

Terms of Reference for Technical Assistance:

Background

The Mission of the Tuvalu Fisheries Department (TFD), as defined in its new Corporate Plan 2023-25, is to increase the contribution of Fisheries to socio-economic development and quality of life. The objective of the TFD Corporate Plan relevant to this consultancy is: 'Objective 6: Development of systems, staff capacity and facilities for a Tuvalu Fisheries Authority.' The specific activity identified is to 'efficiently operate TFD vessels and provide a service to Department and the wider community.' The activity is expected to include the development of a general and engineering maintenance plan for the two vessels, *Manau* and *Manau II*.

Manau is a 17-meter GRP vessel provided under Japanese aid in the 1980s. Originally designed to collect fish from outer island fisheries centres for transport to the capital, its refrigerated fish holds have been unserviceable for many years. It has mainly been used for fishing trials, training and demonstration; and for the transport of personnel and small amounts of cargo between islands. The vessel has been maintained with the support of the Japanese OFCF, however, this tends to be reactive and mainly involves replacing large items of machinery when they break down. *Manau* was intended to be used for a programme of fishing trials funded by TFSP2 but has been unserviceable for two out of the past three years.

Manau II is a larger 19-meter GRP vessel that was delivered new from the Nishi shipyard in Japan in 2021 and is designed more for inter-island transport of personnel, with accommodation for 10 passengers. Due to COVID restrictions, neither an attachment of the TFD crew to the shipyard nor a handover by their engineers in Tuvalu, has been possible. Perhaps as a result of this, the vessel has experienced some initial operational problems. Although provided with a large inventory of spare parts and equipment, the first major failure was caused by a piece of equipment for which there were no spares.

A summary of the main machinery of both vessels is provided as an attachment.

The Tuvalu Fisheries Support Programme Phase 2 (TFSP2), which is funded by New Zealand, is supporting the implementation of TFD's Corporate Plans and is providing funding for this consultancy. The project has additional funding for spare parts and equipment needed to implement recommendations to repair and upgrade the vessels in the short term.

Objective:

The objective of the consultancy is to assess the condition of both vessels and make recommendations on how to improve their reliable and safe operation, both immediately and in future years.

Scope of work:

The Consultant will be expected to undertake the following main tasks:

- Hold an inception meeting with staff of the TFD Operations Section and officers of the vessels to explain the mission and seek their views on issues with the operation and maintenance;
- Carry out a thorough survey of both vessels and identify any defects and safety issues;
- Prepare a costed Workplan (including materials and parts lists) for repair and rectification of any defects, prioritising reliability and safety issues;
- Review the current inventory of spare parts, equipment and tools held by TFD and recommend additional items needed to maintain the vessels in good working order;
- Prepare an annual maintenance and repair plan for each vessel for future use;
- Examine and report on the feasibility of installing hydraulic longline fishing gear (haulier and reel) and/or a seawater ice-maker on *Manau'i*;
- Make recommendations on training and capacity building of the vessel engineers and TFD workshop staff;
- Make any other relevant recommendations that will assist TFD in the management and operation of its vessels in future.

Requirements (qualifications and experience):

Proposals will be assessed against the following criteria by the senior management committee of the TFD:

- Relevant qualifications and experience in marine engineering and vessel survey;
- Experience in assessing the condition of small vessels (15-20 meters overall length) operating in the Pacific Islands regions;
- Experience in planning repairs and maintenance – both for immediate repair requirements and putting in place a long-term maintenance plan and facilities to ensure reliable and safe operations;
- Value for money.

Timing and delivery:

It is expected that inputs of around 10-15 working days will be required, undertaken by a single international consultant, mainly working in Tuvalu. The work should commence soon after the selection of the consultant and should be completed by the end of September 2023. *Manau* is currently on the TFD slipway for about 2 months, which provides a good opportunity to inspect the hull.

Deliverables:

There are two deliverables:

- A draft report, with lists of requirements for urgent action, ready for presentation and discussion before the consultant leaves Tuvalu;
- A final report, incorporating any feedback on the draft, including complete lists of spares, service parts etc. and presenting the repair and maintenance plans detailed above.

Payment schedule:

The proposed payment schedule is for a lump sum contract, payable in AUD, with payments on receipt and acceptance of deliverables as follows:

- 10% of fees on contract signature;
- 40% of fees on completion of fieldwork and presentation of the draft report;
- 50% of fees and any eligible expenses on acceptance of the final report.

The consultant may propose an alternative payment schedule in their quotation if this is not acceptable.

Attachment:

Manau II –

Length overall	19 m
Breadth	5 m
Gross tonnage	66 t
Main engine	Yanmar 6HA2M
Generator	Yanmar 4CHL-N
Electronics	Furuno

Deck crane Tadano ZR260

Manauí –

Length overall 17 m

Breadth 4 m

Gross tonnage 40 t

Main engine Yanmar 6HAE

Generator Yanmar 4JHL with Taiyo electric alternator

Electronics Furuno

Deck machinery Takazawa Man' Co