

GOVERNMENT OF INDIA
(Ministry of Home Affairs)
COMMUNICATION & IT DIRECTORATE
CENTRAL RESERVE POLICE FORCE
EAST BLOCK-7, SEC-1, R.K. PURAM, NEW DELHI-110066
(Email:- comncell@crpf.gov.in Tele/Fax:011-26109038)

No. B.V-7/2024-25-C-(UHF)-Q

Dated, the 5 June'2025

To

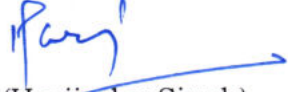
1. The DsG: AR, BSF, CISF, ITBP, NSG, SSB and BPR&D
2. Director, DCPW

Subject: Regarding QRs/TDs of "Digital Hand-Held UHF Transceiver Set, Digital UHF Base/Mobile Transceivers Set and Digital UHF Repeater Set"

I am directed to refer on the subject mentioned above and to say that the QRs/TDs of "**Digital Hand-Held UHF Transceiver, Digital UHF Base/Mobile Transceiver set and Digital UHF Repeater set**" has been approved by the DG CRPF after deliberation and recommended by CAPFs sub-group and experts from DCPW.

2. QRs/TDs of "Digital Hand-Held UHF Transceiver set, Digital UHF Base/Mobile Transceiver set and Digital UHF Repeater set" has forwarded earlier vide letter No. B.V-7/2015-16-C(QRs)-(3)/550 dated 07/08/2015 is rescinded.

Encl:-As above


{Harjinder Singh}
DIG (Communication)
Communication & IT Branch
Directorate General C R P F

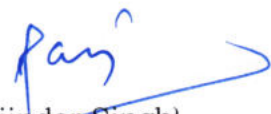
No. B.V-7/2024-25-C-(UHF)-Q

Dated, the 5 June'2025

Copy to:-

2. Mrs. Sugandhi, Technical Director, North block, MHA with request to upload the QRs/TDs of "**Digital Hand-Held UHF Transceiver Set, Digital UHF Base/Mobile Transceivers Set and Digital UHF Repeater Set**" on MHA website (e-mail ID: mpsugandhi@nic.in) and QRs/TDs of "Digital Hand-Held UHF Transceiver set, Digital UHF Base/Mobile Transceiver set and Digital UHF Repeater set" has forwarded earlier vide letter No. B.V-7/2015-16-C(QRs)-(3)/550 dated 07/08/2015 is rescinded.

Encl:-As above


{Harjinder Singh}
DIG (Communication)
Communication & IT Branch
Directorate General C R P F

QRs/TDs of Digital Hand-Held UHF Radio Set


| S.N | Parameter | Specification | Trial directives |
|-------|--------------------------------------|--|---|
| 1. | General | | |
| i. | Frequency range | 403-470 MHz | BOO will check operation of radio set by programming lowest, highest and any random frequency in 403-470 MHz range with the help of measuring instrument |
| ii. | No of channels | Minimum 255 | BOO will check practically |
| iii. | Channel spacing | 12.5 KHz or better in Analog & Digital mode | BOO will check practically |
| iv. | Frequency stability | ± 1.5 ppm or better | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/ NABL accredited Lab. |
| v. | Protocol & Technology | Digital TDMA | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/ NABL accredited Lab. |
| vi. | Types of emission (modulation) | Analog: 11K0F3E Digital: 7K60FXE, 7K60FXD, 7K60FXW or equivalent technique complying to open standard/ nonproprietary Digital Protocol as defined by an international standards body like ETSI/FCC etc. | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/ NABL accredited Lab. |
| vii. | Types of operation | Semi Duplex, push to talk(PTT) | BOO will check practically |
| viii. | Type of antenna | Rugged flexible helical antenna | BOO will check Physically |
| ix. | Weight | less than 475 grams with battery | BOO will check practically |
| x. | Power source | Lithium -ion or Li-polymer battery pack of 2000 mAh or more with belt clip | BOO will check practically and Firm will submit BIS approved certificate not older than 3 year of Govt. Lab/ILAC/NABL accredited Lab. |
| xi. | Average battery duty cycle 5/5/90 | 10 Hrs. or more | BOO will check practically |
| xii. | Protection | Protection against high VSWR | BOO 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 |


