

**Cornerstone Initiative Request (CIR)**

**For**

**Heavy Rare Earth Elements (HREE) Supply Chain Resiliency**

**For**

**Government Fiscal Year 2020**

**Cornerstone Initiative Request (CIR) Number: CS-20-0802**

Issued by:

**Army Contracting Command - Rock Island**

For

**Cornerstone**

In Support of:

**Combat Capabilities Development Command – Chemical Biological Center**

**Issue Date: 4 November 2019**

**Proposal Due Date/Time: 16 December 2019/4:00pm Central**

## I. Background/Terms and Conditions

### 1. Purpose

The purpose of this CIR is to solicit Firm Fixed Price (FFP) proposals for prototypes to field a commercially sustainable domestic capability for the separation of HREE in support of Department of Defense (DoD) and essential civilian products.

### 2. Background

This CIR is being issued by Army Contracting Command – Rock Island in support of the Combat Capabilities Development Command – Chemical Biological Center under the Cornerstone Other Transaction Agreement (OTA). Cornerstone is intended to “Assess and Strengthen the Manufacturing Defense Industrial Base and Supply Chain Resiliency of the United States.” The DoD is required by statute to monitor and support the defense Industrial Base. Pursuant to Title 10, Section 2508 of the U.S. Code (U.S.C.), an Industrial Base Fund exists to fund efforts in four different areas: Monitoring and assessment of the Industrial Base; Addressing critical issues in the Industrial Base related to urgent operational needs; Supporting efforts to expand the Industrial Base; Addressing supply chain vulnerabilities. Furthermore key areas of the Industrial Base Analysis and Sustainment (IBAS) investment include: Advancing and sustaining both traditional and emerging defense manufacturing sectors; Preserving critical and unique manufacturing and design skills; Supporting and expanding reliable sources; Identifying and mitigating supply chain vulnerabilities including cyber manufacturing and trade skills vulnerabilities.

### 3. Period of Performance

The period of performance is up to ten years (one year for the Base agreement, with potential Options for a total of ten years).

### 4. Agreement Type

Subject to availability of funds, the Government intends to award a single fixed price OTA; however, it reserves the right to award multiple OTAs if in the best interest of the Government. The Government may opt to make no awards, or re-open the solicitation at a later period if the submissions are insufficient in quality or fail to meet the intent of the solicitation.

### 5. Other Transaction Authority

In accordance with 10 U.S.C. § 2371b, Authority of the DoD to Carry Out Certain Prototype Projects, each prototype project awarded under an OTA must meet at least one of the following conditions:

- a. There is at least one nontraditional defense contractor or nonprofit research institution participating to a significant extent in the prototype project.

- b. All significant participants in the transaction other than the Federal Government are small businesses (including small businesses participating in a program described under Section 9 of the Small Business Act (15 U.S.C. § 638)) or nontraditional defense contractors.
- c. At least one third of the total cost of the prototype project is to be paid out of funds provided by sources other than the Federal Government.

Throughout the period of performance of any OTA, the Government will actively monitor the award to ensure compliance with this provision in accordance with the implementation guidance from Headquarters – Department of the Army and/or the Office of the Secretary of Defense. Offerors will be given the opportunity to become compliant with the guidance should they be found non-compliant. Failure to comply may result in termination.

## **6. Eligibility**

- a. Only those members who have an executed Cornerstone Consortium Management Agreement and active registration in System for Award Management (SAM) are eligible to receive an award resulting from this CIR.
- b. Offerors must have an active registration with the Joint Certification Program (JCP) in order to handle unclassified military technical data. Instructions for obtaining JCP certification may be found at the following site:  
<http://www.dla.mil/HQ/InformationOperations/Offers/Products/LogisticsApplications/JCP/FAQ/>
- c. Foreign participation, access and transfers, and permit participation for this CIR is restricted and will be approved on a case by case basis, and only when in the best interest of the U.S. Government. Members are wholly responsible for their non-U.S. members/persons if permitted, and shall comply with 8 U.S.C. § 1324(a) and 8 CFR § 274a.2.
- d. Projects within Cornerstone may be subject to export control laws and regulations. Under no circumstances may any foreign entity (i.e. organizations, companies, or persons) receive access to export controlled information unless proper export procedures have been satisfied.

