**Source Selection Statement**
**for the**
**Gateway Logistics Services Contract**
**(Solicitation Number 80KSC019R0002)**

## INTRODUCTION

On December 4, 2019, the Source Evaluation Board (SEB) appointed to evaluate proposals for the Gateway Logistics Services (GLS) contract, which were solicited under Request for Proposals (RFP) Number 80KSC019R0002, presented the results of its evaluation to me and other senior officials of the National Aeronautics and Space Administration (NASA or Agency). Relevant portions of the SEB's evaluation and the rationale for my decision to award the GLS contract based on initial proposals is set forth in this Source Selection Statement (SSS).

## PROCUREMENT DESCRIPTION

NASA is leading the development of the first permanent cislunar outpost known as the Gateway in support of the Artemis program and the goal of landing the first woman and the next man on the Moon by 2024. This outpost will provide a platform to conduct long-term deep space operations and capability demonstrations to enable future exploration and meaningful science on and around the moon. The Gateway's core functions will include power and propulsion, communications, periodic crew habitation, robotics, an airlock, and logistics resupply capabilities. In support of the Gateway and Artemis program, the GLS contract will fulfill the needed logistics resupply capabilities by transporting cargo, equipment, payloads and consumables to and from the Gateway via a logistics vehicle.

This procurement will result in a fixed price indefinite delivery/indefinite quantity (IDIQ) contract with a 12-year ordering period and a 15-year performance period. Under Contract Line Item Number (CLIN) 1 of this contract, NASA will have the ability to order GLS Missions that provide delivery of a logistics vehicle to the Gateway via a commercial launch vehicle, six-month docked operations, and autonomous disposal. Under these missions, NASA also may order Mission Unique Capabilities that include fast transit to Gateway, extended docked operations in three-month increments, and other capabilities needed for mission-specific requirements. Under CLIN 2, NASA can order Specialized Delivery Missions that may be used to deliver other elements supporting the Moon to Mars architecture. The GLS contract will guarantee two missions, each with a separate delivery to the Gateway. In addition, the contract provides for special tasks and studies under CLIN 3 that may be used for advanced planning and feasibility studies in support of future contemplated missions; development, fabrication, and test of hardware/software to support planning studies or special tests; mission or cargo unique studies; material provision; and implementation of requirements changes.

## BACKGROUND

On October 17, 2018, the Kennedy Space Center (KSC) Procurement Officer appointed a Procurement Development Team (PDT) to develop a complete acquisition package for

submission to the SEB. The GLS Contracting Officer (CO) established the North American Industry Classification System code for GLS as 481212, Nonscheduled Chartered Freight Air Transportation, with a 1,500 employees size standard. On October 23, 2018, a Sources Sought Synopsis was issued that sought information to determine industry interest and capability, assist the Agency in developing the acquisition strategy, and facilitate consideration of a potential small business set-aside. On October 25, 2018, a teleconference was held between NASA and industry to discuss the synopsis and answer questions. As a result of input received from industry, the PDT proceeded to conduct market research, define requirements, prepare an acquisition plan (delivered via the Procurement Strategy Meeting (PSM) held on December 17, 2018), issue a draft solicitation for industry comment, hold an industry day, and meet one-on-one with industry representatives.

Following review and consideration of industry comments on the draft solicitation, industry day, and one-on-one meetings, on August 16, 2019, the GLS final RFP was issued on an unrestricted basis. During the course of the procurement, the CO issued four amendments to answer questions and incorporate minor changes.

On August 29, 2019, the Source Selection Authority (SSA) appointed the SEB for the purpose of evaluating proposals received in response to the solicitation.

On October 16, 2019, the Agency received four timely proposals from the following companies (in alphabetical order) in response to the GLS RFP:

| **Prime Company/Offeror** |
|---|
| The Boeing Company (Boeing) |
| Northrop Grumman Innovation Systems (NGIS) |
| Sierra Nevada Corporation, Space Systems (SNC) |
| Space Exploration Technologies Corp. (SpaceX) |

## PROPOSAL EVALUATION PROCESS

This acquisition was conducted as a commercial, competitively negotiated, acquisition in accordance with Federal Acquisition Regulation (FAR) 12.203, Procedures for Solicitation, Evaluation, and Award, in conjunction with FAR Part 15.3, Source Selection, and NASA FAR Supplement (NFS) Part 1815.3, Source Selection. This acquisition allowed for a trade-off process, as described in FAR 15.101, to obtain the best value for the Government. The RFP advised offerors it was the Government's intent to evaluate and select for award, based on initial proposals, without discussions; however, the Government reserved the right to conduct discussions if deemed in its best interest.

The RFP defined three evaluation factors, Price, Mission Suitability, and Past Performance, and provided the relative importance of each factor. The Price factor is more important than the

Mission Suitability factor, which is more important than the Past Performance factor. When the Mission Suitability and Past Performance factors are combined, they are approximately equal to the Price factor.

PRICE FACTOR

Evaluation of the Price factor was conducted as defined in the RFP and in accordance with FAR Subpart 15.4. Price analysis was done in accordance with FAR 15.404-1(b) and unbalanced pricing was considered in accordance with FAR 15.404-1(g). Cost analysis of other than certified cost or pricing data was not required to support a fair and reasonable price determination.

For purposes of the price evaluation, the total evaluated price (TEP) was considered, which consisted of a summation the following:

- SubCLIN 101 – Average Initial GLS Mission price;
- SubCLIN 102 – Average Standard GLS Missions price multiplied by two;
- SubCLIN 103 – Summation of all order year prices for 'Additional 3-month docked operations' capability and average price of all order years for Fast Transit to Gateway;
- CLIN 3 – Summation of the proposed labor rates, multiplied by the hours provided in RFP; and
- TEP Adjustment - To remove any potentially unfair competitive advantage associated with an Offeror proposing to use "rent free" Government-furnished equipment, services, or property (GFEPS), a TEP adjustment was applied for evaluation purposes only to account for the timeframe in which the Offeror proposed using the "rent free" GFEPS.

MISSION SUITABILITY FACTOR

Evaluation of the Mission Suitability factor and associated subfactors focused on each offeror's technical ability, approach to management of the Gateway logistics services, and its proposed small business utilization. The Mission Suitability Factor consisted of the following three subfactors:

| **Mission Suitability Subfactors** | **Weight (Points)** |
|---|---|
| Technical Approach | 550 |
| Management Plan | 400 |
| Small Business Utilization | 50 |
| **Total** | **1000** |

The RFP provided that based on the above weightings, each Mission Suitability subfactor would be evaluated and then rated and scored in accordance with NFS 1815.305(a)(3)(A). This procedure required the SEB to evaluate proposals under each subfactor, to identify findings of significant strengths, strengths, weaknesses, significant weaknesses, or deficiencies; and based

on these findings, to assign an adjectival rating, determine a percentile score, and calculate a total point score for each Mission Suitability proposal. Each subfactor was evaluated in its entirety and the areas included in the subfactors were not individually rated, scored, or listed in a relative order of importance. For each subfactor, the RFP described the following areas that would be evaluated:

i. **Technical Approach Subfactor**: GLS Space Systems Architecture, GLS Mission Approach, Specialized Missions Capabilities, NASA Insight and Approval, Engineering, and Work Plans.
ii. **Management Plan Subfactor**: Organizational Structure, Associate Contractor Agreements, Subcontract Management Plan, Safety and Mission Assurance Plans, and Government Property Management Information.
iii. **Small Business Utilization Subfactor**: Small Business Subcontracting Plan and Commitment to the Small Business Program

