

BY MINISTRY OF DEFENCE GOVERNMENT OF INDIA FOR PROCUREMENT OF

MOBILE CELLULAR COMMUNICATION SYSTEM FOR INDIAN ARMY

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This document contains 17 pages including cover page and Appendices.



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Project Management Organisation Tactical Communication System IHQ of MoD (Army) Room No 009, Block No P-3 PMO Complex, DGIS Enclave New Delhi-110010

B/86977/I/MCCS/PMO/	TCS

22 Jul 2022

REQUEST FOR INFORMATION FOR MOBILE CELLULAR COMMUNICATION SYSTEM (MCCS) FOR INDIAN ARMY

- 1. The Ministry of Defence, Government of India, intends to procure 4G (Long Term Evolution Advance) (4G (LTE-A))/ Fifth Generation (5G) in Stand Alone (SA)/ Non Standalone Architecture (NSA) based mobile cellular communication network on turnkey basis. With a view to seek inputs from suitable Telecommunication Service Providers (TSPs)/ Original Equipment Manufacturers (OEMs) /Firms, who can undertake the said turnkey project and meet the qualifying criteria, TSPs/OEMs/Firms are requested to forward information on the system which they can offer.
- 2. This Request for Information (RFI) consists of following 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.
 - (b) <u>Part II</u>. The second part of the RFI states the methodology of seeking response of participating TSPs/OEMs/Firms. Submission of incomplete response format will render the firm liable for rejection.

PART-I

3. Intended Use of Equipment. Mobile cellular network based on 4G LTE (A)/ 5G (in SA/NSA) mode for field formations of Indian Army deployed in mountainous/ semi-mountainous/ high altitude region (upto range of 18,000 feet). The network is envisaged to provide high bandwidth, low latency, reliable and secure voice, messaging and data services in intended area of coverage to fulfil varied operational necessities. The firms are required to propose a solution under the following terms of reference:

(a) Turnkey solution for mobile cellular network based on 4G LTE (A)/ 5G (SA/NSA) technology for intended area of coverage.

- (b) The solution should meet all specifications and standards as applicable to latest 3GPP release and upgradable for future releases.
- (c) The solution should not be specific to any OEM specifications resulting in vendor lock in and must support globally accepted standards.
- (d) The solution should include detailed product and services description, technical specifications and Key Performance Indicators (KPI) of various components.
- (e) The solution should include capabilities to incorporate IRNSS support.
- (f) Security Assessment Matrix for each type of service planned in the network is required to be submitted along with the proposal.

4. Important Parameters

(a) Operational Requirements.

- (i) The intended network will be used by field formations of Indian Army deployed in mountainous/semi-mountainous / high altitude region (upto 18,000 feet). The network is envisaged to provide reliable and secure voice, messaging and data services in intended area of coverage to support operational requirements of field formation.
- (ii) The response should bring out in detail the aspects related to Geo-Redundancy support for the intended network with another 4G LTE (A), 5G (SA/NSA) or higher technology as per latest 3GPP release based cellular network considering that the EPCs/equivalent core of the two networks are interconnected via Optical Fibre. The details should cater for under mentioned:-
 - (aa) List of sub-systems, equipment, elements, components etc. that will be considered for Geo-Redundancy.
 - (ab) Detailed mechanism for implementation of Geo-Redundancy at System, Sub-system level down to significant card levels.
 - (ac) The detailed functioning of the Geo-Redundant mode of operation.
- (iii) The response should clearly bring out methodology for network optimisation.
- (iv) The detailed list of tools, test and measurement equipment that will be required for RF Planning/Site Survey, Management and Maintenance of the network.



