**Request for Quotations  
5G/6G Core Networks and Algorithms Support Services  
RFQ No. NIST-RFQ-24-6701710**

This is a Combined Synopsis / Solicitation for Commercial Items prepared in accordance with the format in FAR Subpart 12.6 – Streamlined Procedures for Evaluation and Solicitation of Commercial Items – as supplemented with additional information included in this notice. The solicitation is issued using simplified acquisition procedures under the authority of FAR Part 13.  
  
THIS ANNOUNCEMENT CONSTITUTES THE ONLY SOLICITATION. QUOTATIONS ARE BEING REQUESTED AND A WRITTEN SOLICITATION DOCUMENT (*i.e. STANDARD FORM*) WILL NOT BE ISSUED.   
  
This solicitation is a Request for Quotation (RFQ). The solicitation document and incorporated provisions and clauses are those in effect through Federal Acquisition Circular 2024-04 dated May 1, 2024.

The associated North American Industrial Classification System (NAICS) code for this procurement is 541690 – Other Scientific and Technical Consulting Services. The small business size standard is $19 Million. This is a total small business set-aside solicitation. Only small businesses under the applicable NAICS code are eligible to respond.

**DESCRIPTION OF REQUIREMENTS**  
  
Background  
The Transformational Networks and Services Group (TNSG) in the Smart Connected Systems Division, Communications Technology Laboratory (CTL) at the National Institute of Standards and Technologies (NIST) develops foundational network science, network measurement science, standards, and best practices to support the transformation of industries critical to national priorities such as industrial automation and smart transportation. TNSG’s research efforts include fifth and sixth generation (5G/6G) core networks, edge and distributed AI (Artificial Intelligence) and their applications to networking, AI-based autonomous networking, optical and quantum networking, cloud computing, information-centric networks, and automated driving.  
  
Purpose  
The purpose of this requirement is to obtain contractor services to develop AI and ML (machine learning) techniques (including models and algorithms) for supporting 5G/6G networks, quantum networks, and applications over such emerging networks; create new AI-based architectural concepts for such networks; and develop test methods and tools for evaluating the new techniques.

Scope of Work & Specific Requirements

Please see the attached Performance Work Statement (PWS) for details.

**PERIOD OF PERFORMANCE**

The period of performance shall be one (1) year from date of award, from August 29, 2024 through August 28, 2025.

**PLACE OF PERFORMANCE**The primary place of performance shall be the NIST campus located at 100 Bureau Drive, Gaithersburg, MD 20899-1640. **CONTRACT TYPE & PAYMENT TERMS**  
A firm fixed price purchase order is anticipated. Payment will be made on a NET30 basis using milestone payments following inspection and acceptance of individual deliverables.

**APPLICABLE PROVISIONS AND CLAUSES**Please see the attached document for applicable provisions and clauses.

**QUESTION AND ANSWER PERIOD**  
CAR 1352.215-73 INQUIRIES (APR 2010):

Quoters must submit all questions concerning this solicitation in writing electronically to Ms. Lauren Roller, Contract Specialist, at [lauren.roller@nist.gov](mailto:lauren.roller@nist.gov). Questions must be received by or before **May 9, 2024** **at 11:00 AM ET**. Any responses to questions will be made in writing, without identification of the questioner, and will be included in an amendment to the solicitation. Even if provided in other form, only the question responses included in the amendment to the solicitation will govern performance of the contract. (End of Provision).  
  
 **DUE DATE FOR QUOTATIONS**

All quotations must be submitted via email to Ms. Lauren Roller, Contract Specialist, at Lauren.Roller@nist.gov. Submission must be received not later than **May 16, 2024 at 11:00 AM ET**.   
  
*Note: Quoters must have an active registration at* [*www.SAM.gov*](http://www.SAM.gov) *at time of quote submission to be considered for award.*

**INSTRUCTIONS TO QUOTERS (Addendum to FAR 52.212-1)**

The Quoter’s quotation shall be submitted electronically via email and shall consist of two volumes as detailed below. Each quotation volume shall include the Quoter’s name, UEI number, and point of contact information in a cover page, header/footer, or other easily identified location. The Contracting Officer intends to award a purchase order without discussions but reserves the right to enter into discussions if in the best interest of the Government.  
  
**Volume 1: Technical Response**

This volume shall contain the Quoter’s technical response. The technical response (not including table of contents, figures, key personnel resumes, or past performance information) shall not exceed fifteen (12) single-spaced, single-sided pages. Text shall be no less than 12-point font in Microsoft Word or searchable Adobe PDF format. Graphics and tables may use 10-point font.  
  
The technical response shall include the name, title, phone number, and email address of the Quoter’s primary point of contact and the individual authorized to negotiate on behalf of the Quoter (if negotiations are determined to be necessary).   
  
