Request for Proposals (RFP)

Electronic Logbook for West Coast Region Groundfish Fixed Gear Fisheries

Issue Date: 5/9/2022
DEADLINE FOR PROPOSALS: 6/3/2022

RFP Process Schedule

May 9, 2022	Request for Proposal (RFP) issued and distributed
May 20, 2022	Deadline for written questions regarding this RFP
	Please email questions to Michael Arredondo at marredondo@psmfc.org
May 25, 2022	Q&A document, including the answer to the written questions posted on the PSMFC website at: http://www.psmfc.org/procurements/blog
June 3, 2022	Deadline for submission of proposals
	Proposals need to be submitted by e-mail to: marredondo@psmfc.org
	Subject line for submissions: Electronic Logbook Smart Phone App
	Faxed and hard copy proposals **will not** be accepted.
June 6 – June 10, 2022	Proposal review
June 17, 2022	Project finalist selected

Introduction

Pacific States Marine Fisheries Commission (PSMFC) is seeking to contract a vendor to develop a mobile electronic logbook for vessels participating in federal groundfish fisheries in the West Coast region using non-trawl gear. This mobile application will initially be for smart phones with likely future development for tablet and laptop. The application will allow vessel captains to record information about the timing and locations of where their gear is set in addition to catch information. Data must be stored locally when the vessel is outside of Wi-Fi or cellular networks. The application must be fully field tested and a production version ready for deployment in the fleet by **December 1, 2022**. While this current RFP is for the development of a smart phone app, it is anticipated that the electronic logbook will be expanded for tablet and laptop platforms.

PSMFC is acting as a third-party data collection agent for NOAA Fisheries West Coast Region (NOAA). The vendor will be responsible for building the electronic logbook, while PSMFC will house and manage data collected by this application. The vendor will coordinate with PSMFC staff and subcontractors to define integration into existing internal databases. While it is anticipated that PSMFC would continue to work with the vendor for support and/or expansion to other platforms, at the completion of the scope of work PSMFC will have the option to maintain or expand the application independently.

Background

In many fisheries, vessel captains self-report information on their fishing activity to fisheries managers via logbooks. These logbooks typically include information on the locations and times that gear is set and retrieved, as well as catch information.

In the West Coast groundfish fisheries, a paper logbook requirement has been in place for a number of years for vessels fishing with trawl gear. Recently the Pacific Fisheries Management Council acted to require a federal logbook for vessels fishing with non-trawl gear (such as pot or longline gear) and set the requirement that this data be collected electronically rather than via paper logbooks. The state of Oregon already has a requirement for paper logbooks in these fisheries that is comparable to the data that will be required in the federal fisheries. A copy of this logbook is provided in Appendix A.

NOAA has arranged to have PSMFC be the primary party responsible for the development of the electronic logbook, storage of the data, and distribution to state and federal agencies. PSMFC seeks a vendor for the development of the mobile application for electronic logbook data collection. PSMFC will be working in coordination with NOAA and the Oregon Department of Fish and Wildlife (ODFW) to ensure the electronic logbook data meets both federal and state reporting requirements.

Scope of Work

The scope of work for the project is designing a front-end application for mobile devices (initially for smart phones with anticipated future need for tablet and laptop options) to collect electronic logbook data. The final deliverable will be an application meeting the standards described below.

The application must be field tested and a production version ready for deployment in the fleet by **December 1, 2022.**

1. **Data Collection**

    1.1. The vendor will work with PSMFC on both the design of the user interface as well as the table structure for data storage.
    1.2. The electronic logbook application will include an initial selection of logbook type (pot, longline, or hook and line). Subsequent data fields will depend on the logbook type selected with many fields common to all gear types and a smaller number specific to the type of logbook selected. In all cases there will be data collected that will capture:
        1.2.1. Vessel identifying information
        1.2.2. Trip data (vessel operator, permits, etc.)
        1.2.3. Landing data (date of landing, dealer, fish ticket number)
        1.2.4. Gear data (e.g. number of pots or hooks)
        1.2.5. Gear set and retrieval data (locations, dates and times)
        1.2.6. Catch data (e.g. species and counts of retained and discarded fish)
    1.3. A detailed list of required data fields is given in Appendix B.

