



Terms of Reference

UNDERTAKING OF A CONSULTANCY TO EVALUATE AND PROVIDE COSTS FOR AN INTEGRATED ELECTRONIC MONITORING (EM) MODULE IN THE FISHERIES INFORMATION MANAGEMENT SYSTEM (FIMS) FOR LONG LINE FISHERY DATA

Background:

The Fisheries Information Management System (FIMS) is a “Fit for Purpose” integrated web-based system which collects, stores and displays an array of fishery information including, but not limited to, vessel tracking, catch and electronic monitoring (EM) data. The current Long Line EM data available in the FIMS eMonitor Trips module is supplied by a third party provider with minimal data on trip details and catch provided and displayed.

FIMS wishes to enhance its capability to include Electronic Monitoring so as to offer its current and potential clients, the facility to use its own fully integrated and cost effective software package which would allow for the recording, storage, transmission, reporting and analysis of data from Long Line fishery vessels within the EM module in FIMS.

FIMS Inc, the company owner of the FIMS software, has a team of developers who are conversant with the platform and its associated modules and will be assigned to any development either independently or in association with other providers and developers as required.

Consultancy Objective:

To provide the FIMS Inc Board with a comprehensive and authoritative consultancy report detailing the associated costs and options available to undertake development and integration of a complete EM module in FIMS. In addition a detailed “road map” also be provided with the most appropriate way forward to achieve the desired outcome of a FIMS fully integrated EM module.

Specific areas of consultancy:

1. Identify best practice in the application of international EM systems, citing examples from at least two of the World leaders in longline e-monitoring.
2. Review and evaluate the current eMonitor Trips module in FIMS to expand the current module or develop a new module for data display.
3. Assess what elements of EM systems could be integrated into iFIMS (Industry portal), for example visual checks to assess handling, industry transparency issues and crew safety.
4. Determine the key components that will be required to support an EM system including software design, machine learning technologies, the application of algorithm and the use of cloud based verification systems.
5. Determine the relevant IP issues associated with these and options.
6. Advise on the practicality and viability of FIMS competing with other EM systems that are currently in use.
7. Determine a series of critical paths that need to be addressed: namely building a completely independent system or working collectively with one or more EM providers.
8. Analyse the cost, benefits and risks of FIMS providing its own complete EM module for its clients.
9. Provide options, taking into account new technologies, for the ability of FIMS to record, transmit, store and display data collected from Long Line vessels in the Pacific region.
10. Provide costings in relation to the options for FIMS recording, transmitting, storing and displaying data collected.
11. Undertake analysis and provide advice on the options of processing video files into AI-Engines (servers) that can review the catch detection algorithms and then transfer results into respective data annotation software packages for display in FIMS.
12. Report on the viability of the information collected as part of the consultancy and its ability to be displayed in FIMS following required development.

EM data fields required to be collected and displayed:

When providing information on the options for data collection and display the following data fields are mandatory and must be taken into consideration for the data collected.

1. Vessel identification including name, flag state registration, IRCS, IMO and any regional identification requirements.
2. Trip information including date and time of departure, and return, port of departure and return.

3. EM analysis information if reviewed by an analyst being their name and code, country, if the data has been reviewed, number of hauls analysed and any compliance issues detected and reported.
4. Setting and hauling information with date and time of start and end of set, latitude and longitude of start and end of set, date and time of start and end of haul, latitude and longitude of start and end of haul, date, time and position of float set and haul, number of baskets and floats, number of hooks used in a set, bait species and number of baskets , floats monitored by an analyst in a single haul.
5. Special gear attributes as required under WCPFC measures..
6. Catch event information including hook number, between successive floats of the catch event, species code, length of fish, length measurement code, sex, condition when caught, fate, interaction, condition when released, catch event date and time, catch SNAP date and time, latitude and longitude of catch event.
7. Potential Compliance events providing date and time of potential compliance issue, latitude and longitude of compliance issue, compliance category and a note of the issue. These are likely to include catch, handling and fate of SSIs, transshipment, use of illegal gear and waste management

These data fields should be consistent with the priorities identified by the Parties, DDC and the PNA Compliance committee.

Review process:

The EM Review Committee will analyse the information provided in the completed Consultants report in consultation with FIMS developers and clients and may undertake the actions and recommendations provided in the report.

Further information:

If interested persons or organisations wish to express their interest in undertaking this consultancy please provide contact details including name, email address and telephone number along with a brief summary of their experience in relation to being able to provide the information requested by 5pm AEST on Friday the 23rd May 2020. In addition please provide the daily rate being charged and an estimation of the total days that is expected to complete the consultancy to David Wilkinson at david.wilkinson@ifims.com

Payment of the services to the selected consultant for the provision of the report will be paid in US dollars on supply of an invoice to FIMS Inc and calculated on the daily rate provided by the Consultant.

If you require any further information in relation to this requested consultancy please contact David Wilkinson.

Time frames:

Expressions of interest (Eoi) to be received by FIMS Inc	5pm AEST Friday 23 rd May 2020	
Review of Eoi by FIMS Inc EM working group	Tuesday 26 th May 2020	
Notification to successful Consultant	Monday 1 st June 2020	
Completed Consultant report to be received by FIMS Inc	5pm AEST Friday 26 th June 2020	This date may be amended by mutual agreement of the Consultant and FIMS Inc.

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