

**TENDER FOR THE DESIGN, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING, MAINTENANCE, AND TECHNICAL SUPPORT SERVICES OF VEHICLES EQUIPPED WITH MULTI MODAL MOBILE RADIOCOMMUNICATIONS SERVICES AND INTERNET CAPABILITIES - “PRIMAL RADIOCOMMUNICATIONS AND INTERNET ON THE MOVE (“PRIME”)**

**Tender No: MCMC/TSD/TDD(01)/PRIME/TC/07/2024(06)**

**Questions & Answers**

**1. Scope Of Work**

No.	Question	Answer
1	Is the telecommunication based on satellite or gsm solution?	The proposal shall cover the design, supply, installation, testing and commissioning, maintenance, and technical support services of vehicles equipped with multimodal radiocommunications services and internet capabilities, including but not limited to satellite, mobile radio, cellular and Wi-Fi.
2	Does the contract include the design & supply of the vehicle as well?	The tenderer shall include the design and supply of the vehicle.
3	Could you provide the "Trunked radio" frequency? We must use the current trunk radio network, or I can provide one trunk radio station on the car?	The frequency for the trunked radio (digital) is 410 MHz – 430 MHz. The vehicle will be equipped with a mobile trunked radio unit with services by the authorized service provider.
4	Could you provide the "High Frequency (HF) handheld radio" frequency?	The HF radio should be programmable to any frequency within the HF band, either amateur or commercial frequencies. The standard range is 3 MHz to 30 MHz. Please refer to the Guidelines for Amateur Radio Service in Malaysia (Third Edition, 20 December 2022) or any latest version may apply.
5	Could you explain more about "Hybrid Push-to-talk over Cellular (POC)"?	It is a combination of traditional push-to-talk functionality with the capabilities of cellular networks and other communication networks such as Wi-Fi or satellite. The hybrid approach provides users with reliable, flexible, versatile and wide-reaching communication capabilities across various environments. The proposer shall propose the most suitable and effective solution for the radio communication systems and overall performance of the communication vehicle. The proposed solution should ensure seamless integration and interoperability of

		the listed equipment, including but not limited to HF handheld radios, trunked radios, and hybrid Push-to-Talk over Cellular (PoC) systems.
6	Regarding drone requirement, can we propose tethered drone instead of normal conventional drone?	The normal conventional drone is a better option for the purpose of Wi-Fi extension and mesh Wi-Fi.
7	Regarding Mesh WiFi extender requirement, can you elaborate more what is mean by 1 master and minimum 3 slave? Is WiFi extender is consider a master or slave? What is consider as slave?	1 master and minimum 3 slaves are referring to the configuration of the network, where the "master" is the central node (also known as the primary node or router), and the "slaves" are the secondary nodes (also known as satellite nodes or extenders) that can extend the mesh Wi-Fi coverage. Wi-Fi extender must consist of 1 master and minimum 3 slaves.
8	What is mean by 5Km between nodes? In this situation, what is consider as a node?	Extender unit (either master or slave) is considered as a node.
9	As i am understanding from WiFi extender and mesh WiFi requirement, The WiFi extender will be uplift by the drone. Is the WiFi extender purposely for extending WiFi signal from bonding device? It seems no other wifi requirement in tender specification.	The Wi-Fi extender is for extending Wi-Fi signals further from PRIME.
10	What is the difference between SUV and pick up?	<p>Pickup Truck will typically feature an enclosed cab with an open cargo bed at the rear. The cab can be either single (two doors) or double (four doors), and the bed is used for transporting goods, tools, and other items.</p> <p>Sport Utility Vehicle (SUV) generally has a fully enclosed body with a combined passenger and cargo area. SUVs often have two or three rows of seats and a rear cargo space that can be accessed through a liftgate or tailgate.</p> <p>In any case, the vehicles shall be customized to securely house all the equipment as described in the tender.</p>
11	The registration of the vehicles on whether directly under MCMC or to be transferred later?	The vehicle is to be registered directly under MCMC name.
12	Is there any tax exclusion for the purchasing of vehicles, if any?	No.
13	What needs to be included in the vehicle price?	The quoted price must include but not limited to, tax, insurance, and warranty.