(b) Secrecy Requirements

- (i) Communication between User Equipment (UE) or handset would be based on commercial AES 256 bit encryption or better. The UE/handset will have the provision to port application layer secrecy also.
- (ii) The system offered should have capability to be integrated with an encryption device (IP encryptor) as a Buyer Furnished Equipment (BFE) for back haul secrecy of the network.
- (iii) The solution must ensure that the network is inaccessible by an unauthorised and illegitimate user, eNodeB/ G Node B(gNB) or other Radio Access Technology (RAT) network.
- (c) <u>Indigenisation</u>. The response should include in detail the undermentioned aspects:-
 - (i) The availability of the network system/sub-systems/related equipment in Indian Market, level of Indigenisation (% of Indigenisation Content), life time span of the network solution being offered and the associated maintenance support for the life span.
 - (ii) The plans to meet BUY (Indian) guidelines as per DAP 2020.
 - (iii) Wherever applicable, the availability of design documents to include Process of Design, Mathematical and Analytical details in support of design, Engineering Design and Specifications and Manufacturing Process to be involved in the design.
- (d) <u>Test Bed</u>. There would requirement of establishment of test bed to evaluate the network solution being offered within 03 months from award of Contract. The response should clearly bring out the details as mentioned below: -
 - (i) The firm should submit the willingness and capabilities to establish the test bed.
 - (ii) The test bed should consist of Core, at least two Nodes (eNode & gNodeB each) along with backhaul media and other sub-system necessary to showcase the functionalities offered by the network.
 - (iii) Modalities for establishment of Test Bed.

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(e) <u>Delivery and Installation</u>. The firms should submit the capability to complete the delivery of network (including execution) within 12 months or less from the award of the Contract. The modalities and tentative delivery schedule to be submitted with the response.

5. Firm's Information for Implementation of Turnkey Projects.

- (a) Annual turnover of the company.
- (b) Previous experience of implementation of similar turnkey project.
- (c) Compliance to ISO Standards.
- (d) Any project suspended for more than six months after commencement.
- (e) Any project abandoned before completion.

Miscellaneous.

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- (a) Willingness for **Option Clause** (to execute a similar project) including the duration for which the Option Clause would be valid.
- (b) Any futuristic plans for upgradation / modernisation plans for the network solution being offered.
- (c) Acceptability to the terms of payment as per provisions of the DAP 2020.
- (d) Firms to also submit willingness to carry out site survey and RF planning at intended sites on NCNC basis for finalisation of Bill of Material prior for preparation of Detailed Project Report (DPR).
- 7. Firms are also required to submit the willingness to under mentioned conditions along with the response:-
 - (a) 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 the commercial offers should be atleast 18 months from the date of submission of offers.
 - (b) The technical offers will be evaluated by a Technical Evaluation Committee (TEC) to check its compliance with RFP.
 - (c) Amongst the Firms cleared by TEC, a Commercial Negotiation Committee (CNC) will decide the lowest cost bidder (L1) and conclude the appropriate contract.
 - (d) The product support will be provided for time period specified in the RFP, which includes spares and maintenance tools/jigs/fixtures required for up to component level repairs.

- (e) The firm will be required to accept the general conditions of contract given in the Standard Contract Document as per DAP 2020.
- (f) An **Integrity Pact** along with appropriate Bank Guarantee is a mandatory requirement as per DAP 2020.
- (g) A **Performance-cum-Warranty Bond** of **3%** of value of the contract will be furnished by the firm in the form of Bank Guarantee after signing of the contract.

PART II

- 8. **Procedure for Response**. Firms must fill the details as per Performa attached as Appendix A. Firms are also required to furnish additional literature on the product being offered along with the response.
- 9. The Government of India invites responses to this request from TSPs/OEMs/Firms, who have considerable know how/expertise in installation, commissioning, operationalization and maintenance of similar networks. The end user of the offered network solution is Indian Army.
- 10. 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 state. The Government of India also reserves the right to withdraw if it be so necessary at any stage.
- 11. The acquisition process will be carried out under the provisions of DAP 2020.

