

SOLICITATION
CEROS-CORE-06-01

**Ocean Technology Development, Application, and Demonstration
in support of Maritime Military Operations**

National Defense Center of Excellence for Research in Ocean Sciences (CEROS)
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The National Defense Center of Excellence for Research in Ocean Sciences (CEROS) is soliciting proposals for concept development and demonstration of ocean technologies for military maritime purposes. Innovative concepts and new approaches are being sought to advance technology, enhance regional capabilities and infrastructure, and demonstrate beneficial maritime military utility and commercial development potential for the federal Department of Defense (DoD). Proposals are sought within five broad focus areas:

1. **Shallow Water Surveillance Technologies**, emphasizing innovative approaches to collection, processing and presentation of information from and about the shallow (continental shelf depth) maritime operational environment.
2. **Ocean Environmental Preservation**, emphasizing innovative system development and demonstrations for ocean environmental sensing, remediation, monitoring and control.
3. **New Ocean Platform and Ship Concepts**, emphasizing development and demonstration of innovative designs, advanced structures or improved techniques.
4. **Ocean Measurement Instrumentation and Ocean Engineering Tools**, emphasizing development and demonstration of advanced sensors, innovative undersea systems or facilities, and new techniques for undersea measurement, modeling, prediction, and data exploitation.

5. **Unique Properties of the Deep Ocean Environment**, emphasizing new techniques to identify or exploit unique properties, conditions, materials, products or potential of the deep ocean for enhanced maritime operational capability; advanced power sources utilizing batteries, fuel cells, and renewable energy; ocean energy harvesting from waves and currents, gas seeps and gas hydrates, ocean sediments, and water column plankton

CEROS plans to make approximately \$6M available to fund proposals in response to this solicitation. Multiple, firm fixed-price level of effort contract awards, not exceeding \$1M each, are anticipated as a result of this solicitation. Proposed work should be structured with a base period of performance not to exceed 12 months.

CEROS encourages proposals involving multiple entities (*i.e.*, teaming) to leverage capabilities, develop regional technology, and address priority DoD maritime technology needs. To be eligible for consideration, the offeror must be a commercial enterprise; non-commercial, not-for-profit, and/or government entities may be part of project teams as subcontractors to a commercial enterprise.

PROPOSAL PROCESS

CEROS will use a two-step submission process to formulate a Core Program from projects submitted under this solicitation. The first step requires submission of a Proposal Abstract. CEROS will evaluate all abstracts against the evaluation criteria herein without regard to other abstracts submitted. For the second step, CEROS will request full technical and cost proposals from selected offerors for proposed efforts deemed as best qualified for potential negotiation under this solicitation. CEROS will specify the format for full proposals and other relevant information in a letter of invitation to submit a full proposal. No selection for negotiation or subsequent funding will be made under this solicitation without full technical and cost proposals.

To be considered for award, offerors shall submit an unclassified abstract of the proposed effort to CEROS by 12:00 Noon, Hawaii Standard Time, 3 November 2005. The abstract should provide an overview of the project and associated costs. Each proposed project shall have a separate submission. Abstracts must be submitted electronically through the website <https://secure1.ceros.org> according to the procedure described on that website. The submissions shall be prepared in either PDF or Microsoft Word formats readable by IBM-compatible personal computers. Abstracts submitted by any means other than the specified

website will be disregarded. CEROS will attempt to respond no later than 14 December 2005, to companies whose project abstracts are received on or before the deadline given above.

The abstract shall consist of a cover page and up to four additional pages of project information, including figures and tables. Abstracts exceeding five (5) pages in total length will be rejected. Abstracts shall be prepared in the following format: 8.5x11 inch pages; at least ten point type; margins not less than one inch on all sides; and pages numbered. The Cover Page shall include the following: title of the proposed effort; intended product or result; name, company affiliation, phone number, fax number, and electronic and postal mailing addresses of the Principal Investigator and Administrative Point of Contact; proposed period of performance; funding required to produce the proposed products; names and affiliations of sub-contractors and co-investigators; and special requirements or considerations. The balance of the Abstract should clearly describe the projects Problem, Product, Process, Importance, Schedule, and Price. The Abstract shall include the following sections, each clearly labeled:

- A. **Problem**, stating the technical problem and federal Department of Defense (DoD) maritime technical need addressed, describing the technical rationale for the proposed effort, and summarizing the technical objectives of the work.
- B. **Products**, describing the expected results and planned deliverables and discussing the anticipated military and commercial applications of the technology, plans for follow-on development or technical transitions, and patents or other intellectual property that may result from the work.
- C. **Process**, describing the planned technical approach and methods to be used, including the works schedule, task assignments, and major developmental milestones and summarizing special capabilities of the work team, planned risk mitigation efforts, and special techniques or facilities to be used for the proposed work.
- D. **Importance**, stating the specific technical advances and innovation that will be demonstrated by the work, describing the works anticipated residual benefits to maritime military and/or commercial marine technology and discussing the advances to state-of-the-art technology expected and their technical relevance to CEROS program objectives.
- E. **Schedule**, consisting of a timeline chart by work task/subtask covering the period of the proposed work.

