

Tender No. 1546 DMR Tier II For Thane City

SR. NO.	Page no.	RFP CLAUSE	Arya PBQ	Clarification
1	Page no.#15	1.DMR Tier -II Digital Radio Repeater/Base Station-G. Mandatory Requirements: Installation and commissioning-4.Proper Earthing to be done at the repeater site at control room	Kindly specify the specifications and make n model	Specification already mentioned in tender document. Vendor to provide suitable Make and Model of the System as per specifications. Bidder may visit at site in view of proper assessment.
2	Page no.#22	5) Control Room Equipment- A. GPS & Dispatcher- Sr.No.III Hardware Configuration And B. Microwave & DMR Network Fault Management Server-III)III Hardware Configuration	Kindly mention make of PC/system.	Vendor to provide suitable make and models of PC as per specifications.
3	Page no.#22	6) Programming Kit- SL.NO.#4-#2. Cloning cable	Most. of DMR Portable Radios doesn't have Cloning Cable and Cloning is possible using Programming software. SO Kindly omit the Feature	Clause Stands as it is.
4	Page no.#23& 33	Specification of Laptop for Programming Kit & Un-Priced Bill of Material (Mandatory Items) Sl.No. #10- Programing Kit including Laptop, Hardware, Cable and licensed software for Programming, Servicing and training	Tender Intends to 7 Nos of Laptop for Programming. So Kindly confirm the same and make of the Laptop	7 No.s Laptop with microwave link programming kit and 5 Laptop with programing kit of radio set. All laptop are with latest configuration. Rest no change.
5	Page no.#27& 28	B. Microwave & DMR Network Fault Management Server I)DMR Network Fault Management Server	Tender itends to need a NMS (Networking management Server) Popular name RDAC for Repeaters and Repeater Connected thru IP Network. If RDAC Required Please confirm	Working and stand by Server and Working and stand by Console at Thane Main control .

			<p>following. I.. How many number server + watch console required ? II) Tender Intends IP Connectivity Between Repeats so Please Quantify how many number of Peer repeats per site per each network ? III) How many network site in the plan of peer? IV) How many master repeaters (Including Stand By) required per each network ? V) Standby/Redundancy required for RDAC ? VI) No.of Days back up ? VI) No.of remote console required if any ? VII) Need a detailed architecture and Network Diagram for entire network ?</p>	<p>Number of repeater and related information is mentioned in BOM of Tender document.</p> <p>Vendor should provide suitable equipment for Networking Management Server.</p>
6	Page no.21	5) Control Room Equipment- A.GPS & Dispatcher - SL.No.1) GPS Application Features and II) Dispatcher Features	<p>Tender intends a Dispatcher network with IP connectivity for Multi site and Multi repeater connectivity. So request to clarify the follows : 1.No.of Talkgroups required at proposed live network (Local and Wide Area?) 2. How many Voice and data Talk groups require ? 3.How many Server + Dispatcher console required ? 4. No.of Subscribers required for AVLS and Voice dispatch ? 5.Type of Gateway units required to integrate the conventional channels (Analog and Digital)? total No. quantity per entire network ? 6. Private call recording is required ?7.Clarify what is call merging ? 7. How many remote dispatch console required (if any),9.No.of days back up ? (Both Voice and data) 9.AES Encrypted data and voice required for Dispatch console end ?</p>	<p>Related information is mentioned in BOM & Tender documents.</p> <p>For any doubt and clarification bidder may visit at all sites for proper assessment.</p>
7	Page no.# 15	(DMR -II Digital Radio Repeater/Base Station -E. Features - Sl.No.#2 Mode of operation: Repeater Should operate in Analog , Digital , with Multi Site Multi	<p>Tender Intends Multi site and Multi Repeater thru IP Connectivity. It seems like DMR Tier-II trunking . So please clarify follows.1.How many Talkgroups required for voice and Data (GPS Revert) for both wide area and local talk</p>	<p>The proposed system is DMR Tier II. All requirement is of DMR Tier II. For any doubt and clarification bidder may visit at all sites for proper assessment.</p>

