



DEPARTMENT OF COMMERCE RESEARCH PERFORMANCE PROGRESS REPORT (RPPR)

For instructions, please visit

http://www.osec.doc.gov/oam/grants_management/policy/documents/RPPR%20Instructions%20and%20Privacy%20Statement.pdf

AWARD INFORMATION	
1. Federal Agency: NOAA	2. Federal Award Number: NA22NMF4740308
3. Project Title: Integration of vessel monitoring systems and electronic reporting in SAFIS and SAFIS applications through API development and field testing of multiple hardware options: Phase 2	
4. Award Period of Performance Start Date: 07/01/2022	5. Award Period of Performance End Date: 12/31/2022
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR	
6. Last Name and Suffix: Balouskus	7. First and Middle Name: Richard Gardner
8. Title: Principal Marine Biologist	
9. Email: Richard.Balouskus@dem.ri.gov	10. Phone Number: 401-423-1924
AUTHORIZING OFFICIAL	
11. Last Name and Suffix: Masson	12. First and Middle Name: Veronica J.
13. Title: Federal Aid Program Coordinator	
14. Email: veronica.masson@dem.ri.gov	15. Phone Number: 401-423-1938
REPORTING INFORMATION	
Signature of Submitting Official:	
16. Submission Date and Time Stamp:	17. Reporting Period End Date:
18. Reporting Frequency: <input type="radio"/> Annual <input type="radio"/> Semi-Annual <input type="radio"/> Quarterly	19. Report Type: <input type="radio"/> Not Final <input type="radio"/> Final
RECIPIENT ORGANIZATION	
20. Recipient Name:	
21. Recipient Address:	
22. Recipient DUNS:	23. Recipient EIN:

ACCOMPLISHMENTS

24. What were the major goals and objectives of this project?

To continue development of an API-based integration of geographical vessel-monitoring data with real-time electronically reported data for small scale inshore fisheries in the eTRIPS mobile application and through an ACCSP hosted web-based administrative application. The direct objectives of this project include:

- Evaluate functionality of additional VMS devices not tested in Phase 1 in order to complete technical analysis of all currently available cellular devices.
- Develop strawman requirements for future cellular and/or low-cost satellite VMS devices to meet ACCSP standards for integration into the program. This step will be carried out in collaboration with the ACCSP data team. Additionally, this will negate the need for future testing of cellular units as they become available on the market.
- Analyze approval procedures for federal VMS products in light of new inshore cellular options and pending lobster/Jonah crab fishery regulations. Compare approval procedures for federal VMS products to strawman ACCSP requirements developed for this project.
- Produce an updated comparative cost and technical specification analysis of available cellular VMS devices and data plans as well as all NOAA GARFO approved VMS devices.
- Investigate enhancements to current program capabilities for specific use cases of geofencing and track line post-hoc analysis, and document a process to add further use cases and/or additional enhancements after project completion.
- Enhance the existing administrative tool and scope requirements to develop a new tool to view tracks in real time and provide a platform for advanced post-hoc analysis.
- Conduct an informal survey of fishermen to solicit ideas for future improvements of program and end user needs.

25. What was accomplished under these goals?

During this first reporting period, weekly project meetings were initiated to discuss project development and methodologies. Several goals were completed in full, while others were started and continue progressing.

Requirements for cellular and/or low-cost satellite VMS devices to meet ACCSP standards for integration into the program were completed in collaboration with the ACCSP lobster tracking data team. Completion of this goal has negated the need for future testing of cellular units as they become available on the market. A 'type approval' system was initiated using this protocol and will be utilized by ASMFC in the future to approve new devices as needed.

The project team analyzed approval procedures for federal VMS products in light of new inshore cellular options and pending lobster/Jonah crab fishery regulations. The team compared approval procedures for federal VMS products to strawman ACCSP requirements developed for this project. At least two joint meetings were held with NOAA representatives to determine what could be learned from their existing procedures.

An informal survey of fishermen to solicit ideas for future improvements of program and end user needs was written/developed. It will be distributed to fishermen during the next reporting period.

The majority of the team's effort during this reporting period was spent on enhancing the existing administrative tool and scope requirements to develop an administrative compliance tool to view tracks and provide a platform for advanced post-hoc analysis. This tool is constantly in development and will allow for administrative teams from each state to check compliance in a streamlined method moving forward.

