



Bid Number/बोली क्रमांक (बिड संख्या):
GEM/2023/B/3651666
Dated/दिनांक : 04-08-2023

Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण	
Bid End Date/Time/बिड बंद होने की तारीख/समय	16-08-2023 14:00:00
Bid Opening Date/Time/बिड खुलने की तारीख/समय	16-08-2023 14:30:00
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	175 (Days)
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Home Affairs
Department Name/विभाग का नाम	Central Armed Police Forces
Organisation Name/संगठन का नाम	Directorate Of Coordination Police Wireless
Office Name/कार्यालय का नाम	New Delhi
Total Quantity/कुल मात्रा	877
Item Category/मद केटेगरी	Digital Base / Mobile Transceiver Set (MOBILE RADIO) (Q2) , Digital Handheld Transceiver Set (HANDHELD RADIO) (Q2)
Minimum Average Annual Turnover of the bidder (For 3 Years)/बिडर का न्यूनतम औसत वार्षिक टर्नओवर (3 वर्षों का)	400 Lakh (s)
OEM Average Turnover (Last 3 Years)/मूल उपकरण निर्माता का औसत टर्नओवर (गत 3 वर्षों का)	800 Lakh (s)
Years of Past Experience Required for same/similar service/उन्हीं/समान सेवाओं के लिए अपेक्षित विगत अनुभव के वर्ष	3 Year (s)
MSE Exemption for Years Of Experience/अनुभव के वर्षों से एमएसई छूट/ and Turnover/टर्नओवर के लिए एमएसई को छूट प्राप्त है	Yes
Startup Exemption for Years Of Experience/अनुभव के वर्षों से स्टार्टअप छूट/ and Turnover/ टर्नओवर के लिए स्टार्टअप को छूट प्राप्त है	Yes
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Experience Criteria,Past Performance,Bidder Turnover,Certificate (Requested in ATC),OEM Authorization Certificate,OEM Annual Turnover *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Past Performance/विगत प्रदर्शन	10 %

Bid Details/बिड विवरण	
Bid to RA enabled/बिड से रिवर्स नीलामी सक्रिय किया	Yes
RA Qualification Rule	H1-Highest Priced Bid Elimination
Type of Bid/बिड का प्रकार	Two Packet Bid
Primary product category	Digital Base / Mobile Transceiver Set (MOBILE RADIO)
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	2 Days
Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No
Evaluation Method/मूल्यांकन पद्धति	Total value wise evaluation

EMD Detail/ईएमडी विवरण

Advisory Bank/एडवाइजरी बैंक	State Bank of India
EMD Amount/ईएमडी राशि	3

ePBG Detail/ईपीबीजी विवरण

Advisory Bank/एडवाइजरी बैंक	State Bank of India
ePBG Percentage(%) / ईपीबीजी प्रतिशत (%)	3.00
Duration of ePBG required (Months) / ईपीबीजी की अपेक्षित अवधि (महीने).	38

(a). EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy./जेम की शर्तों के अनुसार ईएमडी छूट के इच्छुक बिडर को संबंधित कैटेगरी के लिए बिड के साथ वैध समर्थित दस्तावेज प्रस्तुत करने हैं। एमएसई कैटेगरी के अंतर्गत केवल वस्तुओं के लिए विनिर्माता तथा सेवाओं के लिए सेवा प्रदाता ईएमडी से छूट के पात्र हैं। व्यापारियों को इस नीति के दायरे से बाहर रखा गया है।

(b). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable./ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए।

Beneficiary/लाभार्थी :

ADMM
New Delhi, Central Armed Police Forces, Directorate of Coordination Police Wireless, Ministry of Home Affairs
(K Elamurugan)

Splitting/विभाजन

Bid splitting not applied/बोली विभाजन लागू नहीं किया गया.

MII Purchase Preference/एमआईआई खरीद वरीयता

MII Purchase Preference/एमआईआई खरीद वरीयता	Yes
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MSE Purchase Preference/एमएसई खरीद वरीयता

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes
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1. If the bidder is a Micro or Small Enterprise as per latest definitions under MSME rules, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
2. If the bidder is a Startup, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to their meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
3. The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated above in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
4. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of primary product having highest value should meet this criterion.
5. OEM Turn Over Criteria: The minimum average annual financial turnover of the OEM of the offered product during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
6. Preference to Make In India products (For bids < 200 Crore): Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate. The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023. [OM_No.1_4_2021_PPD_dated_18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.
7. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered

product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25%(selected by Buyer) percentage of total QUANTITY. The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023

[OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

8. Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products for 10% of bid quantity, in at least one of the last three Financial years before the bid opening date to any Central / State Govt Organization / PSU / Public Listed Company. Copies of relevant contracts (proving supply of cumulative order quantity in any one financial year) to be submitted along with bid in support of quantity supplied in the relevant Financial year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.

