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File No Per.

Military College of Telecommunication Engineering, Mhow, Indore MP – 453441

01 Feb 2021

REQUEST FOR INFORMATION FROM VENDORS FOR LTE BASED COMMUNICATION GRID WITH IOMT SENSOR NETWORK

1. Description. Indian Army is planning a LTE based communication grid with (Internet of Military Things) IoMT sensor network for providing failsafe, robust and secure communication to its formations/ units along the Northern and Eastern Borders. This will entail a LTE based communication grid with its own Radio Access Network (RAN), Core Network and IoMT compatible network along with sensors and interfaces to provide surveillance, situational awareness modules, IoT sensor network and compatible interfaces for legacy surveillance devices currently in inventory of Indian Army. The proposed LTE based communication grid with IoMT sensor network is to also ensure interoperability with existing Mobile Communication Networks, the Network is envisaged to be integrated to the Armed Forces communication infrastructure (current/ futuristic) in the zone to include Army owned EPABXs, MSPs, ATM switches, MPLS switches and Routers. The proposed network also to have IoMT sensor network, ground sensors network (Seismic, Pressure, ultrasonic etc), Autonomus UAV/ drones, Information nodes, helmet mounted cameras and interfaces for current surveillance equipment including application ecosystem for controlling/ monitoring of the sensor data from all IoMT devices. The network is likely to be placed for facilitating state of the art mobile communication and sensor netowrk to troops operating in Counter Insurgency environment, rugged terrains of mountains and jungles overlooking Line of Control/ International Border. The project envisages to facilitate high grade and reliable mobile communication with a layer of security for voice, data and video communication so as to make the traffic secure, and make the network free from possibility of intrusion &interception, prevent unauthorised access from unauthorised Base Stations and unauthorised/ fake subscribers.



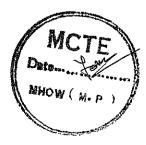
- 2. This Request for Information (RFI) consists of two parts as indicated below:-
 - (a) Part I. The first part of the RFI incorporates operational characteristics and features that should be met by the equipment. Few important technical parameters of the proposed equipment are also mentioned. Additional vendor requirements are also listed.
 - (b) Part II. The second part of the RFI states the methodology of seeking response of vendors. Submission of incomplete response format will render the vendor liable for rejection.

PART I

- 3. This project will include the following:-
 - (a) LTE network of suitable number of eNodeB as part of RAN to provide coverage in an area of 10 x 10 Km.
 - (b) Interconnectivity of all such eNodeB part of one set by means of OFC and microwave backhaul radios.
 - (c) Core network to provide control/ switching for multiple sets of LTE network.
 - (d) Integration with Armed Forces communication infrastructure (current/futuristic) in the zone to include Army owned EPABXs, MSPs, ATM switches, MPLS switches and Routers.
 - (e) High grade and reliable mobile communication with a layer of security for voice, data and video communication so as to make the traffic secure, and make the network free from possibility of intrusion & interception, prevent unauthorised access from unauthorised Base Stations and unauthorised/ fake subscribers.
 - (f) IoMT sensor network along with ground sensors network (Seismic, Pressure, ultrasonic etc.), Autonomous UAV/ drones, Information nodes, helmet mounted cameras and interfaces for current surveillance equipment.
 - (g) Application ecosystem for controlling/ monitoring of the sensor data from all IoMT devices.

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- (h) Hand held Communication devices and e-tabs for access of data and voice on the go.
- (j) Physical infrastructure to mount radio equipment, shelter for static equipment and power to sustain 24x7 availability.
- 5. <u>Vendor Parameters</u>. The vendor should be a registered company in India. It should have a Registered Office, Operations and Maintenance support team in India. The OEMs of the proposed product and services must also have their registered office, operations, maintenance and repair infrastructure in India. The vendor and the OEMs must be technically competent, financially sound and should have adequate infrastructure to set up, maintain and support the proposed networks as per following criteria:-
 - (a) The vendor and OEMs should have a strong financial base. Balance sheets and Profit/Loss statements for the past three years should be submitted, clearly highlighting the annual turnover.
 - (b) Vendor/ OEMs should have implemented / been involved as product OEM in a minimum of one cellular network in India. Track record in implementing Mobile Cellular Communication System (MCCS) networks along with list of successful installation in India and aboard should be provided. Give out case studies and experiences faced during implementation of the network, elsewhere. The condition for participation of OEM of unique/special products like special shelters etc will be dealt with separately.
 - (c) Vendor and OEM Should have a well-established base and technically competent maintenance and repair facility to maintain the network. Submit the support and repair escalation matrix along with maintenance methodology as asked in the RFI with additional details as relevant.
 - (d) The responder shall sign an agreement with OEM to manufacture / distribute the offered equipment in India and supply of spares for at least 10 years after



commissioning of the network. Any obsolescence of product or plan to close the support for the product shall be mentioned.

- (e) Vendor shall confirm that copy of all agreement that he shall be signing with OEMs/ Sub vendors for execution of the Turnkey solution to deliver the desired SLAs will be discussed with user and submitted to the user on conclusion of the same. OEMs shall also confirm that the proposal has been well communicated to them and that they comply with the requirements as projected in the RFI or later(RFP, Contract/ any other time) during all clarifications given before the issue of RFP.
- (f) Vendor must have capability to offer comprehensive onsite warranty of two years and 08 years comprehensive support under AMC on expiry of warranty for a minimum period of eight years.
- (g) Vendor and OEM of all major components must be an ISO accredited company.
- (h) Vendor must confirm that there are no Patent / legal issues that might become hindrance in implementation of the solution at later stages.
- (i) Must highlight and obtain the Government clearances as applicable.
- 6. Vendors should confirm that the following conditions are acceptable:-
 - (a) Categorisation. LTE network with IoMT sensor grid can be supplied under Buy Indian IDDM. If the proposed categorisation is not feasible, the vendor should state the desired categorisation with reasons.
 - (b) The solicitation of offers will be as per "Single Stage-Two Bid System". It would imply that a "Request for Proposal" would be issued soliciting the technical and commercial offers together, but in two separate sealed envelopes. The validity of commercial offers would be at least 18 months from the date of submitting of offers.

