

**JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION (JOFOC)**  
**NOAA/NESDIS/OSPO**  
**SNPP and NOAA-20 Sustainment Support**

**Identification Number:** NE-EB1000-22-01628

**1. Identification of the agency and contracting activity (FAR 6.303-2(b)(1)).**

The NOAA Acquisition and Grants Office (AGO), Satellite and Information Acquisition Division (SIAD) located in Silver Spring, MD, proposes to enter into a contract on the basis of other than full and open competition in support of the National Environmental Satellite, Data, and Information Service (NESDIS), Office of Satellite and Product Operations (OSPO).

**2. The nature and/or description of the action being approved (FAR 6.303-2(b)(2)).**

NOAA intends to award a new sole source, hybrid firm fixed price-time and materials contract to Ball Aerospace and Technologies Corporation (BATC).

**3. A description of the supplies or services required to meet the agency's needs (including the estimated value) (FAR 6.303-2(b)(3)).**

The requirement is to provide continuation of ongoing sustaining operational engineering support for the BATC-proprietary BCP-2000 spacecraft bus components of the SNPP and NOAA-20 satellites, which additionally include onboard instruments that are not supported by this requirement. This will allow NESDIS OSPO to accomplish its mission of providing needed weather data beyond the design life of each satellite's operational lifetime by enabling the sustainment of the current SNPP and NOAA-20 operations. The support will include refurbishments of BATC supplied ground equipment used by the Government, requested changes to spacecraft flight software as well as addressing any on-orbit anomalies due to life limiting aging. The estimated value of the planned contract is [REDACTED] and the contemplated period of performance (base period and option periods) is below:

Base Period	March 3, 2023 through March 2, 2024
Option Period I	March 3, 2024 through March 2, 2025
Option Period II	March 3, 2025 through March 2, 2026
Option Period III	March 3, 2026 through March 2, 2027
Option Period IV	March 3, 2027 through March 2, 2028

**4. An identification of the statutory authority permitting other than full and open competition (FAR 6.303-2(b)(4)).**

The statutory authority permitting other than full and open competition is 41 U.S.C. 3304(a)(1), as implemented by the Federal Acquisition Regulation (FAR) 6.302-1 “only one responsible source and no other supplies or services will satisfy Agency Requirements”.

**5. A statement demonstrating the unique qualifications of the proposed contractor or the nature of the action requiring the use of the authority (FAR 6.303-2(b)(5)).**

BATC is uniquely qualified to provide these services to OSPO.

NOAA has operated a series of polar orbiting meteorological observation and measurement satellites since the 1960s. The daily weather and climate data provided by the sensors carried by the NOAA polar weather satellites are a critical element in providing accurate weather forecast information to military and civilian Federal Agencies, state and local governments, International Partners, the news media and the general public.

As part of the NOAA polar weather satellite program, the interagency NOAA/NASA Joint Polar Satellite System (JPSS) Program launched the SNPP satellite in October 2011 and the NOAA-20 (also known as JPSS-1) satellite in November 2017. Both satellites are operated by OSPO at the NOAA Satellite Operations Facility (NSOF), which is staffed 24/7 to ensure critical weather data is available to federal agencies and international partners. In the event that weather data continuity is disrupted due to an on-orbit satellite anomaly, it is vital to the NOAA mission that OSPO return the satellite to a fully operational state as quickly as possible. A rapid recovery from an anomaly to minimize the loss of weather data requires highly trained and skilled experts that have in-depth knowledge of the satellite design, manufacturing processes, test performance, operations, and vulnerabilities so that root cause and corrective action can be quickly determined for an on-orbit asset.

The NOAA-20 Spacecraft task order was awarded under the NASA GSFC Rapid Spacecraft Development Office (RSDO) Master Contract on March 27, 2017 to BATC as a task order. The NOAA-20 contract was for the development and manufacturing of a proprietary BATC Configurable Platform 2000 (BCP 2000) Spacecraft Bus tailored to NOAA-20 requirements and included launch, a 90-day post-launch commissioning period, and sustaining engineering for the NOAA-20 BCP 2000 Spacecraft. There is a need to continue the NOAA-20 support requirements beyond the period of performance of the current task order, which is scheduled to end in March 2023. Once a satellite is launched, on-orbit anomalies are addressed via ground originated flight software updates transmitted to the satellite. BATC, the original equipment manufacturer (OEM), will sustain their components and will provide flight software modifications under the contemplated contract, as per industry standard.

BATC is the OEM for the Ball heritage BCP-2000 spacecraft bus design used on the SNPP and NOAA-20 satellites. BCP-2000 contains numerous proprietary design elements along with a significant amount of protected and limited data that would only be available to other vendors with BATC's express permission. While the Government has limited data rights to BCP-2000 spacecraft bus hardware technical data, BATC asserts restricted rights for BCP-2000 spacecraft bus software, contamination modeling analysis software, and modeling of BCP-2000 thermal and material properties. The modeling and analysis software packages are used to resolve on-orbit anomalies. Per industry standard, BATC does not share its restricted rights proprietary information with other vendors. In addition, BATC is the only vendor with access to the requisite test beds and simulators developed under the SNPP and NOAA-20 programs to ensure the continued operational status for the JPSS BCP-2000 satellites. As such, only BATC has the in-depth technical capability to provide in-depth technical support and provide flight software updates to resolve on-orbit anomalies.

