

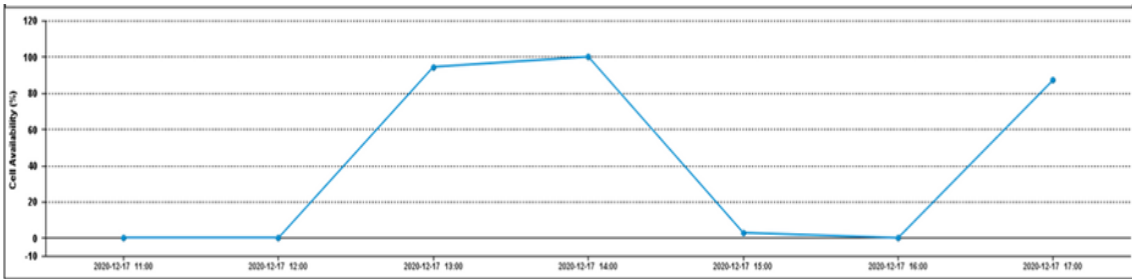
TENDER FOR SITE SURVEY, DECOMMISSIONING, DESIGN, SUPPLY, DELIVERY, INSTALLATION, TESTING, INTEGRATION, COMMISSIONING AND MAINTENANCE OF TWENTY-TWO (22) REMOTE MONITORING STATIONS

Questions & Answers

Scope of Works

No	Questions	Answers
1	45.2.1 (Enclosure): Is the enclosure mandatory? For system that is weather-proof and fit to be placed outdoor, do we need to consider additional enclosure? Do you expect a single enclosure only? Is the Tenderer allowed to propose the design the enclosure(s) for ease of maintenance?	<ul style="list-style-type: none"> i. Yes, it is compulsory for the successful tenderer to supply enclosure as per requirement in subparagraph 45.2. ii. As per our requirement, the purpose of enclosure is to “completely house and protect relevant system components including router, UPS and other relevant accessories near to the mast or antenna without the use of separate cabin”. iii. Yes, single enclosure is enough that able to house & protect relevant system components including router, UPS and other relevant accessories near to the mast or antenna without the use of separate cabin as per our requirement in subparagraph 45.2.1 (iii) iv. Yes, the design of enclosure is part of requirement in subparagraph 45.1
2	Antenna mast: what is the expected height of this mast?	Standard 6 meter tripod mast.
3	45.2.7 (Door Grille): Is new door grille required at all 22 sites? How many sites have existing door grille?	<ul style="list-style-type: none"> i. The requirement for door grill is applicable for the relevant sites that are currently not equipped with the door grill (subject to approval from the building owner/building management). ii. Number of existing sites that are currently equipped with door grill (as of 25 Jan 2021): 14 sites (not including the six (6) sites that are planned to be relocated)
4	45.2.11 (Grounding and earthing system): For the existing sites, can the existing copper grounding be reused or Tenderer has to consider new copper grounding for all sites? Based on MCMC	<ul style="list-style-type: none"> i. No, it is not allowed to reuse the existing copper grounding. As we did mentioned during the VC session last week, the existing copper grounding must be decommissioned and successful Tenderer shall install new copper grounding as per our requirement in subparagraph 45.2.11 (i). The

No	Questions	Answers
	experience, can the Tenderer tap into existing building grounding? In this case, the copper grounding is routed from RMS to the building grounding point.	decommissioned copper grounding must be kept by MCMC upon completion of decommissioning work. ii. Yes, successful Tenderer can tap the copper grounding from RMS to the existing building grounding point.
5	46.10.1(ii): Please explain what is clear/write ?	One type of spectrum traces
6	46.10.1 (ix): Please elaborate on the detection modes. We understand detection modes as level detector such as Average, Peak, Fast and RMS detector.	The selectable detection modes in subparagraph 46.10.1 (ix) are referring to subparagraph 44.2.2- (i) of detection and demodulation mode . Please also refer and read the ITU Handbook Spectrum Monitoring (Edition 2011) specifically at page 137 for details.
7	46.10.5 : Please explain what is visual recording function ?	The ability to perform video recording via standard video format for any transmitted frequency on certain frequency range selected.
8	46.10.5 what is standard video format ?	Any video format that is compatible with windows media player.
9	46.10.5 : is MPEG considered standard video format ?	Yes.
10	46.10.5 (ii): We understand Confidence Factor as Quality setting. Eg. Level Squelch and DF quality threshold. Please advise if we understand this correctly.	Yes. The Confidence Factor in subparagraph 46.10.5 (ii) is mainly use for DF quality threshold and can be specified in Real Time Spectrum Monitoring Alarm (RTSMA).
11	46.10.5 (iv): Please elaborate on sampling bandwidth. Is this step width of a scan or is this the channel bandwidth?	i. Sampling bandwidth as in subparagraph 46.10.5 (iv) is step width of a scan. It is configured much smaller than typical channel bandwidths within monitored frequency range. ii. The sampling bandwidth selection shall be configured manually (or drop down selection) by MCMC officers prior to monitoring sessions.