## **7. Follow-On Production**

The potential for follow-on production for projects awarded from this CIR will be in accordance with 10. U.S.C. 2371b(f). Upon determination that the competitively awarded prototype project has been successfully completed, the requiring office may determine to award a follow-on production contract or transaction without the use of competitive procedures.

## **8. Metrics for Successful Completion**

- a. Phase 1: Successful completion of the research and assessment that proposed a clear path to integrate data from engineering, manufacturing, and sales organizations to produce a business plan for managing the growth of the firm's HREE material supply chain.
- b. Phases 2-4: The success of the completion of these phases under this agreement depends on multiple factors, including, but not limited to, new domestic HREE production, integration of these products in the U.S. DoD and civilian applications, long-term strategy and growth to maintain a significant U.S. market share, and the ability to support downstream HREE industries by being a reliable feedstock supplier. In addition, this Agreement expects the awardee to find innovative solutions to bring the production costs on par with the international market within five year of the first production batch.

## **9. Data Rights**

The Government will retain Government Purpose Rights to all technical data for the manufacturing processes for HREE including the processes and procedures necessary to maintain those capabilities as determined by the Government. Technical data includes, but is not limited to, all process records, description or manufacture, operating and inspection procedures, quality performance and test procedures, maintenance procedures and records, material, and component purchase descriptions, software, and software applications. All technical data delivered to the Government with Government Purpose Rights under this agreement will automatically revert to Unlimited Rights 5 years after the end of the contract performance period.

## **10. Government Property**

The Government does not intend to provide Government Property.

## **11. Non-Government Personnel**

This OTA will utilize non-Government personnel to function as technical advisors to the Government reviewers. These non-Government personnel will have access to the information submitted in response to the CIR and will provide technical expertise and/or advice as required. All non-Government personnel have Non-Disclosure Agreements on file with the Government and are required to protect information to the same standards as Government personnel.

## **12. Freedom of Information Act (FOIA)**

Any sensitive documents or other proprietary data submitted by non-Government parties to this agreement shall be marked with a restrictive legend. The Government will follow its FOIA procedures, including submitter notice, in the event that any person requests sensitive or proprietary data which belongs to a non-Government party.

## **13. Limitation of Government Liability**

Claims for damages of any nature whatsoever pursued under this agreement shall be limited to direct damages only up to the aggregate amount of Government funding disbursed as of the time the dispute arises. In no event shall the Government be liable for claims for consequential, punitive, special and incidental damages, claims for lost profits, or other indirect damages.

**14. Milestone Payment and Deliverables**

Milestone payments will be made in accordance with the negotiated agreement resulting from this CIR. Acceptance criteria for each milestone will be approved/disapproved by the Agreement Officer Representative within 14 calendar days of receipt from the contractor. Once the Government has determined the milestone has been successfully completed and provided notification of approval, the contractor may invoice through Wide Area Work Flow (WAWF).

**15. Accounting System Requirements**

The contractor shall ensure that appropriate arrangements have been made for receiving, distributing and accounting for Federal funds under this agreement. Consistent with this stipulation, an acceptable accounting system will be one in which all cash receipts and disbursements are controlled and documented properly and which is capable of generating a cost element summary.

**16. Payment by Electronic Funds Transfer**

All payments by the Government under this contract, shall be made by electronic funds transfer (EFT). The Government will make payment to the Contractor using the EFT information contained in the SAM. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the SAM.

**17. Electronic Invoicing**

The WAWF system is the method to electronically process vendor payment requests and receiving reports. To access WAWF, the Contractor shall have a designated electronic business point of contact in the SAM and be registered to use WAWF. Step-by-step procedures for self-registration in WAWF is available at <https://wawf.eb.mil/piee-landing/>.

