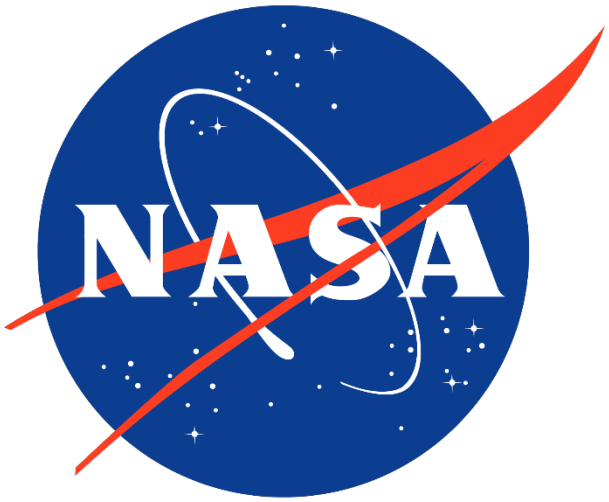
SOURCE SELECTION STATEMENT



National Aeronautics and Space Administration
Goddard Space Flight Center
Greenbelt, MD.

Next Space Technologies for Exploration Partnerships -2 (NextSTEP-2)

Broad Agency Announcement NNH16ZCQ001K-CIS

Appendix O: Capability Studies for NASA Communications and Navigation Network Direct-to-Earth (DTE) and Lunar Space Relay (LSR) Commercialization Services

Background

Communications and navigation services are fundamental to NASA's execution of science and exploration endeavors. NASA's Space Communication and Navigation (SCaN) Program provides communications and navigation services that are essential to the operations of NASA's scientific, technology and human spaceflight missions providing 24/7 Global Near Earth and Deep Space Communications and Navigation Services to over 100 NASA and non-NASA missions, other United States (U.S.) Government agencies, international civil space agencies, and commercial missions. SCaN's vision is to provide interoperable and resilient space and ground communications and navigation infrastructure with the goal of enabling high speed, robust, secure, and cost-effective space communications and navigation services to future science and exploration missions.

NASA's Goddard Space Flight Center's Commercialization, Innovation, and Synergies (CIS) Office, in partnership with the Near Space Network (NSN) Project Office, seeks to work with US industry partners to identify requirements, demonstrate capabilities to address future NASA needs, and explore operational efficiencies to inform the successful commercialization of the NSN services through detailed studies and capability demonstrations based on best practices and state of the art tools and processes. Successful demonstrations will be considered for future NSN commercial services to NASA missions. Commercial services are comprised of ground systems, space systems, and mission planning capabilities.

With this clear vision in mind, the NextSTEP-2 BAA Appendix O supported NASA's objective of moving towards commercial-provisioned services targeting 100% commercial providers for DTE services by 2023 and establishing lunar space relay and navigation service capabilities by the mid-2020s.

On March 29, 2022, NASA posted the NextSTEP-2 BAA Appendix O for Capability Studies for NASA Communications and Navigation Network Direct-to-Earth (DTE) and Lunar Space Relay (LSR) Commercialization Services. The four capability studies under the NextSTEP-2 BAA Appendix O were:

1. Understanding innovations and advancements in RF compatibility testing that will lead to efficiencies of Near Space Network radio frequency architectures.
2. Addressing industry best practices, tools and capabilities related to Mission Planning & Scheduling.
3. Understanding the barriers, challenges, and solutions associated with integration of optical communications ground terminals into the Near Space Network architecture.
4. Understanding innovations and advancements in implementation of software defined radios and cloud computing assets into the Near Space Network architecture.

NASA's intent in soliciting proposals under BAA Appendix O is the award of firm-fixed-price milestone-based contracts. NASA requested that an Offeror can propose on any, multiple, or all study areas identified in Appendix O. NASA notified potential Offerors in the BAA Appendix O that it anticipated total cumulative awards of $600,000 and intended to award two or more contracts. The total number of contract awards would be dependent upon the evaluation results and funding availability. NextSTEP-2 BAA Appendix O Solicitation Amendment one released on April 12, 2022 extended the proposal submission date to May 13, 2022 and Amendment two released on May 5, 2022 extended the proposal submission to May 27, 2022. On May 27, 2022, three proposals were received in response to the issued BAA Appendix O.

Evaluation Process

In accordance with the review process outlined in the BAA Appendix O, an in-depth screening to identify compliance issues with the eligibility criteria contained in the BAA Appendix O and the omnibus BAA. One proposal (AWS) was considered not to have met the eligibility criteria and eliminated from further consideration. The two remaining proposals (KSAT and SpaceLink) were included in the formal evaluation. Both proposals had an acceptable OCI Avoidance Plan.

The Source Evaluation Panel (SEP) that was established for this procurement evaluated the proposals against the evaluation criteria included in the BAA Appendix O and omnibus BAA. The SEP identified strengths and weaknesses and assigned adjectival ratings to the Evaluation Factors of Relevance and Technical Merit. The SEP also evaluated the Price Factor but did not assign a rating.

The evaluation criteria and weighting contained in the Appendix O BAA is outlined below. The criteria is consistent with those established in the NextSTEP-2 omnibus BAA.