9. Reverse Auction would be conducted amongst all the technically qualified bidders except the Highest quoting bidder. The technically qualified Highest Quoting bidder will not be allowed to participate in RA. However, H-1 will also be allowed to participate in RA in following cases:

- i. If number of technically qualified bidders are only 2 or 3.
- ii. If Buyer has chosen to split the bid amongst N sellers, and H1 bid is coming within N.
- iii. In case Primary product of only one OEM is left in contention for participation in RA on elimination of H-1.
- iv. If L-1 is non-MSE and H-1 is eligible MSE and H-1 price is coming within price band of 15% of Non-MSE L-1
- v. If L-1 is non-MII and H-1 is eligible MII and H-1 price is coming within price band of 20% of Non-MII L-1

Digital Base / Mobile Transceiver Set (MOBILE RADIO) (48 set)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

* As per GeM Category Specification/जेम केटेगरी विशिष्टि के अनुसार

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
CONFORMITY	Conformity to technical requirements	As per QR/specification & TDs for 'Digital Base / Mobile Transceiver Set', prepared and approved by DCPW/MHA , 9 Block No. 9, CGO Complex , Lodhi Road, New Delhi-3 and approved by MHA as per letter No. H-18026/1(TS&TDS)/2016-CDN (QRs) Dated 17th Jan, 2018 (Copy of QRs / TDs uploaded in GeM portal)
	Availability of QR/specification for 'Digital Base / Mobile Transceiver Set'	Yes
	QR/specification has been seen, read and understood	Yes
	Scope of supply of 'Digital Base / Mobile Transceiver Set' covers all components complete as per governing QR/specification	Yes
General	Frequency Range	VHF:136 -174 MHz
	No of Channel	255 or more (set with display)
	Type of Band	Full Band

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
	Channel Spacing	12.5 KHz or better
	Frequency Stability	(+/-) 1.5 PPM or better
	Protocol and Technology	TDMA (2-SLOT)
	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 ETSC/FCC etc.
	Type of Operation	Press to talk
	Weight	Less than 2000 grams
	Power Source / operating voltage	10.8 to 15.6 VDC
	Protection	(1) Reverse polarity protection (2) Protection against high VSWR
	RF Power	25 Watt (Programmable / Selectable)
	Antenna Impedance	50 ohm
	EMI/EMC	ETSI EN 301 489-1 & ESTI 301 489-5
	Other parameter	Air Interface Standard (open standard DMR Tier - II)
Transmitter/Receiver	Transmitter	RF power output (5 to 25 watts or more (Programmable)), FM Emission (11K0F3E), FM Emission (7K60FXE), FM Emission (7K60FXD), FM Emission (7K60FXW), Modulation Limiting(+/- 2.5 KHz @ 12.5 KHz), Digital Modulation(4FSK), FM Hum / Noise (-40dB or better), Adjacent Channel power(-60 dB or better), Audio Response(+1 , -3dB), Audio distortion(less than 3%), Digital Vocoder(AMBE +2), Communication security : system should have in built encryption and should also have provision to support 3rd party encryption
	Receiver	Sensitivity(Analog) : 0.30 μ V for 12db SINAD or better, Sensitivity(Digital): 0.30 μ V at 5% BER or better, Adjacent Channel selectivity : 60 dB or better, Inter modulation : 70 dB or better, Audio Output : 3 W or more, Audio Response (+1, -3 dB), Rated Audio Distortion(Less than 3%)
COMMUNICATION SECURITY / OPTIONAL FEATURES	Communication Security	system should have In-built Encryption and should also have provision to support Thirdparty Encryption, NA, NA

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
Buyer specific REQUIREMENTS	Accessories (hint :-Repair Manual and Prog Kit, Qty required by buyer may be specified through ATC in the bid for procurement of sets more than one if considered appropriate, as these are not required one with every radio)	Microphone (DTMF Microphone should be Supplied with Radio), Suitable Battery Cable and Mounting Fixtures (should be Supplied with Radio), Antenna : 0 dB / 3dB gain whip antenna with 3 meters Co-axial cable with connector, Programming Kit(All Necessary Programming Software and Hardware required for the set will be provided as per user's requirements), Literature - User Manual with each radio sets provided free of cost in soft as well as hard copy, Literature - Technical repairing & maintenance manual with complete block diagram, circuit layout etc should be provided as per user's requirements in soft as well as hard copy
	Configuration /features	Caller ID display, Busy channel lock out, Scan with priority, Transmitter Time Out Timer (TOT), LCD Display, Mode of calls : (Selective Call, Group Call, Inter and Intra Group call facility), Remote Radio Kill/ Stun/ Revive facility, Mode of operation (Radio should operate in analog mode and digital mode i.e compatible with existing all type of radio sets), Emergency Button (Allows a user to obtain help in critical situations), SMS Texting (should be capable of sending pre defined messages & short messages from keypad as optional), Programming (front panel programing with password protection or PC programing)
	Configuration /features (optional)	Support GPS (Inbuilt GPS system with accuracy of less than 10 meters), GIS (Radio should have application protocol interface along with software applications to provide locations and messaging on PC/Console), Networking(should be IP based for automatic roaming etc)., NA
	Buyer required Compliance to Enviromental Test	Low & High temperature (as per MIL-STD-810 C,D,E,F), Low Pressure (as per MIL-STD-810 C,D,E,F), Temperature Shock (as per MIL-STD-810 C,D,E,F), Solar Radiation (as per MIL-STD-810 C,D,E,F), Rain (as per MIL-STD-810 C,D,E,F), Salt Fog (as per MIL-STD-810 C,D,E, F), Vibration (as per MIL-STD-810 C;D;E, F), Dust (as per MIL-STD-810 C;D;E, F), Shock (as per MIL-STD-810 C;D;E, F), Dust and Water intrusion (IP 54 or batter), Vibration (as per MIL-STD-810 F/G), Shock & Drop (as per MIL-STD-810 F/G), water intrusion and Dust (as per MIL-STD-810 F/G or IP 54), Salt (as per MIL-STD-810 F/G), Rain (as per MIL-STD-810 F/G), Low Pressure (as per MIL-STD-810 F/G)
	Buyer required Environmental specification	Operating Temperature ('- 30 deg. C to + 60 deg C), Operating Temperature ('- 30 deg. C to + 55 deg C), Storage Temperature ('- 40 deg. C to + 70 deg. C), Humidity (Max. 95% @ + 40 deg. C - Non-Condensing)
Seller specific Requirements	Valid AIP/DL/WPC LICENSE required to be provided by the buyer for execution of order by seller	Yes required (Date of Delivery Period shall be reconed from the date of AIP/DL received)

