NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
Johnson Space Center
Justification for an Exception to Fair Opportunity

1. Nature and/or description of the action being approved (FAR 16.507-6(d)(2)(ii):

This justification documents the basis for issuing an order under the Commercial Resupply Services (CRS) 2 Contract NNJ16GU21B using an exception to the Fair Opportunity process. The purpose of the CRS-2 Contract is for resupply cargo services to the International Space Station (ISS), disposal of unneeded cargo, and for return of cargo from the ISS back to NASA. The end-to-end service shall include all activities to provide the resupply services including launch and landing site and associated resources, launch vehicle, ISS visiting vehicle, reentry vehicle, and the manner in which these are architected and implemented by the contractor. NASA requires the cargo services in order to meet the required annual upmass and downmass to support continued ISS operations via three to four flights per year with the cargo deliveries somewhat evenly distributed throughout the year. Cargo includes both NASA cargo and NASA-sponsored cargo.

2. Description of the supplies or services required to meet the agency's needs (including the estimated value) (FAR 16.507-6(d)(2)(iii)):

This action is a firm-fixed price order for one Northrop Grumman (NG) Resupply Service Standard Mission B on a Contract Line Item Number (CLIN) 1 Task Order. CRS-2 CLIN 0001 describes the standard resupply service missions available under each offeror's contract. All contractors are required to provide 1) pressurized upmass, 2) pressurized return or pressurized disposal or both, and 3) unpressurized upmass and disposal. However, each offeror may also provide unique services specific to their visiting vehicle in addition to the standard services offered. The ISS Program decisions for manifesting are based on a wide variety of requirements including on-orbit anomalies, crew-time availability, customer schedules, vehicle design constraints (i.e., environments, loads, robotic berthing versus docking interface, hatch size, fairing size and vehicle volume), and availability of ISS docking and berthing ports to support different designs of visiting vehicles. The Program also needs to maintain flexibility in determining how and when to manifest hardware and science/research payloads, which may require the Program to execute a purchased mission under CLIN 0001 that are mission or vehicle specific.

The total estimated price of the proposed order for a NG Standard Mission B in calendar year 2030 is [redacted]

The estimated period of performance for the mission is nominally a [redacted] template from the Authority to Proceed milestone to Mission Launch, plus the subsequent berthed mission duration up to [redacted] post launch.

3. Identification of Exception to Fair Opportunity (FAR 16.507-6(d)(2)(iv)):

☐ FAR 16.507-6(b)(1): The agency need for the supplies or services is so urgent that providing a fair opportunity would result in unacceptable delays.

☒ FAR 16.507-6(b)(2): Only one awardee is capable of providing the supplies or services at the level of quality required because the supplies or services ordered are unique or highly specialized.

☐ FAR 16.507-6(b)(3): The order must be issued on a sole-source basis in the interest of economy and efficiency because it is a logical follow-on to an order already issued under the contract, provided that all awardees were given a fair opportunity to be considered for the original order.

☐ FAR 16.507-6(b)(4): It is necessary to place an order to satisfy a minimum guarantee.

☐ FAR 16.507-6(b)(5): For orders exceeding the simplified acquisition threshold, a statute expressly authorizes or requires that the purchase be made from a specified source.

☐ FAR 16.507-6(b)(6): The order satisfies one of the exceptions permitting the use of other than full and open competition listed in 6.103 (10 U.S.C. 3406(c)(5)). **Note:** The public interest exception must not be used unless Congress is notified in accordance with 10 U.S.C. 3204(a)(7).

Supporting Rationale:

The CRS-2 Contracts support a variety of manifest needs. Assured access is critical to ensuring the ISS can continue to operate, support the crew onboard, and conduct the vital research of the unique ISS National Laboratory throughout the life of the ISS (currently authorized through 2030 for NASA and the other United States Operating Segment International Partners). The purpose of awarding multiple CRS-2 contracts was to ensure the Agency has access to different but redundant capabilities, which provides more options, increases flexibility for accommodating evolving manifest needs and unexpected contingencies, and reduces the risk of reliance on a single provider. Historically, the resupply services deliver to either one of the two ISS docking ports or one of the two berthing ports available.

The typical timeframe required for a mission is on the order of [redacted] counting the time required to plan and complete a competitive mission procurement, and the typical [redacted] to execute the mission template (from authority to proceed milestone to the launch). These long lead timeframes require the ISS Program to be prepared to support multiple contingencies. The upcoming ISS mission requirements for calendar year 2030 are dynamic and unique at this time. [redacted] The other docking port during this timeframe would need to be used for a crewed vehicle, leaving critical cargo to be resupplied through one of only two berthing ports.

