



**TENDER FOR SITE SURVEY, DECOMMISSIONING, DESIGN,
SUPPLY, DELIVERY, INSTALLATION, TESTING, INTEGRATION,
COMMISSIONING AND MAINTENANCE OF THIRTEEN (13)
REMOTE MONITORING SYSTEMS AND ONE (1) MOBILE
MONITORING SYSTEM**

BRIEFING SESSION

7 APRIL 2026

CONTENT

Session 1

- Briefing on the project
- Q & A

Session 2

Briefing on Tender Compliance

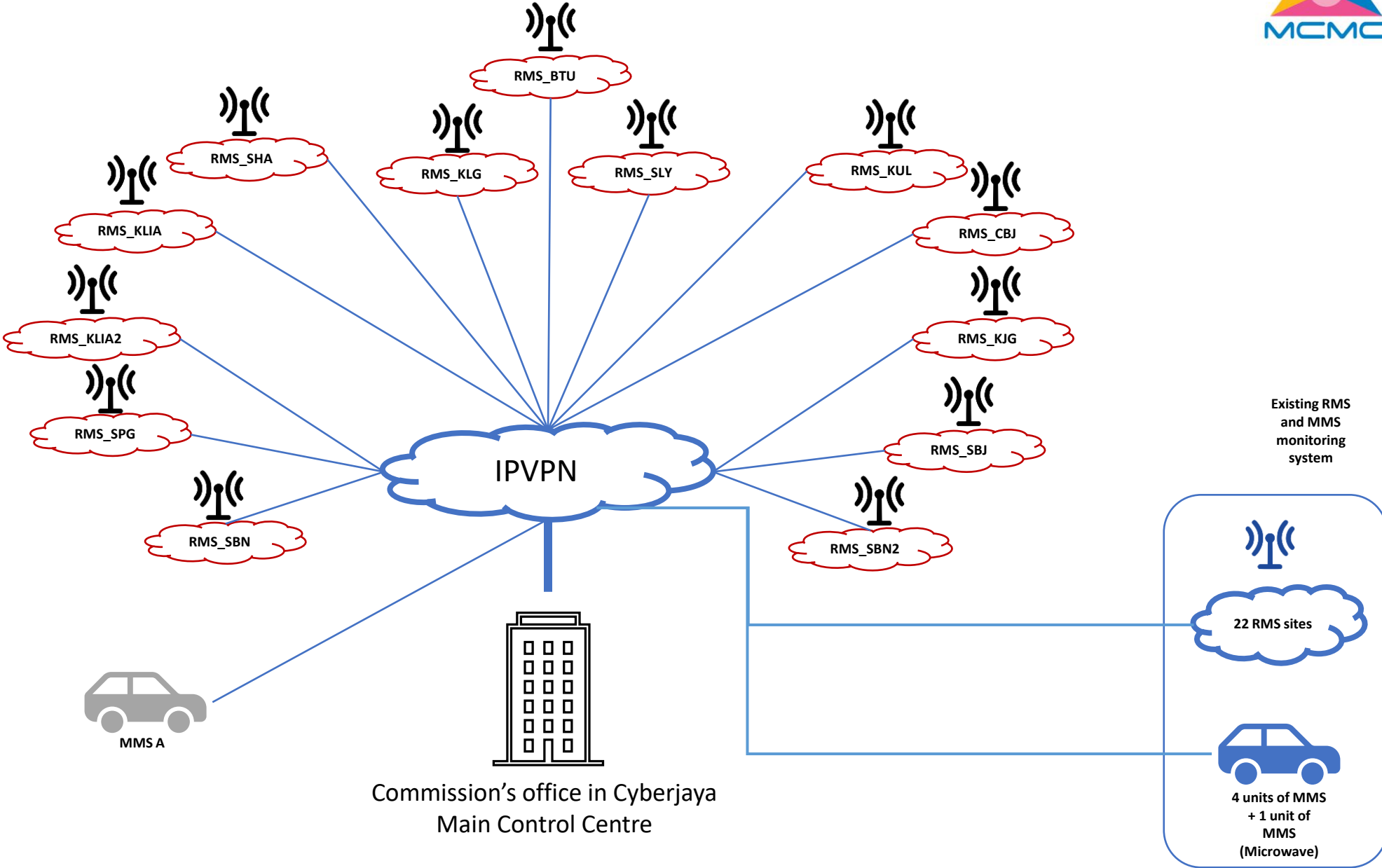
SESSION 1

OVERVIEW OF PROJECT



- **Project Title:** SITE SURVEY, DECOMMISSIONING, DESIGN, SUPPLY, DELIVERY, INSTALLATION, TESTING, INTEGRATION, COMMISSIONING AND MAINTENANCE OF THIRTEEN (13) REMOTE MONITORING SYSTEMS AND ONE (1) MOBILE MONITORING SYSTEM
- **Primary Objective:**
 1. Replacement and upgrade of:
 - a. 13 Remote Monitoring Systems (RMS) – New Spectrum Monitoring System and non-System Components; and
 - b. 1 Mobile Monitoring Systems (MMS) – New Spectrum Monitoring System and non-System Components while maintaining usage of the current vehicle (Ford Everest 3.2L 2016).
 2. The spectrum monitoring system shall comply with International Telecommunication Union (ITU) recommendations and Handbook of Spectrum Monitoring.
 3. Notwithstanding the above requirement, the spectrum monitoring system shall also be implemented as a centralized software platform, fully integrated within a single system. The platform shall be user-friendly, ensuring ease of operation, efficient data management, and seamless access for authorized users.

SYSTEM NETWORK ARCHITECTURE



BACKGROUND

- The National Spectrum Monitoring System (NASMOC) is a Fixed Monitoring System (FMS) designed for spectrum monitoring.
- NASMOC is supported by the Mobile Monitoring System (MMS), a vehicle-based spectrum monitoring system that covers blind spots and improves detection results, ensuring comprehensive spectrum monitoring.
- The FMS serves as the first level of monitoring by identifying unlicensed frequencies that may cause Radio Frequency Interference (RFI). The system can analyze various signal parameters and is capable of determining interference locations through triangulation.
- The MMS functions as the second level of monitoring by conducting ground scanning and direction-finding to locate the interference sources. The usage of both FMS and MMS enhances efficiency in identifying interference locations by ensuring real-time analysis can be performed, further improving the accuracy of detection.
- MCMC intends to acquire thirteen (13) Remote Monitoring Systems (RMS) and one (1) Mobile Monitoring System (MMS) to replace the existing systems, which have been in operation since 2015 and are approaching the end of their service life.
