

General Information

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Defense Advanced Research Projects Agency, Contracts Management Office, 3701 North Fairfax Drive, Arlington, VA 22203-1714

Description

ISIS Program: SOL BAA 03-36, proposals due November 10, 2003. Technical point of contact: Dr. Larry Corey, Program Manager, Defense Advanced Research Projects Agency (DARPA) Special Projects Office (SPO), 3701 North Fairfax Drive, Arlington, VA 22203-1714. Facsimile: (703) 516-7360, E-mail: baa03-36@darpa.mil (e-mail contact preferred). Contractual point of contact: Mr. Charles Nurse, DARPA Contracts Management Office (CMO), 3701 North Fairfax Drive, Arlington, VA 22203-1714. Facsimile: (703) 696-2208; E-mail: cnurse@darpa.mil (e-mail contact preferred).

Industry Briefing Announcement: Potential offerors are invited to attend an Industry Briefing that will be held on October 7, 2003. Offerors are encouraged to register by September 30, 2003 at <https://dtsn.darpa.mil/isis>. A security clearance is not required to attend this briefing, however, U.S. Citizenship is required.

Program Objective: The Defense Advanced Research Projects Agency (DARPA) Special Projects Office (SPO) is soliciting proposals (technical and cost) from qualified corporations, research centers, universities, FFRDCs, and DOE laboratories for the ISIS program under BAA 03-36. The goal of the ISIS program is to develop technology to enable sensor and communication suites based on a stationary unmanned stratospheric airship. This solicitation is limited to a one-year study to develop potential system approaches, to identify technology development requirements, and to assess feasibility. The nominal altitude of 70,000 feet offers a distant radar horizon, and a large unobstructed ground area visible at steep grazing angles. However, the low atmospheric density at this altitude results in limited lift. Year-long station keeping enables the sensor to detect targets that are invisible to traditional moving or intermittent sensors. However, station keeping during peak wind storms requires high peak power and large total energy storage. The result is that the limited airship lift is nearly consumed by the airship structure and the power system required for station keeping. This leaves little mass budget for the sensor. Preliminary analysis of the

sensor suite requirements indicates that they can be met with a dual-band (VHF and X-band) circular phased-array antenna, with a diameter nearly equal to that of the airship.

Several stratospheric airship designs are under development outside of DARPA, but these designs should not be considered as the basis for the ISIS system. Airship designs currently under development would not accommodate an antenna of the necessary size, and could not lift such an antenna if it is fabricated with conventional antenna technology. The proposed system solution must consider possible antenna technology development as well as structural integration of the sensor antenna and the airship. Additional advantages may result from complete integration of the sensor antenna into the airship hull. Further advantages may result from integration of the sensor antenna, airship hull, and portions of the energy collection, storage, and distribution system. Combinations of materials with any level of functional integration will be considered so long as they support the system level mass limit, station keeping goal, and desired sensor capability.

ACQUISITION INFORMATION: DARPA requires that all interested parties register their organization through the ISIS BAA web site <https://dtsn.darpa.mil/isis>. Additional information for offerors is available through this web site. Offerors having difficulty accessing the web site should email a description of the problem to baa03-36@darpa.mil. DARPA will host an industry briefing on October 7, 2003, at Booz Allen Hamilton, Suite 600, 3811 North Fairfax Drive, Arlington, VA 22203. Each organization that plans to attend this meeting must register through the ISIS BAA web site. A security clearance is not required to attend the industry briefing. Offerors are encouraged to register for this meeting by September 30, 2003. Offerors are free to team with any entity, including Federal and Department of Defense Laboratories. If an offeror intends to team with a federal entity, it should include a copy of the teaming arrangement or a signed commitment letter along with a description of the tasks the federal entity will perform and the costs associated with those tasks. Portions of the work to be conducted under this BAA may be classified. Offerors must identify personnel with appropriate clearances, or a plan to hire cleared personnel, or contract this portion of the work to subcontractors with cleared personnel. The Government is seeking participation from the widest number of offerors. Historically Black Colleges and Universities (HBCU) and Minority Institutions (MI) are encouraged to submit proposals or to team with others in submitting proposals; however, no portion of this BAA is set aside for HBCU and MI participation, due to the impracticality of reserving discrete or severable areas of technology for exclusive competition among these entities. Within the meaning of the Federal Acquisition Regulation (FAR) at 6.102 and 35.016, this announcement and the Proposer Information Pamphlet (PIP) constitute DARPA's solicitation for this BAA. Evaluations of all proposals will be accomplished through a technical review of each proposal considering the following general criteria, which are listed in descending order of relative importance: a) Scientific and technical merit, b) Offeror qualifications, c) Cost realism. Specific criteria for each proposal category can be found in the PIP. The Government reserves the right to select for award all, some, or none of the proposals received in response to this announcement. Awards may be