**The technical response shall include:**

1. A narrative of the Quoter’s relevant technical capabilities and the proposed approach to executing the PWS, including proposed methods to successfully complete PWS requirements. If subcontractors will be used, the Quoter shall provide the names of the companies or organizations and their expected roles.
2. The resume(s) of the proposed key personnel which demonstrate qualifications and expertise, including years of experience in each role and professional certifications. Quoters shall clearly identify the individual(s) being proposed as key personnel and the positions for which they are proposed. Quoters shall clearly map their proposed candidates to the required key personnel position title(s) detailed in the “Key Personnel Requirements” section of the PWS.
3. Past performance information to include information on up to three (3) purchase orders or contracts in which the Quoter performed work similar to the scope of this requirement. Past performance information provided shall be for work completed or substantially completed within the past five (5) years. Past performance shall include the following information:  
   1. Name of the Organization Supported
   2. Organization Point of Contact with Current Phone Number and Email Address
   3. Contract Number
   4. Period of Performance
   5. Dollar Value of the Contract
   6. Narrative describing the services performed. The narrative should make clear similarities to the scope of work outlined in this solicitation.
4. Completed provision responses, from the provisions attached to this solicitation. Provisions requiring response are highlighted in yellow. Alternatively, the Quoter may affirm that the provisions are completed and current in their [www.sam.gov](http://www.sam.gov) registration.
5. A list of assumptions and/or exceptions made in preparing the quotation.

**Volume 2: Price Quotation and Small Business Subcontracting Plan**

This volume shall contain the Quoter’s price quotation in Microsoft Excel format or in searchable PDF format. All figures must be rounded to the nearest hundredth.   
  
*Price Quotation:*

Price quotations shall be submitted on a firm fixed price basis in accordance with the contract line item numbering structure provided in this solicitation. Quotations shall be valid for **60** days after solicitation close. Quoters shall completed the yellow highlighted cells in the attached price quotation template and submit the completed template as a *summary* of the proposed pricing. However, Quoters shall provide additional pricing documentation in addition to completing the price quotation template, to include at minimum the information referenced in the following two paragraphs.   
  
To assist the Government in evaluating firm fixed price quotations, the Quoter shall provide a breakdown of the proposed labor per task identified in the Performance Work Statement. The proposed labor breakdown shall include proposed labor categories and estimated hours per labor category.   
  
Quoters shall also include a **proposed fixed price payment schedule** based on requirement **milestones/deliverables** in relation to the deliverables table in the PWS. Quoters may propose alternate payment schedules.

**CONTRACT LINE ITEM STRUCTURE:**

The line item structure for this requirement shall be as follows:  
  
CLIN 0001: 5G/6G Core Networks and Algorithms Support Services in accordance with the attached Performance Work Statement (Firm Fixed Price)  
  
CLIN 0002: Not-to-Exceed Travel (COR-approved travel will be reimbursed in accordance with the Federal Travel Regulation)  
  
The total ceiling price for CLIN 0002 is predetermined; the contractor shall quote the stated ceiling price from the PWS.

**EVALUATION CRITERIA AND BASIS FOR AWARD (Addendum to FAR 52.212-2)**

The Government intends to award a purchase order resulting from this solicitation to the responsible contractor whose quotation conforming to the solicitation will be most advantageous and represents the best value to the Government, price and other factors considered. Best value shall be determined using the trade-off evaluation method. Therefore, the Government may award to other than the lowest priced quote or the highest technically rated quoter.

The Government intends to evaluate quotations and issue a purchase order based on the initial quotations received.  Therefore, the quoter’s initial quotation should contain the quoter’s best terms from a price and technical standpoint.  The Government reserves the right to request revised quotations from, or negotiate final purchase order terms with one or more, but not all, quoters if later determined by the Contracting Officer to be necessary.  The Government may reject any or all quotations if the quotation fails to comply with the requirements of this solicitation.

The factors identified below will be used to evaluate quotations.

Factor A (Technical Factor):  Key Personnel

Factor B (Technical Factor):  Technical Approach

Factor C (Technical Factor):  Past Performance

Factor D (Non-Technical Factor): Price

Technical / non-price factors are listed in descending order of importance. Technical / non-price factors, when combined, are more important than price.  However, price will become more important as the degree of equality among technical non-price evaluations increases.

# A.       Technical Approach

The Government will evaluate the quoter’s technical approach and capabilities for performing each task in the Performance Work Statement. The technical approach will be evaluated for the quoter’s overall understanding of and capability to complete the Government requirements, as well as the expected effectiveness of the proposed approach. Included in the evaluation will be the applicability of the methods proposed to perform each task identified in the Performance Work Statement.

# B. Key Personnel

The Government will evaluate the extent to which the resume(s) submitted for the quoter’s proposed key personnel demonstrate that the proposed individuals meet or exceed the minimum qualifications detailed in the Performance Work Statement, and have the appropriate education, qualifications, and experience to efficiently and effectively address requirements in accordance with the Performance Work Statement.

# C.       Past Performance

The Quoter’s past performance will be evaluated to determine the extent to which the quoter has past performance relevant to the work described in the Performance Work Statement. Relevancy shall be considered similarity to the current requirement in scope of work, period of performance, and total dollar value. The government will consider past performance on efforts completed or substantially completed within the past five (5) years. References may be contacted and the Government may consider past performance information from other sources, such as the Contractor Performance Assessment Reporting System (CPARS).

# D.       Price

Quoted pricing will be evaluated but not scored. Price evaluation will determine whether the quoted price is complete, fair, and reasonable in relation to the RFQ requirements.