Request for Proposals (RFP)

Economic Data Reports Web Form and Database

Issue Date: August 22, 2016
DEADLINE FOR PROPOSALS: October 7, 2016

RFP Process Schedule

August 22, 2016   Request for Proposal (RFP) issued and distributed

September 12, 2016   Deadline for written questions regarding this RFP

Please email questions to Michael Arredondo at marredondo@psmfc.org

September 16, 2016   Q&A document, including the answer to the written questions posted on the PSMFC website at: http://www.psmfc.org/procurements/blog

October 7, 2016   Deadline for submission of proposals

Proposals need to be submitted by e-mail to: marredondo@psmfc.org

Subject line for submissions: *EDR Web and Database RFP*

Faxed and hard copy proposals **will not** be accepted.

October 10-14, 2016 Proposal review

October 21, 2016   Contractor selected

Introduction

Pacific States Marine Fisheries Commission (PSMFC) is the third party data collection agent for NOAA Fisheries Economic Data Report (EDR) and other social and economic survey data collection programs for federally managed fisheries off Alaska. Under a grant from NOAA, PSMFC provides administrative and IT infrastructure support for the collection of mandatory annual EDR data from regulated, federally licensed participants in associated Alaska fisheries, in addition to various periodic or one-time survey projects.

PSMFC is seeking to subcontract with an information technology (IT) company to provide support in the following key areas:

- maintain and develop secure online data collection web application using Microsoft .NET and supporting development tools;
- maintain and develop XML and relational database schemas and scripted database management procedures in Oracle, monitor automated ETL processes, and conduct routine data process QA/QC audit procedures;
- provide ongoing technical support to PSMFC during periods of active user access to web application to ensure that application remains operational and data integrity is maintained, and address critical technical issues rapidly and efficiently

Background

Alaska Fisheries Information Network (AKFIN) is a program of Pacific States Marine Fisheries Commission (PSMFC) that maintains a data warehouse comprised of Alaska State and federal commercial fisheries data, as well as EDR data. The EDR program at PSMFC collects data for EDR projects associated with four different fishery management programs: Crab Rationalization (CR), and Amendment 80, Amendment 91, and Gulf of Alaska groundfish trawl. Each EDR program employs one or more survey forms, each with multiple data entry tables associated with distinct relational database structures, which are stored in AKFIN's data warehouse. Within the data warehouse, EDR records are integrated with other state and federal fishery management data to support analytical and data validation purposes. All EDR and other record-level data within the AKFIN warehouse is confidential under state and federal law.

There are 9 unique EDR survey instruments (forms)

1. CR Catcher Vessel EDR
2. CR Catcher Processor EDR
3. CR Processor EDR
4. GOA Catcher Vessel EDR
5. GOA/A80 Catcher Processor EDR
6. GOA Processor EDR
7. A91 Compensated Transfer Report
8. A91 Fuel Survey
9. A91 Vessel Master Survey

Electronic webform versions of all survey instruments have already been created in .NET. Industry EDR submitters/users are issued secure login credentials, enabling them to access the required forms online via PSMFC's survey web portal, and complete and submit the forms online. At the submitters discretion, CR and GOA EDR can also be printed from a .pdf version available on the web and completed offline or on paper, and submitted to PSMFC by mail or email; in such cases, PSMFC personnel use the .NET webform to data enter the submitted EDR data. The A91 EDR exists only in a .NET webform and all users must electronically submit their data online via the web portal. The main EDR web page is http://www.psmfc.org/edr/ with links to each of the 4 EDR projects and .pdf versions of the associated EDR survey instruments.

Webform data are stored as entered initially in XML format, with all data fields from a submitted form comprising a single Oracle CLOB record. Once the user completes the required form(s), electronically signs and finalizes the data submission, the record is parsed by automated PL/SQL script and loaded into one or more tables in the staging version of the associated relational database schema. PSMFC/AKFIN analysts execute error detection routines, selected records undergo detailed third-party audit validation against submitters' financial records, and all data edits and corrections are completed and finalized by PSMFC personnel in the staging schema. Once all data records are finalized, SQL scripts are executed to load the database to the production schema, from which it is available to authorized data users, including NOAA Fisheries (NMFS) and North Pacific Fishery Management Council (NPFMC) analytical staff. Regulations require that individual CR and GOA EDR records are made available to analysts in anonymized form, and SQL scripts that load data to the production schema are constructed to replace unique identifiers (submitter name, address, and other identifying fields) with anonymized equivalent values.