- To ensure the continued effectiveness of spectrum monitoring, these systems need to be upgraded or replaced with new, more advanced technologies.



SCOPE OF WORK | 10 MAIN STAGES



Site Survey



Decommissioning



Design



**Supply and
Installation**



Integration



Documentations



Commissioning



Training



Delivery



Maintenance

SCOPE OF WORK | STAGE 1 : SITE SURVEY



SITE SURVEY AND ACQUISITION

- Conduct site survey for the existing 11 locations to ensure existing sites are suitable for placement of new RMS;
- If existing locations found not suitable, Successful Tenderer must conduct site survey within 10 km radius to identify new suitable location or any location as proposed by the Commission;
- Conduct site survey at Chukai, Terengganu and Port Dickson, Negeri Sembilan for placement of 2 new RMS that will replaced existing RMS location at KLIA2 at Seremban 2;
- Submission of site survey report for all 13 RMS; and
- Submission of site acquisition proposal for at least 6 proposed locations for any sites that require relocation within 10 km radius from existing sites and 2 relocations RMS at Chukai and Port Dickson.

SCOPE OF WORK | STAGE 2 :

DECOMMISSIONING



DECOMMISSIONING, REMOVAL AND DISPOSAL OR REUSE OF EXISTING RMS AND MMS

- Conduct decommissioning work for existing 13 RMS and 1 MMS system and non-system components as provided by the Commission at Tender Documents (Appendix I);
- Shall obtain endorsement from the Commission upon completion of decommissioning work at the RMS or MMS;
- Method for dispose – “Buy back” or “Trade-in” scheme;
- Commission shall not be responsible for any faults and damages during decommission activity; and
- Successful tenderer shall bear all cost for decommission work, including repair or rectification due to damage to the building owner’s facilities.
- Successful tenderer may propose reutilization of any non-system components, subject to the Commission’s approval.

SCOPE OF WORK | STAGE 3 : DESIGN



DESIGN STAGE FOR RMS

- Design the RMS system and non-system components to be integrated together;
- Obtain approval from :
 - 1. Professional Engineer** for the RMS structure and electrical design;
 - 2. Civil Aviation Authority of Malaysia (CAAM)** on the erection of the structure;
 - 3. Malaysian Nuclear Agency** for RMS system and non-system components for radiation level assessments; and
 - 4. Local Authorities** for the installation of RMS system and non-system components.
- All documents shall be approved by relevant parties and MCMC.