PAST PERFORMACE FACTOR

Finally, for the Past Performance factor, the RFP stated offerors (to include proposed Major Subcontractors) would be evaluated in accordance with FAR 15.305(a)(2) and NFS 1815.305(a)(2). In accordance with NFS 1815.305(a)(2), offerors were assigned one of the following confidence ratings: Very High Level of Confidence, High Level of Confidence, Moderate Level of Confidence, Low Level of Confidence, Very Low Level of Confidence, or Neutral. Under this subfactor, the SEB evaluated the performance of each offeror's recent and relevant work in the areas of technical, schedule, management, small business, cost/price, and mission success. Only efforts performed during the past three years prior to solicitation release were considered in the evaluation. For relevancy, the evaluation took into consideration each submitted effort's size, content, and complexity in relation to the requirements of the GLS procurement.

SEB PROCESS

The SEB conducted all evaluations using the above summarized evaluation criteria as specified in the RFP. In conducting its evaluations, the SEB utilized dedicated evaluators from appropriate disciplines to provide specific expertise needed in the evaluation process. Using the findings and analyses of the evaluators, the SEB generated evaluation consensus findings, which identified and assessed strengths and weaknesses, and rated and scored each proposal accordingly. In addition to the evaluation of the factors and subfactors identified above, the SEB ensured all solicitation requirements established by the RFP were met. Furthermore, the SEB reviewed for completeness each offeror's administrative data, which consisted of a completed Standard Form 1449; Representations, Certification, and Other Statements of Bidders; Organizational Conflict of Interest Plan; Model Contract; and Statement of Acceptance/Summary of Exceptions.

## MISSION SUITABILITY EVALUATION RESULTS

The SEB's results for the four offerors' proposals under the Mission Suitability factor is presented in the following chart:

| Offeror | Technical Approach Subfactor Rating | Management Plan Subfactor Rating | Small Business Utilization Rating | Overall Mission Suitability Score |
|---|---|---|---|---|
| Boeing | Fair<br>- 3 Significant Weaknesses<br>- 4 Strengths<br>- 5 Weaknesses | Good<br>-No findings | Good<br>-No findings | Lowest |
| NGIS | Good<br>- 1 Significant Strength<br>- 1 Significant Weakness<br>- 7 Strengths<br>- 2 Weaknesses | Fair<br>- 1 Significant Weakness<br>- 3 Weaknesses | Good<br>- No findings | Second Highest |
| SNC | Good<br>- 1 Significant Weakness<br>- 5 Strengths<br>- 3 Weaknesses | Good<br>- 1 Weakness | Very Good<br>-1 Significant Strength | Third Highest |
| SpaceX | Very Good<br>- 2 Significant Strengths<br>- 8 Strengths<br>- 5 Weaknesses | Good<br>- 1 Strength | Good<br>-No findings | Highest |

The substance of the SEB's evaluation of each offeror's proposal under the Mission Suitability factor is summarized below (in alphabetical order):

**Boeing**

Boeing's proposal received the lowest overall Mission Suitability score. The SEB identified three significant weaknesses, four strengths, and five weaknesses in the proposal. There were no significant strengths assessed. The following is a summary of the SEB's evaluation of Boeing's proposal under the three Mission Suitability subfactors:

**Mission Suitability – Technical Approach Subfactor**: The SEB rated Boeing's proposal as Fair under this subfactor, and assessed the following three significant weaknesses:

- A **first significant weakness** was assessed for Boeing's CLS-250's [redacted] As proposed, the [redacted] and does not make [redacted] In addition, the [redacted] does not sufficiently describe [redacted] available throughout the mission.

- A **second significant weakness** was assigned for Boeing's approach to NASA insight. The proposed approach does not meet the NASA insight notification, accommodations, or compliance requirements and it does not provide adequate methods for flow-down of insight and approval requirements to ensure all reasonable steps are taken to affect the highest probability of mission success.
- A **third significant weakness** was assigned for an exception taken to providing source code as required under DRD GLS-108, Launch Vehicle Flight Software Input for Independent Verification and Validation (IV&V), and DRD GLS-220, Mission Specific Software.

There were no significant strengths assessed. In addition, the SEB identified the following four strengths and five weaknesses (presented at a summary level):

STRENGTHS (4):
- Application of Heritage Designs
- Levels of Failure Tolerance Exceed Requirements
- Design Life Exceeds 1-year On-dock Requirement
- CLS-250 Capacity Exceeds Cargo Delivery Requirements

WEAKNESSES (5):
- Low Launch Vehicle and Spacecraft Mass Margins
- Apogee Thruster Location May Imperil Unpressurized Cargo
- Spacecraft Does Not Use Single Point Electrical Grounding
- Incorrect Dimensions Applied for Delivery of Robotic Arm XLA Component
- Proposed Changes to Work Plan

**Mission Suitability – Management Plan Subfactor**: The SEB rated Boeing's proposal as Good under this subfactor. The SEB did not identify any strengths, significant strengths, weaknesses, or significant weaknesses.

**Mission Suitability – Small Business Utilization Subfactor**: The SEB rated Boeing's proposal as Good under this subfactor. The SEB did not identify any strengths, significant strengths, weaknesses, or significant weaknesses.

**NGIS**

NGIS' proposal received the second highest overall Mission Suitability score. The SEB identified one significant strength, one significant weakness, seven strengths, and five weaknesses. The following is a summary of the SEB's evaluation of NGIS' proposal under the three Mission Suitability subfactors:

**Mission Suitability – Technical Approach Subfactor**: The SEB rated NGIS's proposal as Good under this subfactor. There was one significant strength identified and one significant weakness.

- NGIS received a **significant strength** for its Exploration Cygnus Cargo Stowage Design, which significantly exceeds requirements. The proposed pressurized module design

provides a large dedicated volume for crew to perform cargo packing, unpacking, and handling tasks and dedicated volume for trash and other payload activities. In addition, their efficient use of volume for compartmentalized trash stowage adds significant capabilities further contributing to this significant strength.

- The **significant weakness** assigned was associated with the logistics vehicle [redacted] As proposed, the conceptual design of the Exploration Cygnus [redacted] In addition, the proposal identified a [redacted]

In addition, the SEB identified the following seven strengths and two weaknesses (presented at a summary level):

STRENGTHS (7):
- Application of Heritage Design
- Levels of Failure Tolerance Exceed Requirements
- Design Life Exceeds 1-year On-dock Requirement
- High Payload Data Rate During Transit
- Single Common GLS Configuration for Missions
- Fast Transit Time Exceeds NASA Requirement
- Pressurized Cargo Late Load Capability Exceeds Requirements

WEAKNESSES (2):
- Launch Vehicle/Space Vehicle Interface Not Clearly Defined
- Fast Transit Propellant Margin Not Sufficiently Described

**Mission Suitability – Management Approach Subfactor**: The SEB rated NGIS's proposal as Fair under this subfactor. The SEB identified one significant weakness as follows:

- NGIS received a **significant weakness** for not submitting a Safety and Health Plan as required in DRD GLS-004, Safety and Mission Assurance Plans, and in accordance with NFS 1852.223-73, Safety and Health Plan.

