

TENDERER'S NAME: .....

CLOSING DATE: **Friday, 25<sup>th</sup> March 2022 by 14:30**

PLACE: THE MANAGER  
MTC PROCUREMENT  
CORNER OF MOSE TJITENDERO & HAMUTENYA WANEHEPO NDADI  
STREET, OLYMPIA  
MOBILE TELECOMMUNICATIONS LIMITED (MTC) HEAD QUARTERS  
WINDHOEK



**TENDER NO: MTC19-22-O**

**REQUEST FOR PROPOSAL FOR SUPPLY AND DELIVERY OF POINT TO MULTIPOINT SOLUTION  
(P2P/PTMPT) FOR MOBILE TELECOMMUNICATIONS LIMITED (MTC)**

MOBILE TELECOMMUNICATIONS LIMITED (MTC)  
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WINDHOEK  
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**A. CONDITIONS OF TENDER**

**INVITATION TO TENDER**

A.1.1 MTC hereby invites offers:

<b>CLIENT:</b>	MOBILE TELECOMMUNICATIONS LIMITED (MTC)
<b>TENDER DESCRIPTION:</b>	REQUEST FOR PROPOSAL FOR SUPPLY AND DELIVERY OF POINT TO MULTIPOINT SOLUTION FOR MOBILE TELECOMMUNICATIONS LIMITED (MTC)
<b>TENDER NUMBER:</b>	MTC19/22/0
<b>CLOSING DATE</b>	25 <sup>th</sup> March 2022 BY 14:30
<b>BRIEFING MEETING</b>	08 <sup>th</sup> March 2022 @ 10:00
<b>BRIEFING MEETING LINK</b>	<a href="#">Click here to join the meeting</a>
<b>ADDRESS TENDER TO:</b>	MTC Procurement, Manager Procurement
	Cnr Mose Tjitendero & Hamutenya Wanehepo Ndadi Street
	Olympia
	Windhoek, Namibia
<b>ALL INQUIRIES:</b>	Effaishe Nghiidipaa Manager Procurement Tel: +264 61 280 2019 Fax: +264 61 280 2057 Email: enghiidipaa@mtc.com.na

**TENDER FORMAT**

A.1.2 Tender documents must be in a sealed package as follows:

- A.1.2.1 One (1) hardcopy of Complete offer to be deposited in the tender box at MTC head Office in Olympia
- A.1.2.2 one (1) scanned electronic format OF **COMPLETE OFFER** to be uploaded on the MTC website

A.1.3 All documents must clearly be marked:

**TENDER NO: MTC19-22-O**

**“REQUEST FOR PROPOSAL FOR SUPPLY AND DELIVERY OF POINT TO MULTIPOINT SOLUTION FOR MOBILE TELECOMMUNICATIONS LIMITED (MTC)”**

**A.1.4 ALL TENDER DOCUMENTS MUST BE DEPOSITED INSIDE THE MTC TENDER BOX AT THE RECEPTION OF MTC HEAD OFFICES IN OLYMPIA, MOSE TJITENDERO AND HAMUTENYA WANAHEPO NDADI STREETS.**

**A.1.5 ALL SOFT COPIES MUST BE UPLOADED ON THE MTC WEBSITE**

## **DEFINITIONS**

A.1.6 In this Tender, unless the context clearly indicates the contrary, the following interpretation will apply to the terms stated below:

A.1.6.1 "MTC" shall mean Mobile Telecommunications Limited

A.1.6.2 "RFP" shall mean Request for Proposal (Tender)

A.1.7 This Request for Proposal is not a contract and does not create an obligation on MTC's part to purchase products / services from any company submitting a proposal. MTC reserves the right to reject any or all proposals in its sole and absolute discretion.

## **TENDER INVITATION**

A.1.8 MTC invites appropriately qualified companies to tender for request for proposals for the supply and delivery point to multipoint solution for mobile telecommunications limited (MTC) for a period of 3 years.