SCOPE OF WORK | STAGE 3 : DESIGN



DESIGN STAGE FOR MMS

- Submit **Design Concept** to house the MMS system and non-system components inside the existing Ford Everest 3.2L Titanium 4 x 4 vehicle;
- Design and drawings that include mechanical and electrical configurations and other relevant system and non-system design shall be **approved by Professional Engineer**, not limited to the movement of equipment within the MMS vehicle during emergency braking at 110km/h;
- Design and drawings for MMS shall also be **approved by Road Transport Department Malaysia**;
- Present approved engineering system design and vehicle drawings to MCMC for approval;
- Ensure usage class for the MMS are retained as **individual usage class**; and,
- All documents shall be approved by relevant parties and MCMC.



SCOPE OF WORK | STAGE 4 : SUPPLY AND INSTALLATION

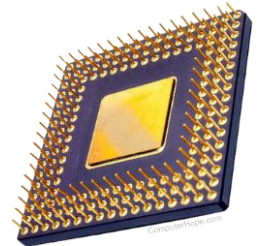


Important!
Installation may only proceed if permitting process have been obtained from Local Authorities.

SUPPLY AND INSTALLATION WORK FOR RMS

! Shall comply to the requirement in ITU Handbook Spectrum Monitoring (Edition 2011), or any latest version published by ITU

System	Non-system
Antenna	Enclosure
Receiver	Power and Electricity Sub-Meter
Processor	Uninterruptible Power Supply (UPS)
Firewall and Security Features	Internal Wiring
Storage	Alarm monitoring system
	Fixed ladder
	Door Grill and Steele Fence
	Fire Extinguisher
	Aircraft Warning Light
	Lightning Protection System
	Grounding and Earthing System



! Successful Tenderer shall bear all the costs in repairing or replacing the part(s) related to the RMS and/or building fittings which are broken or damaged

SCOPE OF WORK | STAGE 4 : SUPPLY AND INSTALLATION



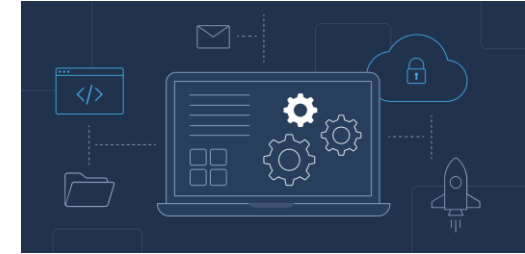
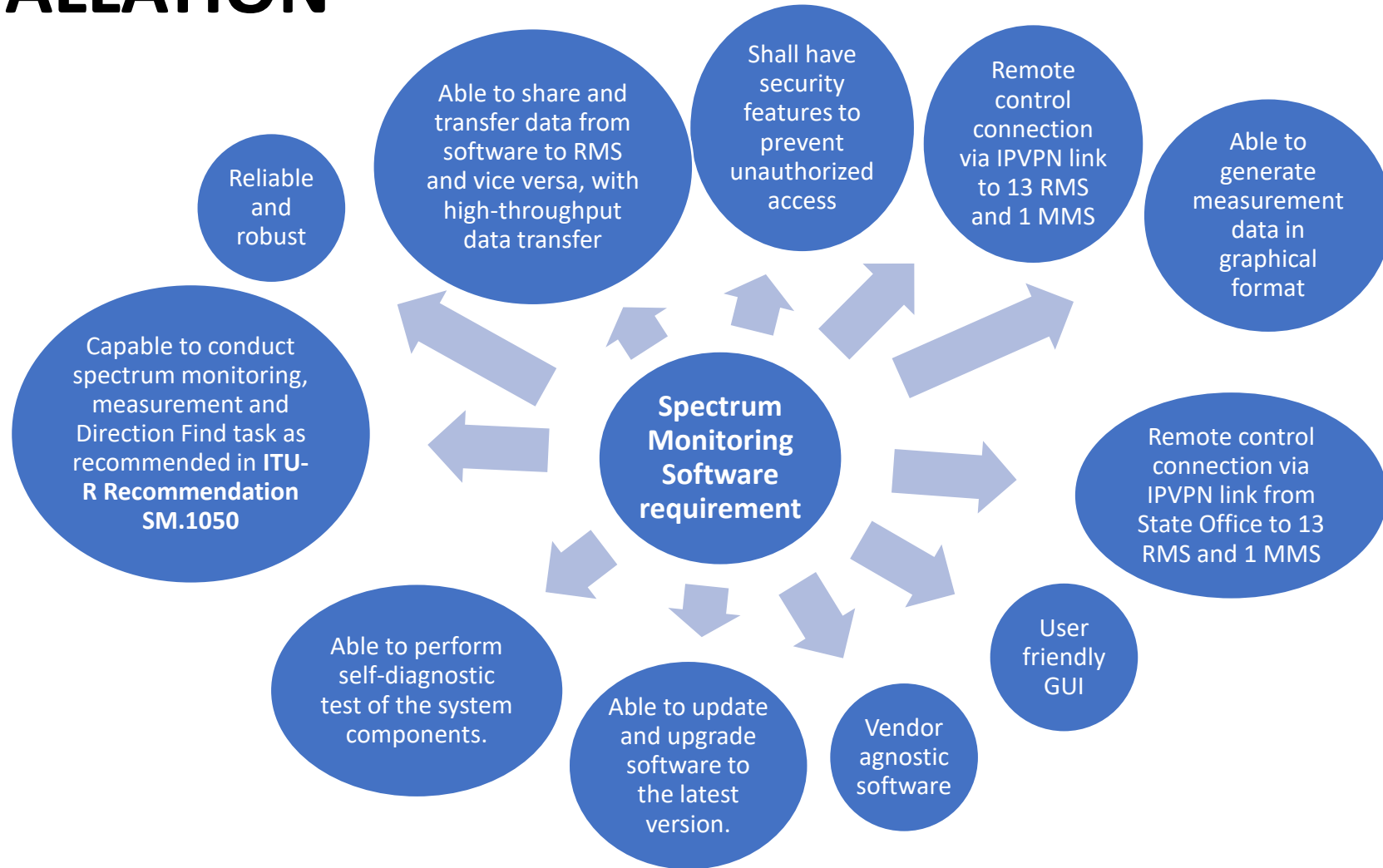
SUPPLY AND INSTALLATION WORK FOR MMS

