

Request for Proposals (RFP)

Issued by:

Directed Energy Professional Society (DEPS)

Date Issued: 24 January 2025

Proposal Submission Deadline: 21 February 2025

Proposal Submission Address: cynnamon@deps.org

Title:

Development, Update, and Delivery of Directed Energy Short Courses

1. Overview

The Directed Energy Professional Society (DEPS) is issuing this Request for Proposals (RFP) to solicit proposals from qualified contractors for the development, update, and delivery of four to six Directed Energy (DE) short courses over a six-month period. These courses will focus on a wide range of technical topics in the field of Directed Energy technologies, aimed at both government and industry professionals. The selected contractor(s) will be responsible for creating the course curriculum, updating existing materials, and delivering engaging and effective training.

2. Objective

The goal of this initiative is to provide up-to-date, relevant, and technically robust training on Directed Energy technologies. The courses should enhance the knowledge and skills of participants, equipping them with the latest advancements in DE systems, as well as operational and testing methodologies. The selected contractor(s) will deliver training in both live and self-paced formats, with flexibility to cater to different levels of technical expertise.

The specific courses to be developed and delivered will include, but are not limited to:

- **Directed Energy Warfighter 101**
- **Design for Testing of Directed Energy Systems**
- **Counter Directed Energy Systems**
- **Space and Airborne Directed Energy Applications**
- **Introduction to Directed Energy Weapons, including:**
 - High Energy Lasers (HEL)
 - High-Power Microwave (HPM)
 - Radio Frequency (RF) Systems

3. Scope of Work

The contractor(s) selected through this RFP will be expected to perform the following tasks:

1. Course Development and Updates:

- Design and develop course curricula for the specified topics, ensuring they are aligned with current technological trends, operational needs, and best practices.
- Revise existing course content to reflect the latest research, industry standards, and advancements in Directed Energy technologies.
- Develop a variety of learning materials, including presentations, readings, technical diagrams, and case studies.
- Ensure that the courses are modular and adaptable to both introductory and more advanced learners.

2. Course Delivery:

- Deliver the courses either in live (virtual or in-person) or on-demand formats.
- Provide engaging, interactive learning experiences through virtual classrooms, webinars, and/or recorded content, depending on the format.
- Ensure that training sessions allow for Q&A, practical demonstrations, and real-world applications where possible.
- Offer post-course support, including resources and materials for continued learning.

3. Evaluation and Feedback:

- Develop an evaluation framework for assessing the effectiveness of the courses, including participant feedback, learning assessments, and course completion rates.
- Collect and analyze feedback to refine and improve course materials and delivery methods.
- Provide DEPS with a comprehensive report summarizing evaluation findings and recommendations for future courses.

4. Proposed Course Topics

The following course topics are a guide for the content to be delivered. The contractor is encouraged to propose additional or alternative courses based on their expertise in Directed Energy technologies:

1. Directed Energy Warfighter 101:

- Overview of Directed Energy technologies and their military applications.
- Introduction to the operational impact of DE systems on defense and military strategies.
- Basic principles and system components of DE weapons.

2. Design for Testing of Directed Energy Systems:

- Fundamentals of testing DE systems, including thermal, electrical, and environmental considerations.
- Test methodologies and frameworks for evaluating performance and readiness.
- Challenges in testing DE systems, with a focus on High Energy Lasers (HEL), High-Power Microwaves (HPM), and Radio Frequency (RF) systems.

3. **Counter Directed Energy Systems:**
 - Principles of countermeasures for Directed Energy systems.
 - Tactical, technical, and strategic aspects of counter-DE operations.
 - Integration of DE countermeasures into larger defense systems and networks.
4. **Space and Airborne Directed Energy Applications:**
 - Overview of space-based and airborne DE technologies.
 - Application of DE systems for missile defense, surveillance, and communication disruption.
 - Unique challenges in deploying and operating DE systems in space and airborne platforms.
5. **Introduction to High Energy Lasers (HEL):**
 - Basic principles of laser technology and its application in defense.
 - Challenges and advancements in HEL systems for military use.
 - Design, testing, and operational aspects of HEL weapons.
6. **Introduction to High-Power Microwave (HPM) Systems:**
 - Fundamentals of HPM technology and its military applications.
 - Technical challenges in developing and deploying HPM systems.
 - Integration of HPM systems into existing military infrastructures.
7. **Introduction to Radio Frequency (RF) Systems:**
 - Overview of RF technologies used in DE systems.
 - Applications of RF in offensive and defensive DE systems.
 - Key differences between RF-based and other DE systems, such as HEL.

5. Contractor Qualifications

To be considered for this contract, the contractor must meet the following qualifications:

- Proven experience in developing and delivering high-quality, technical training courses in Directed Energy or related technologies.
- Expertise in the topics outlined above, particularly in the military, defense, and aerospace sectors.
- Ability to deliver both virtual and in-person training sessions, with the capacity to use various learning technologies (e.g., webinars, learning management systems, multimedia).
- Demonstrated ability to develop clear, engaging, and accessible course materials for a diverse audience.
- Knowledge of government and industry stakeholders involved in Directed Energy technologies.
- Proven track record of successful project management and course delivery.

6. Proposal Submission Requirements

Proposals must be submitted no later than 21 February 2025. All proposals should include the following components:

1. **Company Overview:** A brief history of the contractor, including relevant experience and qualifications.
2. **Course Development Plan:** A detailed outline and description of how the contractor plans to develop and deliver the proposed courses, including methodologies, learning objectives, and instructional materials.
3. **Past Performance:** Documentation of experience in designing and delivering similar technical training programs, including references or feedback from previous clients.
4. **Team Qualifications:** Resume(s) and qualifications of the instructors and subject matter experts who will be involved in the course development and delivery.
5. **Cost Proposal:** A detailed cost estimate for developing and delivering each course, including any associated materials, travel, or other expenses.
6. **Timeline:** A proposed schedule for the development, update, and delivery of the courses, ensuring all training is completed within the six-month period.

7. Proposal Evaluation Criteria

Proposals will be evaluated based on the following criteria:

- **Technical Expertise:** Depth of knowledge in Directed Energy technologies and ability to communicate complex topics effectively.
- **Course Content:** Quality and relevance of the proposed course material, including its alignment with the current needs of the DE community.
- **Experience and Track Record:** Demonstrated ability to deliver similar courses successfully, particularly to government and industry audiences.
- **Cost:** Cost-effectiveness of the proposal, including the value of the training relative to the proposed budget.
- **Timeline:** Feasibility of the proposed schedule for course development and delivery.

8. Proposal Submission Instructions

Proposals must be submitted no later than 21 February 2025. Proposals may be submitted by email to cynnamon@deps.org or via postal mail to:

Directed Energy Professional Society
7770 Jefferson Street NE, Suite 440
Albuquerque, NM 87109

Attn: Directed Energy Short Courses Proposal

For any questions or clarification regarding the RFP, please contact Cynnamon Spain at cynnamon@deps.org or 505 998-4910.

9. Additional Information

- **Contract Duration:** Six months from the award date.
- **DEPS Support:** DEPS will provide necessary logistical support, including access to stakeholders for feedback and coordination of schedules.
- **Training Delivery:** The contractor will be expected to provide both virtual and in-person delivery, with flexibility in scheduling to accommodate a variety of participants.

We look forward to reviewing your proposal and partnering with you to advance the knowledge and capabilities of the Directed Energy community.

Sincerely,
Harry Sinsheimer
Executive Director
Directed Energy Professional Society (DEPS)