| S.N | Parameter | Specification | Trial directives |
|----------|---|--|---|
| 2 | Transmitter | | |
| i. | RF Power output | 1/4 Watt (programmable/selectable) | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab. |
| ii. | FM Hum/Noise | -40dB 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: $0.25\mu\text{V}$ for 12 dB SINAD or better ii) Digital: $0.25\mu\text{V}$ at 5% BER or better | BOO will check practically and Firm will submit Certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab. |
| 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 Specifications | | |
| i. | Operating Temperature | -30°C to + 60 °C | Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab. |
| ii. | Storage Temperature | -40°C to + 70 °C | |
| iii. | Humidity | Max. 95% @ +40°C non-condensing | |
| iv. | Environmental standard (i.e.) Low pressure, Temperature Shock, Rain, Salt Fog, Vibration, Solar Radiation, Dust & Shock | MIL-STD-810 G or above | Firm will submit certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab. |
| v. | Dust & Water Intrusion | IP67 or better | Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab. |
| 5 | Accessories | | |
| i. | Battery Charger | Single unit smart charger | BOO will check practically |
| ii. | Hands free kit (VOX unit with PTT) (Optional- as per user requirement) | The vendor should provide minimum of two variants for trials | BOO will check practically |


| S.N | Parameter | Specification | Trial directives |
|----------|--|---|---|
| iii. | Programming kit | All necessary latest programming software and hardware required for the set will be provided (As per user requirement) | BOO will check practically |
| iv. | Literature | i) User's 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 in soft as well as hard copy. (As per user requirement) | BOO will check practically |
| v. | Battery | Two extra BIS approved Lithium-ion or Li-Polymer batteries with each Radio set or As per user requirement. | BOO will check practically |
| 6 | Configuration | | |
| i. | Caller ID display | Should be available | BOO will check practically |
| ii. | Facility for locking the channel or key pad locking | Should be available | BOO will check practically |
| iii. | Scan with priority | Should be available | BOO will check practically |
| iv. | Transmitter Time Out Timer (TOT) | The time should be programmed to best suit the application | BOO will check practically |
| v. | LCD Display | Display: Should be available (Min Display size 1.2 inch) | BOO will check practically. |
| vi. | Mode of calls | Selective Call, Group Call, Inter and Intra Group call facility | BOO will check practically |
| vii. | Remote radio Kill/ Stun/ Revive facility with authentication/ acknowledgement. | Should be available | BOO 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 (compatibility with existing all type of UHF analog & DMR radio sets) | BOO will check practically |
| ix. | Emergency Button | Allows a user to obtain help in critical situations. | BOO will check practically |


| S.N | Parameter | Specification | Trial directives |
|--------|--|---|---|
| x. | SMS Texting | Should be capable of sending pre-defined messages & minimum 45-character short messages from keypad | BOO will check practically. |
| xi. | Programming | Front panel programming with password protection or PC programming. | BOO will check practically |
| xii. | Front Panel/DTMF alpha-numeric keypad with backlit | Should be available | BOO will check practically |
| xiii. | Battery strength bar | Should be available | BOO will check practically. |
| xiv. | Support GPS | Inbuilt GPS system with accuracy of less than 10 meters or better | BOO will check practically |
| xv. | GIS (As per user requirement) | Radio should have application protocol interface along with software applications to provide location and messaging on PC/ Console. | |
| xvi. | Networking | Should be IP based for automatic roaming etc. | |
| xvii. | Vocoder | AMBE+2 or better | Firm will submit certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab |
| xviii. | Communication security with user defined key management system | System have in-built AES 256 bit or better encryption system and should also have provision to support 3 rd party | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab |
| xix. | OTAP (over the air programming) facility (Optional) | Should be available | BOO will check practically and Firm will submit OEM certificate |
| xx. | Bluetooth (Optional) | 4.0 version or better | Firm will submit OEM certificate |
| xxi. | Noise cancellation/Suppression. | With or without external mic active noise cancellation | Firm will submit OEM Certificate |
| xxii. | EMI/EMC | ETSI EN 301 489-1 and ETSI 301 489-5 /TEC/SD/DD/EMC-221/05/OCT-16 or equivalent | Firm will submit certificate not older than 3 year of Govt Lab/ ILAC/NABL Accredited Lab |


| | | | |
|---|--------------------|---|--|
| 7 | Field Trial | The actual performance of the radio set will be assessed by BOO consisting CAPFs with expert Organization and evaluate the actual field performance of radio. | 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. |
|---|--------------------|---|--|