A.1.9 This tender document shall consist of the following Appendices:

A.1.9.1 Appendix A, BEE Scorecard: This scorecard is not to be filled out, but to show the various elements that the company should be accredited by the Namibia Preferential Procurement Council (NPPC). The Tenderer is required to approach the Namibia Preferential Procurement Council (NPPC), Telephone number 061 248 007, for accreditation and attach their accreditation certificate to the Tender response.

A.1.9.2 Appendix B, Non-Disclosure Agreement: This Non-Disclosure Agreement is to be completed by the Tenderer.

A.1.9.3 Appendix C – Questions template

## **GENERAL TENDER CONDITIONS**

A.1.10 All Tender Documents must be submitted before or on the closing date and time as indicated on the cover page and be deposited in the tender box at the entrance of MTC Headquarters, Olympia.

A.1.11 No late tenders will be considered.

A.1.12 Every Tender Document page must be initialed.

A.1.13 MTC is neither bound to accept the lowest of any Tender nor to assign any reason for acceptance or rejection of such Tender.

- A.1.14 MTC reserves the right to change these dates and any other dates that may appear in this Tender. Such changes will be communicated as soon as they are made.
- A.1.15 Notifications to companies will be in writing to the designated liaison person nominated by the firm (refer to paragraph A.1.36 below).
- A.1.16 From the submissions an evaluation will be performed highlighting a short list.
- A.1.17 If deemed necessary, negotiations may be entered into with the short listed candidates.
- A.1.18 Companies that wish to tender should examine this Tender carefully and review all instructions contained herein. Companies should follow the instructions so that MTC can easily evaluate and compare all proposals received.
- A.1.19 All prices must be in NAD and exclusive of all taxes.
- A.1.20 MTC in its sole and absolute discretion reserves the right to:
- A.1.20.1 Reject any or all proposals, whether or not these instructions are followed.
  - A.1.20.2 Reject any submissions not complying with the specified format.
  - A.1.20.3 Award the contract based solely on a proposal received without entering into any further discussions.
  - A.1.20.4 Short list candidates.
  - A.1.20.5 Not base the final decision solely on price.
- A.1.21 No correspondence will be entered into should MTC decide to reject any proposals or to withdraw the Tender.
- A.1.22 Each response must include a detailed discussion of each of the items below. Should responses not use the same heading and follow the same numbering as the Tender, MTC may automatically disqualify the company from the tender process.
- A.1.23 MTC will make its decision based on the quality of the information contained in the offers received and no opportunity will exist for any company to enhance such information after closing date and time of the Tender.
- A.1.24 It is important to clearly note down any assumptions made in the submitted offer so that each submitted offer may be evaluated fairly against all other offers received.
- A.1.25 This Tender outlines the requirements of MTC and the process to be followed by the prospective Tenderers in submitting an offer.
- A.1.26 Companies should provide a list of previous or current clients they served with similar projects. MTC reserves the right to contact any clients referenced.

- A.1.27 MTC reserves the right to exclude certain persons and legal entities in the event of poor performance; the Tender offering or attempting to offer any bribe, promised a bribe, or any other consideration to any MTC employee involved with this Tender or the tenderer has acted fraudulently and or in bad faith.
- A.1.28 Any restriction imposed upon any such Tenderer shall also apply to any other enterprise under the same or different name with which the person, firm or company is actively associated.
- A.1.29 MTC may accept any Tender in part or wholly with no obligation to explanation whatsoever.
- A.1.30 Tenderer shall be a Juristic Entity with valid Company Registration documents, in terms of the laws of the Republic of Namibia or country of origin. Tenderers who fail to prove that they are a juristic entity shall be disqualified.