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
Certification / Test Report	Type of lab which carried out Test of Complete Product to prove the conformity of product as per specification	NABL accredited lab
	Agree to provide all relevant documents Test Report/suuporting document /reports etc to the buyer at the time of bidding or on demand	YES

Additional Specification Parameters - Digital Base / Mobile Transceiver Set (MOBILE RADIO) (48 set)

Specification Parameter Name	Bid Requirement (Allowed Values)
Additional Accessories	1. L Bracket for each set (accessories) 2. 10 Nos. of Test Zig of DMR VHF Mobile radio set 3. Minimum 20 Nos. of programming Kit required
1. Configuration /features (optional) in Buyer specific REQUIREMENTS	1. Support GPS, GIS etc. not required

* Bidders offering must also comply with the additional specification parameters mentioned above.

Additional Specification Documents/अतिरिक्त विशिष्टि दस्तावेज़

Verified and Signed Tp document	View
Applicable Drawing Document	View

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Rakesh Kumar	110003,Block-9, CGO Complex, Lodhi Road, New Delhi	48	45

Digital Handheld Transceiver Set (HANDHELD RADIO) (785 set)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

* As per GeM Category Specification/जेम कैटेगरी विशिष्टि के अनुसार

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
CONFORMITY	Conformity to technical requirements	As per QR/specification & TDs for 'Digital Handheld Transceiver Set', Prepared and approved by DCPW/MHA , 9 Block No. 9, CGO Complex , Lodhi Road, New Delhi-3 and approved by DCPW as per letter No. H-18026/1(TS&TDS)/2016-CDN (QRs) Dated 17th Jan, 2018 (Copy of QRs / TDs uploaded in GeM portal)
	Availability of QR/specification for 'Digital Handheld Transceiver Set'	Yes
	QR/specification has been seen, read and understood	Yes
	Scope of supply of 'Digital Handheld Transceiver Set' covers all components complete as per governing QR/specification	Yes
General	Frequency Range	VHF:136 -174 MHz
	Type of Band	Full Band
	No of Channel	255 or higher
	Protocol and Technology	Digital TDMA or Digital FDMA, TDMA (2-SLOT)
	Channel spacing	12.5 KHz or better
	Frequency Stability	(+or -) 1.5 PPM or better
	Type of Emission (Modulation)	Analog (11K0F3E), Digital (4 FSK) or equivalent technique to complying to open standard/ non proprietary digital protocol as define an international standards body like ETSI / FCC etc.
	Type of Operation	Simplex, Press to Talk
	Type of Antenna	Rugged flexible Helical antenna
	Protection	(1) Reverse polarity protection (2) Protection against high VSWR
	Weight	Less than 450 gram with battery
	Other parameter	Air Interface Standard (open standard DMR Tier - II), NA

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
Transmitter/Receiver	Transmitter	RF power output (VHF : 1 / 5 watts (Programmable/selectable), FM Emission (11K0F3E), FM Emission (7K60FXE), FM Emission (7K60FXD), FM Emission (7K60FXW), Modulation Limiting(+2.5 KHz at 12.5 KHz), FM HUM & Noise(-40dB), Digital Modulation(4FSK), Adjacent Channel power(-60 dBc), Audio Response(+1 , -3dB), Audio distortion(less than 3%), Digital Vocoder(AMBE +2), Communication security (system should have in built encryption and should also have provision to support 3rd party encryption)
	Receiver	Sensitivity(Analog) : 0.30 μ V for 12dB SINAD or better, Sensitivity(Digital) : 0.30 μ V at 5% BER or better, Adjacent Channel selectivity (60 dB or batter), Inter modulation(60 dB or batter), Inter modulation(70 dB or batter), Audio Output (minimum 500 mW), Audio Response (+1, -3 dB), Audio Distortion(Less than 3%)
POWER SOURCE / BATTERY	Battery Capacity	2000 mAH or More
	Type of Battery supplied with Digital Handheld VHF Transceiver Set (Battery Chemistry)	Li-ion
COMMUNICATION SECURITY / OPTIONAL FEATURES	Communication Security	In-built Encryption with provision to support Thirdparty Encryption,
Buyer specific REQUIREMENTS	Whether the offered product/ model has been successful during field trial conducted through EOI tender by CPMF organisation	No (NOT PARTICIPATED IN ANY EOI TENDER)
	Accessories (hint :-Repair Manual and Prog Kit, Qty required by buyer may be specified through ATC in the bid for procurement of sets more than one if considered appropriate, as these are not required one with every radio)	Good quality leather case with belt clip and shoulder strap, Hands Free Kit (VoX unit with PTT), Literature - User Manual with each radio sets provided free of cost in soft as well as hard copy, Literature - Technical repairing & maintenance manual with complete block diagram, circuit layout etc in soft as well as hard copy, Programming Kit(All Necessary Programming Software and Hardware required for the set shall be provided), Spare Batteries-1No supplied with each radio set (in addition to the battery supplied with the equipment), Single Unit Smart Charger

