter Low Loss RF cable for base station	129
		Programming Cable and Software for 25 Watt radio set.	06
		Technical Service Manual for 25 Watt radio set.	06
04	Commandant, 4 Signal BN CRPF, Neemuch (M.P) Pin- 458445 Tele Phone No.07423-223228	1-5W (Programmable/Selectable) RF output Digital VHF Transceiver based on DMR (TDMA) technology, with 7.4V 2000 mAH or more Li-ion Battery pack with spring loaded belt clip, Flexible Helical Antenna, Single unit smart charger, Inbuilt Support GPS & user manual.	466
		7.4V 2000 mAH or more Li-ion Battery Packs	932
		Programming Cable and Software for 1/5 Watt radio set.	06
		Technical Service Manual for 1/5 Watt radio set.	06
		25W (Programmable/Selectable) RF output Digital VHF Transceiver based on DMR (TDMA) technology with DTMF micro phone, Battery cable, Mounting fixtures, Support GPS & user manual.	126
		6dB gain Omni directional antenna with 30 meter Low Loss RF cable for base station	126
		Programming Cable and Software for 25 Watt radio set.	06
		Technical Service Manual for 25 Watt radio set.	06

SIGNATURE OF THE TENDERER

SPECIFICATION COMPLIANCE STATEMENT (VHF 1/5W SETS)

Sl No	Parameters	Specifications	Complied/Not Complied
1	General		
	i) Frequency Range	136-174 MHz (Full Band)	
	ii) No. of channel	255 or higher	
	iii) Channel Spacing	12.5 KHz or better	
	iv) Frequency Stability	± 1.5 PPM or better	
	v) Protocol & Technology	Digital TDMA (DMR) Technology	
	vi) Type of Emission (Modulation)	Analog ; 11K0F3E Digital;4FSK or equivalent technique complying to open standard/non proprietary Digital Protocol as defined by an international standards body like ETSI / FCC etc.	
	vii) Type of Operation	Simplex, press to talk	
	viii) Type of Antenna	Rugged flexible Helical Antenna	
	ix) Weight	Less than 450 grams with battery.	
	x) Power Source	Lithium-ion battery pack of 2000 mA/HR or more with belt clip.	
xi) Protection	(i) Reverse polarity protection (ii) Protection against high VSWR		
2	Transmitter		
	i) R.F Power output	1/5 Watt (Programmable /Selectable)	
	ii) FM Hum / Noise	-40 dB or better	
	iii) Modulation Limiting	± 2.5 KHz @ 12.5 KHz	
	iv) Adjacent Channel Power	-60 db or better	
v) Audio Distortion	Less than 3%		
3	Receiver		
	i) Sensitivity	i) Analog: 0.30µV for 12 dB SINAD or better ii) Digital: 0.30µV at 5% BER or better	
	ii) Selectivity (Adjacent channel)	60 dB or better	
	iii) Inter Modulation	60 dB or better	
	iv) Audio Output	500 mW	
	v) Audio Response	+1,-3 dB	
vi) Rated Audio Distortion	Less than 3%		
4	Environmental Specification		
	i) Operating Temperature	-30°C to + 60 °C	
	ii) Storage Temperature	-40°C to + 70 °C	
	iii) Humidity	Max. 95% @ +40°C non- condensing	
	iv) Environmental standard (i.e) Low & High Temperature, Low pressure, Temperature Shock, Solar Radiation, Rain, Salt Fog, Vibration, Dust & Shock	As per MIL 810 C, D, E, F	
	v) Dust & Water Intrusion	IP 57 or better	

