

## Statement of Work (SOW)

### a. Overview and Scope

The U.S. Department of Defense (DoD) intends to establish a Public-Private Partnership between elements of the U.S. Government (USG) and a new Defense Precision Optics Consortium (DPOC) to strengthen the economic and force posture of the U.S. defense industrial base (DIB) for the optics sector. The DPOC will be managed by a not-for-profit or non-profit firm that will act as the DPOC Manager (DPOCM). The DPOC and the DPOCM's shared mission will be to strengthen the economic and force posture of the U.S. DIB, specifically for the precision optics sector.

DoD intends the DPOCM to function as a neutral third party that collects and evaluates industrial base issues related to precision optics, including, but not limited to: optical blank or substrate material (e.g. domestic source, production or growth of new materials), generation (e.g. grinding and polishing difficult geometries), metrology (to include measurement standards), optical coatings, and design tools. Also, to include but not limited to: technology development and transition; performance standards development and implementation; supply chain analysis and issues mitigation; low-rate production of specific products; and workforce training and certification. The awardee, a not-for-profit or non-profit DPOCM established by either a non-profit, not-for-profit, or a for-profit entity, will establish and grow a robust DPOC, a public-private partnership among the DoD, relevant USG organizations, and relevant Cornerstone-eligible companies and other organizations in the precision optics DIB.

To demonstrate the practical management and operations capabilities of the DPOCM, the DPOCM will plan and execute a prototype effort project to assess the practical management and operations capabilities of the offeror in action. The objective of the precision optics prototype effort is to evaluate the precision optics manufacturing industrial base and roadmap applications within the DoD to include but not limited to the areas of electro-magnetic apertures (e.g. sensor windows and domes), directed energy weapons (DEW), and counter-DEW (C-DEW). The offeror will produce a roadmap and Industrial Base Assessment (IBA) of the current state of precision optics manufacturing with regards to the DoD. This roadmap and IBA will be used to identify gaps and opportunities for further investment and future projects as determined by the DPOC. Based on the offeror's knowledge of the precision optics sector, the offeror will include two quick-start projects in their proposal that will be integrated in to the roadmap. The DPOCM will also produce and deliver the necessary strategy, plans, testing, and processes needed to develop and deliver the technical reports, updates and specifications and standards required to support acquisition and fielding of precision optics in the DoD.

The prototype effort is expected extend beyond a single year. As proposals are developed, task sequencing and their related costs should be considered, facilitating incremental funding and complete project execution.

**b. Applicable Documents – N/A**

**c. Requirements and Tasks**

To fulfill the DoD's requirement for a public-private partnership focused on addressing DIB issues related to precision optics in the DoD, the awardee shall perform the following tasks:

**c.1 Overall Program Management**

- c.1.1 Plan and coordinate a kick off meeting within one month of receipt of initial and subsequent awards, in coordination with the DoD designated technical representatives, to discuss how project tasks will be planned, executed, monitored, and controlled in greater detail.
- c.1.2 Plan and document how the DPOCM, DPOC, and associated project tasks will be planned, executed, monitored and controlled in a Program Management Plan (PMP). The PMP shall provide the overall management approach including, but not limited to: DPOCM mission, vision, and scope; DPOCM and DPOC organizational structure, role and responsibilities; DPOC membership recruitment and management; plan of actions and milestones over five years for the establishment and management of the DPOC, DPOCM, and planning and conduct of technical tasks; data and information control, distribution, and security; and management of changes, strategic communications, risks, staffing, costs, schedule, and performance. The PMP shall be updated and delivered to the DoD designated technical representatives annually.
- c.1.3 Coordinate and deliver required monthly reports (see table in paragraph 4.0) to the DoD designated technical representatives and conduct quarterly performance review meetings covering activities such as performance specifications, metrics development and reporting, technical standards, guidance documents, and industrial partnerships. Key metrics and reporting requirements shall include, but are not limited to:
  - c.1.3.1 Total number of members contacted
  - c.1.3.2 Percentage of those contacted that were accepted,
  - c.1.3.3 Percentage of those accepted who joined,
  - c.1.3.4 Percentage of those contacted who were rejected (categorized by reason for rejection).

- c.1.3.5 Composition of the standards development team (i.e., an appropriately representation of government, industry, or relevant communities)
  - c.1.3.6 Reports indicating the status of each deliverable effort relevant to the current reporting period. These reports should include known issues, risks and opportunities, as well as mitigation plans and “get well” dates, as necessary.
  - c.1.3.7 Percentage of credentialed workers by skill area in the precision optics sector workforce
  - c.1.3.8 Percentage of unfilled positions in the precision optics sector workforce by skill area
  - c.1.3.9 Required meetings, travel and procurement status
  - c.1.3.10 Presentations made in industry and technical venues
  - c.1.3.11 DoD is willing to consider impactful metrics other than the ones listed above if the metrics can demonstrate superior data availability, usability and value (e.g., insight into issues and root and contributing causes).
  - c.1.3.12 The awardee shall also develop metrics for the precision optics project that enable the DoD to evaluate performance against the tasks outlined in 3.5.
- c.1.4 Conduct bi-weekly or monthly status updates virtually or in-person, as agreed, with the DoD designated technical representatives.
- c.1.5 Provide an annual report and briefings covering results, recommendations, lessons learned and program feedback to the steering group.