		channel configuration.	groups ? 2.How many network ? and Per Network how many sites ?and per site how many repeaters? 3.Detailed Architecture and Network diagram?4. How many standby/redundancy master repeater per network ?	
8		Repeater and Microwave Sites	Requested to provide the exact locations for the Repeater and Microwave installations. Also give the following details : Tower height (adequate for clear LOS between the sights), Power Supply , Air Conditioning availability.	Vendor should visit to concern units & prepare feasibility report & quote accordingly. The details (including heights) of available tower infrastructure at all repeater and control room site are attached as per Annexure "A"
9		Payments	Requested to include payment terms as 80% on supply , 10% on Installations and 10% after acceptance.	100 % Payment after ATP.
10	10(ix)	Latest Test Report along with letter of the tenderer giving technical specifications to the laboratory asking for latest report i.e. on or after March 2017, of the tendered item should be submitted	Environmental testes are carried out once for each model for all of its frequency bands, same may be considered.	Vendor to provide latest available test report as per tender specifications.
11	V.C.6	Training	Only Level 1 training can be provided. Component level training is not possible.	Vendor should provide proper technical training.
12	V.C.6	Warranty	Warranty provided will be for 5 years from ATP on main radio equipments . On Battery (for all items) and accessories the warranty will be for 1 year .	Warranty period will be from date of successful Acceptance Test Procedure (ATP). 1. Warranty for all equipment including accessories (Except batteries) will be 5 (Five) years. 2. Warranty for Batteries of UPS, Power supply and Laptop will be 2 (Two) years. 3. Batteries of Handheld Radio will be 1 (One) year
13	V	Dispatcher for Control Room	Kindly explain the connectivity of the dispatcher and topology. Also provide the no. of radios to be monitored on the dispatcher	As per sr.no. 6

			system .	
14	Page no.#16	Microwave Links for various units in the state (Microwave Radio Link (1+1) for Digital Repeater qty-10)	<p>As scope of this tender involves supply, installation and commissioning of microwave radio links kindly provide the following information for estimating the correct cost -</p> <p>1) Please confirm that towers of required height as per LOS requirement of microwave link shall be provided by the department</p> <p>2)Please confirm that if suitable and required towers are not made available to the bidder after supply of equipments by the department then payment of material towards supply of the equipments shall be eligible to be released by the department.</p> <p>3)Please let us know the details of the locations between which 1+1 microwave links to be installed by the bidder. Details required from the department are:</p> <p>a) Place name & address</p> <p>b)Place is owned by the department or owned by the third party</p> <p>C)Geo-cordinates of place so that link feasibility can be checked</p> <p>d)Is tower /Mast is available at this location .If yes kindly let us know the following :</p> <p>i)Type of Tower- Tubular or Angular</p> <p>ii) Tower installed on ground or on roof top</p> <p>iii)Tower is self supported or guy supported type</p>	For any doubt and clarification bidder may visit at all sites for proper assessment

			<p>iv) Height of the power</p> <p>v) Presently tower is used for which purpose ?</p> <p>vi) SACFA clearance for lower is available or not ? If not Whether it is included in the bidder SOW</p> <p>vii) Whether earthpit and standard earthing provisions are available for the tower or not</p> <p>vii) Please let us know the year of installation of tower</p> <p>viii) Please let us know tower is certified to take how much of head load (in Kgs)?</p> <p>x) Weather available tower has platforms at the top as well as ladder for climbing ?</p>	
15	Page no.#16	Output Power -27 dBm or better Antenna - suitable Antenna to achieve mm 50Km reliable communication	In reference to WPC issued notification no G.S.R.38(E) dated 19/01/2017 (enclosed herewith) for use of wireless equipment in 5.825 to 5.875 GHz the Maximum Effective Isotropic Radiated Power (EIRP) Is required to be fixed at 36 dbm. EIRP (36dbm) =output power (27dbm)+ Antenna Gain (9dbm) Antenna gain of (9dbm) is not suitable to cover desired distance of 50Km. Hence request you to amend output power requirement of 27 dbm and allow flexible combination of radio output power and Antenna gain to achieve EIRP of 36 dbm as per guideline of WPC to achieve desired coverage.	Agreed.
16	Page	Lightening Protection:-	1)Please clarify the use of lightening	