! Shall comply to the requirement in ITU Handbook Spectrum Monitoring (Edition 2011), or any latest version published by ITU

System	Non-system
Antenna	Working Area
Receiver	New Infotainment System for vehicle
Processor	Auxiliary Battery
High Power Inverter	Battery Display Panel
	Power Supply Breaker
	Wiring for Electrical System
	Fire Extinguisher
	Equipment Storage Area
	Window Tint Film
	Dashboard Camera



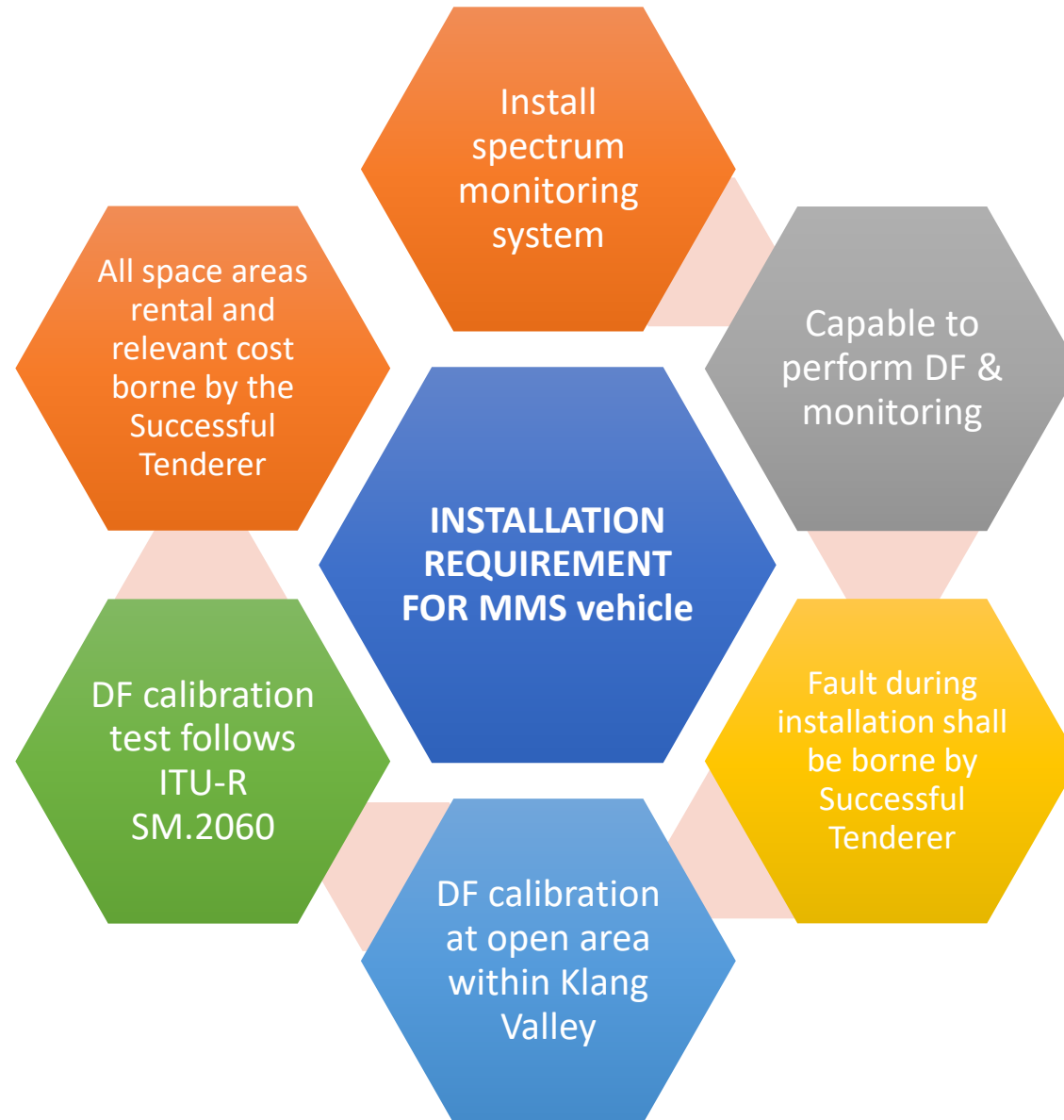
SCOPE OF WORK | STAGE 4 : SUPPLY AND INSTALLATION



SCOPE OF WORK | STAGE 4 : SUPPLY AND INSTALLATION



SCOPE OF WORK | STAGE 4 : SUPPLY AND INSTALLATION



SCOPE OF WORK | STAGE 5 : INTEGRATION



INTEGRATION WORK FOR RMS AND MMS

- 1 All 13 RMS and 1 MMS integrated with MCMC existing 22 RMS and 5 MMS
- 2 Configure and manage the existing IPVPN network to ensure connectivity between all RMS and MMS to the PC installed at MCMC HQ Level 7
- 3 Supply of 1 unit dual 5G and 4G LTE wireless network router for network and remote connection to MMS
- 4 Integration between MCMC's base station database to the RMS and MMS to enable monitoring of licensed or unlicensed transmission.
- 5 Integration to enable triangulation of Direction Finding (DF) result under 1 centralized spectrum monitoring software

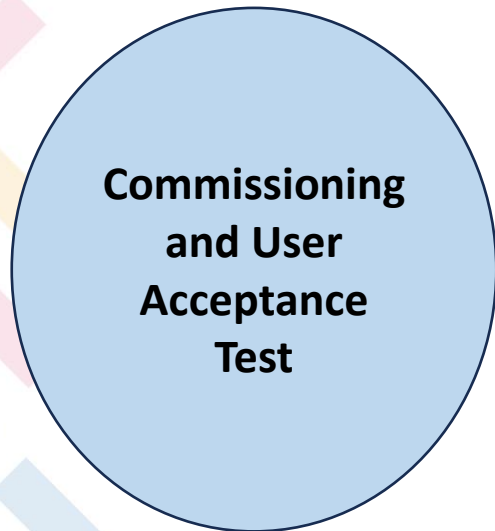
SCOPE OF WORK | STAGE 6 : DOCUMENTATIONS



Documentations

- Submission of approved documentations for RMS and MMS
 1. Professional Engineer;
 2. CAAM;
 3. Road Transport Department;