Immediately upon contract award, the contractor will need to provide technical support to sustain the SNPP and NOAA-20 satellite spacecrafts; which includes but is not limited to, anomaly resolution support for the spacecraft, spacecraft to instrument interfaces, simulator maintenance and support, and flight software maintenance and associated updates, and spacecraft to ground interfaces. The contractor will need to: (1) have the expertise to recommend modifications to the current operational NOAA-20 BCP-2000 spacecraft configuration that will address on-orbit anomalies, failures, or aging issues, (2) have the ability to modify,

validate and deliver SNPP and NOAA-20 BCP-2000 spacecraft flight software loads to address on-orbit anomalies, failures and aging, (3) have SNPP/NOAA-20 BCP 2000 test beds and simulators for anomaly troubleshooting and resolution, and flight software modification and validation, (4) be capable of integrating the SNPP and NOAA-20 instrument Engineering Development Units (EDU) into the SNPP and NOAA-20 test bed(s) for instrument on-orbit anomaly troubleshooting, and (5) be capable of upgrading all SNPP and NOAA-20 BCP-2000 simulators or developing new SNPP and NOAA-20 BCP-2000 simulators if required due to obsolescence. As mentioned above, only BATC has the proprietary information that is required for performing this work.

Overall, if NOAA does not pursue this work via a contract with BATC, then no contract can be awarded for this work at all. A lack of contractual support for this work would pose significant risk to the Government and could lead to negative impacts to overall mission performance. Specifically, a lack of resolution of anomalous behavior may result in a high impact risk of on-orbit spacecraft failure. Success of the SNPP and NOAA-20 spacecraft operations is crucial to maintaining continuity of weather and climate data that is critical to the national interest and must be maintained in order to provide the timely warning of impending storms and other severe weather, thus protecting life and property, promoting the safety of international and domestic land, sea and air transportation systems, and facilitating the mitigation of the impacts of and recovery from the impact of significant weather events.

**6. A description of efforts made to ensure that offers are solicited from as many potential sources as is practicable, including whether a notice was or will be publicized as required by FAR 5.2 and, if not, which exception under FAR 5.202 applies (FAR 6.303-2(b)(6)).**

A Sources Sought Notice was posted on SAM.gov on 11/15/2022 with a response date of 11/22/2022. One (1) response to the notice was received from [REDACTED]. After evaluation of the response, it was determined that [REDACTED] did not demonstrate their capability to independently access BATC's proprietary software and testing specifications for the BCP-2000 spacecraft bus. In addition, [REDACTED] response only provided information pertaining to supporting terrestrial Information Technology (IT) Systems. As such, [REDACTED] cannot provide the needed in-depth technical support with the requisite testing beds and simulators developed under the SNPP and NOAA-20 programs to ensure the continued operational status for the satellites. Thus, the Government determined that [REDACTED] is not capable of performing this work because they lack access to the requisite proprietary information for which only BATC retains the necessary rights; [REDACTED] lacked access to the requisite simulators necessary for resolving on-orbit anomalies and lacked experience in resolving on-orbit anomalies for the satellite.

The current proposed contract action was publicized in accordance with the stipulations at FAR 5.203(a). No responses were received.

[REDACTED]

**7. Determination by the contracting officer that the anticipated cost to the Government will be fair and reasonable (FAR 6.303-2(b)(7)).**

The Contracting Officer determines that the anticipated price will be fair and reasonable based on analysis of the prior contract vehicle and market research. Prior to award of the proposed contract, other than certified cost and pricing data will be obtained from the contractor and a price analysis will be performed to determine that the proposed price is fair and reasonable. The Contracting Officer will determine reasonableness using methods such as: (1) comparison to BATC's most recent Forward Pricing Rate Recommendation, as applicable, (2) comparison to similar contract awards, (3) comparison to historical prices paid on the prior NASA SNPP Sustainment contract which was modified in 2017 to include NOAA-20 Sustainment as well as the prior SNPP Sustainment support, (4) comparison to the Independent Government Cost Estimate (IGCE), and/or (5) reliance on subject matter expertise as it pertains to the proposed levels of effort and/or other direct costs/prices. If needed, the Contracting Officer will negotiate with BATC to maximize NOAA's ability to obtain the best value to the Government.