F. **Price**, consisting of an estimate for a firm, fixed price level of effort project, including the principal cost elements, direct material costs, direct labor costs, other direct costs, indirect costs, facilities capital cost of money, and profit or fee.

The Abstract may also contain any other information deemed germane to the proposed effort, such as descriptions of leveraged assets, co-funding arrangements, consultant commitments, or technical references.

SIGNIFICANT DATES AND TIMES

Event	Date
FY06 Solicitation issued	3 Oct 2005
Abstracts due	3 Nov 2005, 12:00 noon
Request for full proposals	14 Dec 2005
Proposals due	13 Jan 2006
Notify successful offerors	21 Mar 2006
Begin project work	Jun 2006

EVALUATION CRITERIA

The following evaluation criteria apply to both Abstracts and full proposals requested under this solicitation. CEROS will select for award those projects offering the best value and will assign the specified number of points to each criterion.

A. **Quality (40 points)**. Technical quality of the proposed effort and its potential to successfully address the technical problem involved and to advance the technical state-of-the-art and maritime military technical competence; relevance to DoD technical needs and the CEROS mission; and potential importance to intended recipients of the developed technology. Each technically qualified project will be scrutinized for importance to maritime military needs and potential for near-term application or transition.

B. **Approach and Capabilities (20 points)**. Realism of technical approach and methods proposed and potential for attaining stated objectives and milestones on schedule using the techniques and resources described; corporate and individual qualifications for the work; adequacy of equipment, materials and facilities proposed; and quality of technical risk management and transition plans.

- C. **Anticipated Benefits (20 points).** Potential for significant technical advancement in maritime military and/or commercial marine technical capabilities at reasonable cost and in a timely manner; benefit to the DoD and residual value to the region; military or commercial transition potential and potential for generating intellectual property or follow-on support from sources other than CEROS.
- D. **Costs and Budget (20 points).** Cost realism and value of anticipated results for funding requested; schedule and resource efficiency; leveraged, cost-saving, or value added aspects to the proposed effort. Cost is considered a substantial evaluation criterion but is secondary to technical excellence.

OTHER REQUIREMENTS

To be considered for award, a properly formatted abstract must be received by CEROS through the website specified herein by 12:00 noon, Hawaii Standard Time, 3 November 2005.

Abstracts received after that time will not be considered. Offerors responding to this solicitation are wholly responsible for timely submissions.

It is CEROS policy to treat all submissions as competitive information and to disclose the contents only for the purposes of evaluation. CEROS may use selected consultants as special resources to evaluate abstracts and proposals. These consultants are restricted by agreement from disclosing proposal information or using it for purposes other than the technical assessments for CEROS. By submitting an abstract to CEROS, an offeror agrees that the projects technical and management information may be disclosed to selected consultants and evaluators for the limited purpose stated above or unless otherwise required by law.

All abstracts submitted under this solicitation must be unclassified. If offerors propose to undertake classified work or require access to classified information, they must certify that they have a proper facility clearance, and key personnel must be certified as holding a Secret clearance. Abstracts must clearly state that the proposed work will be classified, if applicable.

An invitation from CEROS to submit a full proposal does not assure subsequent award. The decision to submit or not submit a full proposal is the responsibility of the offeror submitting the abstract.

Successful offerors will be required to execute a State of Hawaii Contract for Goods and Services with the Natural Energy Laboratory of Hawaii Authority pursuant to its statutory authority provided under Chapter 227, Hawaii Revised Statutes and Procurement Exemption No. 06-11-C. The Contract General Conditions and Special Conditions, which may be viewed at the CEROS website (www.ceros.org), are subject to negotiation.

Offerors are advised that if awarded a contract under this solicitation, offerors shall, upon award of the contract, furnish proof of compliance with the requirements of section 3-122-112, Hawaii Administrative Rules. This shall include Chapter 237, tax clearance; Chapter 383, unemployment insurance; Chapter 386, workers compensation; Chapter 392, temporary disability insurance; and Chapter 393, prepaid health care. In addition, to be eligible for award, offerors must either be registered and incorporated or organized under the laws of the State of Hawaii; or be registered to do business in the State of Hawaii.

Pursuant to section 103-10, Hawaii Revised Statutes, contract payments shall be contingent upon the receipt of federal funds.

ADDITIONAL INFORMATION

Additional information about CEROS is available at the CEROS website (www.ceros.org). The CEROS website includes information from the CEROS industry briefing of 6 Sep 2005 and from selected military commands regarding specific technical needs.

CEROS reserves the right to select for award all, some, or none of the proposals received in response to this solicitation.