 4. Malaysian Nuclear Agency; and
 5. Local authority
- Instruction manuals and Standard Operating Procedure (SOP) documents in hard copies and soft copies for RMS and MMS system and non-system components as well as operational use of the spectrum monitoring software;
- Submission of insurance value information for each equipment installed at MMS;
- Submission of project report;
- Exclusion zone/radius and maximum field strength required for protection of RMS from interference or desensitization due to new transmitters; and
- Submission of any documentation required by the Commission.

SCOPE OF WORK | STAGE 7 : COMMISSIONING



1

Verification of installed system and non-system components for RMS at all 13 sites and at 1 MMS vehicle.

2

Remote commissioning of Spectrum Monitoring Software for all monitoring module and DF accuracy measurement as per **ITU-R Recommendation SM.2097-0**.

3

Verification of delivery and configuration of new workstation

4

Integration commissioning for 13 RMS and 1 MMS

5

Submission of comprehensive checklist before Commissioning

SCOPE OF WORK | STAGE 8 : TRAINING



- 1 At least 35 MCMC officers
- 2 All training topics and training materials in hardcopy and softcopy
- 3 Venue including F&B and temporary workstation setup for the Spectrum monitoring Software.
- 4 Propose training schedule one (1) month prior to the training
- 5 Provide certification
- 6 Refresher training session to at least 15 MCMC officers during warranty and maintenance period.