## **GENERAL EVALUATION CRITERIA**

- A.1.31 Proposals will be evaluated by MTC using criteria in the Tender and as per the relevant questions asked. These categories are not necessarily listed in order of importance:
- A.1.31.1 Price competitiveness, including any price discount provided in the proposal.
  - A.1.31.2 Project completion schedules and lead times proposed.
  - A.1.31.3 Warrantee conditions and handling of claims.
  - A.1.31.4 Availability of references from other customers and reputation of tenderer.
  - A.1.31.5 Availability of infrastructure for after sales support, both local and international.
  - A.1.31.6 Compliance with local and international standards.
  - A.1.31.7 Certification and accreditations.
  - A.1.31.8 Value added to MTC.
  - A.1.31.9 The financial condition and trading record of the tenderer (Company profile, bank rating of tenderer etc.)
  - A.1.31.10 Tenderer degree of conformance to the Black Economic Empowerment Policy (A certificate from NPPC or any other recognised BEE accreditation agency should be submitted to prove the BEE credential):
    - Alternatively, shareholder names and certificates must be attached.
    - Small and medium enterprises (SME's) must submit their SME certificates issued by the Ministry of Trade and Industry.
- A.1.32 The Tenderer shall ensure that sufficient supporting documentation and information is supplied in his proposal to enable MTC to evaluate the proposal in respect of each of the abovementioned criteria.
- A.1.33 As per the Communications Regulatory Authority of Namibia: Regulations in respect of Type approval and Technical Standards for Telecommunications Equipment, gazetted in the Government Gazette # 5659, General Notice # 22, the tenderer supplying equipment subjected to this regulation must ensure that all documentations required are obtained from the Regulator before importation. Failure to do so may lead to equipment being confiscated

by Customs at the supplier's risk, and MTC hereby distances itself from any confiscated equipment.

## SUMMARY OF DEADLINES

<b>ACTION</b>	<b>DUE DATE</b>
<b>TENDER DOCUMENTS AVAILABILITY:</b>	04 <sup>th</sup> March 2022
<b>SUBMISSION OF QUESTIONS:</b>	09 <sup>th</sup> March 2022
<b>MTC RESPONSE TO QUESTIONS:</b>	16 <sup>th</sup> March 2022
<b>TENDER CLOSING DATE:</b>	25 <sup>th</sup> March 2022 by 14H30

## QUESTIONS & ANSWERS

- A.1.34 If required, companies may submit questions via email to the following e-mail address: tenders@mtc.com.na on or before 09<sup>th</sup> March 2022 Only questions submitted in the questions template as per Appendix C will responded to.
- A.1.35 All questions and answers thereto will be uploaded on the website by the 16<sup>th</sup> of March 2022.
- A.1.36 Communication between MTC and prospective companies, for the duration of this Tender, must only be through Ms E. Nghiidipaa @ 061 280 2019 or enghiidipaa@mtc.com.na. No direct communication or contact with any other party at MTC is permissible. Any such breach may disqualify the company.

## TENDERER'S DESIGNATED LIASON

- A.1.37 Companies must select a single designated contact person, through whom all communications between MTC and the company will take place:

<b>CONTACT NAME:</b>	
<b>DESIGNATION:</b>	
<b>TELEPHONE:</b>	
<b>FAX:</b>	
<b>EMAIL:</b>	
<b>SIGNATURE:</b>	

**REFERENCE LIST (PREVIOUS COMPLETE PROJECTS)**

ITEM	COMPANY NAME	CONTACT PERSON	CONTACT DETAILS	YEAR SERVICE	OF
1					
2					
3					
4					
5					

**SUCCESSFUL TENDERER’S PERFORMANCE MANAGEMENT**

- A.1.38 The successful Tenderer/s are subjected to annual performance reviews to be completed by the respective MTC representative or Procurement Officer responsible for the purchase. The review will be done at intervals to be decided upon by the Procurement department.
  
- A.1.39 The performance reviews will amongst others cover the following issues:
  - A.1.39.1 **Reliability:** How reliably do you follow through on your commitments to MTC?
  - A.1.39.2 **Cost:** How closely did your final total costs correspond to your expectations at the beginning of the transaction?
  - A.1.39.3 **Order Accuracy:** How well did the product/service delivered matched your order specifications and quantity?
  - A.1.39.4 **Delivery / Timeliness:** How satisfied is the appraiser about the timeliness of the product/service delivery?
  - A.1.39.5 **Quality:** How satisfied is the appraiser about the quality of the product/service provided by your company?
  - A.1.39.6 **Documentation Accuracy:** Does your company present its all and correct documents with its deliveries?
  - A.1.39.7 **Personnel:** How satisfied is the appraiser about the attitude, courtesy, and professionalism of your company’s staff?
  - A.1.39.8 **Customer Support:** How satisfied is the appraiser about the customer support she/he received from your company?
  - A.1.39.9 **Responsiveness:** How responsive is your company to information requests, issues, or problems that arose in the course of the transaction?



