JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION (JOFOC)
3rd Generation (3G) Environmental Sample Processor (ESP) Integration and Support Services

Identification Number: REQUIREMENTS-25-3806

1. Identification of the agency and contracting activity.

The National Oceanic and Atmospheric Administration (NOAA), Acquisition and Grants Office (AGO), Western Acquisition Division (WAD), proposes to enter into a contract on the basis of other than full and open competition in support of the Oceanic and Atmospheric Research (OAR) Great Lakes Environmental Research Laboratory (GLERL).

2. The nature and/or description of the action being approved.

NOAA intends to award a new contract on a sole source basis to Monterey Bay Aquarium Research Institute (MBARI), UEI: GM6EL1UH2L83.

A firm-fixed-priced purchase order is contemplated for award.

3. A description of the supplies or services required to meet the agency's needs (including the estimated value).

The Government requires support in the deployment, calibration, embedding, and use of a 3G Environmental Sample Processor (ESP) with a surface plasmon resonance (SPR) into an Uncrewed surface vehicle (USV) to assess the USV capability to monitor harmful algal blooms, understanding phytoplankton community dynamics, and assist with public health associated with phycotoxins in Great Lakes and Alaska. This requirement includes integrating a water capture sampling system for the 3G ESP onto the USV and providing support to GLERL for the system during mission deployments. This acquisition is essential for ensuring NOAA is in compliance with 33 U.S.C. 53, which federally mandates NOAA to advance the scientific understanding and ability to detect, monitor, assess, and predict harmful algal bloom (HAB).

The period of performance will consist of one base year and two option years, totaling three years. The total estimated value for this acquisition is [redacted].

4. An identification of the statutory authority permitting other than full and open competition.

The statutory authority permitting other than full and open competition is 41 U.S.C. 1901 as implemented by the Federal Acquisition Regulation (FAR) 12.102 entitled, Restricting Competition.

5. A statement demonstrating the unique qualifications of the proposed contractor or the nature of the action requiring the use of the authority.

MBARI is the only responsible source that can provide these services to GLERL based upon the following:

Historically, GLERL has utilized the 3G ESP-SPR system developed by MBARI since 2017. This system was produced and continuously developed by MBARI through previous contract and grant actions and has supported 5 operational missions between 2018 and 2024. Starting in 2017, GLERL, began working with MBARI to optimize MBARI's existing long-range autonomous surface vessel (LR-AUV) technology equipped with a 3G ESP-SRP unit to monitor genetic changes in the cyanobacteria HAB and simultaneously measure microcystin toxins (supported by NOAA's Ocean Technology Transition (OTT) and NOAA OAR Omics program). Following the success of the initial LR-AUV 3G ESP-SPR deployment, the GLERL-MBARI collaboration continued to enhance the 3G ESP-SPR unit by expanding its capabilities to provide near real-time microcystin toxin detection and eDNA sampling in shallow environments, where human-bloom interaction is the highest. Additionally, a follow-on project further explored and demonstrated the feasibility of integrating and deploying the 3G ESP-SPR unit in a USV. Further development of the advanced technology (USV 3G ESP-SPR) is needed to validate that the technology can be used in other HAB prone areas and in remote locations.

Currently, the USC 3G ESP-SPR technology developed by MBARI is the only technology available that is capable of advancing the scientific understanding and ability to detect, monitor, assess, and predict harmful algal bloom (HAB) as required by 33 U.S.C. 53. As the developer of this technology, MBARI is the only source able to advance the technology capabilities and provide integration and support services of this technology to GLERL. Only MBARI possesses the immediate resources, knowledge, and infrastructure to ensure complete continuity of operations for the 3G ESP-SPR system, including any advancements, integration, and support services for this technology. Only MBARI

is in a unique position to provide the required 3G ESP-SPR support at the level of quality required without causing unacceptable delays to support GLERL missions.

6. **A description of efforts made to ensure that offers are solicited from as many potential sources as possible, including whether a notice was or will be publicized as required by RFO FAR Part 5 and, if not, which exception under RFO FAR Part 5 applies.**

   The GLERL and WAD solicited industry capabilities by posting a sources sought notice on SAM.gov on March 19, 2026.

   The sources sought notice posting yielded two (2) responses. However, based on the reviews of their sources sought responses, none of the businesses that responded were found to have the relevant capabilities and experience to perform the work required.

   A presolicitation notice will be posted to the GPE as required under RFO FAR Subpart 5.1.

7. **Determination by the contracting officer that the anticipated cost to the Government will be fair and reasonable.**

   The contracting officer determines that the anticipated price(s) will be fair and reasonable based on RFO FAR 12.204(a), Price reasonableness. Prior to award of the proposed modification, price information shall be obtained from the contractor and a price analysis will be performed and documented to sufficiently determine that the cost to the government for the proposed modification will be fair and reasonable.

8. **The market research conducted (see RFO FAR Part 10) and the results or a statement of the reason market research was not conducted)**.

   Market research was conducted by GLERL and WAD to identify available sources and to evaluate the availability of the marketplace to meet the requirement. Methods included conducting electronic searches via the Small Business Administration (SBA) Dynamic Small Business, GSA e-library, AbilityOne, and UNICOR websites; as well as interviewing knowledgeable subject-matter experts within the Government. Further, a Sources Sought Notice was posted to SAM.gov on March 19, 2026 to identify any potential sources. Two responses were received. However, based on the reviews of their sources sought responses, none of the businesses that responded were found to have the relevant capabilities and experience to perform the work required. Based on market research, and a review of the responses to the Sources Sought Notice, the government determined that only MBARI has the capabilities, experience and historical knowledge to successfully complete this highly specialized requirement.

9. **Any other facts supporting the use of other than full and open competition.**

   All supporting facts have been documented herein. There are no additional facts to be reported in this section.

10. **A listing of any sources that expressed a written interest in the acquisition.**

    No sources have expressed a written interest in this acquisition.

11. **A statement of any actions the agency may take to remove or overcome any barriers to competition, if subsequent acquisitions are anticipated.**

    The government will continue to conduct thorough market research to gauge the marketplace capabilities for future requirements. As the market allows, the government will seek competition for future acquisition for these services.