	no.#16	Outdoor unit :- Discharge Device	protection in which of following combinations.	
		Characteristics Surge - 20 KA		
		Indoor Unit - Surge Capacity- 1kA per wire / RJ 45 Connector	a) Between Outdoor Unit and External Antenna connected through RF Cable	For given combination lightning protection is mandatory.
		Circuit Type - Three stage series Hybrid	b) Between Outdoor Unit and indoor antenna connected through STP Cable	
			c) Between Indoor Unit and Power Source connected through Power cable	
			2)What is the purpose and meaning of three stage hybrid circuit as standard lightening protection devices are passive in nature .	Bidder to provide suitable lightening arrester as per specification.
	3)What is the preferred make of lightening arrestors?			
17	Page no.#16	Interface -10/100 Base T (RJ45). G703/704 and G823/G824	1)Please let us know whether all interfaces viz 10/100 Base T (RJ 45), G 703/704 and G823/G824 required in radio IDU or we can propose suitable additional devices to meet this requirement.	No change. Clause Stands as it is.
			2)Please let us know what will be end application or the device which will be communicating through proposed microwave links using G 703/704 and G823/G824 Protocols. Are these devices available at all sites ?	No change. Clause Stands as it is.
			3)As per our understanding MW links will be used to interconnect digital repeaters. These repeaters required standard 10/100 Base (T) RJ 45 interface, in this light interface requirement of G 703/704 and G 823 /G824 may please be waived	

18	Page no.#16	Operating Temperature 0 to 60 c	Considering the tropical climate conditions prevailing in Maharashtra wherein maximum temperature varies between 45 C -48 c ,request you to amend this specification as per below . Outdoor unit :- 0 C to 55 C Indoor unit :- 0 C to 40 C	No Change. Clause Stands as it is.
19	Page no.#16	Cabinet -Suitable open mounting rack to house repeater, UPS/Charger, Battery etc. with bearing capacity of 100Kg. Rack should be swivel caster with lock	Please let us know whether cabinet./rack required is wall mounting type or floor standing type	Suitable rack should be provided by the vendor.
20	Page no.#16	Installation and commissioning :- 1) Installation of Indoor unit, outdoor unit and antenna. 2) Layout of RF Cable 3) Repeater site linking with microwave link	1)Considering various interfaces requirement and end application devices like repeater is not in the scope of present tender please let us know what will be the acceptance criteria of installation and commissioning so as to consider correct costing.	Yes. It should be the criteria of ATP.
			1)RF cable is to be used between radios ODU and external Antenna while STP cable will be used to connect ODU and IDU . In addition to this conduit is not part of the BOM , Please let us know the exact & detailed scope to be considered for 'Layout of RF Cable '	For indoor unit, outdoor unit & Antenna, layout of RF Cable is essential.
			1) Is Repeater sites are fixed or in other words whether installation will be one time activity?	Installation will be one time activity
21	Page no.#17	Field Trail on no cost Commitment basis	In case we are offering the same microwave radio equipment with accessories which are in use with Maharashtra Police meeting distance criteria of 50Km LOS operation . can this clause may please be waived for the bidder.	No Change. Clause Stands as it is.

Annexure "A"

8	Repeater and Microwave Sites	Requested to provide the exact locations for the Repeater and Microwave installations. Also give the following details : Tower height (adequate for clear LOS between the sights), Power Supply , Air Conditioning availability.	<p>A) Main Control Room (Dispatcher installed) Latitude 19° 11' 46" Longitude 72° 58' 52" Mast Hight :- Antenna On Bldg.terrace . Description:-Control Room, office of the commissioner of Police thane city Near kalwa thane bridge.</p> <p>B) Repeater</p> <p>1. Mukund Repeater Latitude 19° 10' 47" Longitude 73° 00' 35" Mast Hight 15 mtr. Description:- Hill top near Mukund Co.</p> <p>2. Sathe Repeater Bhiwandi Latitude 19° 28' 03" Longitude 73° 04' 44" Mast Hight 15 mtr. Description:-Hillock near Bhiwandi</p> <p>3. Netiwali Repeater Kalyan Latitude 19° 14' 02 " Longitude 73° 07' 21" Mast Hight 15 mtr. Description:-Hillock near Kalyan</p> <p>4. Birla Tekadi Repeater ,Ulhasnagar Latitude 19° 14' 30" Longitude 73° 10' 06" Mast Hight 15 mtr. Description:-Small hill near Shahad</p> <p>5..Belawali Repeater,Badlapur Latitude 19° 10' 50 " Longitude 73° 14' 07" Mast Hight 15 mtr. Description:-Hillock near Belawali</p>
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Tender No. 1546 DMR Tier II For Thane City