The SEB did not identify any significant strengths. Additionally, the SEB identified the following three weaknesses (presented at a summary level):

WEAKNESSES (3):
- Safety Risk Definition Deviates from Industry Standards
- Incorrect Meteoroid and Orbital Debris Environment Identified
- Barriers to NASA Insight in Safety and Mission Assurance (S&MA) Plan

The SEB did not identify any strengths.

**Mission Suitability – Small Business Utilization Subfactor**: The SEB rated NGIS' proposal as Good under this subfactor. The SEB did not identify any strengths, significant strengths, weaknesses, or significant weaknesses.

**SNC**

SNC's proposal received the third highest overall Mission Suitability score. The SEB identified one significant strength, five strengths, four weaknesses, and one significant weakness. The following is a summary of the SEB's evaluation of SNC's proposal under the three Mission Suitability subfactors:

**Mission Suitability – Technical Approach Subfactor**: The SEB rated SNC's proposal as Good under this subfactor. The SEB identified one significant weakness as follows:

- SNC received a **significant weakness** for the proposed [redacted] which limits [redacted] Although the offeror proposed a GLS capability that can meet the minimum pressurized mass required, the [redacted] than that referenced in the statement of work. In addition, the proposed [redacted] significantly increases the risk that the [redacted]

There were no significant strengths identified. Also, the SEB identified the following five strengths and three weaknesses (presented at a summary level):

STRENGTHS (5):
- Application of Heritage Design
- Levels of Failure Tolerance Exceed Requirements
- Power Allocation for Payloads Exceeds Requirement
- Mission Extension Flexibility
- Single Common GLS Configuration for Missions

WEAKNESSES (3):
- Launch Vehicle/Space Vehicle Interface Not Clearly Defined
- Negative Launch Vehicle Performance Margin
- Restrictive Pressurized Cargo Stowage System Design

**Mission Suitability – Management Plan Subfactor**: The SEB rated SNC's proposal as Good under this subfactor. The SEB identified the following one weakness (presented at a summary level):

WEAKNESS (1):
- Foreign Object Debris and Electrostatic Discharge were not Adequately Addressed in S&MA Plan

There were no significant strengths, significant weaknesses, or strengths identified.

**Mission Suitability – Small Business Utilization Subfactor**: The SEB rated SNC's proposal as Very Good under this subfactor. The SEB identified one significant strength as follows:

- SNC received a **significant strength** for proposing a small business subcontracting plan that demonstrates a strong commitment to supporting small business participation with a significantly high small business goal.

There were no significant weaknesses, strengths, or weaknesses identified.

## SpaceX

SpaceX's proposal received the highest overall Mission Suitability score. The SEB identified two significant strengths, nine strengths, and five weakness in the proposal. There were no significant weaknesses identified. The following is a summary of the SEB's evaluation of SpaceX's proposal under the three Mission Suitability subfactors:

**Mission Suitability – Technical Subfactor**: The SEB rated SpaceX's proposal as Very Good under this subfactor. The SEB identified the following two significant strengths:

- SpaceX received its **first significant strength** for the proposed Dragon XL's total cargo delivery capacity, which significantly exceeds cargo delivery requirements. The proposed combination of a large usable cargo volume, high delivery mass capability, and low cargo packing density provides a cargo delivery capacity that significantly exceeds mission requirements and adds high flexibility for pressurized and unpressurized cargo delivery on both fast and slow transit missions.
- A **second significant strength** was assigned for the proposed cargo stowage design of the Dragon XL which significantly exceeds requirements. SpaceX proposed an efficient baseline cargo stowage system design that supports on-orbit storage and trash management.

There were no significant weaknesses assigned. Also, the SEB identified the following eight strengths and five weaknesses (presented at a summary level):

STRENGTHS (8):
- Application of Heritage Design
- Level of Failure Tolerance Exceed Requirements
- Excess Spacecraft Battery Capacity
- Single Common GLS Configuration for Missions
- Fast Transit Time Exceeds NASA Requirement
- Pressurized Cargo Late Load Capability Exceeds Requirements
- Effective Approach to Safety Critical Software
- Mission Extension Flexibility

WEAKNESSES (5):
- Launch Vehicle/Space Vehicle Interface Not Clearly Defined
- Dragon XL Delta-V Margin and Falcon Heavy Performance Capability
- Intermodule Ventilation Concept

- Gateway Time Triggered Ethernet Interface
- Dragon XL Service Section in Close Proximity to Crew

**Mission Suitability – Management Plan Subfactor**: The SEB rated SpaceX's proposal as Good under this subfactor. The SEB identified one strength as follows (presented at a summary level):

STRENGTH (1):
- Vertically Integrated Business Model for Development and Manufacturing

There were no significant strengths, significant weaknesses, or weaknesses assigned.

**Mission Suitability – Small Business Utilization Subfactor**: The SEB rated SpaceX's proposal as Good under this subfactor. The SEB did not identify any strengths, significant strengths, weaknesses, or significant weaknesses.

## PAST PERFORMANCE EVALUATION RESULTS

The Past Performance evaluation was conducted in accordance with FAR 15.305(a)(2) and NFS 1815.305(a)(2). The SEB evaluated the recent and relevant performance of each offeror (to include major subcontractors) in the areas of technical, schedule, management, small business, cost/price, and mission success. The RFP required offerors to submit up to five past performance efforts for themselves and up to five additional past performance efforts by their major subcontractors. The SEB also utilized the Contractor Performance Assessment Reporting System (CPARS) and past performance questionnaires.

### Boeing

The SEB has a High Level of Confidence Boeing will successfully perform GLS solicitation requirements based on the Boeing team's performance on recent and relevant contracts and agreements.

Boeing's past performance is highly pertinent to this acquisition, in terms of size, content, and complexity with relevant experience in some of the major GLS technical areas. The Boeing team's past performance citations demonstrated overall very effective performance in the areas of technical, schedule, management, small business, cost/price, and mission success. This performance evaluation also leaned heavily on demonstrated performance in the following major areas: launch services; spacecraft development; Rendezvous, Proximity Operations, and Docking (RPOD); habitable systems development and operations; management and integration of complex systems; cargo integration; and mission operations. Based on the totality of the past performance information reviewed, the SEB determined the Boeing team demonstrated predominantly relevant experience highly pertinent to GLS requirement; however, minimal experience was noted in areas of cargo integration and RPOD. There was no single past performance citation Boeing submitted that the SEB found to be relevant and similar in size, content, and complexity compared to the entire scope of work for GLS. However, when viewed

in totality, the citations evaluated demonstrate that Boeing has the ability to perform like services to GLS.

In consideration of Boeing's overall performance, the SEB found this offeror's technical performance to be of high quality having a positive impact on meeting mission requirements. Furthermore, the SEB found Boeing's performance under schedule for the most part to be timely, with areas of improvement in their allocation of resources and planning. There were schedule delays noted under Commercial Crew Transportation Capability (CCtCap) contract; however, because the CCtCap program is significantly more complex than GLS due to the human-rated launch requirement, the performance delays for CCtCap did not carry as much weight in this evaluation since GLS does not require human-rated launches. The SEB also concluded in the area of management that Boeing was meeting expectations and was supportive of program data reviews and training.