## DECLARATION OF INTEREST FORM

Any deliberate omission in this declaration or the supplying of false information will be regarded in a serious light and may lead to an investigation and disqualification of the tender process.

Tenderer Name:		Tender #:	
Description of Tender:			

### RELATION TO MTC EMPLOYEES/ MANAGEMENT/ DIRECTORS

I herewith declare that I have/am related – i.e. spouse (also fiancé or boyfriend/ girlfriend), parent, child, any other relation with the following MTC Employee(s)/ Member(s) of Management/ Board of Directors: \*

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### CONFIRMATION OF FACTUAL INFORMATION

I confirm by signing this declaration that, to the best of my knowledge, the statements made above are factual and accurate and that I have taken note of all the sections. \*

Full Name:	Signature:	Date:
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\* Please initial in each box where applicable.

### TENDER PRICES

- A.1.40 Tender prices shall be quoted in Namibian Dollar, the legal currency in use in the Republic of Namibia.
- A.1.41 No change in the submitted tender price shall be countenanced after receipt and before award of Tender.

## **VALIDITY OF TENDER AND ACCEPTANCE**

- A.1.42 The MTC is not bound to accept the lowest or any Tender nor to give any reason for the rejection of a Tender, nor shall they be responsible for or pay any expenses or losses which may be incurred by the Tenderer in the preparation and delivery of his Tender.
- A.1.43 Tenders remain open for acceptance for a period of ninety (90) days as from the closing date of the Tender.
- A.1.44 MTC reserves the right to ask for extension of the validity without any change in the prices.
- A.1.45 MTC shall not entertain price variations due to any currency fluctuations for the submitted offer during its validity period.
- A.1.46 After submission and before decision, no interviews dealing with the subject shall be answered by MTC. Tenderers may, however, be called upon to clarify aspects of their Tender at the discretion MTC, and supply further information requested and necessary to assess the Tenders.
- A.1.47 The successful Tenderer will be advised by the MTC to this effect by letter through the mail or by telegram or by fax and in such case the Post Office shall be regarded as the agent of the Tenderer and delivery of such acceptance to the Post Office shall be treated as delivery to the Tenderer.
- A.1.48 In the event that the Tenderer submits his proposal together with a technical partner whether local or foreign, MTC reserves the right to require that both the Tenderer and the Technical Partner conclude the Contract.
- A.1.49 The successful Tenderer shall provide at his own expense all the necessary revenue stamps for the Contract as required by Law in Namibia.
- A.1.50 After the signing of the Contract Documents by MTC and the successful Tenderer a duplicate copy shall be handed over to the latter.
- A.1.51 The MTC reserves the right to adjust arithmetical or other errors in the Tender. Any adjustments made to a Tender will be stated to the Tenderer prior to the acceptance of the Tender.

## **AMENDMENT OF TENDER DOCUMENTS**

- A.1.52 At any time prior to the last date of submission for offers, MTC may, for any reason, whether at its own initiative or in response to a clarification requested by a Tenderer, modify the documents by amendment.

- A.1.53 The amendment shall be notified to all the prospective Tenderers in writing and these shall be binding on them.
- A.1.54 MTC may extend the last date of submission required as a result of such amendment.

### **DETAILS CONFIDENTIAL**

- A.1.55 Tenderers shall treat all aspects pertaining to this tender as confidential and shall not disclose details to third parties except for bona fide tendering purposes.