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
	Configuration /features	Caller ID display, Facility for locking the channel or key pad locking, Scan with priority, Transmitter Time Out Timer (TOT), LCD Display, Mode of calls (Selective Call, Group Call, Inter and Intra Group call facility), Remote Radio Kill/Stun/Revive facility, Mode of operation (Radio should operate in analog mode and digital mode i.e compatible with existing all type of radio sets), Emergency Button (Allows a user to obtain help in critical situations), SMS Texting (should be capable of sending pre defined messages & short messages from keypad as optional), Programming (front panel programming with password protection or PC programming), DTMF front panel key pad with back lit, Battery strength bar, Continuous Tone Coded Squelch System (CTCSS), Simple press to talk, Mixed Mode operation(Analog and Digital), Any one of 2-Tone/5-Tone/DTMF signaling, Busy Channel Lockout, Selective call Decode/Encode, Capable of VOX hand free operation, PTT ID Encode, channel Scanning with call queuing facility, Emergency SOS/Siren, Talk around mode, Automatic number identification(ANI), Text messages and predefined message, Built-in GPS (with features such as Time to First Fix(TTFF)cold start:<2 minutes, Time to First Fix(TTFF)Hot start:<20 seconds, Horizontally accuracy: <10 meters), low battery alert
	Configuration /features (optional)	Support GPS (Inbuilt GPS system with accuracy of less than 10 meters), GIS(Radio should have application protocol interface along with software applications to provide locations and messaging on PC/Console), Networking(should be IP based for automatic roaming etc), NA
	Buyer required Compliance to Enviromental Test	Dust and Water intrusion (IP 57 or better), Low Pressure (as per MIL-STD-810 F/G), Rain (as per MIL-STD-810 F/G), Salt (as per MIL-STD-810 F/G), Vibration (as per MIL-STD-810 F/G), Shock and Drop (as per MIL-STD-810 F/G), Dust and Water intrusion ((as per MIL-STD-810 F/G) or IP 67 or better)
	Buyer required Enviromental specification	Operating Temperature ('- 30 deg. C to + 60 deg C), Storage Temperature ('- 40 deg. C to + 70 deg. C), Humidity (Max. 95% @ + 40 deg. C - Non-Condensing)
Seller specific Requirements	Valid AIP/DL/WPC LICENSE required to be provided by the buyer for execution of order by seller	Yes required (Date of Delivery Period shall be reconed from the date of AIP/DL received)
Certification / Test Report	Type of lab which carried out Test of Complete Product to prove the conformity of product as per specification	NABL accredited lab

Additional Specification Parameters - Digital Handheld Transceiver Set (HANDHELD RADIO) (785 set)

Specification Parameter Name	Bid Requirement (Allowed Values)
Accessories	1. Rapid charger and adapter with each Set 2. 10 Nos. of Test Zig of DMR VHF Handheld radio set 3. Minimum 20 Nos. of programming Kit required 4. 01 No. of spare Battery for each radio set
1. Configuration /features (optional) in Buyer specific REQUIREMENTS	1. Support GPS, GIS etc. not required

* Bidders offering must also comply with the additional specification parameters mentioned above.

Additional Specification Documents/अतिरिक्त विशिष्टि दस्तावेज़

Verified and Signed Tp document	View
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Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Rakesh Kumar	110003,Block-9, CGO Complex, Lodhi Road, New Delhi	785	45

Digital Base / Mobile Transceiver Set (MOBILE RADIO) (44 set)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

[* As per GeM Category Specification/जेम कैटेगरी विशिष्टि के अनुसार](#)

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
CONFORMITY	Conformity to technical requirements	As per QR/specification & TDs for 'Digital Base / Mobile Transceiver Set', prepared and approved by DCPW/MHA , 9 Block No. 9, CGO Complex , Lodhi Road, New Delhi-3 and approved by MHA as per letter No. H-18026/1(TS&TDS)/2016-CDN (QRs) Dated 17th Jan, 2018 (Copy of QRs / TDs uploaded in GeM portal)
	Availability of QR/specification for 'Digital Base / Mobile Transceiver Set'	Yes