14	Are the engineering systems, vehicle drawings, and schematic diagrams different for SUVs and pickup trucks for Package A and B?	Yes, the engineering systems, vehicle drawings, and schematic diagrams for SUVs and pickup trucks can differ significantly due to their distinct configurations, wiring, arrangements, and design purposes. However, the radiocommunications system and configuration is the same for all the vehicles. Submission must consist of both packages A and B.
15	Can the proposer propose the same model for SUV in package A and B?	Yes, the proposed SUV model can be from the same model or different model for Package A and B.
16	How about the cost of vehicle maintenance?	Cost of vehicle maintenance needs to be quoted including any part replacement.
17	For the vehicle registration, does MCMC's vehicle need to apply for road tax or applicable for any exemption?	MCMC's vehicles require road tax and no exemption.
18	Is there a need for any vehicle commissioning by JPJ before/after the FAT?	Any process that requires JPJ or any authorized agency to be followed accordingly.
19	Registration for vehicles that are to be delivered to Sabah and Sarawak	All vehicles are to be registered first in Semenanjung prior to delivery to Sabah and Sarawak.
20	About the delivery timeline, the warranty period for the vehicle will be starting after each FAT or final FAT for PRIME 03?	The warranty period for the vehicle will start after completion of FAT for each vehicle.
21	How long is the satellite subscription?	The satellite services subscription is for 1 year.
22	Where is the expected placement of the satellite dish?	The satellite dish is expected to be placed on the roof of the vehicle or at any other location recommended by the tenderer based on optimal performance and installation requirements.
23	Do Wi-Fi extenders and mesh Wi-Fi systems require an external antenna to be installed on the vehicle and what is the size of the antenna?	<p>Wi-Fi extenders and mesh Wi-Fi systems typically require an external antenna to be installed on the vehicle to further improve signal strength and coverage. This antenna helps to receive and transmit the cellular signal, which is then distributed as a Wi-Fi network.</p> <p>The size of the external antenna can vary, but it is essential to refer to the requirements and specifications provided in the tender document as well as its functionalities in optimizing the connectivity solution. The tenderer shall propose the most suitable and effective solution.</p>
24	How long can the power supply last in operation mode?	The power supply shall be able to support for continuous 8 hours of operation. and please refer to the requirements and specifications provided in the tender

		document for further details.
25	Could you explain more about "Hybrid Push-to-talk over Cellular (POC)"? when the network can get public cellular service, we will use the public Push-to-talk service, otherwise we will use the private Push-to-talk service?	It is a combination of traditional push-to-talk functionality with the capabilities of cellular networks and other communication networks such as Wi-Fi or satellite. The hybrid approach provides users with reliable, flexible, versatile and wide-reaching communication capabilities across various environments. The proposer shall propose the most suitable and effective solution for the radio communication systems and overall performance of the communication vehicle. The proposed solution should ensure seamless integration and interoperability of the listed equipment, including but not limited to HF handheld radios, trunked radios, and hybrid Push-to-Talk over Cellular (PoC) systems.
26	for the trunk radio service? we must use the public trunk radio service?	The frequency for the trunked radio (digital) is 410 MHz to 430MHz. The vehicle will be equipped with a mobile trunked radio unit with services by the authorized service provider.
27	Regarding drone requirement, can we propose tethered drone instead of normal conventional drone?	The normal conventional drone is a better option for the purpose of Wi-Fi extension and mesh Wi-Fi.
28	Regarding Mesh WiFi extender requirement, can you elaborate more what is mean by 1 master and minimum 3 slave? Is WiFi extender is consider a master or slave? What is consider as slave?	1 master and minimum 3 slaves are referring to the configuration of the network, where the "master" is the central node (also known as the primary node or router), and the "slaves" are the secondary nodes (also known as satellite nodes or extenders) that can extend the mesh Wi-Fi coverage. Wi-Fi extender must consist of 1 master and minimum 3 slaves.
29	What is mean by 5Km between nodes? In this situation, what is consider as a node?	Extender unit (either master or slave) is considered as a node.
30	As i am understanding from WiFi extender and mesh WiFi requirement, The WiFi extender will be uplift by the drone . Is the WiFi extender purposely for extending WiFi signal from bonding device?. It seems no other wifi requirement in tender specification.	The Wi-Fi extender is for extending Wi-Fi signal further from PRIME.
31	Regarding Mobile Radio requirement, the tender did not stated specification for frequency spectrum? May I know what is the frequency ?. Is MCMC has trunk radio system currently or has subscription to any provider?	The frequency for the trunked radio (digital) is 410MHz to 430MHz. The vehicle will be equipped with a mobile trunked radio unit together with subscription services by the authorized service provider.
32	Regarding for Wifi Extender & Mesh WiFi , can you explain more actually what is tender want ? It hard to understand requirement A and B .	The Wi-Fi extender is for extending the Wi-Fi signal coverage using a mesh Wi-Fi network. The WiFi extender consists of a master located in the vehicle and 3 slaves (the first and second slave are fitted on the drones and the third is used as a spare