Sr.	Tender Reference	Tender Clause	Rolta Query	Clarification
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No.	Page No./Clause No.			
1	Page No. 3 of 34 Technical Bid / Clause No. 10, ix	Latest Test Report along with letter of the tenderer giving technical specifications to the laboratory asking for latest report i.e. on or after March 2017, of the tendered item should be submitted.	Generally, OEM get their models tested by NABL Accredited lab or ILAC at the time of product introduction into the market to confirm that model is meeting all the planned parameters. Hence recommend requirement of latest case reports i.e. on or after March 2017 be dropped. This will only limit the competition and facilitate those OEMs who are just entering the DMR market	Bidder to provide latest available test report as per tender specifications.
2	Page No. 5 of 34 Commercial Bid, Clause No. 18	The warranty period of the equipment / item will start from date of receipt / acceptance of equipment, the period of the comprehensive warranty shall be applicable for 3 years or as mentioned in specification.	Both clause are contradictory Request reconfirm that period of warranty for equipment and also for accessories viz. battery, cables, antennas etc.	Warranty period will be from date of successful Acceptance Test Procedure (ATP). 1. Warranty for all equipment including accessories (Except batteries) will be 5 (Five) years. 2. Warranty for Batteries of UPS, Power supply and Laptop will be 2 (Two) years. 3. Batteries of Handheld Radio will be 1 (One) year.
3	Page No. 31 of 34 Terms and Conditions bid, Clause No. 18	Warranty period will start after successful ATP (Acceptance Test Procedure). Warranty period shall be 5 years for all equipment and accessories except batteries. Warranty period shall be one year for batteries. Warranty period shall be Three year for 3 dB whip antenna for Mobile Radio and Helical antenna for Portable.		
4	Page No. 5 of 34 Commercial Bid, Clause No. 22	The testing charges of Government approved laboratories, if any of the samples tendered will have to be paid by the shortlisted Bidders after the short listing of Technical Bids. The rates of testing charges are likely to vary & the tenderer will have to pay the current charges before sending the samples for testing. The samples will not be returned to the tenderer.	The Radio equipment products on offer are controlled stores where bidder is required to maintain record for WPC audit. Hence it is requested that after technical evaluation and testing of the product samples be returned to the bidder.	<i>Samples will be returned after commercial bid opening</i>
5	Page No. 7 of 34 Commercial Bid, Clause No. 40	Tenderers should state the place of inspection of the stores offered, if the goods are offered for inspection outside Maharashtra State, the tenderer will have to bear all expenditure of inspection carried out by this office.	Request intimate the number of Maharashtra Police officials that will be deputed for inspection of the stores so that this requirement can be catered.	<i>Clause stands as it is.</i>
6	Page No. 7 of 34 Commercial Bid, Clause No. 41	Goods should be dispatched at carrier's risk and should be properly covered by transit insurance with Govt. Insurance Fund, Mumbai-400 032. However, the tenderer	Kindly intimate the full address where the stores are to be delivered.	Dy. Superintendent of Police Wireless HQ, Pune office of the ... Addl. DGP and DPW M.S. Pune,

		will be responsible till the entire Stores contracted for arrived in good condition at destination.		Dr. Bhabha Road, Chavan Nagar, Pune 411008.
7	Page No. 15 of 34 Sr. No. 3 of G	Field trial on no cost no commitment basis : At the time of product evaluation bidder should bring adequate quantity of the offered make and model radios, test jig, Dispatcher (Hardware/software), Digital communication System Analyzer and other test and measuring instruments required to demonstrate full functionality of system offered Set, Handheld & Repeater.	Request, specify the actual quantity of the equipments (Handheld, Mobile / Static, repeaters and microwave with dispatchers) required for the demonstration.	Repeater 02, Mobile Radio 06, Handheld Radio 06, Microwave Link 01, Dispatcher 01, Required Test and Measuring Instruments And required mandatory accessories as per demo requirement.
8	Page No. 16 of 34 Sr. No. 12	Inter-site Microwave Radio Link Equipment Power Source : 12/24 V DC operational. FCBC along with batteries be provided.	Batteries have been mentioned but the duration of backup have not been provided. For ensuring that at all times a stable power supply is available to microwave radio for link stability it is recommended that FCBC be changed to UPS Hence, it is requested that the clause be amended as below : Power source : UPS with _____ hours battery backup for microwave radios be provided.	Backup for 4 (Four) hours. Rest Clause Stands as it is. F C B C is not required. UPS with 4 Hrs. Backup is required.
9	Page No. 18 of 34 Sr. No. 15 of F	Offered Radios should be interoperable for voice with other manufactures radios.	Please elaborate details of other manufacturer radios to check the interoperability.	Bidder should give the names of other manufacturer's radios which are interoperable with offered radios for voice.
10	Page No. 18 of 34 Sr. No. 3 of G-2	Power supply for Static Radio Power supply cum battery Charger Input 230 V AC +/- 20%, 50 Hz; DC Output 13.8V /15Amp; Indicators/meters.	Power supply is not mentioned in the unpriced BOM. If power supply is required for static radio please mention number of power supply required for static radios.	Power supply for static radio will be provided by Maharashtra Police.
11	Page No. 20 of 34 Sr. No. 4 of G-1	Type of Antenna : Rugged flexible Helical Antenna for the specified frequency Band.	Please mention the specific frequency band, so that vendor will prepare the antenna with cut frequency during demonstration as well.	438 MHz to 443 MHz Frequency Band.
12	Page No. 21 of 34 Sr. No. 5 (i) of 2	Real time tracking of vehicles on a Google map.	Google map is license based and license need to be taken. Request this be included in BOM	Clarification to be sought by DPW office.