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
	QR/specification has been seen, read and understood	Yes
	Scope of supply of 'Digital Base / Mobile Transceiver Set' covers all components complete as per governing QR/specification	Yes
General	Frequency Range	UHF: 400 - 470 MHz
	No of Channel	255 or more (set with display)
	Type of Band	Full Band
	Channel Spacing	12.5 KHz or better
	Frequency Stability	(+/-) 1.5 PPM or better
	Protocol and Technology	TDMA (2-SLOT)
	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 ETSC/FCC etc.
	Type of Operation	Press to talk
	Weight	Less than 2000 grams
	Power Source / operating voltage	13.8 Volt DC (+ / - 15 %)
	Protection	(1) Reverse polarity protection (2) Protection against high VSWR
	RF Power	25 Watt (Programmable / Selectable)
	Antenna Impedance	50 ohm
	EMI/EMC	ETSI EN 301 489-1 & ESTI 301 489-5
	Other parameter	Air Interface Standard (open standard DMR Tier - II)
Transmitter/Receiver	Transmitter	RF power output (25 watt programmable/selectable), RF power output (5 to 25 watts or more (Programmable)), FM Emission (11K0F3E), FM Emission (7K60FXE), FM Emission (7K60FXD), FM Emission (7K60FXW), Modulation Limiting(+/- 2.5 KHz @ 12.5 KHz), Digital Modulation(4FSK), FM Hum / Noise (-40dB or better), Adjacent Channel power(-60 dB or better), Audio Response(+1 , -3dB), Audio distortion(less than 3%), Digital Vocoder(AMBE +2), Communication security : system should have in built encryption and should also have provision to support 3rd party encryption
	Receiver	Sensitivity(Analog) : 0.30 μ V for 12db SINAD or better, Sensitivity(Digital): 0.30 μ V at 5% BER or better, Adjacent Channel selectivity : 60 dB or better, Inter modulation : 70 dB or better, Audio Output : 3 W or more, Audio Response (+1, -3 dB), Rated Audio Distortion(Less than 3%)

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
COMMUNICATION SECURITY / OPTIONAL FEATURES	Communication Security	system should have In-built Encryption and should also have provision to support Thirdparty Encryption, NA
Buyer specific REQUIREMENTS	Accessories (hint :-Repair Manual and Prog Kit, Qty required by buyer may be specified through ATC in the bid for procurement of sets more than one if considered appropriate, as these are not required one with every radio)	Microphone (DTMF Microphone should be Supplied with Radio), Suitable Battery Cable and Mounting Fixtures (should be Supplied with Radio), Antenna : 0 dB / 3dB gain whip antenna with 3 meters Co-axial cable with connector, Magnetic base / Mounting bracket for vehicle use will be provided, Programming Kit(All Necessary Programming Software and Hardware required for the set will be provided as per user's requirements), Literature - User Manual with each radio sets provided free of cost in soft as well as hard copy, Literature - Technical repairing & maintenance manual with complete block diagram, circuit layout etc should be provided as per user's requirements in soft as well as hard copy
	Configuration /features	Caller ID display, Busy channel lock out, Scan with priority, Transmitter Time Out Timer (TOT), LCD Display, Mode of calls : (Selective Call, Group Call, Inter and Intra Group call facility), Remote Radio Kill/ Stun/ Revive facility, Mode of operation (Radio should operate in analog mode and digital mode i.e compatible with existing all type of radio sets), Emergency Button (Allows a user to obtain help in critical situations), SMS Texting (should be capable of sending pre defined messages & short messages from keypad as optional), Programming (front pannel programing with password protection or PC programing)
	Configuration /features (optional)	Support GPS (Inbuilt GPS system with accuracy of less than 10 meters), Networking(should be IP based for automatic roaming etc).
	Additional Features	AES 128 bit encryption, AES 256 bit encryption, AES 128 bit encryption + Thirdparty Encryption, AES 256 bit encryption + Thirdparty Encryption
	Buyer required Compliance to Enviromental Test	Low & High temperature (as per MIL-STD-810 C,D,E,F), Low Pressure (as per MIL-STD-810 C,D,E,F), Temperature Shock (as per MIL-STD-810 C,D,E,F), Solar Radiation (as per MIL-STD-810 C,D,E,F), Rain (as per MIL-STD-810 C,D,E,F), Salt Fog (as per MIL-STD-810 C,D,E, F), Vibration (as per MIL-STD-810 C;D;E, F), Dust (as per MIL-STD-810 C;D;E, F), Shock (as per MIL-STD-810 C;D;E, F), Dust and Water intrusion (IP 54 or batter), Vibration (as per MIL-STD-810 F/G), Shock & Drop (as per MIL-STD-810 F/G), water intrusion and Dust (as per MIL-STD-810 F/G or IP 54), Salt (as per MIL-STD-810 F/G), Rain (as per MIL-STD-810 F/G), Low Pressure (as per MIL-STD-810 F/G)
	Buyer required Environmental specification	Operating Temperature (°- 30 deg. C to + 60 deg C), Operating Temperature (°- 30 deg. C to + 55 deg C), Storage Temperature (°- 40 deg. C to + 70 deg. C), Humidity (Max. 95% @ + 40 deg. C - Non-Condensing)

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
Seller specific Requirements	Valid AIP/DL/WPC LICENSE required to be provided by the buyer for execution of order by seller	Yes required (Date of Delivery Period shall be reconed from the date of AIP/DL received)
Certification / Test Report	Type of lab which carried out Test of Complete Product to prove the conformity of product as per specification	Govt Lab
	Agree to provide all relavant documents Test Report/suuporting document /reports etc to the buyer at the time of bidding or on demand	YES

Additional Specification Parameters - Digital Base / Mobile Transceiver Set (MOBILE RADIO) (44 set)

Specification Parameter Name	Bid Requirement (Allowed Values)
Additional Accessories	1. L Bracket for each set (accessories) 2. 10 Nos. of Test Zig of DMR UHF Mobile radio set 3. Minimum 20 Nos. of programming Kit required
1. Configuration /features (optional) in Buyer specific REQUIREMENTS	1. Support GPS, GIS etc. not required

* Bidders offering must also comply with the additional specification parameters mentioned above.