## c.2 DPOCM Role and Responsibilities

- c.2.1 Produce and grow a robust DPOC: a public-private partnership among the DoD, relevant USG organizations, and relevant Cornerstone-eligible companies and other organizations in the precision optics DIB. The DPOC shall be established and functional within one year of award and be well positioned to support and carry out operational and technical tasks.
- c.2.2 Function as a neutral third party that collects and evaluates industrial base issues related to precision optics, including, but not limited to: product safety, security, quality, reliability and resiliency; technology development and transition; standards development and implementation; supply chain analysis and issues mitigation; low-rate production of specific products; and workforce training and certification.
- c.2.3 Serve as an advisor and/or subject matter expert to the DoD and relevant USG organizations on DoD-pertinent supply chain matters.

- c.2.4 Serve as a self-sustaining entity that has internally-funded leadership, administrative and financial support staff. Solutions that reduce the direct cost of sustainment will be viewed favorably.

### c.3 DPOC Recruitment and Membership Management

- c.3.1 Develop and, once approved by DoD, employ a market outreach and engagement process. Document the market outreach and engagement process in, or as an appendix to the PMP. The process will describe how the awardee intends to engage, recruit, and convene Cornerstone-eligible companies and other organizations, and DoD and relevant USG organizations to perform activities including, but not limited to: nominate and participate in studies and analyses, execute prototype projects to mitigate supply chain risks, develop and implement standards, and develop workforce training and certification programs in support of the optics DIB.
- c.3.2 Ensure invited companies complete the online Cornerstone membership application found at <https://ibasp-public.ria.army.mil/cornerstone/> and sign the Cornerstone Management Agreement (CMA) prior to any substantive discussion with the Cornerstone program or participation in the DPOC.
- c.3.3 Generate specific criteria for evaluating and accepting prospective and current DPOC members and for assessing the effect of and improving the market outreach and engagement process.
- c.3.4 Create, maintain an up-to-date list of all member organizations and include it the monthly report referenced in 3.1.3.

### c.4 DPOCM Status Monitoring: Develop, employ, and document in the PMP a continuous monitoring process that enables the awardee to:

- c.4.1 Assess participants' continued compliance with program requirements.
- c.4.2 Detect changes in participant status that may result in a need to suspend or disqualify the participant from continued participation in the program.
- c.4.3 Collaborate with DoD on the development and implementation of the definitions, standards, and compliance requirements for "trustworthy" status.

**c.5 Initial Technical Task Execution – Defense Precision Optics Manufacturing Assessment & Quick-Start Projects: Plan and execute an initial technical task focused on precision optics manufacturing for DoD systems.**

- c.5.1 Develop a five-year Roadmap of the precision optics sector in the DoD.
  - c.5.1.1 Identify the state of precision optics use in the DoD; current and future (out five years) in the following DoD sectors, to include but not limited to:
    - c.5.1.1.1 Electro-magnetic (EM) apertures (e.g. sensor windows and domes);
    - c.5.1.1.2 Directed energy weapons (DEW), high energy laser and high power microwaves (HPM);
    - c.5.1.1.3 Counter-DEW (C-DEW) technology.
  - c.5.1.2 Identify manufacturing gaps and opportunities for further investment and future projects as determined by the DPOC.
- c.5.2 Perform an IBA of the precision optics sector (with respect to DoD)
  - c.5.2.1 IBA for the following, to include but limited to:
    - c.5.2.1.1 Blank or substrate material (e.g. domestic source, production or growth of new materials);
    - c.5.2.1.2 Generation (e.g. grinding and polishing difficult geometries);
    - c.5.2.1.3 Metrology (to include measurement standards);
    - c.5.2.1.4 Optical coatings;
    - c.5.2.1.5 Design tools.
  - c.5.2.2 Identify gaps and opportunities for further investment and future projects as determined by the DPOC.
- c.5.3 Develop a gap analysis relative to defense and optics user community application of future state precision optics.
  - c.5.3.1 Based on the results of 3.5.1 and 3.5.2, characterize existing precision optics practices/processes and contrast them with future state practices.
  - c.5.3.2 Identify and document issues related to defense application of precision optics within critical defense systems.
- c.5.4 Identify two quick-start projects that would address documented industrial base deficiencies in precision optics sector, to include but limited to, EM windows/domes, DEW, and C-DEW technology.
  - c.5.4.1 Develop and deliver a technical project plan including milestones, clearly identifying the DoD systems that would be impacted and quantify the anticipated benefits with respect to but limited to: technology and manufacturing availability, cycle time, and cost.

c.5.4.2 Deliver a final comprehensive report with results, conclusions, and recommendations presented.

c.5.5 Develop and deliver a final report containing a DoD precision optics Roadmap, IBA, identified gaps and deficiencies, and recommendations for an implementation plan with proposed milestones.

c.6 Other Technical Task and/or DIB Task Execution  
Develop and/or update relevant documentation upon receipt of new technical and/or DIB awarded tasks by the Government, as negotiated.