13	Page No. 21 of 34 Sr. No. 5	Control Room Equipment A. GPS & Dispatcher	Please mention how many radios are required to be controlled by the dispatcher. This may also be reflected in the BOM. Base on the quantity configuration of dispatch server will also need to be decided.	All radios as per BOM required to be controlled by the dispatcher.
14	Page No. 23 of 34 Section V – Dispatcher for control room – Technical specifications / Clause No. B-I, Installation and commissioning	Repeater site Linking with Dispatcher	Request, provide more details along with the Lat / Long positions for the repeater location and the location of the control room where the required dispatcher will be installed this will enable us to study the microwave link between repeater and dispatcher site. Also request to provide the details (including heights) of available tower infrastructure at all repeater and control room site.	Clause stands as it is. Vendor should visit to concern units & prepare feasibility report & quote accordingly. The details (including heights) of available tower infrastructure at all repeater and control room site are attached as per Annexure “A”
15	Page No. 7 of 34 Clause No. 39	Any statutory increases or decreases in an Act of State or the Central Government relating to GST and other taxes shall be borne by the tenderer.	We request that all taxes shall be payable as per prevailing rates applicable at the time of delivery / invoicing.	<i>Clause stands as it is.</i>
16		General	To work out a detailed and based suited solution will required time after the response to queries is received. Hence, request bid submission date may be extended by minimum 3 weeks from the date of receiving the pre-bid queries response.	<i>Bid submission date extend by one week</i>

Annexure “A”

<p align="center">14</p>	<p>Page No.23 of 34 Section – V – Dispatcher Room - Technical Specifications/ Clause. No. B – I, Installation & Commissioning</p>	<p align="center">Repeater site Linking with Dispatcher</p>	<p>Request, provide more details along with the Lat/ long positions for the Repeater Location and the location of the Control Room where the required Dispatcher will be installed, this will enable us to study the microwave link between Repeater and Dispatcher Site. Also, request to provide the details (including height) of available tower infrastructure at all repeater and control room site.</p>	<p>A) Main Control Room (Dispatcher installed) Lattitude 19 11 46 Longitude 72 58 52 Mast Hight :- AntennaOn Bldg.terrace . Description:-Control Room,office of the commissioner of Police thane city Near kalwa thane bridge.</p> <p>B) Repeater</p> <p>1. Mukund Repeater Lattitude 19 10 47 Longitude 73 00 35 Mast Hight 15 mtr. Description:- Hill top near Mukund Co.</p> <p>2. Sathe Repeater Bhiwandi Lattitude 19 28 03 Longitude 73 04 44 Mast Hight 15 mtr. Description:-Hillock near Bhiwandi</p> <p>3. Netiwali Repeater Kalyan Lattitude 19 14 02 Longitude 73 07 21 Mast Hight 15 mtr. Description:-Hillock near Kalyan</p> <p>4. Birla Tekadi Repeater ,Ulhasnagar Lattitude 19 14 30 Longitude 73 10 06 Mast Hight 15 mtr. Description:-Small hill near Shahad</p> <p>5..Belawali Repeater,Badlapur Lattitude 19 10 50 Longitude 73 14 07 Mast Hight 15 mtr. Description:-Hillock near Belawali</p>
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