Additional Specification Documents/अतिरिक्त विशिष्टि दस्तावेज़

Verified and Signed Tp document	View
Applicable Drawing Document	View

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Rakesh Kumar	110003,Block-9, CGO Complex, Lodhi Road, New Delhi	44	45

Special terms and conditions-Version:2 effective from 03-02-2023 for category Digital Base / Mobile Transceiver Set (MOBILE RADIO)

1. Buyer's Responsibility: Valid AIP/DL/WPC LICENSE required to be provided by the buyer for execution of order by seller (Date of Delivery Period shall be reconed from the date of AIP/DL received)

Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें

1. Generic

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.

2. Scope of Supply

Scope of supply (Bid price to include all cost components) : Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)

3. Turnover

Bidder Turn Over Criteria: The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.

4. Turnover

OEM Turn Over Criteria: The minimum average annual financial turnover of the OEM of the offered product during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria. In case of bunch bids, the OEM of CATEGORY RELATED TO primary product having highest bid value should meet this criterion.

5. OEM

IMPORTED PRODUCTS: In case of imported products, OEM or Authorized Seller of OEM should have a registered office in India to provide after sales service support in India. The certificate to this effect should be submitted.

6. Service & Support

Dedicated /toll Free Telephone No. for Service Support : BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.

7. Service & Support

Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.

8. Certificates

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

9. Certificates

Material Test Certificate Should Be Sent Along with The Supply. The Material Will Be Checked by Buyer's Lab & the Results of the Lab will be the Sole Criteria for Acceptance of the Item.

10. Certificates

The bidder is required to upload, along with the bid, all relevant certificates such as BIS licence, type test certificate, approval certificates and other certificates as prescribed in the Product Specification given in the bid document.

11. Warranty

Timely Servicing / rectification of defects during warranty period: After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within 7 days time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG). Cumulative Penalty cannot exceed more than 10% of the total contract value after which the Buyer shall have the right to get the service / rectification done from alternate sources at the risk and cost of the Seller besides forfeiture of PBG. Seller shall be liable to re-imburse the cost of such service / rectification to the Buyer.

12. Warranty

Warranty period of the supplied products shall be 3 years from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply), at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid.

13. Generic

Bidder financial standing: The bidder should not be under liquidation, court receivership or similar proceedings, should not be bankrupt. Bidder to upload undertaking to this effect with bid.

14. Generic

Malicious Code Certificate:

The seller should upload following certificate in the bid:-

(a) This is to certify that the Hardware and the Software being offered, as part of the contract, does not contain Embedded Malicious code that would activate procedures to :-

- (i) Inhibit the desires and designed function of the equipment.
- (ii) Cause physical damage to the user or equipment during the exploitation.
- (iii) Tap information resident or transient in the equipment/network.

(b) The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringements related to copyright and Intellectual Property Right (IPRs) are caused due to activation of any such malicious code in embedded software.

15. Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

(i). Kindly upload Certificate/Undertaking regarding acceptance of **Additional terms and conditions with signature, Bid No. and Date.**

(ii). Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

1. Field Trial of the Equipment will be done by a Board of Officer at the time of the GeM Bidding. Bidders are bound to participate in the Field trial failing which their bidding will be cancelled.

- Participating firms shall ensure that their products i.e. Digital VHF and UHF 20/25 watt Mobile/Base and Digital VHF 1 to 5 watt Handheld/Base shall fully comply with latest MHA approved QRs/TDs.
- Participating firms shall ensure the interoperability of their product with minimum 2 other OEMs.
- The product offered by the firms/supplier under this category shall be put to Field Trail as per the QRs/TDs.
- Bids of such participating firms/suppliers shall be unequivocally rejected if they willfully fail to either comply with or abstain from field trial under these additional terms and conditions.
- Bids of such participating firms/suppliers shall be unequivocally rejected if the equipment offered for field trial fails to either fulfill the approved QRs or fails to perform as per approved TDs.

2. As per MHA SOP for procurement of Radio Communication Equipment circulated vide OM dated 29.10.2020:

(a) As and when asked for, the firm shall share the complete Hardware (including disclosure of sourcing of critical components)/ software/ Firmware details of the radio communication equipment with the procurement agencies/testing agencies.

(b) The firm shall cooperate with the testing agency, as designated by the procurement agencies, to provide any further details/assistance, as and when sought by them.

(c) If the Radio equipment supplied by the firm fails test by Testing Agency, the Bank Guarantee of the firm shall be revoked and suitable legal action shall be initiated against the firm.