SIGNATURE OF THE TENDERER

5	Accessories		
	i) Battery Charger	Single unit smart charger	
	ii) Programming kit	All necessary software and hardware required for programming of the set	
	iii) Literature	i) Users manual with each radio sets should be provided free of cost in soft as well as hard copy. ii) Technical repairing manual with complete block diagram, circuit layout etc should be provided as per users' requirement in soft as well as hard copy.	
	iv) Battery	Two extra Lithium -ion batteries with each Radio Set	
6	Configuration		
	i) Caller ID display	Should be available	
	ii) Facility for locking the channel or key pad locking	Should be available	
	iii) Scan with priority	Should be available	
	iv) Transmitter Time Out Timer (TOT)	The time should be programmed to best suit the application	
	v) LCD Display	Should be available	
	vi) Mode of calls	Selective Call, Group Call, Inter and Intra Group call facility	
	vii) Remote Radio Kill / Stun /Revive facility	Should be available	
	viii) Mode of operation	Radio should operate in analog mode and digital mode. (Compatible with existing all type of VHF analogue radio sets viz : Motorola, Icom, Kenwood, Vertex etc)	
	ix) Emergency Button	Allows a user to obtain help in critical situations.	
	x) SMS Texting	Should be capable of sending pre defined messages & short messages from keypad as Optional.	
	xi) Programming	Front panel programming with password protection or PC programming.	
	xii) DTMF front panel key pad with back lit	Should be available	
	xiii) Battery strength bar	Should be available	
	xiv) Support GPS	Inbuilt GPS system with accuracy of less than 10 meters.	

SIGNATURE OF THE TENDERER

**TECHNICAL SPECIFICATIONS / QRs FOR DIGITAL VHF MOBILE/BASE
TRANSRECEIVER SET (25 W)**

Sl No	Parameters	Specifications	Complied/Not Complied
1	General		
	i) Frequency Range	136-174 MHz (Full Band)	
	ii) No. of channel	255 or higher	
	iii) Channel Spacing	12.5 KHz or better	
	iv) Frequency Stability	± 1.5 PPM or better	
	v) Protocol & Technology	Digital TDMA (DMR) Technology	
	vi) Type of Emission (Modulation)	Analog: 11K0F3E Digital: 4FSK or equivalent technique complying to open standard/non proprietary Digital Protocol as defined by an international standards body like ETSI / FCC etc.	
	vii) Type of Operation	Simplex, press to talk	
	viii) Weight	Less than 2000 grams.	
	xi) Power Source	13.8 Volt DC ± 15%	
	x) Protection	(i) Reverse polarity protection (ii) Protection against high VSWR	
2	Transmitter		
	i) R.F Power output	25 Watt (Programmable /Selectable)	
	ii) FM Hum / Noise	-40 dB or better	
	iii) Modulation Limiting	± 2.5 KHz @ 12.5 KHz	
	iv) Adjacent Channel Power	-60 db or better	
	v) Audio Distortion	Less than 3%	
3	Receiver		
	i) Sensitivity	i) Analog: 0.30µV for 12 dB SINAD or better ii) Digital: 0.30µV at 5% BER or better	
	ii) Selectivity (Adjacent channel)	60 dB or better	
	iii) Inter Modulation	70 dB or better	
	iv) Audio Output	3 W or more	
	v) Audio Response	+1,-3 dB	
	vi) Rated Audio Distortion	Less than 3%	
4	Environmental Specification		
	i) Operating Temperature	-30°C to + 60 °C	
	ii) Storage Temperature	-40°C to + 70 °C	
	iii) Humidity	Max. 95% @ +40°C non- condensing	
	iv) Environmental standard (i.e) Low & High Temperature, Low pressure, Temperature Shock, Solar Radiation, Rain, Salt Fog, Vibration, Dust & Shock	As per MIL 810 C, D, E, F	
	v) Dust & Water Intrusion	IP 54 or better	

SIGNATURE OF THE TENDERER

5	Accessories		
	i) Microphone	DTMF Microphone should be supplied with Radio	
	ii) Battery cable & Mounting fixtures	Should be supplied with Radio	
	iii) Antenna	6dB gain Omni Directional antenna with 30 meter RF Cable for base station will be provided as per user's requirements.	
	iv) Programming kit	All necessary software and hardware required for programming of the set	
v) Literature	<p>i) Users manual with each radio sets should be provided free of cost in soft as well as hard copy.</p> <p>ii) Technical repairing manual with complete block diagram, circuit layout etc should be provided as per users' requirement in soft as well as hard copy.</p>		
6	Configuration		
	i) Caller ID display	Should be available	
	ii) Bussy channel lock out	Should be available	
	iii) Scan with priority	Should be available	
	iv) Transmitter Time Out Timer (TOT)	The time should be programmed to best suit the application	
	v) LCD Display	Should be available	
	vi) Mode of calls	Selective Call, Group Call, Inter and Intra Group call facility	
	vii) Remote Radio Kill / Stun /Revive facility	Should be available	
	viii) Mode of operation	Radio should operate in analog mode and digital mode. (Compatible with existing all type of VHF analogue radio sets viz : Motorola, Icom, Kenwood, Vertex etc)	
	ix) Emergency Button	Allows a user to obtain help in critical situations.	
	x) SMS Texting	Should be capable of sending pre defined messages & short messages from keypad as Optional.	
	xi) Programming	Front panel programming with password protection or PC programming.	
xii) Support GPS	Inbuilt GPS system with accuracy of less than 10 meters.		