(Harif Choudhury)
AC(Exe), CISF



(Ujjwal Kumar Singh)
AC(QR), CRPF



(Major Atul Sharma)
NSG

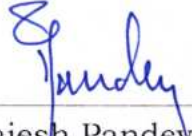

(Prem Narain)
DC(Comn),SSB


(Sunil Kumar Singh)
DC(Comn),CRPF



(Vivek Kr Gupta)
AD, DCPW

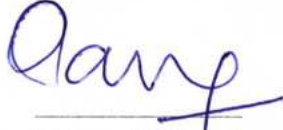

(Lt. Col V.P. Singh)
Assam Rifles



(Rajesh Chaudhary)
Comdt(Tele),ITBP



(Rajesh Pandey)
Comdt (Tele), ITBP


(S.K. Sastri, Comdt)
BSF



(P.C. Jha)
DIG(Comn), CRPF


(Vijay Kumar)
IG, CRPF


(Syed Mohammad Hasnain)
IG (Comn& IT), CRPF


(Vitul Kumar, IPS)
SDG (OPS), CRPF

✓
Approved/Not Approved


(Gyanendra Pratap Singh,IPS)
DG, CRPF

QRs/TDs OF DIGITAL UHF MOBILE/BASE TRANSRECEIVER SET (20 W)

| Sn | Parameters | Specification | Trial directives |
|----|-----------------------------------|--|---|
| 1. | General | | |
| | i) Frequency Range | 403-470 MHz (Full Band) | BOO will check operation of radio set by programming lowest, highest and any random frequency in 403-470 MHz range with the help of measuring instrument |
| | ii) No. of channel | 500 or higher | BOO will check practically |
| | iii) Channel Spacing | 12.5 KHz or better in Analog & Digital mode | BOO will check practically |
| | iv) Frequency Stability | ± 1.5 PPM or better | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab |
| | v) Protocol & Technology | Digital TDMA Technology | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab. |
| | vi) Type of Emission (Modulation) | Analog: 11K0F3E Digital: 7K60FXE, 7K60FXD, 7K60FXW | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab |
| | vii) Type of Operation | Semi Duplex, push to talk (PTT) | BOO will check practically |
| | viii) Weight | Less than 2000 grams | BOO will check practically |
| | ix) Antenna Impedance | 50 Ω | BOO will check practically. |
| | x) Power Source | 13.8 Volt DC $\pm 15\%$ | BOO will check practically |
| | xi) Protection | (i) Reverse polarity protection (ii) Protection against high VSWR | i) BOO 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) BOO 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. |


| Sn | Parameters | Specification | Trial directives |
|----|---|--|---|
| 2. | Transmitter | | |
| | i) R.F Power output | 20 Watt Programmable /Selectable) | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab. |
| | 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% | |
| | Receiver | | |
| 3. | i) Sensitivity | i) Analog: 0.25 μ V for 12 dB SINAD or better ii) Digital: 0.25 μ V at 5% BER or better | BOO will check practically and Firm will submit Certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab. |
| | 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 Specifications. | | |
| | i) Operating Temperature | -30°C to + 60 °C | Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab. |
| | ii) Storage Temperature | -40°C to + 70 °C | |
| | iii) Humidity | Max. 95% @ +40°C non-condensing | |
| | iv) Environmental standard (i.e) Low pressure, Temperature Shock, Rain, Salt Fog, Vibration, Solar radiations, Dust & Shock | As per MIL STD 810 G or better | Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab. |
| | v) Dust & Water Intrusion | IP 54 or better | Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab. |


Handwritten signatures and initials in blue ink.

| Sn | Parameters | Specification | Trial directives |
|----|---------------------------------------|---|---|
| 5. | Accessories | | |
| | i) Microphone | DTMF/Keypad Microphone should be supplied with Radio | BOO will check practically. |
| | ii) Battery cable & Mounting fixtures | Should be supplied with Radio | BOO will check practically |
| | iii) Antenna | <p>i) 3dB gain whip antenna with 3 meters co-axial cable with connector, magnetic base/ mounting bracket for vehicle use will be provided.</p> <p>ii) 6dB or high gain Omni Directional antenna with 30-meter RF cable (LDF ½"/RG-217 as per user requirement) attenuation 2 dB per 100 feet or better for base station will be provided.</p> | BOO will check practically. Firm will submit Certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab |
| | iv) Programming kit | All necessary latest programming software and hardware required for the set will be provided (As per user requirement) | BOO will check practically |
| | v) Literature | <p>i) User's 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 in soft as well as hard copy (As per user requirement)</p> | BOO will check practically |
| 6 | Configuration | | |
| | i) Caller ID display | Should be available | BOO will check practically |
| | ii) Busy channel locks out | Should be available | BOO will check practically |
| | iii) Scan with priority | Should be available | BOO will check practically |
| | iv) Transmitter Time Out Timer (TOT) | The time should be programmed to best suit the application. | BOO will check practically |