		or carried by the team member on the ground). The master and slaves are configured to create a mesh WiFi network, hence extending the WiFi coverage.
33	in the Interoperability system, do the different network terminal communicate each other using audio? is there any audio conference/ video conference requirement?	It is essential for the system to enable voice calls between all the handheld radios, SIP phones, Hybrid PoC devices, and normal phones through the interoperability system. There is no specific audio/ video conference requirement however the LEO satellites connectivity and cellular booster should be able to allow conferencing services.
34	for the bonding equipment, understand you want to bond the 4 wireless network to provide higher bandwidth. could you explain more about the 4 WAN interfaces? why need so many Wan interfaces? and consideration? Do it mean 4 Wan RJ45 interface?	Two ports of WAN interface will be used to connect to the two unit of satellite equipment/routers (LEO) and the other two can be used for other connections as may be proposed by the tenderer. The connection is typically using the RJ45 connector.
35	Regarding Mobile Radio – Hybrid Push to Talk over cellular (POC) seamless switching between VHF and cellular. Is cellular including 5G as well?	Yes, to include 5G.
36	There is a requirement for 4G/5G bonding device. The requirement did not state if it require cloud or on prime because for bonding, it need 1 eqpt in the vehicle and the other one in the HQ or using vendor cloud which will not be in Malaysia. So, may I know which option did MCMC require.	The requirement is for the bonding equipment to be installed on PRIME. The tenderer shall propose the most suitable and effective solution to combine the bandwidths of satellite and cellular services for use on PRIME including for extending the WiFi coverage using mesh network.
37	In the Prime system, there is a lot of handheld radio/SIP phone/Hybrid POC/Normal phone, does MCMC require this system to have the voice call with each other? That means I should configure one equipment to connect all these gateways to make sure they can call each other?	It is essential for the system to enable voice calls between all the handheld radios, SIP phones, hybrid PoC devices, and normal phones through the interoperability system.

## Questions & Answers

### 2. General

No.	Question	Answer
1	(With Reference to 13.1 page 14) If we were to submit a Bank Guarantee for the tender deposit, could MCMC provide us with a sample of the BG as it is required by the bank?	We will accept any format of BG, provided it is irrevocable and unconditional.
2	(With Reference to 54.1 page 42) SST is normally paid separately by the customer and is not a part of the budget for a tender. Could this be taken out of the RM4.9m budget, so that we could allocate the full amount towards optimising the equipment to be offered?	The quoted price shall include all taxes including the SST.
3	<p>Referring to the screenshot below, kindly advise is it acceptable to fill in with handwriting due to time constrain in retrieving our director signature.</p> <p><b>9. TENDER SUBMISSION</b></p> <p>9.1. All submissions shall be prepared in typewritten form and in the English language.</p> <p>9.2. The tender submission is divided into two (2) parts:</p>	Shall be in typewritten form based on the subparagraph 9.1.
4	<p>We would like a clarification regarding below screenshot.</p> <p>9.9. However, for the Financial Submission, the Tenderer shall ensure that the <b>Tenderer's official company stamp and authorised signature appear on all pages of the Financial Submission.</b></p>	To stamp and sign at every page of financial submission.
5	<p>We have submitted our application to be your supplier in your MSMART portal. To date we have not received any reply.</p> <p>As we are participating in the above tender, I shall be very grateful if our application is approved.</p>	<p>For this open tender <b>you are not required</b> to be registered as supplier. It is only for the purpose to purchase tender document.</p> <p>However, we encourage you to proceed you to register as MCMC supplier so that you can participate in relevant RFQ in the future.</p>
6	Do we need to submit a pendrive for each of the submissions, in a different envelope?	Please ensure that the tenderer provides the soft copies of the Technical and Financial submissions on separate USB drives and envelopes. These should be attached alongside the original submission.