### **LEGAL ASPECTS**

- A.1.56 Unless in special cases the MTC agrees to the contrary, the laws of the Republic of Namibia shall be applicable to each contract created by the acceptance of a tender and each Tenderer shall indicate a place in Namibia and specify it in his tender as his domicilium citandi et-executandi where any legal process may be served on him.
- A.1.57 Each Tenderer shall bind himself to accept the jurisdiction of the Courts of Law of the Republic of Namibia.
- A.1.58 Each foreign Tenderer shall state in his tender the name of his accredited agent in the Republic of Namibia in whom the necessary legal competence is vested and who has been duly appointed to sign any contract.
- A.1.59 A foreign company may tender on condition that, should it be informed by the MTC that its tender has been successful, it registers as a company and taxpaying entity in the Republic of Namibia prior to the signing of the Form of Agreement or within such extended time as may be allowed by the MTC.
- A.1.60 The Bidder should be an original equipment manufacturer (OEM) or authorized partner of OEM for supply of the equipment, licenses, solution implementation and maintenance support. Letter of confirmation from OEM must be submitted.
- A.1.61 The bidder is only allowed to submit one offer, either individually or in a partnership. Bidders submitting more than one offers will automatically be disqualified.
- A.1.62 One Bidder can bid only with one OEM and similarly one OEM can bid with only one Bidder. Letter of confirmation from the Bidder and OEM is required. Bidders with letters from the same OEM will automatically be disqualified.

### **DISQUALIFICATION OF TENDERERS**

- A.1.63 The offer of any Tenderer, which does not conform to the Conditions of this Tender and the instruction reflected in the Tender, may be disqualified at the discretion of the MTC.

## **NOTICE (S) TO TENDERS**

- A.1.64 Additional information and amendments to the tender documents will be conveyed to the Tenderers by the MTC or his agents, prior to the closing date of the tender, by means of Notices to Tenderers. Receipt thereof shall be acknowledged immediately to the sender by email and shall also be submitted together with the Tender Document with tender closure.

## **LANGUAGE**

- A.1.65 All offers shall be submitted in the English language.

## **ADDITIONAL CONDITIONS OF TENDER**

- A.1.66 **Good Standing in terms of the Social Security Commission Act**  
Tenderers shall provide Original certificates of good standing in terms of the Social Security Commission Act.
- A.1.67 **Good standing with Inland Revenue Office**  
Tenderers shall attach a valid Original Tax Good Standing Certificate.
- A.1.68 **Company Registration Certificate**  
Tenderers shall attach a valid copy of his/her Company Registration Certificate or proof of Defensive Name issued in terms of Section 7 of the Companies Act of 1973 (Act 61 of 1973) OR a Close Corporation Certificate issued in terms of Act 26 of 1988.
- A.1.69 **Letter of Intent**  
Letter of Intent to be provided by financial institution with the Tender to confirm that a Performance Guarantee will be issued after award of the Tender.
- A.1.70 **Shareholding**  
Tenderers shall attached shareholders certificates clearly indicating the shareholding structure of the company tendering

## **TERMS OF REFERENCE**

### **1. Introduction**

Mobile Telecommunications Company (MTC) is a telecommunications service provider offering a variety of “fixed” services to the market (Enterprise/Business/Residential). These include

- Internet Access
- SD-WAN
- MPLS-VPN
- Voice-over-broadband
- SIP trunking
- Etc.

The expectation from the market, has evolved from just traditional internet connectivity. Services such as video streaming, IP-voice, online-gaming and real-time applications are of the highest demand. For the enterprise segment, a significant part of its value proposition is managed IP connectivity services. To meet these demands, while controlling costs and optimizing efficiency, MTC must identify and introduce alternative technologies such as point-to-point/point-to-multipoint.

This technology (P2P/P2MP) needs to address the need of MTC to establish a cost-effective, reliable, and high-speed-broadband access, as an alternative to existing xDSL, MSAN/fiber or microwave solutions from other Telcos/Service Providers. This platform must enable the establishment of symmetrical/asymmetrical and CIR (committed information rate) connectivity, from the customers to the MTC network.

### **2. Solution Requirement**

To support the delivery of the services mentioned above, the PtMP solution should support the following features/requirements. It is very important for vendor (bidder) to respond “fully” to the below requirements. The quality of the responses and the provided information will determine prospects of the offered solution.