NG is the only CRS-2 provider currently capable of attaching to the ISS via a berthing port, which means NG is the only responsible source that can provide resupply services after the USDV arrives and docks to the ISS. Additionally, NASA requires cargo resupply services to meet ISS obligations for logistics and propellant; to meet its obligations for upmass to the Russian Partners; and to deliver a large amount of cargo. In addition, a long duration mission is needed to support the collection and disposal of waste. Reboost propellant capability is required to contribute to maintaining the ISS orbital altitude. NG is the only responsible source capable of meeting all these requirements due to the unique characteristics of their Cygnus vehicle, specifically with its berthing design, large cargo capacity, long duration missions, large capacity waste disposal capability, and operational reboost services which are essential to fulfill the Agency's commitment and legal obligation to provide continuous uninterrupted cargo delivery services and safe operation of the ISS.

The NG Cygnus vehicle's large cargo capacity reduces the number of missions required to deliver cargo. The Cygnus vehicle's ability to stay berthed to the ISS for an extended period [redacted] provides required operations flexibility to NASA, such as the collection of waste, more time with temporary volume available, and more coverage for reboost services. The NG Cygnus vehicle is currently the only CRS-2 vehicle that has demonstrated proven on-orbit operational reboost (propellant) services. Maintaining flexibility for the timing of missions will mitigate schedule risk and increase NASA's ability to provide uninterrupted cargo resupply services to and from the ISS which is critical to ensuring that the ISS remains a viable and productive facility. Additionally, it is imperative that NASA provide early indication of known cargo service needs in this timeframe to ensure launch services can be appropriately planned for and secured. Waiting until the [redacted] of performance begins to initiate this action would introduce unnecessary risk without providing sufficient time to change the landscape or readiness of alternate cargo resupply providers.

NASA has determined that allowing an exception for this requirement from the Fair Opportunity requirements at FAR 16.507 is in the best interest of the Government because NG is the only CRS-2 awardee capable of providing the required services and unique capabilities to meet the ISS requirements for 2030. Most importantly, the NG Cygnus vehicle is able to attach to the ISS via a berthing port, which is the only available means to transport cargo inside the ISS during this timeframe. Additionally, NG's ability to provide uninterrupted reliable cargo resupply services for large items is necessary to ensure sufficient cargo transportation services to and from the ISS. Having NG perform cargo resupply, reboost, and waste disposal services for the anticipated mission will ensure that NASA meets its statutory obligations, its obligations to its International Partners, and the Government's need to maintain the ISS. Due to the unprecedented uncertainty of the timeframe, this also allows the ISS Program to be best postured to support the operations of the ISS. At this time no other CRS-2 contractor possesses the technical capabilities necessary to execute this particular mission given the constraints articulated above. The ISS Program's approach of allowing an exception for this requirement from Fair Opportunity is the most effective method of meeting the Program objectives, reducing overall risk to the Program, and ensuring a safe and reliable cargo resupply mission to the ISS.

4. Determination that the anticipated cost to the Government will be fair and reasonable (FAR 16.507-6(d)(2)(v)):

Price reasonableness will be established based on the comparison of historical mission prices that are currently in the NG CRS-2 contract, as well as a comparison to the mission prices proposed from all of the CRS-2 contractors. For mission pricing, NG will be required to submit a proposal to be evaluated and negotiated by the government, and a proposal analysis will be performed to ensure that the final agreed-to price for the contract action is fair and reasonable.

5. Other Facts supporting the justification (FAR 16.507-6(d)(2)(vi)):

Not Applicable

6. A statement of the actions, if any, the agency may take to remove or overcome any barriers that led to the restricted consideration before any subsequent acquisition for the supplies or services is made (FAR 16.507-6(d)(2)(vii):

NASA intends to provide each contractor a fair opportunity to be considered for all future mission task orders under CRS-2 unless there are unique requirements. In this case, there are unique requirements for this mission which can only be met by NG due to the unique capabilities of the service they provide.

If these unique capabilities are not required for future missions to and from the ISS, NASA intends to compete missions in accordance with FAR 16.507, ordering, and the applicable task ordering procedures contained in the contract.

The CO will continue to examine the market, and contractor capabilities, in the future for alternative solutions or new sources before executing any subsequent acquisitions for the same requirements.