2. **Data Transmission**

    2.1. Data must be recorded and stored locally until the user has network access.
    2.2. Data must transmit either via cell network or Wi-Fi.
    2.3. Vendor will work with PSMFC staff and subcontractors to define API layer for validating credentials, synchronizing selection lists and transmitting logbook records.

3. **Confidentiality**

    3.1. Data requirements include trip information (vessel number, landing port, landing date, etc.), gear types, gear set and retrieval locations and dates, and catch information.
    3.2. Per federal fisheries requirements, a confidentiality agreement must be signed by the contractor to ensure complete confidentiality of all data collected as well as all data provided for look-up values, etc. No copies of confidential data will be retained by the contractor without the written consent of PSMFC.

4. **Ownership**

    4.1. The final version of the application will be owned by PSMFC/NOAA. The vendor may adapt the product for use in other projects or to sell to other clients, but PSMFC/NOAA will have the right to the application and all associated code such that they may adapt and further develop the product independently.
    4.2. All data collected in the electronic logbook will be owned by PSMFC/NOAA.

5. **Platforms**

5.1. Android and iOS compatible for initial deployment, with future expansion to tablet and laptop compatibility.

6. **User Interface**

6.1. Intuitive, simple navigations

6.2. Drop-down menus

6.3. Auto-fill fields including locations and date/times

6.4. Ability to easily see related data (such as catch data related to specific haul)

6.5. Development process to include screen mock-ups for feedback

7. **Features**

7.1. Ability to capture different elements based on fishery type.

7.2. Ability to dynamically display custom lists based on state of landing.

7.3. Ability to maintain updated value lists (ports, vessels, gears, species, etc.) that will be managed internally by PSMFC.

7.4. Ability to save draft and final versions of a logbook.

7.5. Ability to void a logbook record.

7.6. Ability to find existing logbook record, edit and finalize it.

7.7. Ability to make certain fields required.

7.8. Ability to validate specific entries for business rules specific to fishery type.

7.9. Ability to capture GPS coordinates when requested.

7.10. Require user authentication on application launch.

8. **Maintenance/Support**

8.1. PSMFC anticipates after the application is completed and rolled-out for usage in the fisheries, there may be requests for changes to the application both in the user interface and in the data fields collected.

Anticipated Future Work

The current RFP seeks proposals to cover the scope of work described above. However, PSMFC anticipates two areas of possible expansion:

9. **Expansion to tablet and laptop platforms**
9.1. PSMFC anticipates that the application will be expanded to both tablet and laptop application once the initial smart phone application is completed.

10. **Integration of the electronic logbook with a vessel monitoring system.**
10.1. Vessel monitoring systems include, at a minimum, a tamper proof GPS unit that continuously records the locations of the vessel and submits these via satellite and or

cellular signal. Some of vessels that will use the electronic logbook already carry vessel monitoring systems required under federal regulations that meet NOAA Office of Law Enforcement standards. Some vessels also participate in other fisheries where there are proposed regulations for vessel monitoring systems including an electronic logbook. Because of these overlaps in fishery participation, the option to integrate this electronic logbook by using the GPS locations from the vessel monitoring system (for example via Bluetooth) is seen as an advantage.

PSMFC will give some priority to vendors with the capacity to expand the electronic logbook in both of these areas, with particular priority to expansion to tablet and laptop applications.

Contractor Qualifications

To successfully respond to this RFP, the vendor must:

- Demonstrate expert knowledge of smart phone application development, as well as the ability to expand the application to tablet or laptop in the future.
- Demonstrate an ability to complete IT projects in a timely manner. This project has fast approaching and unbendable deadlines. The contractor must have IT resources available that are capable of completing this project on a rapid timeline.
- Make contract staff available to meet with agency staff online and at short notice, as needed. The stakeholders in this project fully expect to work with the contractors in a close and dynamic relationship to develop, evaluate, and modify the electronic logbook application. Mentoring staff to maintain and upgrade this system is also required.

While not strictly required, it is also preferred that the vendor is familiar with fisheries data.