SCOPE OF WORK | STAGE 9 : DELIVERY



Delivery of MMS vehicle



MCMC Centre of Excellence (COE)

- Off, Persiaran Multimedia, 63000 Cyberjaya, Selangor.

Equipment verification during delivery

Delivery cost to be borne by the Successful Tenderer

Cost to repair any damage to the system and non-system components during delivery to be borne by the Successful Tenderer



SCOPE OF WORK | STAGE 10 : WARRANTY AND MAINTENANCE



One (1) year warranty period after CFA

Three (3) years of maintenance services

Comprehensive on-site preventive maintenance

Receiver calibration at least once a year

Cover both software and hardware including wear and tear of MMS vehicle

Notification to MCMC at least seven (7) working days

Calibration by ISO 17025 accredited calibration/testing labs in Malaysia or manufacturer's own lab

Provide calibrated unit to temporarily replace the relevant receiver during calibration

Hardware for calibration is insured

Submit calibration report and certificate after completion

Collect vehicles from MCMC COE for service

Vehicle service by authorized service center

Provide a list of critical parts for RMS and MMS and ensure the spare parts are available during warranty and maintenance period.

Three (3) types of technical support; 1) Helpdesk; 2) On-site hardware and software support including vehicle issues; 3) Additional maintenance work



Additional Maintenance Work:

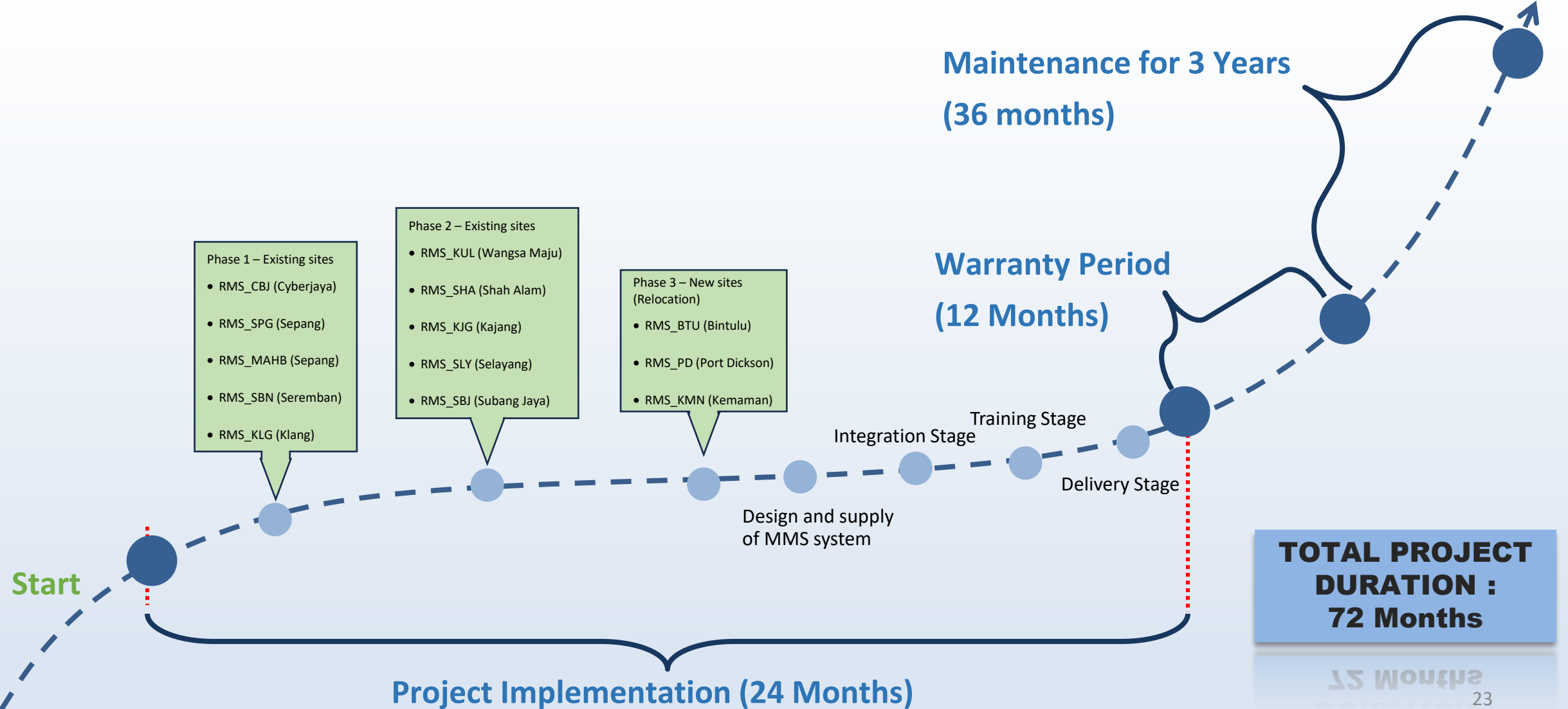
1. Replacement of the faulty grounding and earthing system
2. Relocation of RMS due to termination of tenancy agreement



