Pacific Islands Regional Oceanscape
Program (PROP)
Project Number: P151780

Department of Fisheries
Ministry of Natural Resources
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TERM OF REFERENCE
INFORMATION TECHNOLOGY SPECIALIST CONSULTANT
PROCUREMENT NUMBER: PROP/TFD/CCS1-2016

Background information on the project

The Tuvalu Government has received grant financing from the World Bank and the Global Environment Facility to participate in the Pacific Islands Regional Oceanscape Program (PROP). The objective of the PROP is to strengthen the management of selected Pacific Island oceanic and coastal fisheries, and the critical habitats upon which they depend. This will provide the basis for sustainable and increased economic benefits from this resource.

The PROP comprises four components:
  i.   Sustainable management of oceanic fisheries;
  ii.   Sustainable management of coastal fisheries;
  iii. Sustainable financing of the conservation of critical fishery habitats; and
  iv.   Regional Coordination, Implementation Support and Program Management.

The first four countries to be part of the program are the Republic of the Marshall Islands, the Federated States of Micronesia, Tuvalu and Solomon Islands. The Pacific Islands Forum Fisheries Agency (FFA) has also received grant financing to provide a regional coordination role for program implementation; support to participating countries with financial management and procurement as needed; and implementation of component (iii).

PROP implementation at the national level is anticipated to last until September 2020. Other Pacific Island World Bank member countries are eligible to participate, as all share the transboundary fisheries and fish resources. The Tuvalu Fisheries Department (TFD) is the implementing agency for the PROP project in Tuvalu.

TFD is expecting a construction of a new office building to be provided by New Zealand, and which should be completed in August 2017. Until that time, the staff are distributed in 6 buildings around Funafuti, with several ad hoc servers provided by SPC and others, poor internet connections and unreliable communications. Although many old computers have been replaced through recent purchases of portable laptops there are still problems with software, viruses, email communications and the use of databases. It is envisaged that the new building will be fitted with completely new, carefully designed IT infrastructure, including servers, cabling and access to internet. The design of the new IT infrastructure must accommodate the Vessel Monitoring System (VMS) and associated hardware, most of which is currently in use by TFD. As it will take at least nine months before the new building and IT infrastructure are available for staff to use, interim arrangements are urgently

needed to allow fisheries officers to carry out their work, and to prepare IT systems for the new building.

TFD is seeking approval for the establishment of a new position of IT Officer for the Department. The new IT Officer should be recruited in early 2017 and will require training and mentoring so that s/he can take over the management of the TFD IT infrastructure both in the interim, and long term with the completion of the new building.

To enable TFD achieves it support to the implementation of the project, TFD seeks the services of an international Information Technology Specialist (ITS) to be selected using under the World Bank Individual Consultant Selection process.

Objective (s) of the assignment

The primary objective of this assignment is to improve TFD information system through the establishment and maintenance of IT equipment and services needed for the various project components. The ITS will assess TFD's current computer, network and internet arrangements, finding weaknesses that can be rectified, and recommending actions that would increase efficiency. The ITS will assess TFD's medium to long term IT requirements and design an IT system for the new TFD building, accommodating the VMS, and prepare technical specifications and assist TFD in identifying reputable suppliers capable of supplying to Tuvalu. S/he will also assist the Department in the procurement, installation, configuration, updating, maintenance and training for proper use of computers, servers and communications technology.

Scope of Work

The Information Technology Specialist is required to undertake the following tasks:
- Assess possibility of bypassing local internet with satellite connection.
- Assessment of the existing IT infrastructure of the TFD, including computers, cabling, wifi systems, ISP accounts and speeds, servers, databases, software, virus and malware protection, domain management, website, email accounts, spam issues and blacklisting etc. to identify points of weakness that could be immediately remediated to improve communications within the TFD and with the outside world. This to be presented as a report with options and budget of not more than 10 pages;
- Carry out improvements identified in that report that are approved by TFD and for which funding can be obtained;
- Recommend, procure and install a small interim server in Coastal Fisheries and assist SPC and the Inshore Fisheries Adviser to install databases there for use by the Coastal fisheries Staff;
- Establish, if possible, a way for virus updates to be downloaded and distributed to all computers once a week to protect against virus and malware using free software (preferably native Windows 10 Defender, but better solutions may be suggested);
- Facilitate the day to day functioning of the TFD by addressing any IT issues particular staff are experiencing and which are impeding their work;

- Investigate issues with spam blacklisting of the tuvalufisheries.tv domain emails with Fortiguard and others and restore reputation, securing emails against future reputational attacks;
- Train and mentor TFD's new IT Officer so that s/he can more efficiently manage IT for the Department for both the interim and permanent arrangements in the new building;
- Provide remote support through Skype, email and other avenues (as may be recommended by the (ITS) to staff from home base on an as-needed basis.
- Draw up technical specifications and/or terms of reference for establishing the IT system in the new building including procurement and installation taking into account accommodation of the VMS as well as plans for ongoing maintenance and part replacement.
- Assist TFD with the procurement process for the IT system for the new building.

Expected Outcomes

The expected outcomes for this assignment include:
- All TFD computers and laptops are in good operating condition and free from viruses and malware.
- Speed of internet and wifi systems in all TFD occupied facilities are improved and running smoothly without disruptions.
- Standard processes for operation and maintenance of IT systems are established.
- The Consultant's local counterpart is skilful and confident to diagnose and rectify any TFD IT issues.
- An installation plan and a list of IT equipment with specifications for the new office is available to the department.

Duration of the assignment and estimated time input

The duration of the assignment will be for a total of 105 days to 31st march 2018. This includes 60 days during the first half of 2017, 30 days during the second half of 2017 and a further 15 days in 2018. The timing of all inputs will be as agreed with the Deputy Director of Fisheries. The Consultant is expected to spend 75% of his/her time in country.

Qualification requirements and basis for evaluation (evaluation criteria)

Essential minimum requirements

- A degree qualifications in Information Technology, Computer Science, Software Engineering or Electronic Engineering
- At least 5 years of experience in IT and network management for small to medium organizations
- Experience working in developing countries with poor internet access and staff with varying internet skills
- Demonstrated experience and success in delivering training and capacity development
- Fluent in written and spoken English

Desirable Key Skills:

- Demonstrated ability to consult and work with staff from different parts of an organization
- Demonstrated experience determining information system requirements and defining project objectives
- Experience in recommending appropriate hardware, software and systems and track record of achieving successful outcome for clients
- Experience designing, installing and trialing new systems and software, and fixing any issues that arise
- Ability to synthesize information and communicate clearly, in both verbal and written forms
- Ability to work collaboratively with others and respond to feedback from stakeholders.

A flexible attitude to working patterns is helpful as travel and periods of working away from home are to be expected.

Reporting requirements

The consultant is expected to provide the following reports:

- An initial assessment/diagnostic report within two weeks of first arrival in Tuvalu.
- Issues rectification and training report within 5 weeks of commencement of contract.
- Draft plan of new office IT system and procurement list for review by TFD within 8 weeks of commencement of contract.
- Final plan of new office IT system incorporating feedback and input from TFD and draft procurement documentation within 10 weeks of commencement of contract.
- Installation and maintenance manual for TFD IT systems within 28 weeks of commencement of contract.
- A draft completion report with recommendations for future actions to be considered by the TFD no later than 14 days before the last day of the contract (31st March 2018).
- A final completion report, incorporating feedback from TFD if any, with recommendations for future actions no later than the final day of contract.

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