**d. Milestones and Deliverables**

Task	Description	Due Date
<b>Overall Program Management</b>		
3.1.1	Project Kickoff	1QFY21
3.1.2	PMP – to be updated annually	2QFY21 – 2QFY25
3.1.3	Monthly Status Reports – to include DPOC membership list, technical project status updates, etc.	1QFY21 – 4QFY25
3.1.3	Quarterly Performance Review Meetings – to discuss technical and operational performance of DPOCM, DPOC, and associated tasks	2QFY21 – 4QFY25
3.1.4	Bi-weekly or Monthly Status Updates Virtually or In-Person Meetings	2QFY21 – 4QFY25
3.1.5	Annual Report and Briefings to Steering Group	4QFY21 – 4QFY25
<b>DPOCM Role and Responsibilities</b>		
3.2.1	Establish the DPOC	4QFY21
<b>Initial Technical Task Execution</b>		
3.5.1	Develop a 5-year Roadmap of the precision optics sector in the DoD	As negotiated
3.5.2	Perform an Industrial Base Analysis of the precision optics sector	As negotiated
3.5.3	Perform an Industrial Base Analysis of the precision optics sector	As negotiated
3.5.4	Identify two quick-start projects that would address documented industrial base deficiencies in precision optics sector	As negotiated
3.5.5	Develop and deliver a final report	As negotiated
<b>Other Technical and/or DIB Task Execution</b>		
3.6.1	Other Technical and/or DIB Task – specific reporting and meeting requirements are to be negotiated	As negotiated

**e. Safety**

The awardee shall comply with all federal, state, and local safety laws and regulations to maintain a safe and non-hazardous occupational environment during execution of this agreement.

**f. Environmental**

The awardee shall comply with federal, state, and local environmental laws and regulations, executive orders, treaties, and agreements. The awardee shall consider alternate materials and processes to eliminate or reduce the generation of hazardous waste while reducing item cost and risk to system performance.

**g. Security**

7.1 The security classification level for this effort is unclassified. However, a Secret Facility Security Clearance may be required in later phases of this effort. The awardee must provide acknowledgement of potential requirement to obtain a clearance or to provide cleared personnel up to Top Secret level and describe a path to fulfill that potential requirement with their proposal submission.

7.2 The awardee shall ensure that all controlled unclassified information is handled in accordance with DoD Instruction (DoDI) 8582.01 and DoD Manual (DoDM) 5200.01 Volume 4, and DoD 5010.12-M.

7.3 The awardee shall implement the security requirements of the then-current version of the National Institute of Standards and Technology SP 800-171 for safeguarding its unclassified internal information system. All cyber incidents that affect the controlled unclassified information shall be reported directly to the Agreements Officer and DoD at <https://dibnet.dod.mil>.

7.4 Information Subject to Export Control Laws/International Traffic in Arms Regulation (ITAR): Public Law 90-629, "Arms Export Control Act," as amended (22 U.S.C § 2751 et. Seq.) requires that all unclassified technical data with military application may not be exported lawfully without an approval, authorization, or license under E.O. 12470 or the Arms Export Control Act and that such data required an approval, authorization, or license for export under E.O. 12470 or Arms Export Control Act. For purposes of making this determination, the Militarily Critical Technologies List (MCTL) shall be used as general guidance. All documents determined to contain export controlled technical data will be marked with the following notice: WARNING: - This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., App. 2401 et seq). Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25, "Withholding of

Unclassified Technical Data from Public Disclosure, 6 Nov 1984 Incorporating Change 1, dated 18 Aug 1995.”

**h. Government-Furnished Property**

DoD will provide government furnished equipment, as negotiated.

**i. Intellectual Property**

The Government will establish appropriate Government Purpose Rights in all data, including but not limited to processes, test or market research data, models, business plans, and/or physical items developed under the scope of this project. Intellectual property negotiations will focus on the Government’s potential need to use, modify, release, reproduce, perform, display or disclose the data within the Government without restriction and to release or disclose the data outside the Government only for government purposes. Required technical data shall be provided to the Government at performance milestone events as agreed upon during contract negotiations, or at the end of the contract performance period in its most current form; i.e., current as of the last date of its use. Technical data delivered with Government Purpose Rights will automatically revert to unlimited rights 5 years after the end of the contract performance period. An Offeror may identify and assert restrictions on the Government’s use, release, or disclosure of technical data or computer software under the procedure identified at DFARS 252.227-7017.

**j. Shipping and Reporting Provisions:**

Deliverables shall be provided to the POCs listed in the final Agreement.