PROJECT TIMELINE



End



TENDER REQUIREMENT



No	Information	Details
1	Mode of Tender	Open Tender
2	Mandatory Requirement	<ol style="list-style-type: none"> 1. The Tenderer is required to have a valid certificate of registration issued by the Companies Commission of Malaysia (hereinafter referred to as “CCM”). 2. The Tenderer is required to submit a valid authorisation letter or certificate from the manufacturer, provider, or principal of the spectrum monitoring system. This document must certify the tenderer as an authorised representative within Malaysia to manage and provide the necessary support throughout the project period. 3. The Tenderer(s) are required to submit a certificate or letter from the manufacturer, provider, or principal of the RMS and MMS solutions, confirming that the provided RMS and MMS systems are fully compliant with the International Telecommunication Union (ITU) standards, as specified in this document. This compliance must specifically address the requirements detailed under paragraphs 42, 43, 44, 45, 48, 49, 51 of Section 5 (Scope of Work) and Appendix O. 4. The Tenderer shall submit audited financial statements, issued by a reputable and independent auditing firm, evidencing a stable and positive balance sheet, cash flow statement, and income statement for each of the preceding five (5) fiscal years. 5. The Tenderer must have a paid-up capital of more than RM1,500,000.00 for the past 5 years. 6. The proposed system must be a proven solution that has been previously supplied to any National Regulatory Authority (NRA). The system manufacturer, provider, or principal shall possess a minimum of five (5) years of relevant experience in the development, supply, and maintenance of the proposed Radio Monitoring System (RMS), Mobile Monitoring System (MMS), and/or other spectrum monitoring and management systems for NRAs. Where the tenderer is acting as a local representative of the manufacturer, provider, or principal, the tenderer shall have a minimum of one (1) year of relevant experience in providing and maintaining spectrum monitoring and/or management systems for any NRA. 7. The Tenderer shall ensure that all Financial Submissions submitted to the MCMC are duly verified and endorsed by way of signature and official stamp by the Chief Executive Officer (CEO) or an equivalent authorised officer of the Tenderer.

FINANCIAL



- The indicative price for the Work is **Ringgit Malaysia Twenty Eight Million Only (RM 28,000,000.00)** inclusive of any duties or taxes imposed by the Government of Malaysia. Tenderer is required to provide details in **Appendix D**. All price quotations shall be made in Ringgit Malaysia.
- The Successful Tenderer shall be subjected to the verification and satisfaction of MCMC before the payment is disbursed according to the payment schedule stipulated in **Table 2—Payment Schedule and Table 3 – Payment Schedule for Maintenance after Warranty Period** refer to Tender Document.
- Performance bond preferably in the form of Bank Guarantee (BG) at 5% of the total contract sum and the validity throughout the Work period and an additional twelve (12) months after the acceptance by MCMC of the Final Acceptance Test (FAT), to the satisfaction of MCMC.

SESSION 2

TENDER COMPLIANCE

HOW TO PURCHASE TENDER DOCUMENT



[URL : https://msmart.mcmc.gov.my/web/index.php](https://msmart.mcmc.gov.my/web/index.php)



TENDER SUBMISSION



FINANCIAL

Section 3

Section 4

Financial Checklist

APPENDIX A – F

APPENDIX R

Financial Submission:

1 Original (hardcopy) + 1 Copy (hardcopy) + 1 digital copy of scanned documents in pdf format (USB flash drive) + **Working File**

TECHNICAL

Section 5

Technical Checklist

APPENDIX G & H

APPENDIX I - P
(For reference)

APPENDIX Q

Technical Submission:

1 Original (hardcopy) + 1 Copy (hardcopy) + 1 digital copy of scanned documents in pdf format (USB flash drive) + **Working File**