**8. A description of the market research conducted (see FAR Part 10) and the results or a statement of the reason market research was not conducted (FAR 6.303-2(b)(8)).**

Market research was conducted by NESDIS OSPO and AGO SIAD to identify available sources and evaluated the availability of the marketplace to meet the requirement as follows:

Solicited available capabilities from industry to meet the SNPP and NOAA-20 operational flight sustainment requirements through the SAM.gov Sources Sought Notice posted on 11/15/2022. AGO made further efforts to publicize the Sources Sought Notice by notifying ProTech Program Management Office and emailing fifteen (15) active small businesses engaged in supporting spacecraft development, production, testing, and/or sustainment. The small businesses were identified by searching the Small Business Administration's Dynamic Business Search portal under NAICS 541330 - Engineering Services. One (1) response was received by the response due date of 11/22/2022 but the company (██████████) is not capable of performing this work because they do not have access to the requisite proprietary information that only BATC retains rights to. In addition, this vendor is unable to meet the requirement because their provided information only pertains to supporting terrestrial IT Systems. ProTech did not conduct a market analysis for the requirement and provided a waiver for this requirement because no ProTech contract holders can support this work.

The current proposed contract action was publicized in accordance with the stipulations at FAR 5.203(a). No responses were received.

**9. Any other facts supporting the use of other than full and open competition (FAR 6.303-2(b)(9)).**

All facts have been documented in the preceding sections. 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 (FAR 6.303-2(b)(10)).**

A Sources Sought Notice was posted on SAM.gov on 11/15/2022 with a response date of 11/22/2022. One (1) source responded to the notice or expressed a written interest in this acquisition. It was determined that the interested source (██████████) is not capable of performing this work because they do not have access to the requisite proprietary information that only BATC retains rights to. In addition, this vendor is unable to meet the requirement because their provided information only pertains to supporting terrestrial IT Systems.

**11. A statement of any actions the agency may take to remove or overcome any barriers to competition, if subsequent acquisitions are anticipated (FAR 6.303-2(b)(11)).**

Barriers to competition cannot be removed before the acquisition or during the period of performance. No other company has the in-depth knowledge and experience, access to proprietary hardware and software design information, and access to proprietary testing equipment needed to maintain a BCP-2000 spacecraft bus tailored to the SNPP and JPSS-1 satellites other than the manufacturer BATC.

The Government will continue to conduct thorough market research to gauge the marketplace capabilities for future requirements. If practicable, the Government will seek opportunities for competition on future acquisitions for the operational flight sustainment of the SNPP and NOAA-20 satellites.

**12. The JOFOC has been prepared and certified by:**

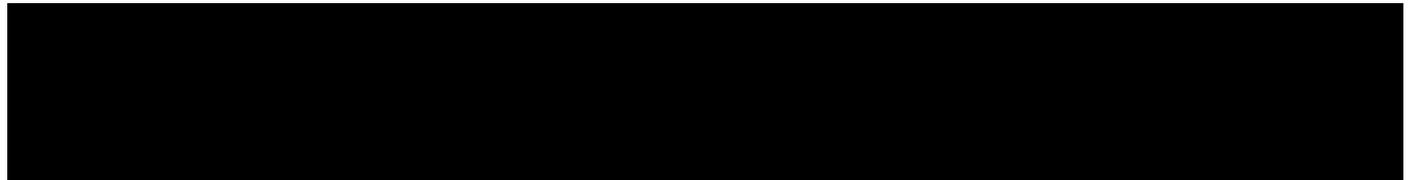
**Technical/Requirements Personnel:**

I certify that the above narrative is accurate and contains complete data necessary to support the recommendation for other than full and open competition. I further certify that the narrative verifies the Government's minimum needs or schedule requirements and any rationale used to justify other than full and open competition procedures.



**Contracting Officer:**

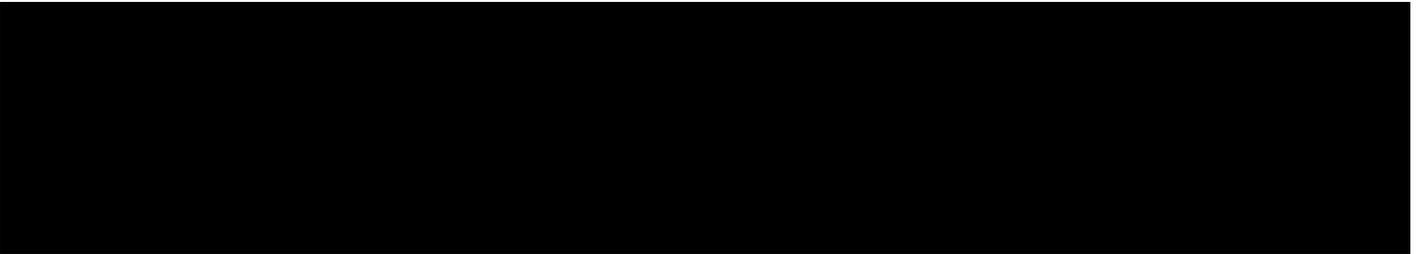
I certify that the data supporting the recommended use of other than full and open competition is accurate and complete to the best of my knowledge and belief.



**REVIEW and CONCURRENCE**

**Review:**

**Office of General Counsel**



**Concur:**

**Head of Contracting Office**