Enclosures :- (As above)



Appendix A

(Ref Para 7 of PMO TCS letter No B/86977/I/MCCS/PMO/TCS dated 12 Jul 22)

REQUEST FOR INFORMATION (RFI): MOBILE CELLULAR COMMUNICATION SYSTEM (MCCS) FOR INDIAN ARMY

- 1. The Ministry of Defence, Government of India, intends to execute project Mobile Cellular Communication System on Long Term Evolution Advance 4G LTE (A)/ Fifth Generation in Stand Alone/ Non Standalone Architecture (5G (SA/NSA)) technology or better for Indian Army. The parameters/ broad specifications of the item are mentioned in the questionnaire attached as per Annexure I to Appendix A. In addition, the vendors are required to furnish details as per Performa given at Annexure II to Appendix A.
- 2. Apart from the information as per the Appendix the vendors may also forward technical details/product brochures/literature etc pertaining to the item in question.
- 3. The filled form along with the response should be dispatched at the undermentioned address:-
 - (a) Project Management Organisation
 Tactical Communication System(I/O Section)
 IHQ of MoD(Army)
 Room No 009,Block No P-3
 PMO Complex, DGIS Enclave
 New Delhi-110010
 Telephone No: 01126155076
 Email: root.tech613@nic.in
 - (b) Directorate General of Capability Development (CD-7)
 General Staff Branch,
 A Wing, Sena Bhawan,
 IHQ of MoD(Army)
 DHQ PO
 New Delhi -110011
 - (c) Army Design Bureau (GSQR Cell)
 General Staff Branch
 Room No 16, C Wing
 Sena Bhawan
 IHQ of MoD (Army)
 DHQ PO, New Delhi 110011
 - (d) ADG Acquisition Technical (Army)
 Room No 28,
 D-II Wing, Sena Bhawan
 Ministry of Defence,
 New Delhi- 110010
- 4. Last date of acceptance of the response is 16 Sep 2022. A RFI meeting will be held at DG Signals, Sena Bhawan within four (04) weeks of issue of RFI for clarification, if any. Participating firms are requested to intimate details to address mentioned at Para 3 (a) above for coordination of meeting for RFI clarifications by 12 Aug 2022.



Annexure I to Appendix A (Ref Para1 of Appendix A)

QUESTIONNAIRE

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tand	THE PARTY OF THE P	No de la company	* H	See	क्षांत्र रहाते व	Technical Parameters			Capabilities	Purpose	T
							Erections Rand	Standards for Network			Parameters
						applica / maxi (LTE) MHz a	Acces	The ne / NSA release comply	The so 4G/5G field for altitude low late of cover of field	To provid Alone (S services terrain.	
(e)	(d)	(c)	(b)	(a)	Ser No	able to L mum fre and 5G Iso be b	Access System	mode mode es. The to TEC	The solution pro 4G/5G in SA / Not field formations altitude (upto 18, low latency, reliation of coverage with of field formation.	vide Lor (SA)/ N s to fo	
24.25 – 27.5 GHz	3.3-3.67 GHz	2380-2400 MHz	800 MHz	700 MHz	Band	nc (/	The system should have support for multiple hand of frequency as	The network should comply with latest 3GPP release applicable to LTE (A) / 5G in SA / NSA mode mobile cellular communication technology and upgradable to future releases. The equipment, accessories and subsystem of the offered solution should comply to TEC GR, as applicable.	sposed should be SA mode and upg of Indian Army do 000 feet) areas. To ble and secure vo optimal Quality of	To provide Long Term Evolution – Advance (LTE (A))/ Fifth Generation (5G) in Stand Alone (SA)/ Non Standalone Architecture (NSA) technology based mobile cellular services to formations deployed in mountainous/semi mountainous/high altitude terrain.	
		20 MHz	5 MHz	10/20 MHz	Bandwidth	A networks. In an verage and data ailability, through ve format is as un	ld have support fo	st 3GPP release a nunication technous es and subsyster	based on latest release of 3GPP pertaining to radable to future releases as a turnkey solution for reployed in mountainous/ semi-mountainous/ high ne solution is envisaged to provide high bandwidth, ice, messaging and data services in intended area Service (QoS) to support operational requirements	Advance (LTE (A))/ Fifth Generation (5G) in Stand itecture (NSA) technology based mobile cellular in mountainous/semi mountainous/high altitude	Specifications
					Throughput	ddition, requirement throughput be input and coverage ider:-	or multiple band o	applicable to LTE logy and upgrac n of the offered s	release of 3GPF leases as a turnh linous/ semi-mou aged to provide he data services in upport operationa	/ Fifth Generation chnology based emi mountainou	
					Coverage	ent of minimum ndicated in 4G e in 2380-2400	of frequency as	(A) / 5G in SA lable to future solution should	pertaining to key solution for intainous/ high ligh bandwidth, intended area al requirements	mobile cellular s/high altitude	
											Reply