No	Questions	Answers																
12	46.11.1 : is the HQ Server a spectrum monitoring client?	No. It is a server that automate all spectrum monitoring and measurement processes either scheduled or ad-hoc spectrum tasks & processes as specified in paragraph 46.11																
13	46.11.1 : Is the HQ Server just an independent device that needs to interface and instruct spectrum monitoring client to perform specific task ?	Yes. HQ server is a server equipment that will be installed at MCMC's data center located at Level 1, MCMC Tower 1. The HQ server must able to handle high amount spectrum tasks and measurements with at least 15 years support.																
14	46.11.2 Spectrum Occupancy: What is the definition of cell availability chart? Please share Cell Availability Chart format. We understand this chart as an attachment in jpeg or pdf to the report.	<p>i. We believe this is related to subparagraph 46.11.3 (iii) and not subparagraph 46.11.2.</p> <p>ii. Cell availability chart (%) as in subparagraph 46.11.3 (iii) is a graph of a base station to be turned ON for coordination with nearest RMS. The sequences shall be as follow:</p> <ul style="list-style-type: none"> a) 2 hours OFF; b) 2 hours ON and; c) 2 hours OFF <p>iii. This chart is upload (image format) by service provider before coordination result can be processed. Sample as below:-</p>  <table border="1" data-bbox="808 982 1932 1258"> <caption>Cell Availability Chart Data</caption> <thead> <tr> <th>Time</th> <th>Cell Availability (%)</th> </tr> </thead> <tbody> <tr> <td>2020-12-17 11:00</td> <td>0</td> </tr> <tr> <td>2020-12-17 12:00</td> <td>0</td> </tr> <tr> <td>2020-12-17 13:00</td> <td>95</td> </tr> <tr> <td>2020-12-17 14:00</td> <td>100</td> </tr> <tr> <td>2020-12-17 15:00</td> <td>0</td> </tr> <tr> <td>2020-12-17 16:00</td> <td>0</td> </tr> <tr> <td>2020-12-17 17:00</td> <td>85</td> </tr> </tbody> </table>	Time	Cell Availability (%)	2020-12-17 11:00	0	2020-12-17 12:00	0	2020-12-17 13:00	95	2020-12-17 14:00	100	2020-12-17 15:00	0	2020-12-17 16:00	0	2020-12-17 17:00	85
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15	46.11.3 : Does the HQ Server need to analyse the field strength measurement data and compare it with available chart to make some intelligence result as qualifying factor to generate NASMOC coordinate report ?	Yes. MCMC requires the coordination report to be generated automatically. The field strength measurement data shall be able to be analysed and compared to the installed RMS's maximum field strength chart acceptable by HQ Server before triggering the requestor to upload the cell availability chart.																

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16	46.11.4 : Does it mean, the HQ Server will collect and analyse the DF scan results from various RMS and then identify two or more RMS within the same vicinity that is able to detect the said frequency to triangulate the source?	Yes. ARMS module shall be able to perform triangulation automatically before generating FMR as per subparagraph 46.11.4 .																						
17	46.12 : Is the term software mentioned in this clause refers to the software resides in the HQ Server or just the ARMS module ?	The term software mentioned in this clause refers to the whole paragraph 46 – Spectrum Monitoring Software Requirements of the tender document.																						
18	47.14: Please provide a sample of Apparatus Assignment database fields.	<p>The sample of Apparatus Assignment database fields are as follows:</p> <table border="1" data-bbox="802 756 1961 854"> <thead> <tr> <th>No</th> <th>Application No.</th> <th>Applicant Name</th> <th>Station Name</th> <th>Service</th> <th>Region</th> <th>Latitude</th> <th>Longitude</th> <th>Frequency (MHz)</th> <th>Tx Power (W)</th> <th>Antenna Gain (dBi)</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No	Application No.	Applicant Name	Station Name	Service	Region	Latitude	Longitude	Frequency (MHz)	Tx Power (W)	Antenna Gain (dBi)											
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19	47.14 : Please define interfere ?	Radio frequency transmission from new transmitters that will disturb the installed RMS.																						
20	47.14 : What type of interference, transmit power from the new transmitter, transmit frequency or structure of the new transmitter ?	Any type of interference from any radio frequency transmissions that will be harmful to the installed RMS.																						
21	47.14 : what is automated coordination checker, please elaborate in more details ?	Automated coordination checker is an application/software to harmonize the existence of installed RMS with new transmitters via information acquired from the Apparatus Assignment database fields. It is an application/software that analyze the possibility of new transmitter to co-exist or being nearby the installed RMS as whether to allow the new transmitter to be there or otherwise.																						