**18. Use of Funds and Comptroller General Access**

All funds are to be used only for costs that a reasonable and prudent person would incur in carrying out this prototype project. To the extent required by 10 U.S.C. § 2371b(c), the Comptroller General shall be permitted to examine the records of any party to the resulting agreement.

**19. Foreign Involvement**

For the entirety of this agreement, keeping with the Cornerstone Mission of “Strengthen the force posture of the US Defense Industrial Base (DIB),” and in accordance with the 2018 Unclassified National Defense Strategy (NDS) which

articulates the threat from foreign predatory economics and inter-state strategic competitions that are the primary threats to US security, Cornerstone will restrict foreign participation, access and transfers. Any proposed foreign participation, access or transfer will require Government notification and concurrence on a case-by-case basis prior to initiating any work effort.

## **20. Non-US Research Programs**

For the entirety of this agreement, keeping with the Cornerstone Mission of “Strengthen the force posture of the US Defense Industrial Base (DIB),” and the intent of protecting tax-payer investments and intellectual property, Cornerstone will restrict direct or indirect participation, collaboration, communication or acceptance of funding with non-US research programs, such as the Thousand Talent Program (TTP), even in the case the activity is conducted with and/or through a US citizen, entity or company. Any proposed non-US research program involvement will require Government notification and concurrence on a case-by-case basis prior to initiating any work effort.

## **21. Foreign Acquisitions/Mergers**

For the entirety of this agreement, the Cornerstone Member shall notify the Government within three business days of entering any discussions regarding potential foreign acquisition or merger, for itself or any business unit of the Cornerstone Member. Said notification will include all relevant details of the potential merger or acquisition. Per the “Foreign Involvement” clause, above, the Government retains the right to consent to any foreign acquisition or merger, considering whether or not the merger/acquisition is consistent with the best interests of the Government.

## **II. Instructions to Offerors**

### **1. Evaluation Type**

This CIR will utilize a one-step evaluation process.

#### **a. FFP Proposal Submission**

Proposals are due no later than 4:00pm Central on 16 December 2019 and shall remain valid for a minimum period of six months from the CIR closing date. Offerors shall submit their Statement of Work (SOW), based on the Statement of Objectives (SOO) included herein and include a matrix showing traceability to the SOO requirements. The Technical and Price proposals should be based upon the SOW.

Proposals shall be submitted electronically via email. The Offeror can choose to send the email encrypted or unencrypted. If an Offeror chooses to encrypt the email, send a separate email follow up with the encrypted password to the following addresses:

- i. [usarmy.ria.ccdc-cbc.mbx.cornerstone-ota@mail.mil](mailto:usarmy.ria.ccdc-cbc.mbx.cornerstone-ota@mail.mil)

- ii. [claire.m.dowd.civ@mail.mil](mailto:claire.m.dowd.civ@mail.mil)
- iii. [katelyn.m.coon.civ@mail.mil](mailto:katelyn.m.coon.civ@mail.mil)

**b. Formatting and Page Limitations**

Proposals shall adhere to the following requirements:

- i. Proposals shall include a cover page that includes the company name, Commercial and Government Entity (CAGE) Code, address, and point of contact (including phone number and email address). The cover page should also include the total dollar amount being proposed and specifically lay out the Government/Contractor share (if cost sharing is applicable). The cover page is excluded from the page count limit.
- ii. Proposals shall include a completed and signed Representation and Certification statement as provided at Attachment 0002. The Representation and Certification document is excluded from the page count limit.
- iii. Proposals shall be submitted in PDF, shall not exceed 20 pages, and shall be Unclassified. SOWs shall be submitted in PDF, shall not exceed 10 pages, and shall be Unclassified.
- iv. Pages shall be 8.5 inches x 11 inches; however, graphs, charts, tables, and diagrams may use oversized paper and shall not exceed 20pages. Supplementary appendices or exhibit documentation may be included and will be excluded from the page count limit.
- v. Text size should be no less than 12 point and Offerors shall utilize Times New Roman font. Smaller font size may be used in figures and tables but must be clearly legible.
- vi. All pages shall be numbered and contain at least one inch margin.
- vii. Offerors will mark all technical information that is to be protected for five years from FOIA disclosure with a legend identifying the documents as being submitted on a confidential basis.