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The response should include details for all kinds of eNodeB / gNodeB (Static and Cell on Wheel based Indoor/small-cell, Satellite backhaul capable etc). The details should include the various form factors for each type, power requirements, coverage provided by each type, cell edge throughput, interfaces supported and scalability.	eNodeB and gNodeB	DE STATE OF THE ST
The response should clearly bring out the details of the IMS required to be deployed alongwith its network functions as per latest 3GPP standards. It should also bring out methodology of implementation of these network functions i.e. virtual or separate products or multiple functions in same product.	IP Multimedia System (IMS)	THE COMPANY OF THE CO
The proposal should include core solution for 4G /5G /5G-NSA with IMS and also covering the necessity of connecting proposed network with existing army owned CDMA network via gateway and other military mobile communication systems, with Army owned EPABX and Army Data Network. The response should also cover details on proposed features of Mobility Management Entity (MME), Policy and Charging Rules Function (PCRF), Serving/PDN Gateway, DNS, Evolved Packet Data Gateway (ePDG) and Network Time Protocol Server etc as applicable to 4G LTE (A)/ 5G (SA/NSA) technology as per 3GPP standards.	Evolved Packet Core(EPC)/ 5G Core	
The outdoor equipment should function in altitude and temperature range given.	17	
 (a) Temperature Range (b) Altitude Range (c) Rainfall Range (d) Snowfall Range (e) Wind speed (a) Temperature Range (b) 45°C +/(-) 5°C. (c) Upto 18000 feet. (d) Snowfall Range (e) Wind speed (e) Wind Speed (f) 5°C to 45°C +/(-) 5°C. (e) Upto 18000 feet. (e) Nil to 10 feet. (e) Wind speed 50 to 120 Kmph. 		
The network should be capable to be deployed indoor, outdoor as well as Cell on Wheel (CoW) mode. The indoor equipment will be in shelter with controlled environment. The outdoor elements of the network including UE/ handsets should be able to perform to its full capacity in under mentioned meteorological details:-	Environmental Parameters	
Satellite. For remote locations Satellite backhaul with no communication infrastructure is planned. The response should consider planning for 25% Nodes with satellite backhaul capability. The response should also include in detail the satellite system component and architecture i.e. the technical specifications, features and capabilities.	in the second se	
Microwave. The microwave solution should be based on 4/5 GHz as well as 7/8 GHz band. Also state if other bands are supported.		

