



NATIONAL MARITIME SAFETY AUTHORITY

Terms of Reference

TASK DESCRIPTION

PROJECT/TASK TITLE:	CMS Satellite (VSAT) Network Completion
IMPLEMENTING AGENT:	National Maritime Safety Authority (NMSA)
PROJECT SPONSOR:	General Manager / CEO
PROJECT LOCATION:	MMI Pacific Insurance Building Port Moresby
COMMENCEMENT:	March 2018
PROJECT DURATION:	3 Months

1. INTRODUCTION / BACKGROUND

The Navigation Safety Services Department (NSSD) of the National Maritime Safety Authority (NMSA) is responsible for the operation and maintenance of the three Coastal Monitoring Systems (CMS) sites in Papua New Guinea.

The data from the CMS sites is utilized for Search and Rescue, monitoring of vessels, prevention of pollution, rogue vessel surveillance, safe navigation of vessels etc. The three Coastal Monitoring Stations play a vital role in the execution of NMSA functions and responsibilities.

The 3 sites identified for installation of CMS were chosen due to their strategic proximity to areas of heavy shipping in the PNG water passages. The sites are 1) Jomard Island in the Milne Bay Province, 2) Tuam Island adjacent to the Vitiaz Strait in Morobe Province and 3) Cape St George, located at the very southern tip of New Ireland and adjacent to the St George's Channel.

Shipping and local weather data collected from these 3 CMS sites are transmitted to the central Maritime Rescue Coordinating Centre (MRCC) in Port Moresby MRCC via leased SCPC satellite connectivity. The provision of the SCPC Satellite connectivity is outsourced to a 3rd party service provider.

Currently NSSD maintains 3 VSAT nodes at the 3 remote CMS sites. At the Port Moresby end, the signals from the Speedcast VSAT Network are down linked to the satellite service providers VSAT hub from which all data is then routed through landlines to the MRCC located in the MMI Pacific Insurance Building, CBD downtown.

The NSSD has funds allocated in its 2018 Work Plan and intends to utilize these funds to install a VSAT node at the MRCC end to complete the CMS Satellite Network.

2. OBJECTIVE

The objective of this project is to install a VSAT node at the central MRCC, thereby directly linking the three CMS remote sites to MRCC office in Port Moresby 2nd floor of the MMI building through a complete VSAT Network.

The new installation shall meet all relevant NICTA and IALA standards/requirements and specifications.

3. CONSTRAINTS

There are unique requirements of this projects which include knowledge of the setup at the 3 remote locations, power consumption and equipment specifications which should be taken into considerations when designing the VSAT node solution for the Port Moresby MRCC end.

The constraints expected from this project include:

- Consultations must be carried out with the Building Manager before and during works are carried out.
- Consultations must be carried out with the current CMS Satellite connection service provider
- Integration of VSAT node into the MRCC LAN
- VSAT node hardware/software will have to be same to the existing at the 3 remote CMS sites.

4. REQUIREMENTS FOR THE BIDDER

4.1 GENERAL PRINCIPLES

By accepting the Terms of Reference (ToR), the Bidder agrees and confirms that they meet the following general conditions:

- The Bidder gives an assurance of proof of evidence that all employed staff and sub-contractors involved in this project are qualified in their relevant field and are certified where required to the PNG standards and international standards and requirements.
- The Bidder must be currently registered as required under the PNG Companies Act 1997 and must always comply with the requirements and guidelines of the Investment Promotion Authority (IPA) and Internal Revenue Commission (IRC).
- The Bidder must comply with all tax requirements of the Internal Revenue Commission (IRC) and must have a current operating Certificate of Compliance (CoC) where necessary.
- The Bidder on accepting the Terms of Reference shall return to NMSA the Bidder's Proposal for the project which shall include the costing for the successful completion of the project.
- All design and drawings for the project shall upon completion of the Project be the property of National Maritime Safety Authority (NMSA) and shall be properly collated and labeled and handed over to NMSA.
- Upon the successful completion of the Project a Completion Report is to be submitted to the NMSA Representative within ten (10) working days.
- A Maintenance Plan for the continued use of the new Coastal Monitoring System Satellite services shall be submitted to NMSA on completion of the project concurrently with the Completion Report.