#### **2.1 Frequency Band**

MTC is currently having a license to operate PtMP in the following frequency bands.

- 3.x GHz [**3.6GHz Band (3.750Mhz and 3.790Mhz, Centre Frequencies with 2x 40Mhz Bandwidth Channels)**]
- 10.x GHz [**10.5GHz (10.518Mhz and 10.546Mhz, Centre Frequencies with 2x 28Mhz Bandwidth Channels)**]

The vendor's solution should also be capable of operating in the unlicensed spectrum of 4.x to 6.x GHz [**5GHz Free Band (4.9GHz to 5.9GHz)**]. Alternatively, the vendor should specify the various spectrums in which its solution operates.

## **2.2 Base Station (Access Points)**

Below are a list of specific questions/requirements. Provide detailed, clear, and substantiated responses.

- Is the base station single, or multi-carrier? Meaning, can the operate with multiple carriers on different frequencies?
- What is the supported Bandwidth Utilization Options for the relevant indicated frequencies above?
- What is the Base station throughput (download/upload), aggregated per each carrier, at channel bandwidth of 20, 40 and 80MHz?
- What is the maximum number of Subscriber Units (SUs) that the base station can register?
- Is the base station capable of registering a mixture of Point-to-Point (PtP) and Point-to-Multi-Point (PtMP) SU's/Services?
- If yes, how does the above configuration/setup affect sector throughput?
- Does the base station provide the functionality/feature to setup/configure subscriber groups linked to different resource profiles? For instance, a group with committed information rate (CIR / No over-subscription), versus another group linked to minimum information rate (MIR / over-subscription allowed)?
- What is the Maximum coverage distance, from base station to SU? Does it in any way affect the number of SUs to be connected on a base station? Or, is this SU dependent (Low-range /mid-range & long-range)?
- What QoS parameters can be managed by the base station?
- Does the solution support QoS 802.1q?
- What is the IP rating for weather conditions? Can the base station last in coastal, rust, salt conditions?
- How does the base station handle internal and external interference?
- What security mechanisms are built in the solution?
- Does the solution equipment support Multi Mode MIMO, and if so, is this a licensed Feature?
- Does the solution equipment support frequency reuse?
- Does the solution include connectorized options to be used with external antennas?

If yes, provide details of optional antennas available?

The complete (full) specification documents and data sheets for the solution should be provided.

### **2.3 Subscriber Units**

Below are a list of specific questions/requirements. Provide detailed, clear and substantiated responses.

- What is the minimum/maximum capacity throughput (download / upload) per SU? Is it License dependent?
- If yes, please indicate the cost associate to upgrade from one to the next capacity license.
- Does the SU operate Line-Of-Sight (LOS), or on Near-Line-Of-Sight (nLOS)?
- Is the solution having various types of SUs (low-range, mid-range, long-range, indoor/outdoor, WiFi, etc.)? If yes, please provide the list of SUs with data/sheets and technical specifications.
- Is the SU capable of performing PPPoE authentication?
- Can the same type of SU operate in PtP and PtMP mode, or are different SUs required?
- Does the solution support “zero touch” onboarding of the SU?
- What is the IP rating for weather conditions? Can the outdoor SU last in coastal, rust, salt conditions?
- Does the solution include connectorized options to be used with external antennas?  
If yes, provide details of optional antennas available?

The complete (full) specification documents and data sheets for the solution should be provided.

### **2.4 Customer Premises Equipment**

Below are a list of specific questions/requirements. Provide detailed, clear, and substantiated responses.

- Does the vendor provide own solution for Customer Premises Equipment? Like Wi-Fi routers, Wi-Fi-extenders, etc.?
- If yes, please provide the complete (full) specification documents and data sheets for the solution.
- Is there a capability to separate “ISP-Network Access” from the “customer access” to the router? For instance, setting-up of PPPoE account profiles should not be accessible to the customer, but the customer should have access to create and change SSID and Wi-Fi password as they please.
- Does the Wi-Fi CPE support TR-069 for zero-touch onboarding and management?
- Does the CPE support PPPoE?
- Does the CPE support segmentation via VLANs?