**c. Technical**

Offerors shall develop a SOW, a Work Breakdown Structure (WBS), and an Integrated Master Schedule (IMS) from the SOO. The IMS shall contain Government milestone decision points at the conclusion of each phase. The Offeror shall submit the SOW with all requirements of the SOO mapped to the SOW. Offerors shall provide a full descriptive proposal articulating any and all requirements in the Offeror-prepared SOW. The proposal shall address

every requirement in the SOW, and include a matrix showing where each requirement is addressed. The full proposal shall address the following areas:

- i. A detailed overview of the work to be accomplished in Phase 1.
- ii. A general overview of the SOW to be completed in Phases 2, 3, and 4.

**d. Price**

- i. Offerors shall provide a FFP proposal for Phase 1, and a Rough Order Magnitude (ROM) estimate for Phases 2 through 4, and provide a detailed cost breakdown for all tasks that identifies direct labor (including labor categories, man-hours, and rates), material costs, subcontractor costs, other direct costs (e.g., travel), and overhead/indirect costs (including rates), and profit necessary to execute the requirements of this initiative. The proposal shall identify pricing assumptions, and include the basis of estimate and vendor quotes utilized to generate proposed costs (actual quotes must be provided to support material/subcontract costs for Phase 1).
- ii. The Offeror may propose a milestone payment schedule in its price volume. The milestone payment schedule shall include events and timing, event completion criteria, and event values. Milestone events shall be, or represent, meaningful and essential steps in successfully executing the work called for under this initiative. Milestone events, and their completion dates, shall be clearly and adequately defined so that their accomplishment can be objectively determined. Milestone payment amounts shall be commensurate with the value of the performance event, and fairly represent the progress achieved on the Agreement. Milestone payments are not intended to result in the Government funding all contract costs as they are incurred, and shall not exceed 90% of the contract price. Additionally, Government approval of a milestone payment does not constitute acceptance of an end-item.
- iii. The price proposal shall be submitted in Excel format and is not included in the page limitations.

**III. Evaluation Criteria**

**1. Initial Evaluation**

The Government will conduct an initial evaluation of proposals to determine if they have met basic eligibility and proposal submission requirements. Those

proposals determined to meet the aforementioned criteria will be forwarded for competitive evaluation.

## 2. Competitive Evaluation

A competitive evaluation will be prepared for every eligible proposal as a result of this CIR. The overall competitive evaluation rating will be based on an integrated assessment of the Technical and Price factors identified herein. The Government will select the proposal that represents the best overall value to the Government. Therefore, the Government reserves the right to award to other than the lowest priced offer, or other than the highest technical offer.

Proposals will be evaluated in accordance with the following criteria:

- a. **Feasibility:** Based on current and near term capabilities and capacities. Various differential factors are used to analyze whether a facility project meets business objectives reflecting reasonable economic cost constraints. Key aspects to satisfy success potential are, economic cost-benefit; technical risks; operational efficiencies; and attainable schedule targets for timelines and optimization. This criteria can be integrated with other industry factors such as infrastructure, processing, staffing, energy and utilities, sourcing of raw materials, waste control, permitting. Tested economic assessments combined with a practical project design will incorporate business history, management, operations and market research. A detailed operational description of project controls are a significant developmental stage for mapping demand and revenue profiles.
- b. **Ensured Supply:** Based on ability to acquire feedstock from a reliable and proven resource. Assurance supply is a balance between risks of supplier attrition and ensuring ultimate delivery to markets and customers, including both DoD and civilian. Mixed concentrates of HREE enriched in higher value heavies such as dysprosium (Dy) and terbium (Tb) are economically preferred. Supply chain continuity is a time-factored discipline of supply-side potential suppliers; product qualities; and long-term contract durability. Supply chain best practices are workable through continuity strategies efficient inventory management, compressed logistics and accounting for disruption and volatility.
- c. **Sustainability:** Based on evidence of a long-term business plan with demonstrated knowledge of the rare earth element supply chain. Federal support for a separation facility start up represents opportunity for cost-sharing of capital equipment across the supply chain. Beyond establishing immediate domestic contracts (federal and commercial), outside of US market interests and other business influences need to be in place for long-term. Implementation of a strategic plan can be proposed for the business to persevere if private industry does not support premiums sufficient to stand against the global low pricing structure.