FINANCIAL SUBMISSION



No	Requirement	Details	Remarks
1	Submission of proposal before tender closing	Paragraph 7 <ul style="list-style-type: none"> To submit on or before 12pm, on specified date 	Failure : Ground for disqualification
2	Submission of Tender Deposit (RM10,000)	Paragraph 12 <ul style="list-style-type: none"> Attach the Tender Deposit to the Form of Tender Document (Appendix B) 	Failure : Ground for disqualification
3	Submission of Appendix A - Statement of Compliance	Paragraph 9 <ul style="list-style-type: none"> Declaration of compliance for terms of condition of the tender and salient terms on contract To state every paragraph under section 3 and Section 4 (para 16 -39) 	Failure : Ground for disqualification
4	Submission of Appendix B - Form of Tender	Paragraph 10 <ul style="list-style-type: none"> Formal undertaking by the tenderer for this tender 	Failure : Ground for disqualification
5	Submission Appendix C – Form for Business Profile (include all attachment)	Paragraph 11 <ul style="list-style-type: none"> Tenderers business profile information and submission of the required attachment 	Failure : Ground for disqualification
6	Mandatory Requirement under paragraph 2 of the tender document	Paragraph 2 <ul style="list-style-type: none"> To shows tenderer’s eligibility and competency for the tender 	Failure : Ground for disqualification
7	Appendix D – Schedule of Price	Paragraph 10 <ul style="list-style-type: none"> To provide detailed price quoted – Bill of Quantity 	Failure : Ground for disqualification
8	Submission of signed Appendix E	Paragraph 15 <ul style="list-style-type: none"> MCMC Tenderer’s Declaration – on anti bribery 	Failure : Ground for disqualification
9	Submission of signed Appendix F	Paragraph 15 <ul style="list-style-type: none"> Declaration of Interest by Tenderers – to declare on the conflict of interest of the tenderers on this tender 	Failure : Ground for disqualification
10	Submission of signed Appendix R	<ul style="list-style-type: none"> Overview of the financial proposal Formal submission detailing the price and commercial terms for delivering the scope defined in the tender duly signed by CEO/equivalent designation. Other information deemed necessary. 	Failure : Ground for disqualification

MCMC reserves the right to review, assess, and seek clarification from the Tenderers regarding their Tender Submissions

TECHNICAL SUBMISSION



No	Requirement	Details	Impact
1	<p>Submission of Appendix G</p> <ul style="list-style-type: none"> Statement of Compliance To The Terms And Conditions Of Scope Of Work And Specification 	<p>Paragraph 9</p> <ul style="list-style-type: none"> Compliance to the scope of work of the tender To state every paragraph under section 5 Submission of Tenderer's proposal 	Failure : May impact your evaluation score
2	<p>Submission of Appendix H</p> <ul style="list-style-type: none"> List Of All Personnel That Shall Undertake The Work List of Experiences 	<p>Paragraph 43</p> <ul style="list-style-type: none"> List Tenderer competency and experience 	Failure : May impact your evaluation score
3	Submission of Appendix Q	<ul style="list-style-type: none"> Overview of the technical proposal Technical proposal that aligns with Section 5: Scope of Work BOQ for each deliverable according to without name and price. Overall project duration proposal consisting of project implementation, warranty and maintenance period presented in Gantt Chart and PERT Diagram. Confirmation Letter from the RMS and MMS System Manufacturer stating that the system components, particularly the antenna, receiver, and processor, will remain maintainable and replaceable for the next ten (10) years. Other information deemed necessary. 	Failure : May impact your evaluation score
4	Non-display of Tenderer's name or logo in technical submission	<p>Paragraph 8.7</p> <ul style="list-style-type: none"> Prohibited from displaying or including its name in the Technical Submission 	Failure : Ground for disqualification

MCMC reserves the right to review, assess, and seek clarification from the Tenderers regarding their Tender Submissions

IMPORTANT NOTES



1. All information and updates will be on MCMC website.
2. Be aware and comply with the required signatories. Please ensure that the Tenderer's official company stamps, and authorized signature appear on all pages of the Financial Submission only.
3. No company name/info/logo in the Technical Submission (redact). Tenderer is strictly prohibited from displaying or including its name in the Technical Submission. This is including the evidence sent in the technical submission.
4. The MCMC Tender Secretariat will be the only point of contact for this project (tender@mcmc.gov.my).

TENDER TIMELINE



31 Mar 2026

TENDER ISSUANCE



7 Apr 2026

TENDER BRIEFING
SESSION



23 Apr 2026

TENDER
CLARIFICATION ENDS

- **Before 5.00pm**
- Strictly via email only to tender@mcmc.gov.my
- The consolidated Q&A will be published in MCMC website



30 Apr 2026

TENDER SUBMISSION /
TENDER CLOSING DATE

- **On or before 12.00pm**
- MCMC CoE, Cyberjaya
- To complete Acknowledgement Form (2 copies)
- **Late submission shall be rejected**

THANK YOU