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Dt. William Committee Comm				•	
Power System	Network Availability	Services	Secrecy at UE / Handset	Backhaul Media	Quantity
The response should include the power requirement of a complete functional packet core and eNodeBs/ gNodeBs. The power solution should be a mix of generators of indigenous make (comparative analysis of normal and silent generators), UPS (single/3 phase), SMPS and alternate sources such as solar energy. The power requirement should be proposed keeping in view the terrain and environmental parameters of the intended area of execution of the project. Certain places may require the carriage of generators by ponies, human resources or transportation by air effort that may require de-assembling of the equipment. There will be places where captive mains may be available. The feasibility to utilise the mains should exist along with the automatic changeover mechanism. The devices will be required to run 24x7.	The solution proposed must have an availability of 99.95 % for Core and 99.9 % for eNodeB/ gNodeBs.	The intended network is proposed to deliver voice, VoLTE, SMS, Data and all services as per latest release of the 3GPP standards as applicable to 4G LTE-A /5G SA/ NSA systems. The response should clearly mention the detailed list of all services that will be offered by the network. The firm is also required to propose solution for Mobile Device Management (MDM) suite for the network including details of all features offered by MDM.	User devices should have commercial grade 256 bit AES encryption secrecy or better and should also have facility to port application level encryption solution as per user requirement. The response should clearly bring out in detail the services that can be offered by the user device.	Fresh or Existing, Microwave and Satellite). Microwave radio should be worked out with optimal requirement per eNodeB/gNode B as per standards. Optical cable will preferably be employed as the primary means of backhaul with Microwave and Satellite being employed for connecting locations with no fibre connectivity and/or for redundancy. Feasibility of auto switch over between the available backhaul media as a failsafe mechanism in the event of failure of current media should be available. The capability of the expansion of media to cater for increased user density and integration of additional eNodeB/gNodeB should be clearly stated in the response.	solution should be proposed 00 users including approxima ld bring out the maximum sub

The response should clearly bring out the power requirements as pe Node and equipment it's being employed for, power management m proposed and the standards applicable to the equipment. The solution cater for centralised power management of the complete network. The may indicate feasibility of fuel cells solution for isolated detachments. Environmental Control The solution proposed should bring out details of environmental control device/sys System The solution proposed should provide state of the art Earthing solution network). The response should clearly bring out the technical specific components, different standards to which the system will comply and capabilities of the devices being proposed as part of earthing. Also feasibility of reusable earthing kit for mobile eNodeB / gNodeBs. Lightning Protection Solution proposed should cater for protection against lightning. Also feasibility of reusable earthing kit for mobile eNodeB / gNodeBs. Lightning Protection Solution proposed should cater for protection against lightning. Also feasibility of proposed should cater for protection against lightning. Also subject the support of the network at altitudes of the devices being proposed should bring out the support the network at altitudes of upto 18000 feet which is prone to se and thunderstorm. EMI / EMI / EMI / EMI Comply and the EMI/EMI Capabilities of the devices being propose should clearly bring out the necessity of residential engine monitoring, maintenance and necessary repair of the system. Engineer Support The response should clearly bring out the Element and the Network Systems that shall form part of the solution being offered. The detail lite architecture, utilisation, features, capabilities, reports that can be gen EMIS/NMS by supports a submitted along with the response.		Hair	.4			p.	ť	
mental Control g Protection (LPS) ent ration including beliverables VIS	E STEND SES		Additional Features		E E			
Node and equipment it's being employed for, power management mechanism so proposed and the standards applicable to the equipment. The solution should also cater for centralised power management of the complete network. The firm/SI/OEM may indicate feasibility of fuel cell solution for isolated detachments. The solution should bring out details of environmental control device/system required for the complete network as applicable to the solution offered. The solution proposed should provide state of the art Earthing solution to the entire network. The response should clearly bring out the technical specifications of the components, different standards to which the system will comply and the EMI/EMC capabilities of the devices being proposed as part of earthing. Also include the feasibility of reusable earthing kit for mobile eNodeB / gNodeBs. Solution proposed should cater for protection against lightning, thundering and surge for all active and passive devices/elements. The response should clearly bring out the technical specifications of the components, different standards to which the system will comply and the EMI/EMC capabilities of the devices being proposed as part of lightning protection system. The solution proposed should clearly bring out the capability to support the network at altitudes of upto 18000 feet which is prone to severe lightning and thunderstorm. As per commercial standards. The response should clearly bring out the necessary repair of the system. The firm is required to submit in detail the configuration of all equipment forming part of the network along with the list of deliverables. The response should elaborate in detail the Element and the Network management systems that shall form part of the solution being offered. The detail literature on the architecture, utilisation, features, capabilities of fered. The detail literature on the lement and the should bring out feasibility to incorporate Al tools for Network.	EMS/NMS	Equipment Configuration including List of Deliverables	Engineer Support	EMI / EMC	Lightning Protection System (LPS)	Earthing	mental	
	The response should elaborate in detail the Element and the Network management Systems that shall form part of the solution being offered. The detail literature on the architecture, utilisation, features, capabilities, reports that can be generated out of EMS/NMS to be submitted along with the response. The response should bring out feasibility to incorporate AI tools for Network	The firm is required to submit in detail the configuration of all equipment forming part of the network along with the list of deliverables.	The response should clearly bring out the necessity of residential engineer support for monitoring, maintenance and necessary repair of the system.	As per commercial standards.	Solution proposed should cater for protection against lightning, thundering and surge for all active and passive devices/elements. The response should clearly bring out the technical specifications of the components, different standards to which the system will comply and the EMI/EMC capabilities of the devices being proposed as part of lightning protection system. The solution proposed should bring out the capability to support the network at altitudes of upto 18000 feet which is prone to severe lightning and thunderstorm.	The solution proposed should provide state of the art Earthing solution to the entire network (EPC, eNodeB/ gNodeBs of all types and other subsystems as part of the network). The response should clearly bring out the technical specifications of the components, different standards to which the system will comply and the EMI/EMC capabilities of the devices being proposed as part of earthing. Also include the feasibility of reusable earthing kit for mobile eNodeB / gNodeBs.	The solution should bring out details of environmental control device/system required for the complete network as applicable to the solution offered.	The response should clearly bring out the power requirements as per the type of Node and equipment it's being employed for, power management mechanism so proposed and the standards applicable to the equipment. The solution should also cater for centralised power management of the complete network. The firm/SI/OEM may indicate feasibility of fuel cell solution for isolated detachments.