For all efforts, the SEB agreed Boeing is meeting its small business subcontracting goals. In addition, the SEB noted, from the citations where applicable, that Boeing and its team members did a good job of effectively keeping costs under control.

When Boeing's highly pertinent performance record is considered in its entirety, this offeror has demonstrated its ability to provide timely, efficient, and economical services to all contract requirements. Therefore, there is a high Level of Confidence Boeing will successfully perform the GLS solicitation requirements.

**NGIS**

The SEB has a High Level of Confidence NGIS will successfully perform GLS solicitation requirements based on the NGIS team's performance on recent and relevant contracts and agreements.

The NGIS team's past performance is very highly pertinent to this acquisition, in terms of size, content and complexity with relevant experience in all of the major GLS technical areas. The team's past performance citations demonstrate overall very effective performance in the areas of technical, schedule, management, small business, cost/price, and mission success. Most relevant to the GLS requirements, is NGIS's repeated demonstrated experience under the Commercial Resupply Services (CRS)-1 effort, delivering cargo successfully to the International Space Station (ISS) for six missions within the assessed performance period. Under these missions, NGIS successfully performed spacecraft development, RPOD, habitable systems development and operations, management and integration of complex systems, cargo integration, and mission operations. In addition, NGIS has also successfully performed the majority of requirements under CRS-2 and other somewhat relevant efforts, further contributing to the overall very highly pertinent determination with very effective performance. This performance evaluation leaned heavily on the relevant efforts demonstrated under CRS-1, as it is the most similar in scope to the work required under GLS. When this effort was considered, the SEB concluded NGIS has demonstrated an overall technical ability to perform similar services. NGIS has also shown an excellent ability to meet management expectations with proactive communication and a consolidated effort to maintain open and cooperative relationships. This offeror has been

performing exceptionally with regards to its schedule for both CRS-1 and CRS-2 citations and the SEB recognized such efforts as an area of success.

In consideration of NGIS's overall performance under other, somewhat relevant efforts, the SEB found this offeror's technical performance to be exceptional. The SEB found NGIS's performance under schedule averaged mostly very good and where the rating was lower, NGIS has been able to mitigate any schedule issues with corrective actions and alternative solutions with no adverse impact on performance. In the area of management, the SEB also concluded NGIS has a very strong performance record and agreed it has provided exceptional support in many of the citations for this area.

For all past performance citations where applicable, the SEB agreed while NGIS has not met all of its small business subcontracting goals it is meeting many of the categories of small business subcontracting goals. NGIS is continuing to identify small business subcontracting opportunities in order to improve the amount of small business subcontract awards. In addition, the SEB noted that all citations were firm-fixed price, except for the TESS contract. The SEB agreed NGIS did a good job of effectively keeping costs under control for TESS during the assessment period. All of NGIS's proposed efforts, with the exception of the ISS Exploitation contract, together are highly pertinent and can be applied to the requirements of the GLS solicitation. NGIS demonstrated very effective performance and was responsive to contract requirements. Therefore, there is a high level of confidence NGIS will successfully perform the GLS solicitation requirement.

**SNC**

The SEB has a Moderate Level of Confidence SNC will successfully perform GLS solicitation requirements based on the SNC team's performance on recent and relevant contracts and agreements.

SNC's past performance is pertinent to this acquisition, in terms of size, content and complexity with relevant experience in various GLS technical areas. SNC's past performance citations demonstrated overall very effective performance in the areas of technical, schedule, management, cost/price, and mission success. This performance evaluation leaned heavily on demonstrated performance in the following major areas: launch services; spacecraft development; RPOD; habitable systems development and operations; management and integration of complex systems; cargo integration; and mission operations. Based on the totality of the past performance information reviewed, the SEB determined SNC has demonstrated relevant experience in three GLS requirement areas: launch services, spacecraft development, and management and integration of complex systems. SNC demonstrated somewhat relevant experience in the remaining four technical areas. There was no single past performance citation SNC submitted that the SEB found to be relevant and similar in size, content, and complexity compared to the entire scope of work for GLS. Since the majority of SNC's performance was only somewhat relevant to the GLS requirements, the relevancy of SNC's past performance was determined pertinent.

In consideration of SNC's overall performance under somewhat relevant efforts, the SEB found its technical performance to be of very good quality having a positive impact on meeting mission requirements. The SEB found SNC's performance under schedule for the most part to be timely notwithstanding the one-year delay identified under CRS-2. In the area of management, the SEB also concluded SNC performed well with a positive, responsive and proactive management approach. While SNC has had some challenges in meeting its small business subcontracting goals, its performance in this area has trended positively and it is expected that this trend will carry over into performance under GLS since its design builds off the current CRS-2 production line. In addition, the SEB noted that all citations were firm- fixed price; as a result, no separate cost/price assessment was performed.

When SNC's pertinent performance record is considered in its entirety, this offeror has demonstrated the ability to provide timely, efficient, and economical services to all contract requirements. Therefore, there is a Moderate Level of Confidence SNC will successfully perform the GLS solicitation requirements.

**SpaceX**

The SEB has a High Level of Confidence SpaceX will successfully perform GLS solicitation requirements based on SpaceX's performance on recent and relevant contracts and agreements.

SpaceX's past performance is very highly pertinent to this acquisition, in terms of size, content and complexity with relevant experience in all of the major GLS technical areas. SpaceX's past performance citations demonstrated overall very effective performance in the areas of technical, schedule, management, small business, cost/price, and mission success. Most relevant to the GLS requirements is SpaceX's repeated demonstrated experience under CRS-1, which has delivered cargo successfully to the ISS for a total of nine missions within the assessed performance period. Under these missions, SpaceX has successfully performed launch services, spacecraft development, RPOD, habitable systems development and operations, management and integration of complex systems, cargo integration, and mission operations. In addition, SpaceX has successfully performed the majority of requirements under CRS-2 and other somewhat relevant efforts, further contributing to the overall highly pertinent determination with very effective performance.

This performance evaluation leaned heavily on the relevant efforts SpaceX demonstrated under CRS-1, as it is the most similar in scope to the work required under GLS. When the CRS-1 effort was considered, the SEB concluded SpaceX has demonstrated an overall technical ability to perform similar services. SpaceX has also demonstrated an excellent job of meeting management expectations with proactive communication and a consolidated effort to maintain open and cooperative relationships. Although this offeror had some early delays in the schedule under CRS-1, it is now performing exceptionally and the SEB recognized this as an area of success. There were schedule delays noted under CCtCap; however, because the CCtCap program is significantly more complex than GLS due to the human-rated launch requirement, the performance delays for CCtCap did not carry as much weight in this evaluation since GLS does not require human-rated launches.

In consideration of SpaceX's overall performance under somewhat relevant efforts, the SEB found this offeror's technical performance to be very good and SpaceX continues to show a positive trend in this performance area. The SEB found SpaceX's performance under schedule averaged mostly satisfactory and that it was able to mitigate any schedule issues with minor corrective actions and alternative solutions with no adverse impact on performance. In the area of management, the SEB also concluded SpaceX has a very strong performance record and agreed this offeror provided exceptional support in many of the citations for this area. For all efforts where applicable, the SEB agreed SpaceX is meeting its small business subcontracting goals. In addition, the SEB noted all citations submitted were firm-fixed price so no separate cost/price assessment was performed.