SIGNATURE OF THE TENDERER

CHECK LIST FOR TENDERER

(Tenderers should check following requirements for compliance before submission of the tender documents)

Sl. No.	Requirements to be checked by the tenderer before submission of the tender.	Compliance (To be indicated with “YES” after compliance)
1.	Tenderers should mention quantity for which they have quoted. This should be mentioned in the covering/ forwarding letter head of the technical bid.	
2.	Tenderers should ensure deposit of required Earnest Money Deposit if the tenderer are not registered with DGS&D or NSIC for the store(s) quoted for the governing specification as per Tender Enquiry.	
3.	Tenderers should ensure that their registration with DGS&D and NSIC is valid if they are registered with DGS&D/NSIC and not depositing Earnest Money. They should enclose the latest DGS&D/NSIC registration certificate.	
4.	Tenderers should confirm that their equipment/products conform to the governing specifications of the quoted stores as per Tender Enquiry.	
5.	Tenderers should mention whether it is an SSI Unit or not.	
6.	Tenderers should mention their monthly manufacturing / supplying capacity.	
7.	Tenderers should mention in the Tender Enquiry that they accept our delivery terms i.e. they agree to supply stores at consignees’ locations at freight, risk and cost of the tenderer.	
8.	Tenderers should mention that their offer is valid up to 180 days and EMD, if applicable, for 240 days from the date of opening of the tender.	
9.	Tenderers should mention their Delivery Period in days clearly .	
10.	Tenderers should mention that they agree to the Tolerance Clause of the Tender Enquiry.	
11.	Tenderers should give their past performance in the specified format given in the Tender documents.	
12.	Tenderers should mention that they agree to the Arbitration clause of the Tender Enquiry.	
13.	Tenderers should mention whether it is a manufacturer of the store (s) quoted or it is the manufacturer’s authorized agent. In case of agent, it should submit valid authority letter(s) of their Principal (s) for the stores they have quoted. In case of agent of foreign Principals, they should attach valid registration certificate of DGS&D as agent of foreign Principals.	
14.	Tenderers should mention that they agree to accept the conditions of the contract contained in DGS&D-68 (Revised) amended up to 31.12.91 and those contained in Pamphlet No. DGS&D-229 read with Annexure attached.	
15.	Tenderers should ensure that they have duly filled up Equipment and Quality Control Proforma given in the Tender documents.	
16.	Tenderers should mention that Business dealing with their firms has not been banned by any Govt/private agencies.	

SIGNATURE OF THE TENDERER

17.	Tenderers should ensure that witness has signed at appropriate places of the Tender documents and full name and address of the witness have been mentioned clearly.	
18.	Tenderer should ensure to sign each page of the Tender documents with name, designation, seal and address of the signatory.	
19.	If the tenderer want to mention any specific condition, it should be mentioned on the covering/ forwarding letter only which will be placed on the first page of the technical bid. Such condition mentioned in any other document shall not be given any consideration.	
20.	Tenderers should mention their address for communication with Telephone and Fax Number.	
21.	Tenderers should mandatorily submit a technical literature/ brochure with their tenders clearly mentioning the compliance of each and every technical parameter as per specifications	
22.	Lab test should have been issued prior to date of tender opening.	
23.	Tenderer should quote full quantity for both types of radios i.e 5W & 25W with required allied accessories.	

SIGNATURE OF THE TENDERER