| Sn | Parameters | Specification | Trial directives |
|----|---|---|---|
| | v) LCD Display | Display: Should be available | BOO will check practically |
| | vi) Mode of calls | Selective Call, Group Call, Inter and Intra Group call facility | BOO will check practically |
| | vii) Remote radio Kill/Stun/Revive facility with authentication/acknowledgement | Should be available | BOO 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 and Digital mode (compatible with existing all type of UHF Analog & DMR radio sets.) | BOO will check practically |
| | ix) Emergency Button (Optional) | Allows a user to obtain help in critical situations. | BOO will check practically. |
| | x) SMS Texting | Should be capable of sending predefined mgs and minimum 45-character short mgs form key pad. | BOO will check practically |
| | xi) Programming | Front panel programming with password protection or PC programming. | BOO will check practically |
| | xii) Support GPS | GPS system with accuracy of less than 10 meters. | BOO will check practically. |
| | xiii) Networking | Should be IP based for automatic roaming etc. | |
| | xiv) GIS (As Per user requirement) | Radio should have application protocol interface along with software applications to provide location and messaging on PC /Console. | |
| | xv) Communication security user defined key management system | System have in-built AEC 256 bit or better encryption system and should also have provision to support 3 rd party encryption | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab. |
| | xvi) OTAP (over the air programming) facility (Optional) | Should be available | BOO will check practically |
| | xvii) EMI/EMC | ETSI EN 301 489-1 and ETSI 301 489-5 / TEC/SD/DD/EMC-221/05/OCT-16 or equivalent | Firm will submit Certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab |

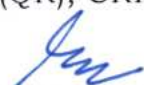
| Sn | Parameters | Specification | Trial directives |
|----|-------------|--|--|
| 7 | Field Trial | The actual performance of the radio set will be assessed by BOO consisting CAPFs with expert Organization and evaluate the actual field performance of radio | Field trial of equipment will be conducted 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. |



 (Hanif Choudhury)
 AC(Exe), CISF



 (Ujjwal Kumar Singh)
 AC(QR), CRPF



 (Major Atul Sharma)
 NSG



 (Prem Narain)
 DC(Comn),SSB

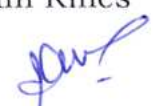

 (Sunil Kumar Singh)
 DC(Comn),CRPF



 (Vivek Kr Gupta)
 AD, DCPW



 (Lt. Col V.P. Singh)
 Assam Rifles



 (Rajesh Chaudhary)
 Comdt(Tele),ITBP



 (Rajesh Pandey)
 Comdt (Tele), ITBP


 (S.K. Sastri, Comdt)
 BSF


 (P.C. Jha)
 DIG(Comn), CRPF


 (Vijay Kumar)
 IG, CRPF


 (Syed Mohammad Hasnain)
 IG (Comn& IT), CRPF


 (Vitul Kumar, IPS)
 SDG (OPS), CRPF

✓
Approved/Not Approved


 (Gyanendra Pratap Singh,IPS)
 DG, CRPF

Draft QRs/TDs OF DIGITAL UHF REPEATER SET

| S. N | Parameters | Specification | Trial directives |
|------|-----------------------------------|--|---|
| 1. | General | | |
| | i) Frequency Range | 403-470 MHz (Full Band) | BOO will check operation of radio set by programming lowest, highest and any random frequency in 403-470 MHz range with the help of measuring instrument. |
| | ii) No. of channel | 16 or more | BOO will check practically |
| | iii) Channel Spacing | 12.5 KHz or better | BOO will check practically |
| | iv) Frequency Stability | ± 1.5 PPM or better | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab. |
| | v) Protocol & Technology | Digital TDMA | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab. |
| | vi) Type of Emission (Modulation) | Analog: 11K0F3E Digital: 7K60FXE, 7K60FXD, 7K60FXW | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab. |
| | vii) Weight | Less than 15 Kg | BOO will check practically |
| | viii) Power Source | i) DC: 13.8 Volt $\pm 15\%$ ii) AC: 110V-260V iii) There should be provision to shift automatically on DC supply during mains failure & when mains supply restored it should be shifted on mains from DC supply. | BOO will check practically |
| | ix) Protection | i) Reverse polarity protection ii) Protection against high VSWR | BOO will check practically |
| | x) EMI/EMC | As per ETSI EN 301 489-1 and ETSI 301 489-5 /TEC/SD/DD/ EMC-221/05/OCT-16 or equivalent | Firm will submit certificate not older than 3 year of Govt. Lab/ILAC/NABL Accredited Lab. |