When SpaceX's performance record is considered in its entirety, it has demonstrated the ability to provide timely, efficient, and economical services to all contract requirements. Therefore, there is a High Level of Confidence SpaceX will successfully perform the requirements of the GLS solicitation.

## PRICE EVALUATION RESULTS

In accordance with the RFP provision 7.3(c), the SEB utilized each offeror's total evaluated price to conduct its price analysis. SpaceX had the lowest overall total evaluated price. SNC had the next lowest total evaluated price, which was significantly higher than SpaceX's. NGIS had the next lowest price and Boeing had the highest price. For the Price factor, no exceptions, inaccurate conditional assumptions or new terms, conditions, or clauses were noted in NGIS's, SpaceX's, or SNC's price proposals. However, Boeing's price proposal included an inaccurate conditional assumption and two exceptions to the contract terms, which Boeing used as the basis for its proposed pricing. This is described in detail in the SEB's Price Evaluation Report.

In accordance with RFP provision 7.3(c), the SEB assessed each offeror's proposal for unbalanced pricing and financial capability, and each proposed GLS Mission Payment Schedule was assessed for conformance with work plans and payment limitations. Amongst all four offerors, the SEB did not identify any instances of unbalanced pricing and all companies were determined to have sufficient financial resources. NGIS, SNC, and SpaceX were determined to be compliant with the proposed GLS Mission Payment Schedule; however, Boeing's proposed schedule significantly exceeded the cumulative percentage of payment allowed.

As a result, the total evaluated price for NGIS, SNC, and SpaceX was determined fair and reasonable based on adequate price competition. Specifically, three out of four priced offers were received from responsive and responsible offerors, competing independently, to satisfy the Government's expressed requirements, and there was no finding that any of the prices were unreasonable or unbalanced. The SEB was unable to determine whether Boeing's proposed price was reasonable given its inaccurate conditional assumption and exceptions to the contract terms.

## SELECTION DECISION

On December 4, 2019, the GLS SEB presented the results of its initial evaluation to me as the Source Selection Authority (SSA). The SEB (or Board) informed me that in accordance with the

GLS solicitation, I had the option to either award based on initial proposals or establish a competitive range consisting of the most highly rated proposals. The SEB also informed me the RFP gave me the option to award one or more contracts.

During this initial presentation, the SEB fully briefed me on the procurement process and on the detailed evaluation it performed on the four proposals submitted for the GLS competition: Boeing, NGIT, SNC, and SpaceX. I questioned the SEB on the material presented and carefully considered the detailed Mission Suitability findings, Past Performance information, and Price data presented by the Board. Additionally, I solicited and considered the views of key senior stakeholders within the Human Exploration and Operations (HEO) mission directorate as well as other cognizant organizations during this briefing. These key senior personnel have responsibilities related to the conduct of this procurement and the execution of the work under the resultant contract. Each understood the application of the evaluation factors set forth in the RFP.

In determining which proposal(s) offered the best value to NASA, I referred to the following relative order of importance of the evaluation factors specified in the RFP:

> The Price factor is more important than the Mission Suitability factor, which is more important than the Past Performance factor. When the Mission Suitability and Past Performance factors are combined, they are approximately equal to the Price factor.

Utilizing these evaluation factors, I note this allows me to make a selection based on other than the lowest price, in accordance with the trade-off process described in FAR 15.101-1. The selection rationale that follows was based on a comparative assessment of each of the proposals against each of the source selection factors.

As a preliminary matter, I note that Boeing received the lowest adjectival rating and score under the Mission Suitability factor amongst the four offers while also submitting the highest price. Particularly within the Technical Approach subfactor (the most important within the Mission Suitability factor), Boeing's proposal was the lowest rated of the four offers, with the inadequacy of its cargo stowage design identified as a significant weakness. I further note that Boeing took several exceptions to the RFP and predicated its fixed price on several key assumptions/exceptions. This made it impossible for the SEB to determine whether Boeing's offered price was reasonable. From a Past Performance standpoint, Boeing did very well, having earned a High Level of Confidence rating (along with NGIS and SpaceX). However, Boeing's High rating cannot overcome its Mission Suitability ratings and the significant issues present in its Price proposal. That is, since Boeing's proposal was the highest priced and the lowest rated under the Mission Suitability factor, while additionally providing a conditional fixed price, I have decided to eliminate Boeing from further award consideration. This offeror's evaluation results and my assessment thereof, combined with the relative order of importance of the RFP's evaluation factors, have led me to conclude that Boeing is not competitive for award.

**MISSION SUITABILITY FACTOR**

For the remaining three offerors, I began by reviewing the findings presented by the SEB within the Mission Suitability factor, including the three subfactors (Technical Approach, Management Plan, and Small Business Utilization) therein. I note SNC and NGIS received overall Mission Suitability scores that were very similar, while SpaceX's score was significantly higher than both. When reviewing the underlying findings, I have concluded these scores, while not determinative, are accurate representations of the relative merits of these Mission Suitability proposals.

NGIS

NGIS' technical solution would provide a large dedicated volume for crew to perform tasks such as cargo packing and unpacking, while reserving volume for other critical aspects. NGIS's approach to cargo stowage design in general was impressive and the SEB identified it as a significant strength. Additionally, NGIS's cargo design had significant [redacted] NGIS's trash management approach was also strong in that it was not only [redacted] if need be. This is a significant benefit to overall crew well-being.

In addition to the above-described significant strength, the SEB identified seven strengths in NGIS' approach. These include NGIS's utilization of a heritage design for its cargo solution with its cargo module, service module, and launch vehicle all having significant design and operations experience (Strength #1). NGIS also has failure tolerances (single and dual) built into several of its systems where the requirement does not require it. (Strength #2). NGIS's overall design is robust, exceeding Gateway requirements for design life, which increases design life margin, increases the possibility of extended missions, or both. (Strength #3). It also utilizes a single configuration for both fast and slow transit, which decreases the overall development necessary to have the module ready for Gateway's need date. (Strength #4).

NGIS also proposed a communications approach that would enable a high data rate for payloads during transit, which could enable real-time health and status data for Gateway payloads during transit. This capability could also enable data-intensive science or technology payloads to be flown, increasing NASA's manifesting flexibility for such payloads. (Strength #5). NGIS' proposed approach also allows NASA additional manifest flexibility by providing a very fast transit time to Gateway, significantly eclipsing the 30-day fast transit requirement. This feature allows just-in time payload delivery of emergency repair or replacement items, if needed. (Strength #6). Finally, NGIS' approach also enables manifest flexibility by allowing late loading of a significant amount of cargo. (Strength #7). I agree with the SEB's assignment of strengths in each of these areas and agree that each are beneficial to the Government. However, these strengths were not key discriminators in my award decision.