3. Bidder shall submit the relevant document/ Certificate related to their offer product for claim of Local Supplier as per Make in India order dated 16.09.2020.
4. Bidder shall upload Model, specification and Brochure of their offer product along with the Bid document.
5. Financial year wise breakup of experience criteria and past performance for last three years i.e. April 2020 to March 2021, April 2021 to March-2022 and April 2022 to March 2023.
6. Bidder shall ensure that they are not under suspension/disabled by GeM incident management or are currently under debarment/suspension or have been blacklisted as per DoE, Ministry of Finance Order dated 02.11.2021 at any time during the bid procurement process. Also bidder shall provide the details regarding blacklisted by any Govt. entity for past 5 years (If applicable).
7. The firm will be blacklisted if it breaches any of the above mentioned clauses.

Annexure:

QRs of DIGITAL CONVENTIONAL RADIO DMR Tier II

A. HANDHELD RADIO

1	GENERAL		TRIAL DIRECTIVE
1.1	Frequency Range	VHF/UHF (Organisation may specify)	User/ DCPW to test
1.2	TDMA	2 - Slot	User/ DCPW to test
1.3	Channel Capacity	255 or more (Set with display) 16 Channels (Set without display)	User/ DCPW to test
1.4	Channel Spacing	12.5KHz	User/ DCPW to test
1.5	Battery Capacity	Li-ion/Li-Poly rechargeable battery of capacity 2000 mAh or higher capacity. Complying applicable BIS Standard	User/ DCPW to test
1.6	Average battery duty cycle 5/5/90	Digital:10 hrs or more Analog:8 hrs or more	User/ DCPW to test
1.7	Frequency Stability	±1.5 PPM or better	User/ DCPW to test
1.8	Antenna Impedance	50 Ω	User/ DCPW to test
1.9	Antenna	Helical Antenna	User/ DCPW to test
1.10	Weight	Less than 500 gms with battery	User/ DCPW to test
1.11	EMI/EMC	ETSI EN 301 489-1 & ETSI 301 489-5/	OEM Certification supported by International Recognised Laboratory
1.12	Air Interface Standards	Shall be open Standards DMR Tier-II	OEM Certification supported by International Recognised Laboratory
2	TRANSMITTER		
2.1	RF Power Output	VHF - 1 to 5 Watts (programmable) UHF - 1 to 4 Watts (programmable)	User/ DCPW to test
2.2	FM Emission	11 K0F3E, 7K60FXE, 7K60FXD ,7K60FXW	User/ DCPW to test
2.3	Digital Modulation	4FSK	User/ DCPW to test
2.4	Modulation Limiting	±2.5KHz@ 12.5 KHz	User/ DCPW to test
2.5	FM Hum & Noise	-40 dB or better	User/ DCPW to test
2.6	Adjacent Channel Power	-60 dBc or better	User/ DCPW to test
2.7	Audio Response	+1,-3dB	User/ DCPW to test
2.8	Audio Distortion	Less than 3%	User/ DCPW to test

2.9	Digital Vocoder	AMBE+2	User/ DCPW to test
3	RECEIVER		
3.1	Sensitivity (Analog)	0.30 μ V (12dB SINAD) or better	User/ DCPW to test
3.2	Sensitivity (digital)	0.30 μ V at 5% BER or better	User/ DCPW to test
3.3	Adjacent Chanel Selectivity	60 dB or better	User/ DCPW to test
3.4	Inter-modulation	70 dB or better	OEM Certification supported by International Recognised Laboratory
3.5	Audio Output	Minimum 500 mW	User/ DCPW to test
3.6	Audio Distortion	Less than 3 %	User/ DCPW to test
	ENVIRONMENTAL		
4.1	Operating Temperature	-30'Cto+55"C	OEM Certification supported by International Recognised Laboratory
4.2	Storage Temperature	-40'Cto+70'C	
4.3	Humidity	95% Max. at +40° C non-condensing	
4.4	Vibration	MIL-STD -810 F/G	
4.5	Shock& Drop	MIL-STD -810 F/G	
4.6	Water intrusion & Dust	MIL-STD -810 F/G or IP-67	
4.7	Salt	MIL-STD -810 F/G	
4.8	Rain	MIL-STD -810 F/G	
4.9	Low Pressure	MIL-STD -810 F/G	

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Feature wise Configuration:

5	ACCESSORIES		
5.1	Battery charger	-	-
5.1.1	Input voltage	230V+10%, 50Hz	User/ DCPW to test
5.1.2	Output Voltage	As per battery pack (Information will be provided by OEM/ Vendor)	User/ DCPW to test
5.1.3	Type of Battery Charger	Li-ion /Li-Poly	User/ DCPW to test
5.1.4	Protection	(1) Reverse polarity protection (2) Short circuit protection	User/ DCPW to test
5.1.5	Indication	Visual indication for all modes of charging status	User/ DCPW to test
5.1.6	Charging time	Standard chargers -- 6 to 14 Hrs Rapid Charger -1 to 3 Hrs	User/ DCPW to test