Proposal Requirements and Scoring

Proposal Requirements

Proposer must submit the following information:

- **Experience**. Explain the qualifications of the company and its specialized experience and technical competence that qualify it to develop the electronic logbook as described in the scope of work. Please also detail any work with fisheries data. Please also include any experience relevant to the Anticipated Future Work section.

  o **References**. A list of three clients and contact information for whom similar services have been provided. If you have references from work with fisheries data, please include these.

  o **Subcontractors.** A list of all, if any, third parties and/or subcontractors that vendor intends to use or may use in connection with meeting the scope of work.

- **Technical Approach.** Describe your approach to meeting the scope of work. Include descriptions of:
  o Design and development approach, interaction with PSMFC

- o Testing, deployment and documentation plans
- o Initial development platform and level of version compatibility
- o Offline capability
- o Potential for meeting the work described in Anticipated Future Work including:
  - Strategy for expanding to other mobile devices and computers
  - Potential for integration with vessel location monitoring units

- **Cost Proposal.** Vendor must submit a budget for the scope of work described above including all items except for maintenance and support (items 1-7 in the scope of work). Separate of the total budget, the vendor should submit an hourly rate for updates to the application, maintenance, etc. (item 8 in the scope of work).

Scoring

- **Experience**. (40 percent) – Includes Experience and Reference items of the proposal requirements
- **Technical Approach** (30 percent)
- **Cost** (30 percent)

Appendix A. Current Oregon paper logbook for fixed gears

Below is the existing Oregon fixed gear paper logbook. Many of the required data fields for the electronic logbook will be the same, as described in Appendix B.

Appendix B. Anticipated data field requirements

Below is the anticipated list of required fields and data types. The field list, names and data types are not finalized, but are provided for reference in assessing the scope of work.

Field	Data Type	Description
Vessel fields:		
Vessel Number	Text (Lookup)	UI drop-down list should include both vessel number and name from lookup
Trip fields:		
EFP Trip	Boolean	
EM Trip	Boolean	

Operator Name	Text	
Permit Type	Text (Lookup)	
Permit Number	Text	
Comments	Text	
Delivery fields:		
Delivery Date	Date	
Fish Ticket Number	Text	
Return Port Name	Text (Lookup)	
Buyer	Text	
Haul (gear set/retrieval) fields:		
Haul Start Date/Time	Date	Date/time/location when gear is set. Should be user options for recording current date/time/location from device or for manual entry. Manual entry of lat/lon would be in degrees-min-sec although data field should be stored as numeric
Haul Start Latitude	Numeric	
Haul Start Longitude	Numeric	
Haul End Date/Time	Date	Date/time/location when gear is retrieved. Should be user options for recording current date/time/location from device or for manual entry. Manual entry of lat/lon would be in degrees-min-sec although data field should be stored as numeric
Haul End Latitude	Numeric	
Haul End Longitude	Numeric	
Haul Start Depth	Integer	
Haul End Depth	Integer	
String or Set Number	Text	Buoy line number for pot; gear version from header (A or B) for longline
Gear Per Set	Integer	Number of skates, tubs, or pots per set (pot and longline only)
Lost Pot Count	Integer	(pot only)
Catch fields:		
Species	Text (Lookup)	
Catch Disposition	Text (Lookup)	Retained or discarded catch
Weight	Numeric	
Count	Integer	
Gear fields (Pot):		
PotType	Text (Lookup)	

PotHeight	Numeric	
PotWidth	Numeric	
PotLength	Numeric	
Spacing	Numeric	
EscapementHoleSize	Numeric	
EscapementHoleCount	Integer	
Gear fields (Longline):		
Longline Type	Text (Lookup)	
Unit Length	Integer	
Hook Size	Numeric	
Hook Spacing	Numeric	
Number of Hooks per Skate or Tub	Integer	
Total Number of Skates or Tubs Lost	Integer	
Floating longline	Boolean	
Gear fields (Hook and Line):		
Gear type	Text (Lookup)	
Total Number of mainlines or rods	Integer	
Number of hooks on each mainline or rod	Integer	