However, I have serious concerns regarding NGIS' Exploration Cygnus ability [redacted] The SEB identified this as a significant

weakness. It appears NGIS' offering would [redacted] This is a significant concern that could ultimately lead to significant degradation (or even total failure) of the Exploration Cygnus, the launch vehicle, or both. NGIS also identifies a [redacted] in its Exploration Cygnus which, when [redacted] could exacerbate this problem even further. This significant weakness is a key discriminator in my selection decision.

I note NGIS received two weaknesses. The first one was assigned by the SEB for NGIS's failure to clearly identify the interface between its Exploration Cygnus and its selected launch vehicle, with test and qualification plans. (Weakness #1). Additionally, it seems to me NGIS could have done a better job identifying its propellant margins for its fast transit concept of operations. (Weakness #2) This is especially true given the launch vehicle configuration that it has proposed has not flown yet and thus, propellant margins are as of yet untested. However, these two weaknesses are of lesser importance to me than the fairing impingement issue with NGIS' approach.

For the **Management Plan** subfactor, I note NGIS failed to submit a Safety and Health Plan in accordance with the RFP instructions. As a result, it is impossible to ascertain how NGIS would approach this key area. The SEB assessed this as a significant weakness, and I mostly agree. While in my professional judgment, I believe NGIS would certainly have the ability to easily execute a Safety and Health Plan, for reasons unknown, it did not do so here. The SEB correctly evaluated this fact, which contributed to NGIS's Fair rating for this subfactor.

I note NGIS's **Management Plan** was assigned three weaknesses. First, NGIS's safety risk definition deviates from industry standards. (Weakness #1). Specifically, its risk management section, NGIS lumped all risks (i.e., cost, technical, schedule, and safety) together. The failure to differentiate between risks to the crew and risks to cost or schedule could impact NGIS's successful contract performance. Second, NGIS identifies the ISS/Low Earth Orbit micrometeoroid and orbital debris environment, rather than the Gateway environment. (Weakness #2). Finally, NGIS' approach has some caveated language that could be a barrier to insight in contract implementation. (Weakness #3). However, I have determined none of these weaknesses are discriminators for award purposes.

Finally, I have concluded NGIS' approach to **Small Business Utilization** does not provide any meaningful basis for discrimination among the offerors' proposals for award purposes. That is, NGIS, along with SpaceX, received ratings of Good in this subfactor with no corresponding SEB findings.

SNC

SNC's technical solution for cargo to Gateway meets the minimum 3500kg of pressurized cargo, as stated in the RFP, but it [redacted] The SEB identified this as a significant weakness. For instance, the GLS Statement of Work (SOW) contained a reference [redacted] In contrast, to achieve its pressurized cargo capability, SNC's approach uses

a [redacted] without any explanation as to how SNC can achieve the [redacted] Without any additional information than what was proposed, there is a high likelihood SNC will be unable meet the minimum cargo requirement if it cannot achieve this seemingly [redacted]

Additionally, the SEB identified as a weakness the feature that in order to meet the minimum pressurized cargo requirement, SNC proposes to [redacted] (Weakness #3.) This presents challenges to crew time since it will require the crew to [redacted] iven the significant weakness and weakness as just described, this combination of [redacted] is a key discriminator in my selection decision.

In addition to the significant weakness and the weakness described above, the SEB identified two other weaknesses in SNC's proposal. I note that similar to NGIS, SNC also did not identify the interface between its Cargo Module and the launch vehicle. (Weakness #1). SNC also did not clearly identify propellant reserves associated with its yet-to-be-flown launch vehicle configuration. (Weakness #2). Both of these weaknesses would need to be monitored and rectified if SNC were to receive the award, but I have concluded both are less impactful than the significant weakness and weakness associated with SNC's cargo design.

There are several strong aspects of SNC's Technical Approach for which the SEB assigned a total of five strengths. For instance, SNC leverages an existing spacecraft bus and launch vehicle that are largely already developed and operational. (Strength #1). This, combined with the fact that SNC is only developing one configuration for both fast and slow transit, increases the likelihood of SNC being ready to launch by Gateway's initial need date. (Strength #5). Also, SNC's approach has either dual or single fault tolerance in several systems, where only single failure tolerance is required. (Strength #2). SNC also exceeds Gateway's power requirements for payloads, allowing NASA flexibility to manifest more power-hungry payloads. (Strength #3). Finally, SNC's approach allows for a mission extension very late in the mission with very little lead-time needed. (Strength #4). This provides flexibility in overall mission design should NASA need it. While these strengths are certainly beneficial to the Government, they do not rise to the level of key discriminators in my selection decision.

Similarly, SNC's rating in the **Management Plan** subfactor was not a discriminator in my selection decision. SNC received a Good rating (along with SpaceX) and was assessed one weakness related to its Health and Safety Plan. Finally, for the **Small Business Utilization** subfactor, I recognize SNC provided the highest commitment to small business subcontracting of any offeror, including strong commitments to each of the small business sub-categories. SNC earned a Very Good rating for this subfactor, which is superior to NGIS's and SpaceX's ratings of Good. However, given the weight of the evaluation subfactors, SNC's superiority in this subfactor does not translate to a discriminator in my selection decision.

SpaceX

For this factor, SpaceX was the highest rated of all the offerors, receiving a rating of Very Good. First, I first recognize SpaceX provided, by far, the highest amount of both pressurized and

unpressurized cargo capability of any of the offerors, significantly exceeding the minimum cargo amounts levied by the RFP. This is true with both SpaceX's fast transit and slow transit concepts of operation. The SEB assigned this as a significant strength. (Significant Strength #1). In addition, SpaceX provides for a cargo packing density that is significantly lower than the reference density of 290kg/m3 (standard for ISS cargo missions). This large usable volume will allow for cargo to be packed to optimize crew accessibility and ease of use instead of optimizing around cargo density. SpaceX's approach allows for tremendous flexibility in manifesting the maximum amount of cargo. SpaceX's approach to cargo design within the pressurized volume is equally impressive. The SEB assigned this as a significant strength. (Significant Strength #2). The large volume and highly configurable cargo storage concepts are a significant benefit to the crew, offering enhanced flexibility, access, and organization. For example, the solution allows for several possibilities including additional storage once on-orbit, room for trash handling, storage space for large mission unique cargo like Extravehicular Activity (EVA) suits, or for other crew activities like exercise, or science experimentation. The configurability of the entire space is also well designed. In all, SpaceX's cargo capability and configurability represent a significant benefit to NASA and are significant discriminators in my award decision.

SpaceX's cargo delivery approach has several other benefits, which the SEB identified by assigning eight strengths. SpaceX's solution leverages heavily from its pre-existing systems and processes, including Dragon, which is currently flying cargo missions to the ISS, and Falcon Heavy, which is currently in production and operational. (Strength #1). SpaceX's heritage RPOD hardware and software is also already proven and in use. Additionally, SpaceX is not developing two separate configurations for their fast and slow transit approaches to Gateway. (Strength #4). These features reduce development schedule and technical risk to making GLS' initial need date. SpaceX also has a strong approach that allows cargo loading very late in the processing flow (Strength #6) as well as a capability for fast transit to Gateway (Strength #5) that significantly exceeds the 30-day maximum GLS requirement. This not only allows for manifesting flexibility with cargo handover and delivery closer to launch, but also benefits time sensitive payloads that might not otherwise have the ability to fly. Like SNC, SpaceX's approach also allows for a mission extension very late in the mission with very little lead-time needed. (Strength #8). This provides flexibility in overall mission design should NASA need it. SpaceX also has an approach that exceeds requirements by having dual fault tolerance in several critical systems and single fault tolerances in others. (Strength #2). Other benefits to SpaceX's proposal include enhanced battery capability that allows for higher performance of its spacecraft during eclipse periods when its solar arrays are not charging. (Strength #3). Finally, SpaceX offered to have its safety-critical software independently verified and validated as part of its baseline service. (Strength #7). Third party independent verification and validation (IV&V) is a beneficial feature that reduces the risk of catastrophic failures due to software. When combined, these numerous strengths will result in benefits to NASA, over and above the two significant strengths described earlier.