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	(c) Capability to support the network for additional two years post expiry of the AMC.	The state of the s	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	(b) Detail description of maintenance philosophy for the network, its components and elements, spares and user end equipment/accessories (data terminals, handsets, antivirus suite renewal, OS updation, firmware/patch/release up-gradation of all network equipment, power equipment accessories (fan belt, fuses, filters, connectors etc), batteries, electric installations, license renewals and many other micro level needs of the complete infrastructure during the warranty and AMC.	Dt. And The Committee of the Committee o	D. Sorial
	(a) Built in Test and power on self-test features available in the system being proposed.		
	The proposed project will be covered under 2 years of warranty and 08 years of comprehensive AMC. The system availability has to be ensured to minimum 99.95% for core and 99% for eNodeB/ gNodeBs. Response should include undermentioned details:-	Maintenance and Repair	œ
	The response should bring out the capability to complete execution of the project (if contracted) within 12 months or less from the date of the award of contract.	Delivery Capacity	7.
, (Civil infrastructure will include the construction and erection of new towers and refurbishment of existing towers, if any, buildings for EPC complex (underground/over ground) and shelters (underground/over ground) for eNodeB/gNodeB and Mobile eNodeB/gNodeB, sheds for generators, plinths and beds for placing DG Sets, Power Equipment and other necessary items. The response should clearly bring out the optimum dimensions with layout of proposed buildings/shelters/sheds/plinths/beds required, the covered and the total land area necessary for establishment of nodes or related sub-systems.	Civil Infrastructure	, O
	The response should clearly bring out the training capacity, training cycle and training mechanism for operator level training to facilitate operation and first level user maintenance.	Training	٠ 5.
	The response should clearly bring out the willingness to carry out site survey and RF survey on NCNC basis.	Survey	
	Optimisation and RF / Spectrum management / Data Analytics tools etc.		