- **Factor 1 – Relevance:** The Government will evaluate the relevance of the proposal to meet the services study objectives, the Government's interests and goals, including how the proposal addresses the notional study requirements.
- **Factor 2 – Technical Merit:** The Government will evaluate the quality, depth, and thoroughness of the proposed technical and public private partnership approach and the organization's capabilities and the qualifications of key personnel.
- **Factor 3 – Price:** The Government will evaluate the overall cost reasonableness of the firm-fixed-price estimate and corporate contributions including the extent to which the Offeror complied with the specified dollar limits in this Announcement.

Factor 2 (Technical Merit) is the most important. Factor 3 (Price) is more important than Factor 1 (Relevance).

Evaluation Results

NASA's NextSTEP-2 Broad Agency Announcement Appendix O: Capability Studies for NASA Communications and Navigation Network Direct-to-Earth (DTE) and Lunar Space Relay (LSR) Commercialization Services proposal factor adjectival ratings and prices are as follows:

FIGURE 1: *Appendix O Relevance, Technical Merit, and Price*

	Relevance	Technical Merit	Price	Decision
KSAT, Inc.	Very Good	Good	$161,638.74	Select
SpaceLink Corporation	Good	Good	$189,881.00	Select

Selection Decision

On September 01, 2022, I reviewed the SEP's comprehensive briefing summarizing its evaluation work and conclusions. The briefing provided an opportunity for the SEP to fully explain its final assessment of each proposal and for me to ask questions directly to the SEP while ensuring I had an in-depth understanding of each offeror's proposal to support making informed selection decisions. It is my determination that the evaluation results documented therein, including the findings, adjectival ratings, narrative bases for each adjectival rating, and the Total Evaluated Prices were created in accordance with the evaluation criteria and methodology set forth hereto. Further, it is my determination that this evaluation record has a rational basis, is thoroughly documented, and provided me with information regarding the qualitative merits and drawbacks of each offeror's proposal that is sufficient to support my independent selection decisions. I have selected the following companies for contract award:

1. KSAT, Inc.
2. SpaceLink Corporation

Below is my analysis for each of these offerors and the accompanying basis for their selection for award. For each offeror, I have identified those aspects of its proposal that I find to be particularly compelling and noteworthy.

KSAT, Inc.

Relevance: KSAT thoroughly addressed the study objectives and succeeded in capturing NASA's goals as outlined in the referenced solicitation. The proposal provided a comprehensive plan for the study requirements review and assessment and demonstrated high relevance in both improving current methodologies for compatibility testing and future innovations for how to

address the four study areas. The proposal demonstrated a comprehensive understanding of NASA SCaN services and infrastructure.

Technical Merit: The KSAT proposal provided a detailed approach to meet the compatibility test requirements and innovations using cloud-based solutions that will be beneficial to current and future NASA missions. The proposal included a detailed understanding in how to provide the process and planning details for Optical Communications Ground Terminal site selection and integration into an existing ground segment infrastructure. The proposal included considerable organizational capabilities and highly-qualified key personnel for information related to mission capabilities, virtualized architectures, and modernization initiatives.

Price: KSAT's proposed study price, and all elements thereof, were found to be fair and reasonable, as well as consistent with the work to be performed under the study.

Selection Rationale: In consideration of the results of KSAT's evaluation and consistent with the evaluation criteria and framework, including the relative importance of the evaluation factors as well as the overall adjectival ratings and identified strengths, I have determined that KSAT would provide value to the Government through completion of its study and is selected for contract award.

SpaceLink Corporation

Relevance: The SpaceLink proposal solidly addressed the study objectives and succeeded in capturing NASA's goals as outlined in the referenced solicitation. The proposal provided a detailed plan for the study requirements review and assessment and demonstrated a good understanding of NASA's challenges as the Agency begins procuring commercial relay and DTE services.

Technical Merit: The SpaceLink proposal provided a detailed understanding of the Integration of Optical Ground Terminal into Network Operations study area. SpaceLink's proposal demonstrated current and state of the art experience and technologies for space-based optical communication link and services. The proposal included considerable organizational capabilities and highly-qualified key personnel for information related to Optical Communications and road mapping to ground segment integration techniques and concepts.

Price: SpaceLink's proposed study price, and all elements thereof, were found to be fair and reasonable, as well as consistent with the work to be performed under the study.

Selection Rationale: In consideration of the results of SpaceLink's evaluation and consistent with the evaluation criteria and framework, including the relative importance of the evaluation factors as well as the overall adjectival ratings and identified strengths, I have determined that SpaceLink would provide value to the Government through completion of its study and is selected for contract award.

Summary

NASA places a high emphasis on working with US industry partners to identify requirements, demonstrate capabilities to address future NASA needs, and explore operational efficiencies to inform the successful commercialization of the NSN services. This will enable CIS to help guide NASA in establishing the standards, technology, and mechanisms to advance commercialization efforts and create an interoperable space communications ecosystem around the Earth, to the Moon, and beyond. I am confident that NASA's commercialization goals will be advanced in a meaningful fashion through the two proposals I have selected for contract award.

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Neal Barthelme
Commercialization, Innovation, and Synergies (CIS) Office Chief
Source Selection Official