SpaceX's technical proposal contained five weaknesses I consider to be minor in nature and correctable. First, its design approach would locate the service section of the Dragon XL between the pressurized volume and the Gateway, meaning crew would have to translate through the service section, which is mechanically active. (Weakness #5). There is a small possibility that human health and performance standards, such as acoustics environment, would require

mitigations if they are at an unacceptable level. Further, SpaceX, like NGIS and SNC, inadequately defined what will likely be a new hardware interface between its launch vehicle and cargo vehicle. (Weakness #1). Additionally, SpaceX could have been clearer in stating its launch vehicle's performance capability, especially since this configuration has not yet flown and thus, performance margins for lifting its Dragon XL are uncertain. (Weakness #2). There were also two minor technical weaknesses regarding a drag-through duct for ventilation between Gateway and Dragon XL (Weakness #3) and internet communications protocol (Weakness #4). However, because these weaknesses are minor and correctable, I do not consider them to be an obstacle to SpaceX's successful contract performance.

In the management subfactor, SpaceX garnered a Good rating and was assigned one strength from the SEB for its vertically integrated business model, consisting of all major aspects of their cargo delivery capability. I acknowledge this potential advantage in maintaining commonality across systems, subsystems, and components can provide technical synergy. Additionally, since SpaceX performs virtually all of its Design Development Test and Evaluation (DDT&E) in-house, it controls the schedule associated with those efforts, without having to account for subcontracted effort. Overall, SpaceX's approach in in this subfactor was not a discriminator in my selection decision. Finally, I do not believe that SpaceX's approach to small business subcontracting provides a basis for selection, given its low overall point total. It was adequate and in line with what is typically seen in aerospace applications. It is similar to NGIS's approach and less impressive than that put forward by SNC.

**PAST PERFORMANCE FACTOR**

Past Performance consists of three aspects, which the SEB reviewed- recency, relevancy, and performance (i.e., the quality of the offeror's performance on prior efforts). For relevancy, I note the SEB considered aspects of each offeror's past performance that would be germane to the GLS requirement. These included launch services, spacecraft development, RPOD, habitable systems development and operations, management and integration of complex systems, cargo integration, and mission operations.

NGIS

NGIS has performed relevant work in every area with implications for the GLS scope. By virtue of its CRS contract to deliver cargo to the ISS, the NGIS team has demonstrated launch services, spacecraft development, RPOD, habitable systems development and operations, management and integration of complex systems, cargo integration, and mission operations. NGIS also has demonstrated aspects of these areas in other contracts, including CRS-2, which will have nearly identical scope to CRS-1, but has yet to have operational missions.[1] Additionally, NGIS has demonstrated the ability to develop and/or integrate complex spacecraft systems through their ICESat-2 and TESS contracts. Other citations demonstrate somewhat relevant pertinence to a subset of the GLS effort, such as NGIS's NextSTEP BAA for habitation development and its launch-related citations for its launch vehicle subcontractor.

[1] Between SEB evaluation activities and the drafting of this document, NG has begun to fly operational missions to ISS under CRS 2.

For the most part, NGIS has performed this relevant work in a very effective way. On its most relevant contract, CRS-1, NGIS performed strongly, earning CPARS ratings of [redacted] or [redacted] in the areas of Technical, Management, and Schedule. The one area in which NGIS seemed to struggle is in Small Business, with several [redacted] ratings. Continuing on to CRS-2, NGIS is making significant upgrades to its cargo delivery capability, including increased mass capability, and an increased ability to accomplish 24-hour cargo load refreshes. NGIS continues its strong performance under CRS-2, with CPARS ratings holding in the [redacted] to [redacted] range in each area except for Small Business. NGIS' performance in Management and Technical areas in its satellite and habitat development were generally superlative as well, with the vast predominance of CPARS for the ICESat-2, TESS, and NextSTEP-2 citations being either [redacted] or [redacted] Schedule for the most part was also adhered to with some outliers early on in the ICESat-2 period of performance.

Citations for NGIS's launch and pressure vessel subcontractors were largely positive as well, both in CPARS and commercial past performance questionnaires. I have no concerns regarding how these two major subcontractors are likely to perform if selected. Overall, given the relevancy of the NGIS team's combined citations and how they performed on those citations, I agree with the SEB and have a High level of confidence in NGIS' ability to successfully execute the GLS requirement.

SNC

SNC has performed work in a majority of the areas applicable to the GLS requirement, performing launch services (through a major subcontractor), spacecraft development, and management/integration of complex systems. SNC's work in the areas of RPOD, habitable systems development and operations, cargo integration, and mission operations is not yet fully mature, as SNC is still some time away from launching cargo to the ISS under its CRS-2 contract. SNC has other somewhat relevant ongoing work that captures some, but not all of the scope of the GLS effort. For instance, SNC is currently developing a concept of operations and a habitation mock-up under its NextSTEP-2 study contract. These study contracts are significantly smaller in scope and effort than GLS; however, they do require an understanding of habitable systems development and are therefore somewhat relevant. SNC's service module subcontractor has also demonstrated limited elements of the GLS scope (spacecraft development) through its commercial satellite bus contracts. Finally, its launch vehicle subcontractor has performed significant work in the launch services aspect of the GLS end-to-end service. In total, SNC checks a number of the boxes when it comes to the types of effort needed to fully encompass the GLS scope. However, SNC has not yet fully demonstrated RPOD, habitable systems development and operations, cargo integration, and mission operations since its cargo missions to the ISS are still at least a year from launch.

SNC performed the vast majority of its efforts successfully and at a high level. For its CRS-2 work, SNC achieved CPARS ratings that ranged from [redacted] to [redacted] However, the majority of its citations for Technical, Management, and Schedule were [redacted] I note this offeror has been trending negatively in the Schedule area, as its first Dreamchaser launch has been delayed, slipping into no earlier than 2021. SNC consistently underperforms its small business goals but that is likely a product of aggressively pursuing high goals (as this offeror

proposed here, in GLS). In its NextSTEP work, SNC received consistently outstanding ratings across all of the assessed areas. The remainder of SNC's work as it relates to GLS comes through its service module and launch vehicle subcontractors. Its service module subcontractor performed predominantly commercial work, so data on how this entity performed was somewhat erratic. Questionnaires obtained identify relatively minor delays in schedule of producing commercial satellite buses. These minor delays do not cause me concern that SNC would have trouble executing the GLS requirement since developmental challenges in such a significant DDT&E effort are to be expected. SNC's launch vehicle subcontractor has received mostly good ratings for its performance in the Technical and Management areas. Early on, customers have expressed concerns with timely delivery of launch services; however, those schedule concerns are currently trending in a favorable direction. I have no concerns that SNC's launch vehicle major subcontractor could execute the launch vehicle portion of the GLS scope. Overall, given the relevancy of the SNC team's combined citations and how the SNC team performed on those citations, I agree with the SEB and have a Moderate level of confidence in SNC's ability to successfully execute the GLS requirement.