26. What opportunities for training and professional development has the project provided?

Nothing to Report

27. How were the results disseminated to communities of interest? Progress has been reported to the ASMFC Lobster Board and interested public during ASMFC meetings (08/2022, 11/2022, 01/2023).
28. What do you plan to do during the next reporting period to accomplish the goals and objectives? During the next reporting period the survey will be sent to fisherman and development/testing will continue on the administrative app. RI will conduct a regulatory workshop to disseminate information to the public about this project and related regulations.
PRODUCTS
29. Publications, conference papers, and presentations Nothing to Report
30. Technologies or techniques Nothing to Report
31. Inventions, patent applications, and/or licenses Nothing to Report
32. Other products Nothing to Report

PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS
<p>33. What individuals have worked on this project?</p> <p>Name: Richard Balouskus Total Number of Months: 6 Project Role: Co-PI Contribution to Project: Rhode Island lead for the project, participates in most project discussions State of Residence: Rhode Island, USA No foreign collaboration</p> <p>Name: John Lake Total Number of Months: 6 Project Role: Other professional Contribution to Project: staff participant, participates in all project discussions. Expert on data reporting. State of Residence: Rhode Island, USA No foreign collaboration</p>
<p>34. Has there been a change in the active other support of the PD/PI(s) or senior/key personnel since the last reporting period?</p> <p>Nothing to Report</p>
<p>35. What other organizations have been involved as partners?</p> <p>Atlantic Coastal Cooperative Statistics Program, Washington D.C.: Collaboration, administrative application development Rhode Island DEM – Marine Fisheries, Jamestown, RI: Co-PI Massachusetts DFG – Division of Marine Fisheries, Gloucester, MA: Co-PI</p>
<p>36. Have other collaborators or contacts been involved?</p> <p>Harborlight Software, Bethlehem, PA: Software development, funded through other parts of this grant administered by ACCSP</p>
IMPACT
<p>37. What was the impact on the development of the principal discipline(s) of the project?</p> <p>Nothing to Report</p>
<p>38. What was the impact on other disciplines?</p> <p>Nothing to Report</p>
<p>39. What was the impact on the development of human resources?</p> <p>Nothing to Report</p>

40. What was the impact on teaching and educational experiences?

Nothing to Report

41. What was the impact on physical, institutional, and information resources that form infrastructure?

Nothing to Report

42. What was the impact on technology transfer?

Nothing to Report

43. What was the impact on society beyond science and technology? Nothing to Report
44. What percentage of the award's budget was spent in foreign country(ies)? Nothing to Report
CHANGES/PROBLEMS
45. Changes in approach and reasons for change Nothing to Report
46. Actual or anticipated problems or delays and actions or plans to resolve them Nothing to Report
47. Changes that had a significant impact on expenditures Nothing to Report
48. Significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents N/A
49. Change of primary performance site location from that originally proposed Nothing to Report
PROJECT OUTCOMES
50. What were the outcomes of the award? N/A

Attach a separate document if more space is needed for #6-10, or #24-50.

DEMOGRAPHIC INFORMATION FOR SIGNIFICANT CONTRIBUTORS (VOLUNTARY)	
<p>Gender:</p> <p><input type="radio"/> Male</p> <p><input type="radio"/> Female</p> <p><input type="radio"/> Do not wish to provide</p>	<p>Ethnicity:</p> <p><input type="radio"/> Hispanic or Latina/o</p> <p><input type="radio"/> Not Hispanic or Latina/o</p> <p><input type="radio"/> Do not wish to provide</p>
<p>Race:</p> <p><input type="radio"/> American Indian or Alaska Native</p> <p><input type="radio"/> Asian</p> <p><input type="radio"/> Black or African American</p> <p><input type="radio"/> Native Hawaiian or other Pacific Islander</p> <p><input type="radio"/> White</p> <p><input type="radio"/> Do not wish to provide</p>	<p>Disability Status:</p> <p><input type="radio"/> Yes</p> <p><input type="checkbox"/> Deaf or serious difficulty hearing</p> <p><input type="checkbox"/> Blind or serious difficulty seeing even when wearing glasses</p> <p><input type="checkbox"/> Serious difficulty walking or climbing stairs</p> <p><input type="checkbox"/> Other serious disability related to a physical, mental, or emotional condition</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Do not wish to provide</p>

Attach a separate document if more space is needed for #6-10, or #24-50.