	10.	, ,
	Estimated Cost of the Proposal	Project Management
(b)	The response s mentioned head for 4G (LTE (A) for reference):-	The re turnke dispate optimis also re
(ii) EPO (iii) IMS (iii) eNo (iv) gNo (v) HS (vi) EM (vii) Cel (viii) L2 (ix) NIE (ix) NIE (ix) Ant (xii) Ant network. (ii) Opt (iii) Sat	sponse aned he (LTE (serence)	espons y netw ch ins sation, equired
EPC /5G Core. IMS. eNodeB of each type. gNodeB of each type. HSS. EMS. Cell site routers. L2 Switches. NIB. Ground Based Towers as applicable Antenna Assembly both omni directional and sectoral. Any other equipment/system/subsystem as deemed necessary for the rik. naul. Optical Fibre Cable. Microwave. Satellite.	The response should include the breakdown of tentative cost of the project in under mentioned heads. The same be specified separately for each solution i.e. complete for 4G (LTE (A)), 5G (NSA) and 5G (SA). (The details given below are only indicative for reference):-	The response should bring out in detail the project management methodology for a turnkey network implementation, methodology for conduct of pre-dispatch and post-dispatch inspections, installation and commissioning of the network, network optimisation, network integration and acceptance testing of the network. The firm is also required to submit the post contract management philosophy.



(0) Subscriber Devices

intended area of deployment should also be specified). Mobile Handsets. (Broad specifications of the device for functioning in

SIM Cards.

(d) Power Systems & Other Systems

Indigenous DG Sets (various types).

 \equiv UPS.

SMPS.

 \equiv

Earthing and Lightening Protection System.

Environmental Control Devices.

(e) Civil Infrastructure

3 3

Construction and refurbishments of towers.

Buildings for EPC Complex and Warehouse

Shelters for eNodeB (Static, Mob).

(iv) Sheds for Generators.

(v) Plinths for placing DG Sets, Power Equipment or other necessary items.

 \Im Installation and Commissioning

(g)

Network Optimisation.

(E) Training.

AMC for 8 years

B Miscellaneous (Any additional item required for network).

VENDOR INFORMATION PROFORMA

Name of the Vendor/C	ompany/Firn	1.	
(Company profile including Sh	are Holding p	attern, in brief, to be	attached)
2. Type (Tick the relevan	t category).		
Original Equipment Manufactu	irer (OEM)	Yes/No	
Authorised Vendor of foreign F	Firm	Yes/No (a	attach details, if
yes Others (give specific detail	ls)		
3. Contact Details.			
Postal Address:			
City:	_ State:		
Pin Code:	Tele:		
Fax:	URL/Web	Site:	
Email:			
4. <u>Local Branch/Liaison</u>	Office/Agent	(if any)	
Name & Address:			
Pin Code:	Tele:	Fax:	
Email:			
5. Financial Details. Ca	tegory of Indu	stry (Large/Medium/	/Small Scale):
6. Certification by Quality	ty Assurance	Organisation.	
Name of Agency Ce	ertification	Applicable from (Date &Year)	Valid till (Date & Year)



Details of Registration.

Agency	Registration No.	Validity (Date)	Equipment
GeM		7%	
DGQA/DGAQA/DGNAI			
OFB			
DRDO :			
Any other Government Agency			

8.	Membership	of FICCI/ASSOC	HAM/CII or othe	r Industrial	Associations
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Name	ot	()ra	anis	ation
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Membership Number

9.	Equipment/Product Profile	(to be submitted fo	r each product separately)
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(a)	Name of Product :			
	(IDDM Capability be indicated against the pro- (Should be given category wise for e.g. all products under night videvices to be mentioned together)			
(b)	Description (attach technical literature):			
(c)	Whether OEM or Integrator:			
(d)	Name and address of Foreign collaborator (if any):			
(e)	Industrial Licence Number:			
(f)	Indigenous component of the product (in percentage):			
(g)	Status (in service/design & development stage):			
(h)	Production capacity per annum:			
(j) quanti	Countries/agencies where equipment supplied earlier (give detainity supplied):	ls of		



(k) Estimated price of the equipment including cost wise breakdown of components.

- 10. Alternatives for meeting the objectives of the equipment set forth in the RFI.
- 11. Any other relevant information.
- 12. <u>Declaration</u>. It is certified that the above information is true and any changes willbe intimated at the earliest.

(Authorised Signatory)