SpaceX

SpaceX has performed relevant work in every facet implicated by GLS' scope. By virtue of its CRS contract to deliver cargo to the ISS and their Commercial Crew contract to deliver crew to ISS, SpaceX has demonstrated launch services, spacecraft development, RPOD, habitable systems development and operations, management and integration of complex systems, cargo integration, and mission operations. Through its robust launch service work, SpaceX has demonstrated its ability to accomplish launch services for a wide range of customers, including NASA, DoD, and commercial entities.

SpaceX's performance on CRS has been relatively consistent across the period of performance with a vast majority of its ratings in either the [redacted] or [redacted] categories. SpaceX did have some challenges in earlier rating periods within the Schedule area, mostly related to the qualification of its Full Thrust launch vehicle and its return to flight after the AMOS-6 on-pad failure in 2016. In the intervening rating periods, SpaceX has improved to [redacted] which demonstrates to me they are beyond initial growing pains and are ready to execute GLS requirements if selected. SpaceX's CRS-2 performance is likewise impressive. It will soon begin to transition from CRS-1 to CRS-2 work in CY 2020. CPARS ratings for SpaceX's commercial crew work were mostly positive as well, with Technical and Management ratings in the [redacted] or [redacted] range with some lower ratings [redacted] in Schedule. CPARS for other Government customers (NASA LSP and DoD) were more of a mixed bag, ranging from [redacted] to [redacted] in the areas of Technical, Management, and Schedule. Overall, SpaceX has past performance that matches every aspect of the GLS requirements and this offeror performed this work, by and large, in a successful manner, although with some schedule hiccups along the way. I agree with the SEB and have a High level of confidence in SpaceX's ability to execute GLS.

**PRICE FACTOR**

For the remaining three offerors, SpaceX had the lowest overall total evaluated price. SNC had the next lowest price, which was significantly higher than SpaceX's price. NGIS had the third highest price, which was significantly higher than SNC's price. The SEB also determined the three offerors' evaluated prices were reasonable and balanced.

**SUMMARY AND SELECTION**

Based upon the foregoing discussion and being cognizant of the relative order of evaluation factors, which places the Price factor as approximately equal to the non-price factors (i.e., Mission Suitability and Past Performance), I have determined that SpaceX's proposal represents the overall best value to the Government. I believe that NGIS, SNC, and SpaceX all demonstrate Technical Approaches that could successfully accomplish the GLS requirements. However, in this subfactor, SpaceX differentiates itself with a superior approach to GLS cargo delivery. Its proposed cargo capacity is the largest of any offeror, by far, and significantly exceeds both RFP requirements for overall cargo and fast-transit cargo. SpaceX's cargo layout is extremely impressive, with an overall volume that allows for a cargo packing density that is superior among the offerors and even better than the reference ISS density provided in the SOW. Its unpressurized cargo capability is also the best among all offerors and is approximately double of what is required. Not only is SpaceX's cargo carrying capacity impressive, its configurability is equally impressive. SpaceX also provides for crew accessibility and the easy segregation of trash handling from cargo handling/unpacking.

Furthermore, the fact that SpaceX is able to leverage significant portions of its prior development efforts (i.e., Dragon and Falcon family of launch vehicles), coupled with its need to develop one GLS configuration for either fast or slow transit, gives me a high level of confidence SpaceX will be able to meet the initial GLS need date. SpaceX also shows flexibility on both the front end with a fantastic late-load cargo capability and the back end with the ability to add additional on-orbit operations. Overall, SpaceX's Technical Approach, which is the most heavily weighed subfactor under the Mission Suitability Factor, is superior to the other offerors. Space X received a rating of Very Good, while NGIS and SNC received Good ratings. The results and ratings under this subfactor are the most significant discriminators in my selection decision.

In the Management Plan subfactor, I note SNC and SpaceX each earned Good ratings, with SNC being assigned only one weakness, and SpaceX earning only one strength. While these findings are not key discriminators in my award decision, SpaceX's one strength gives it a slight edge in superiority for this subfactor. NGIS had the lowest Management Plan rating, having earned a rating of Fair in large part because it did not submit a Safety and Health Plan, which the SEB identified as a significant weakness.

In the Small Business Utilization subfactor, I note SNC is superior to the other offerors, having earned a rating of Very Good. NGIT and SpaceX trail close behind, with both receiving Good ratings for this subfactor and no findings assigned. However, since this subfactor is afforded significantly less weight in the Mission Suitability evaluation scheme (i.e., assigned 50 points out

of 1,000 total), superiority in this subfactor alone does not represent a significant discriminator in my award decision.

For the Past Performance factor, I have concluded all three offerors have demonstrated effective performance on the citations they submitted, responses to questionnaires, and information contained in public databases. I have determined NGIS and SpaceX have demonstrated more relevant experience to the GLS requirement than SNC, primarily due to their work delivering cargo to the ISS. SNC has also received a contract to fly cargo to the ISS but has yet to fly operational missions. SpaceX does have the additional edge by flying Commercial Crew missions to the ISS as well, which demonstrates several portions of the GLS scope. I have concluded any of these three companies could perform the GLS effort; however, I think SpaceX and NGIS currently have the advantage of better relevance ratings by virtue of their Cygnus and Dragon operations to the ISS. There is a clear hierarchy within the Past Performance factor, with SpaceX and NGIS (both receiving overall High levels of confidence ratings) having more relevant experience than SNC (receiving an overall Moderate level of confidence rating). Furthermore, I have determined SpaceX's operational experience with both Commercial Cargo and Commercial Crew gives it a slight advantage over NGIS in overall demonstrated Past Performance.

For the Price Factor, Space X has the clear price advantage with the lowest overall total evaluated price. SNC had the next lowest price, followed by NGIS. Both were significantly higher than SpaceX's price.

In sum, my comparative assessment of these proposals in the non-price area do not lead me to conclude that a tradeoff to the higher priced proposal is in the best interests of the Government, since in my view, SpaceX has the superior Technical Approach, a slightly superior Management Plan, and has, by a small margin, the best Past Performance among the other offerors. This, combined with the fact it also proposed the lowest evaluated price, leads me to select SpaceX for the initial GLS contract based on initial proposals. I note the RFP allows me to award GLS contracts to more than one offeror; however, given the evaluation results and my assessment of those results, I have determined awarding more than one GLS contract at this time is not in the Government's best interest. Furthermore, the on-ramp clause in the RFP will allow these offerors to submit GLS proposals in the future.

Accordingly, after considering the above cited selection criteria and the findings of the Source Evaluation Board, and exercising my independent judgment, I hereby select SpaceX for award of the Gateway Logistics Services contract. This decision will be communicated promptly to the designated Contracting Officer for contract execution.

Kenneth D. Bowersox
Source Selection Authority
Deputy Associate Administrator
Human Exploration and Operations Mission Directorate