4.2 QUALIFICATIONS AND EXPERIENCES

The successful Bidder is expected to be technically qualified and experienced and having all the required working assets for commencement through to completion of

the project. The Bidder shall provide a summary of its technical qualifications and experiences and include a list of all its working equipment to be engaged in the project.

4.3 EXPECTED RESPONSE PROPOSALS

EOI are required to detail the following requirements;

- Works implementation schedule
- Schedule of rates
- Detail proposed methods of mitigating the constraints, issues and requirements stated above in achieving the objective
- Required manpower strength and capability
- Necessary certifications (NICTA, etc)

5. SCOPE OF WORKS (SoW)

The scope of works shall include supply, delivery, installing and commission of the VSAT node at the MRCC (MMI Pacific Insurance Building) and integrating into the NMSA CMS Satellite Network.

5.1 SCOPE OF WORK AND REQUIREMENTS

- 5.1. The approved contractor prior to commencement of works shall provide NMSA with their revised schedule of works and costing.
- 5.2. The approved contractor shall at all times maintain communication with the MMI Building Manager.
- 5.3. The approved contractor shall ensure nil disruption of all client services to and within the Building.
- 5.4. Ensure installation is completed within Building Regulations and to sustain wind conditions.
- 5.5. After the completion of the project, NMSA shall inspect the installation and the authority shall give final approval of acceptance.

6. EXPECTED OUTCOMES

The NMSA expects the Port Moresby MRCC VSAT Node is installed and integrated into the NSMA CMS Satellite Network. The links should be dedicated and

uncontended to provide for RADAR streams, video and weather and data from remote sites to the MRCC in Port Moresby.

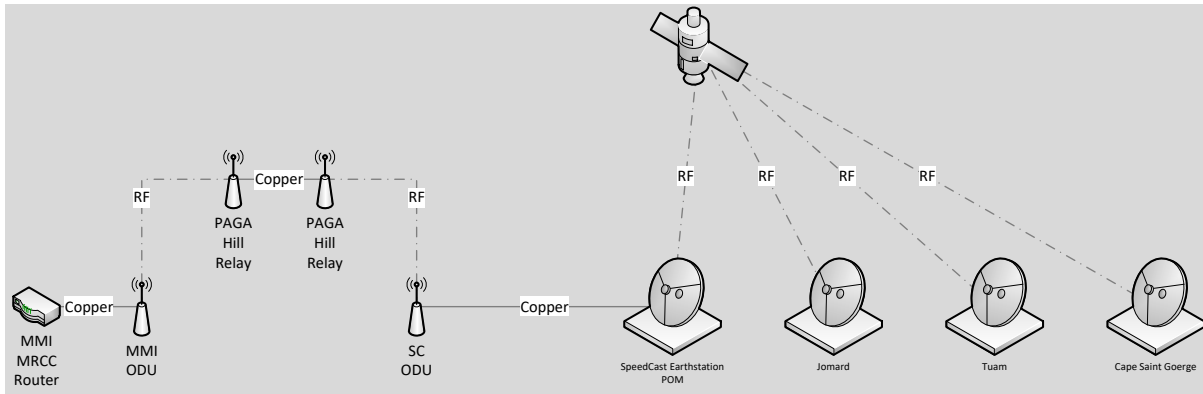
The operation of the Satellite network shall be available 24/7 365 days for NMSA MRCC Operations.

7. TERMS OF CONTRACT AND PAYMENT

A legally binding contract agreement will be established with the preferred bidder, within which the scheduled of payments will be set.

CMS Satellite Network – Current & Proposed Block Diagram

Current Network Diagram



Proposed Network Diagram