| S. N | Parameters | Specification | Trial directives |
|------|------------------------------------|---|---|
| | xi) Duplexer (optional) | 403 to 470 MHz (Frequency as per user requirement) | BOO will check practically |
| | xii) Mode of Operation | Repeater should operate in Analog and digital mode and Compatible with existing all type of UHF digital and Analog radios in both plain and secure mode | BOO will check practically |
| | xiii) Antenna Impedance | 50Ω | BOO will check practically. |
| | xiv) Duty cycle | Should be 100 % duty cycle at full power in both AC and DC operation | OEM will submit certificate |
| 2. | Transmitter | | |
| | i) R.F Power output | 40 Watt or more (Programmable /Selectable) | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab. |
| | 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 | | |
| | i) Sensitivity | i) Analog: 0.25 μV for 12 dB SINAD or better ii) Digital: 0.25μV at 5% BER or better | BOO will check practically and Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab. |
| | ii) Selectivity (Adjacent channel) | 60 dB or better. | |
| | iii) Inter Modulation | 70 dB or better | |
| | vi) Audio Response | +1, -3 dB | |
| | v) Rated Audio Distortion | Less than 3% | |
| 4. | Environmental Specification | | |
| | i) Operating Temperature | -30°C to + 60 °C | Firm will submit certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab. |
| | ii) Storage Temperature | -40°C to + 70 °C | |
| | iii) Humidity | Max. 95% @ +40°C non- condensing | |

| S. N | Parameters | Specification | Trial directives |
|------|--------------------------------------|--|--|
| 5 | Networking | Should be capable to support IP site connects | Firm will show networking and interfaces related function of repeater practically by connecting it in user organisation network. |
| 6 | Interfaces | Ethernet port RJ-45 to provide a) Wide area IP connectivity for voice and data b) Remote monitoring and status check | |
| 7. | Accessories | | |
| | i) Battery cable & Mounting fixtures | Should be supplied with Repeater | BOO will check it practically by connecting battery cable & mounting fixtures with repeater. |
| | ii) Antenna | 6dB or high gain Omni Directional antenna with 45-meter RF (LDF 1/2"/RG-217 as per user requirement) attenuation 2dB per 100 feet or better for repeater base station will be provided | Firm will submit Certificate not older than 3 year of Govt. Lab/ ILAC/NABL Accredited Lab |
| | iii) Programming kit | All necessary programming software and hardware required for the set will be provided. (As per user requirement) | BOO will check it practically that all necessary programming software and hardware are available as per user requirement. |
| | iv) Literature | i) User's 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 in soft as well as hard copy. (As per user requirement) | BOO will check it physically that User and Technical manual are available as per user requirement. |















| | | | |
|---|-------------|--|---|
| 8 | Field Trial | The actual performance of the radio set will be assessed by BOO consisting CAPFs with expert Organization and evaluate the actual field performance of radio | 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. Repeater equipment with all required accessories will be provided by the participating firm's on " No cost No Commitment " basis at the indenter discretion. |
|---|-------------|--|---|



(Hanif Choudhury)
AC(Exe), CISF



(Ujjwal Kumar Singh)
AC(QR), CRPF



(Major Atul Sharma)
NSG



(Prem Narain)
DC(Comn),SSB


(Sunil Kumar Singh)
DC(Comn),CRPF



(Vivek Kr Gupta)
AD, DCPW

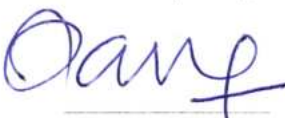

(Lt. Col V.P. Singh)
Assam Rifles



(Rajesh Chaudhary)
Comdt(Tele),ITBP



(Rajesh Pandey)
Comdt (Tele), ITBP



(S.K. Sastri, Comdt)
BSF


(P.C. Jha)
DIG(Comn), CRPF


(Vijay Kumar)
IG , CRPF


(Syed Mohammad Hasnain)
IG (Comn& IT), CRPF


(Vitul Kumar, IPS)
SDG (OPS), CRPF


Approved/Not Approved


(Gyanendra Pratap Singh,IPS)
DG, CRPF