The complete (full) specification documents and data sheets for the solution should be provided.

## 2.5 Network Element Management System (NMS)

Below are a list of specific questions/requirements. Provide detailed, clear and substantiated responses.

- What are the various options for available for the deployment of the NMS? On-premise physical? On-premise own-cloud solution? Vendor cloud solution?
- How does the various deployment scenarios influence, or affect the customer onboarding process, especially when a service provider is looking at introducing seamless zero-touch onboarding (plug-n-play)?
- MTC has own cloud solution, based on Huawei-Fusion-Sphere Open Stack. Please indicate whether NMS is complaint to this, or not.
- What are the standard reports available in the NMS for the Base-Station and Subscriber-Units? (Throughput, or Capacity Utilization / Base Station Resources Utilization / Base Station Availability / Subscriber Unit Availability / On-line, Offline SUs / etc.)
- What is the NMS DATA validity period? How long does the NMS store/keep DATA from the Base Station and the Subscriber Units? MTC requirement is for DATA to be kept for a minimum of three (3) years.
- Can the NMS support single-sign-on?
- Is there a defined limit to the users that may sign-on?
- Can the NMS provide user activity reports, on ALL actions performed by any user, on the NMS, and on the various Network Elements (Base Station / Subscriber Units / CPE)
- What is the license regime for the solution? How are Network Elements licensed? Should a network element be licensed to be onboarded on the NMS? What are the various options available to MTC?
- Does the NMS allow for setup/configuration of alarms notifications and escalations to set recipients?

The NMS must provide MTC's network and systems administrators the ability to have visibility of the deployed network components by recording data from a network's remote points that will be carried to central reporting platforms to the Engineers. The network management system must be useful in:

- Network device discovery
- RF Planning
- Network device monitoring
- Network performance analysis
- Network device management
- Intelligent notifications, or customizable alerts for congestion or failures on the links

The complete (full) specification documents and data sheets for the solution should be provided.



## **2.6 Service Level Agreement (SLA)**

Vendor (bidder) is requested to provide a comprehensive response as to how their solution offered addresses the below topics.

- Network Element Management SLA – What are the SLA options available to support the NMS? Access to the latest firmware / updates, etc.
- Network Maintenance Support – What are the available SLA options, for network maintenance support, where vendor support (3<sup>rd</sup> level) is required to operate the network, or to support/repair failures in the network (remote / on-site)?
- Return Merchandise Authorization (RMA) – Is the vendor’s solution having SLA that supports RMA? Warrantee period? Which network elements of the vendor’s solution are covered within the RMA?

## **2.7 Roadmap for Vendor’s Technology**

The vendor (bidder) is requested to provide a clear roadmap strategy for the offered solution.

- Does it address backward / forward compatibility?
- The roadmap should also clearly illustrate the “life-span” of the various Network Elements

## **2.8 Integration**

Does the vendor’s (bidder) offered solution provide interfaces for northbound and southbound integration?

## **2.9 Applications for Subscriber Unit Installations**

To improve on the quality of the “SU Installation” at customers’ premises, and to reduce the time spent on installations, there are applications and tools in the industry used to “assist” installers. These tools, are used for

- Identify the best serving base station for the specific customer location
- Performing the basic configurations required to onboard the SU
- Store Link Quality kpi’s of initial installation, for use as baseline reference and for commissioning and acceptance of installation

Does the offered solution make use of such applications/tools?

## **2.10 User Training**

The vendor (bidder) is requested to provide a comprehensive offer with regards to training. This offer should outline the various training packages available, the course outline and cost there-off.

- Local / International training
- Basic / Advanced / Expert
- Course Content / Course Outline

## **2.11 Supply and Delivery**

The vendor (bidder) is requested to clarify to MTC the process around its supply delivery, for MTC to understand the stock lead times, when orders are placed with the vendor.

Is the vendor's supply and delivery also affected by the global Covid-19 pandemic? What mechanisms / solutions does the vendor have in place to ensure that the supply of stock to MTC is not adversely affected?