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22	47.14 : Is this software module part of the HQ Server software?	No, it is an independent application/software.
23	48.1 : please provide the model of spectrum monitoring receiver and DF equipments in all 9 units of MMS from Rohde & Schwarz?	ESMD Wideband Monitoring Receiver and ADD295 Antenna for DF
24	48.1 to 48.1.12 : MMS A, B, 1 to 3 and DCMU Sprinter. We need to liase with TCI and Rhode on intergration, would they work with us although they may already have local partnership to work with	All work needed to make the integration workable are at tenderer's own effort especially in regards to collaboration between companies.
25	49.8 : Does the interference refer to excessive power from the new transmitter ?	Any type of interference from any radio frequency transmissions that will be harmful to the installed RMS
26	52.11: Can exclusion be given to Commercial-of-the-Shelf (COTS) items such as IT systems, IP camera, etc?	No exclusion because we expect all system and non-system components can be operated and maintained for at least 15 years. COTS items normally have a shorter warranty span. The successful Tenderer shall able to maintain the said components accordingly without additional cost. In order to maintain the said components for at least 15 years, the tenderer may have to replace and integrate the COTS items with other equivalent model or better specifications.
27	Requesting for MCMC approval & assistance to pay visit at either one or/and at the following site(s) for our initial validation of existing off site systems and decommissioning assessments.	<p>MCMC will not conduct any site visit to the RMS site as the Equipment Viewing Session had been conducted through online platform on 21 January 2021.</p> <p>Kindly refer to the Tender Document and the pictures of the decommissioned RMS as provided on 19 January 2021 via email for further reference.</p> <p>For any further enquiries, you may email to us at tender@mcmc.gov.my for our further action.</p>

No	Questions	Answers
	<p>1. RMS_IPH Bangunan Tabung Haji, Ipoh</p> <p>And/or</p> <p>2. RMS_MJG TNB Manjung, Seri Manjung</p> <p>Or</p> <p>RMS_TPG Hotel Taiping Perdana, Taiping</p> <p>The approval and arrangement to visit either site or both sites would be a great help in our assessments to derive at best solutions and cost synergies.</p>	
28	<p>Clause 55 : Please elaborate and breakdown the 87 months duration of completion of work from stamping Agreement</p>	<p>There is no specific breakdown on the 87 months duration. It is because successful Tenderer shall provide a Gantt chart that consists of project timeline according to the Scope of work as specified in whole from paragraph 41 until paragraph 52 for MCMC's approval.</p> <p>Please note that the project duration of 87 months consist of project implementation, 1-year warranty and 3 years of maintenance services.</p>
29	<p>Can we use back the antenna boom, equipment shelter, lightning rod, existing cooper, cable ladder, ladder cage and other.</p>	<p>No. As specified in whole paragraph 42, successful Tenderer must perform decommissioning work of existing RMS system and non-system components at 21 RMS.</p>
30	<p>If have to replace all new are we allow to shut down? OR setup new equipment first, test OK then shutdown the old equipment?</p>	<p>It is up to successful Tenderer's proposal as per subparagraph 55.1 and further deliberations by MCMC for approval at that time.</p>
31	<p>Can we use back the same antenna boom location and also shelter location.</p>	<p>As per subparagraph 43.1, it is up to successful Tenderer's proposal to locate the system & non-system components and further deliberations by MCMC for approval at that time.</p>

No	Questions	Answers
32	Enclosure. Any specification on the shelter size and thickness on the metal size.	In term of shelter size, we have specify the size as per subparagraph 45.2.1 (i) . In term of thickness, we do not have any specification but the shelter shall able to endure extreme temperature conditions of the surrounding as per subparagraph 45.2.1 (v) .
33	Lightning system any specification?	All the specifications required by MCMC are as per subparagraph 45.2.10 .
34	Is they any fibre reach at the shelter or we have to offer GSM?	As per paragraph 43 , successful Tenderer must perform Technical site survey that consist of verification of fiber/copper availability as stipulated in Appendix G . MCMC requires wired connectivity for the sites as per subparagraph 45.2.4 .
35	What is the down time we allow when we use the same location?	It is up to successful Tenderer's proposal as per subparagraph 55.1 and further deliberations by MCMC for approval at that time.
36	IPVPN link. Can we use existing line but new router & new modem? OR totally new link, new router & new modem?	As per paragraph 43 , successful Tenderer must perform Technical site survey that consist of verification of fiber/copper availability as stipulated in Appendix G . Decision on using existing/new line with new/existing router or modem can only be made thereafter.
37	Alarm monitoring system. It's required integration for all (building mains power and UPS status, enclosure temperature level, IPVPN router link connection status, enclosure door alarm and smoke detector) in one system OR we can do separate individual alarm monitoring system?	All the specifications required by MCMC are as per subparagraph 45.2.5 . Other solutions that has already fulfilled all the specifications in subparagraph 45.2.5 are welcomed.

No	Questions	Answers
38	<p>We have situation where TCI not responding to our attempts to reach out to them, initiated on many platforms. We need their cooperation in assessing integration challenges and solution, as well as, RMS/MMS supports we could get for integration, We appreciate your assistance in requiring TCI to work or at least, state their stand to us/vendors that may not willing to work in partnership. We already get responses from other's like CRFS and Rhode except TCI.</p> <p>We believe its very important to have their cooperation in some manner.</p>	<p>All MCMC's requirements for integration are as per paragraph 48. All work needed to make the integration workable are at tenderer's own effort especially in regards to collaboration between companies.</p>

General

No	Questions	Answers
1	<p>We don't see MCMC payment Terms, only payment milestone is available in the tender. Please share details.</p>	<p>The payment terms will be provided to the Successful Tenderer during Agreement drafting process.</p>