- d. **Technology Readiness:** Based on evidence that technology selected is mature enough to be scaled in a timely and somewhat predictable manner. Delivery requirements in a delivery schedule for achieving business development stages are measured by Technology Readiness Level (TRL) definitions. Demonstration of costly pilot and commercial design (TRL 6-8) can be expedited through collateralizing equipment as a direct means of achieving full commercial deployment (TRL 9). Stage frames for completion of commercial demonstration and deployment for construction and commissioning may span 6 to 18 months, and 12 to 24 months, respectively. Preliminary differential factors influencing timelines are, permits and disposal contracts, customer qualifications, intellectual property, and licensing.
- e. **Expertise:** Based on evidence of significant past experience in the design and building of rare earth separation facility. Expertise in market applications of rare earths is a determining factor in establishing the potential for standing up a capability for the separation facility of HREEs. With past performance in commercial operations of separation, a facility can be physically constructed for production capability in a relatively short time frame. Familiarity with aspects of a customer base requirements enhances successful market entry and decreases risk related to offtake potential and supply dynamics. Technical growth in the rare earth sector is enhanced by having an expertise base of professionals and managers with acquired knowledge gained from global commercial practices

**3. Technical Rating**

The Government will evaluate proposals for acceptability based on demonstrated knowledge, capability, and approach to perform all aspects of the SOO. The Government will assign an overall competitive evaluation merit rating for each eligible proposal. The overall competitive evaluation rating reflects the Government’s confidence in an Offeror’s ability, as demonstrated in its proposal, to meet the stated objective and the potential technical benefit of the effort. The overall competitive evaluation technical ratings are detailed below:

Merit Rating	Definition
Outstanding	Proposal indicates an exceptional approach and understanding of the requirement and contains multiple technical benefits. The risk of unsuccessful performance is low.
Good	Proposal indicates a thorough approach and understanding of the requirement and contains at least one technical benefit. The risk of unsuccessful performance is low to moderate.
Acceptable	Proposal meets requirements and indicates an adequate approach and understanding of the requirement. The risk of unsuccessful performance is no worse than moderate.

Marginal	Proposal does not demonstrate an adequate approach and understanding of the requirement, and/or the risk of unsuccessful performance is high.
Unacceptable	Proposal does not meet requirements of the CIR and thus, contains one or more deficiencies, and/or the risk of unsuccessful performance is unacceptable.

**4. Price**

The Government will evaluate the Offeror’s FFP proposal as part of the competitive evaluation process to assess (1) whether the proposed price is within the available funding limits, and (2) the ability and/or likelihood of the Offeror to successfully execute the proposed project with the financial resources proposed. The Government will determine if the overall estimate is deemed Insufficient, Sufficient, or Excessive in accordance with the ratings below:

Rating	Definition
Sufficient	The price is considered appropriate to successfully complete the proposed project.
Insufficient	The price is lower than what is considered appropriate to successfully complete the proposed project.
Excessive	The price is higher than what is considered appropriate to successfully complete the proposed project, or exceeds available funding limits.

**IV. Points of Contact**

All questions concerning this CIR shall be submitted via email to the Cornerstone Consortium Management Team, [usarmy.ria.ccdc-cbc.mbx.cornerstone-ota@mail.mil](mailto:usarmy.ria.ccdc-cbc.mbx.cornerstone-ota@mail.mil), and Agreement Specialist, Claire Dowd: [claire.m.dowd.civ@mail.mil](mailto:claire.m.dowd.civ@mail.mil). Please reference the specific CIR Number and title with any inquiries.

**V. Attachments**

- Attachment 0001: SOO – HREE Supply Chain Resiliency
- Attachment 0002: Representation and Certification