Login credentials for A91, A80 and GOA forms are delivered to required submitters by April 1 of each year, with a June 1 deadline for EDR submission. The CR EDR login credentials are distributed by June 1, with a July 31st submission deadline each year. The web application and respective webforms must be updated for annual changes (e.g. date references), tested and prepared for deployment in advance of the April 1/June 1 start dates, and actively maintained during the 60-day reporting periods, with approximately 4-6 weeks of additional maintenance for ongoing use by late submitters and completion of error corrections.

The Alaska Saltwater Sport Fishing Charter Business Survey is not conducted every year, but is periodically fielded during March – May. The survey has a .NET webform and associated database schemas in AKFIN similar to those developed and maintained for the EDR program.

Scope of Work

The EDR program has been operating since 2005. The web application and all EDR form and database code has been developed and refined over a period of years under previous contract, and is currently fully operational and in active use. During 2015-2016, the .NET web application and all forms were modified to incorporate the Bootstrap framework of HTML, CSS and JS tools, and PSMFC will have completed the 2016 EDR collection cycle using the modified web application.

The scope of work for the project is largely comprised of maintenance of the existing code base, execution and monitoring of pre-developed routines, and stand-by technical support during active

data collection phase of the project. Review of user comments and completed results of the most recent round of data collection and processing may identify a limited set of revisions to address webapp or data processing errors. Further development of the web application will focus on refining the current functionality to improve efficiency and accuracy of data reporting. Specific tasks and responsibilities under the contract are the following:

- maintain and develop secure online data collection web application using Microsoft .NET and supporting development tools;
- maintain and develop XML and relational database schemas in Oracle, including (1) designing new tables and views in Oracle, (2) develop SQL and PL/SQL code, (3) SQL performance tuning, and (4) perform routine data QA/QC procedures to validate results of ETL processes;
- provide rapid-response technical support to PSMFC during periods of active user access to web application;
- assist with future web application and database enhancements as needed during the life of this contract.

The EDR webforms need to be up and running for each EDR collection with no errors or downtime. Because the data being collected is confidential, security is also very important. Accomplishing all of these needs requires subcontracted support that: (a) are dependable and available within short notice, (b) have an understanding of commercial fisheries data, (c) can complete assigned projects in a timely manner with unbendable deadlines, and (d) have the necessary senior level knowledge and resources to complete the projects on time and budget.

Contractor Qualifications

This project requires an IT consulting firm that has demonstrated expert knowledge of the activities and systems of resource management agencies. The staff of this firm shall be stable and have a successful record of completing projects similar in size and scope to support a medium sized organization with fewer than 50 users.

Technical requirements demand the contractor have experience with Oracle database 10g or above, SQL, PL/SQL, Oracle BI Administration and report development, APEX, Microsoft .NET, Linux environment, and a thorough knowledge of data warehousing principles.

Proposal Requirements and Scoring

Requirements

To successfully respond to this RFP the applicant must:

- 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 joint electronic reporting system and administration tasks. Mentoring staff to maintain and upgrade this system is also required.

- Understand the realities and limitations of self-reported fisheries information in Alaska. For instance, when NMFS first deployed halibut and sablefish IFQ card swipe terminal systems, it experienced significant problems with software compatibilities and data communications. The contracting agency must be responsive to such events and remain flexible in finding solutions to encountered problems.

Scoring

- **Business Experience. (40 percent)** The contractor must demonstrate knowledge of natural resource management, have worked with confidential economic data in the past two years, and must have experience with Oracle Database environment and Microsoft .NET.
- **Cost (30 percent)** Provide total cost per hour that you would bill PSMFC for work on the proposed project. Identify position titles, their hourly wage and tasks each position would be involved with.
- **Technical Approach (30).** Describe your web form to collect confidential economic data and ETL solution for transferring and verifying all data was transferred from the web form to the Oracle data warehouse.