traditional FAR/DFARS contracts, grants, cooperative agreements, and/or Other Transaction Agreements. PROPOSAL SUBMISSION: Offerors must obtain the BAA 03-36 Proposer Information Pamphlet (PIP) which provides further technical and administrative detail for the BAA including the technologies of interest, evaluation criteria, and format of proposals. Proposals not meeting the specified format described in the PIP will not be considered for award. The PIP is not classified and may be obtained via the ISIS BAA web site. Questions regarding this BAA or comments on the PIP may be submitted through the ISIS BAA web site. A table of important dates and milestones is provided in the PIP. The Government shall not be liable for the cost of proposal preparation and submission. Proposals shall be submitted in accordance with this announcement and the PIP. There will be no other solicitation issued in regard to this requirement. Offerors should be alert for any BAA amendments that may be published at <http://www.darpa.mil/baa/#spo>.

PROPOSAL EVALUATION: The Government intends to select for award the proposals that overall represent a balanced approach to program execution, program approach, risk and proposed cost. Evaluation of proposals will be performed using the following criteria: 1) Scientific and Technical Merit: The evaluation will consider whether the proposed study fully encompasses all critical aspects of the airship and sensor systems, and whether the system approach and technologies proposed for study appear likely to support a future integrated sensor-airship system that meets the ISIS system performance goals. The risk/payoff of the selected approach and the risk/payoff of technology development required to enable the selected approach will be considered although not necessarily adversely. Innovation relative to conventional approaches and relative to other proposed approaches will be considered. The feasibility of some proposed system concepts cannot be adequately established through a study alone. Offerors are invited to propose necessary proof-of-principle demonstrations of critical technologies. If funded, the performer should complete all hardware demonstrations within the time frame of the one-year study. 2) Offeror Qualifications: The evaluation will consider the capabilities of the offeror to perform the proposed study. The offerors team should include expertise, prior experience, and other necessary resources (e.g. computer simulation tools) in each technology area involved in the proposed study. The team should also include system engineering expertise and resources. The soundness of the proposed management plan will also be considered. 3) Cost Realism: Cost will be evaluated to determine whether the offerors estimate is realistic for the technical and management approach offered. This is necessary to gauge the offerors practical understanding of the effort and to estimate the likelihood that the proposed effort can be completed with the proposed funding. Affordability will also be considered during proposal evaluation.

ORGANIZATIONAL CONFLICT OF INTEREST: Each cost proposal shall contain a section satisfying the following requirements: Awards made under this BAA are subject to the provisions of the Federal Acquisition Regulation (FAR) Subpart 9.5, Organizational Conflict of Interest. All offerors and proposed subcontractors must affirmatively state whether they are supporting any DARPA technical office(s) through

an active contract or subcontract. All affirmations must state which office(s) the offeror supports and identify the prime contract number. Affirmations shall be furnished at the time of proposal submission and the existence or potential existence of organizational conflicts of interest, as that term is defined in FAR 9.501, must be disclosed. This disclosure shall include a description of the action the offeror has taken, or proposes to take to avoid, neutralize or mitigate such conflict. If the offeror believes that no such conflict exists, then it shall so state in this section. It is the policy of DARPA to treat all proposals as competitive information, and to disclose the contents only for the purposes of evaluation. The Government intends to use non-Government personnel as special resources to assist with the logistics of administering the proposal evaluation and providing selected technical assistance related to proposal evaluation. Support personnel are restricted by their contracts from disclosing proposal information for any purpose. Contractor personnel are required to sign Organizational Conflict of Interest Non-Disclosure Agreements. By submission of its proposal, each offeror agrees that proposal information may be disclosed to those selected contractors for the limited purpose stated above. Any information not intended for limited release to support contractors must be clearly marked and segregated from other submitted proposal material.

SPONSOR: Defense Advanced Research Projects Agency (DARPA), Contracts Management Office (CMO), 3701 North Fairfax Drive, Arlington, VA 22203-1714. Charles Nurse, Contracting Officer, Phone (571) 218-4815, Fax (703) 696-2208, E-mail cnurse@darpa.mil. Technical Point of Contact Dr. Larry Corey, DARPA Program Manager, Phone (703) 248-1513, Fax (703) 516-7360, E-mail baa03-36@darpa.mil.