- (c) The technical offers would be evaluated by a Technical Evaluation Committee (TEC) to check its compliance with RFP.
- (d) The equipment of all TEC cleared vendors would be put through a trial evaluation at a suitable location nominated by the buyer on a "No Cost No Commitment" basis. A staff evaluation would be carried out by SHQ to analyse the result of field evaluation and shortlist the equipment for introduction into service.
- (e) Amongst the vendors cleared by GS evaluation, a Contract Negotiations Committee would decide the lowest cost bidder (L1) and conclude the appropriate contract.
- (f) Vendor would be bound to provide product support for the entire life span of the LTE network with IoMT sensor grid, which includes technical support, spares and maintenance tools/ software.
- (g) The vendor would be required to accept the general conditions of contract given in the Standard Contract Document at Chapter VII of DAP placed on www.mod.nic.in.
- (h) An integrity pact along with appropriate IPBG is a mandatory requirement in the instant case (Refer Annexure I to Appendix M of Schedule (I).
- (j) Performance-cum-Warranty Bond both equal to 10% value of the contract is required to be submitted after signing of contract.
- (k) ToT (if applicable) as applicable to categorisation would be need to be confirmed by Vendors.



PART - II

- 7. Procedure for Response
 - (a) Response to RFI (Appendix A) will be submitted at under mentioned address Brigadier General Staff Military College of Telecommunication Engineering, Mhow, Indore

MP - 453441 Fax:

Email: manlik. 687a@gov.in

- (b) In addition to providing details about company, details about the exact product meeting other generic technical specifications should also be carefully filled. Additional literature on the product can also be attached with the form.
- (c) Last date of intimation of willingness to participate and acceptance of filled form (Appendix A) is two weeks from date of issue of RFI. In case the responses are delivered by courier or through authorised company representatives.
- (d) In accordance with the provisions of the DAP 2020 a vendor interaction will be conducted with all interested parties in sixth week from the date of issue of RFI. Exact date and time of the vendor interaction will be intimated to all companies who intimate their willingness to participate.
- 8. The Government of India invites responses to this request only from Indian Vendors who have tie ups with Original Equipment Manufacturers (OEM)/Authorised Vendors/Government Sponsored Export Agencies (applicable in the case of countries where domestic laws do not permit direct export by OEMs). The end user of the equipment is the Indian Armed Forces (name of user service).





9. This information is being issued with no financial commitment and the Ministry of Defence reserves the right to change or vary any part thereof at any stage. The Government of India also reserves the right to withdraw it should it be so necessary at any stage. The acquisition process would be carried out under the provisions of DAP-2020.

Brigadier Dinesh Tiwari

Brigadier General Staff Military College of Telecommunication Engineering, Mhow, Indore MP – 453441



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(Refer to	Para	7	of	MCTE	File	No

INFORMATION PERFORMA (INDIAN VENDORS)

1. Name of the Vend	or/Company/Firm	
(Company profile, in	n brief, to be attached)	
2. Type (Tick the rel	evant category).	
(a) Original Equipmen	nt Manufacturer (OEM) Yes/No (
b) Authorised Vendor	r of foreign Firm Yes/No (Attach details, if yes)	
(c) Other (give specif	fic details).	
3. Contact Details.		
Postal Address:		
City :	State :	
Pin Code :	Tele :	
	URL/Website :	
	aison Office in Delhi (India) (if any).	
Name & Address : _		
Pin Code		
Tele :		
Fax		ICTE



Appendix A Continued

5. Financial Details.			
(a) Category of Industry	(Large/Medium/sma	all scale) :	
(b) Annual Turnover:		(in INR)	
(c) Number of employee	es in firm:		
(d) Details of manufactu	ring infrastructure: _		
(e) Earlier contracts with	n Indian Ministry of E	efence/Government a	gencies :-
Contract Number	Equipment	Quantity	Cost
Name of Agency	Certificate	Applicable from (Date & Year)	Valid till (date & Year)
7. Details of Registrati		Validity (Date)	Equipment
DGS&D			
DGQA/DGAQA			
OFB			÷
DRDO			
DRDO Any other Government Agency			

Appendix 🙈 Continued

8. Membership of FICCI/ASSOCHAM/CH or other Industrial Associations.

	Name of Organistion	Membership Number					
9.	Equipment / Product Profile (to be	Equipment / Product Profile (to be submitted for each product separately)					
	(a) Name of Product :						
	(Should be given category wise for e	(Should be given category wise for e.g. all products under night vision devices to					
	be mentioned together)						
	(b) Description (attach technical lite	rature) :					
	(c) Whether OEM or Integrator :						
	(d) Name and address of Foreign collaborator (if any) :						
	(f) Indigenous component of the pro	duct (in percentage) :					
	(g) Status (in Service/Design develo	pment state) :					
	(h) Production capacity per annum :						
	(j) Countries/agencies where equipr Supplied :	nent supplied earlier(give details of quantity					
	(k) Estimated price of the equipmen	t					
10. /	Alternatives for meeting the objectives	of the equipment set forth in the RFI.					
11. /	Any other relevant information :						
		MCTE					
		M Date V					

12. Declaration. It is certified that the above information is true and any changes will be intimated within five (05) working days of occurrence.

(Authorised Signatory)