5.1.7	No. of Charging Pocket	1/2/6 (vendor to quote accordingly)	User/ DCPW to test
5.11	Hand free Kit (VOX unit with PTT) (optional)	The offered sets should be compatible with any one or more of the following variants 1. Bone Conduction 2. Ear Plug 3. Headphone, etc.	User/ DCPW to test
5.12	Programming Kit	All necessary Software and Hardware required for programming of the set independently for lifelong support with regular updates	User/ DCPW to test
5.13	Literature	a) User manual with each radio sets should be provided free of cost in soft as well as hard copy. b) Technical repairing & maintenance manual, with complete block diagram, circuit layout, PCB layout, component & wiring diagram etc should be provided as per user's requirement In soft as well as hard copy.	User/ DCPW to test
5.14	No. of Battery	Two lithium-Ion or Li-polymer batteries with each radio set.	User/ DCPW to test
5.15	Case	One good quality case with belt clip & shoulder strap to house the Radio Sets in operation.	User/ DCPW to test
6	Configuration VH1 (without display)		
6.1	Simple press to talk		User/ DCPW to test
6.2	Low battery alert.		User/ DCPW to test
6.3	Continuous Toned Squelch System (CTCSS)		User/ DCPW to test
6.4	Mixed Mode Operation (analog and digital)		User/ DCPW to test
7	Configuration VH2 (with display)		
7.1	All features of configuration VH1.		User/ DCPW to test
7.2	Any one of 2-Tone/5-Tone/ DTMF signalling		User/ DCPW to test
7.3	Busy Channel Lockout		User/ DCPW to test
7.4	Selective call Decode / Encode		User/ DCPW to test
7.5	Capable of VOX hand free operation		User/ DCPW to test
7.6	PTT ID Encode		User/ DCPW to test

7.7	Chanel Scanning with call quieting facility.		User/ DCPW to test
7.8	Emergency SOS/SIRE		User/ DCPW to test
7.9	Talk around Mode		User/ DCPW to test
7.10	Automatic Number Identification (ANI)		User/ DCPW to test
7.11	Text messages and predefined message (Optional with keypad)		User/ DCPW to test

QRs of DIGITAL VHF/UHF CONVENTIONAL RADIO

A. MOBILE RADIO

1	GENERAL		
1.1	Frequency Range	VHF/UHF (Organisation may specify)	User/ DCPW to test
1.2	TDMA	2-Slot	User/ DCPW to test
1.3	Channel Capacity	255 or more (Set with display)	User/ DCPW to test
1.4	Channel Spacing	12.5 KHz	User/ DCPW to test
1.5	Operating Voltage	10.8 V to 15.6 V DC	User/ DCPW to test
1.6	Protection	a) Reverse polarity protection b) Protection against high VSWR	User/ DCPW to test
1.7	Frequency Stability	±1.5 PPM or better	User/ DCPW to test
1.8	Antenna impedance	50 Ω	User/ DCPW to test
1.9	Weight	Less than 2 Kg	User/ DCPW to test
1.10	EMI/EMC	ETSI EN 301 489-1 & ETSI 301 489-5/	OEM Certification supported by International Recognised Laboratory
1.11	Air Interface Standards	Shall be open Standards DMR Tier-II	OEM Certification supported by International Recognised Laboratory
2	TRANSMITTER		
2.1	RF Power Output	5 to 25 Watts or more (programmable)	User/ DCPW to test
2.2	FM Emission	11K0F3E, 7K60FXE, 7K60FXD, 7K60FXW	User/ DCPW to test
2.3	Digital Modulation	4FSK	User/ DCPW to test
2.4	Modulation Limiting	±2.5 KHz @ 12.5 KHz	User/ DCPW to test
2.5	FM Hum & Noise	-40 dB or better	User/ DCPW to test
2.6	Adjacent Channel Power	-60 dBc or better	User/ DCPW to test
2.7	Audio Response	+1,-3dB	User/ DCPW to test

2.8	Audio Distortion	Less than 3 %	User/ DCPW to test
2.9	Digital Vocoder	AMBE+2	User/ DCPW to test
3	RECEIVER		-
3.1	Sensitivity (Analog)	0.30 μ V (12 dB SINAD) or better	User/ DCPW to test
3.2	Sensitivity (digital)	0.30 μ V at 5% BER or better	User/ DCPW to test
3.3	Adjacent Chanel Selectivity	60 dB or better	User/ DCPW to test
3.4	Inter-modulation	70 dB or better	OEM Certification supported by International Recognised Laboratory
3.5	Audio Output	Minimum 3 W	User/ DCPW to test
3.6	Audio Distortion	Less than 3 %	User/ DCPW to test
	ENVIRONMENTAL	-	
4.1	Operating Temperature	-30'Cto+55"C	OEM Certification supported by International Recognised Laboratory
4.2	Storage Temperature	-40'Cto+70'C	
4.3	Humidity	95% Max. at +40° C non-condensing	
4.4	Vibration	MIL-STD -810 F/G	
4.5	Shock & Drop	MIL-STD -810 F/G	
4.6	Water intrusion & Dust	MIL-STD -810 F/G or IP-54	
4.7	Salt	MIL-STD -810 F/G	
4.8	Rain	MIL-STD -810 F/G	
4.9	Low Pressure	MIL-STD -810 F/G	

Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. Any clause(s) incorporated by the Buyer regarding following shall be treated as null and void and would not be considered as part of bid:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.

6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process.
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

[This Bid is also governed by the General Terms and Conditions/ यह बिड सामान्य शर्तों के अंतर्गत भी शासित है](#)

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्रवाई का आधार होगा।

---Thank You/धन्यवाद---