

# **HAWAII TECHNOLOGY DEVELOPMENT VENTURE Request for Proposals**

**DATE: June 2009**

**Administered by the:  
Pacific International Center for High Technology Research (PICHTR)  
1440 Kapiolani Boulevard, Suite 1225  
Honolulu, Hawaii 96814**

SOLICITATION: HTDV 09-02 (ONR)

POINT OF CONTACT: Harold S. Masumoto, HTDV Project Director, phone: (808) 237-5160.

INITIAL ABSTRACT DUE: Monday, July 13, 2009, Noon HST

The Hawaii Technology Development Venture (HTDV), a project of the Pacific International Center for High Technology Research (PICHTR), is soliciting proposals for applied research, advanced technology development, and transition and commercialization of technologies of interest. Innovative concepts and new approaches are being sought from Hawaii-based small business firms to meet current and future Department of Navy (DoN) and Department of Defense (DoD) requirements as well as those products demonstrating dual-use capabilities. HTDV will execute the program outlined in this announcement contingent upon funding amount and availability.

Subject areas of interest, in accordance with DoD Priority Areas, include:

- Protection (non-lethal capabilities for urban operations; counter IED; maritime domain awareness; maritime interdiction; computer network defense; trusted systems and assurance; broad spectrum medical countermeasures; stand-off fissile material detection).
- Battle-Space Awareness (information fusion and decision making; language translation and understanding; cultural and social network understanding; locating, tagging and tracking; interoperable command and control; alternatives to space for persistent surveillance/enhanced UAVs; software-intensive systems producibility).
- Force Applications (prompt global strike; energetic materials; undersea warfare; air dominance; increased lethality).
- Focused Logistics (alternative energy/energy efficiency; improved responsive access to space; reduced logistics footprint; reduced manpower requirements).
- Human Machine Interfaces.
- Advanced Radar Techniques.
- Non-Cooperative Target Classification and Identification.
- Other technologies as applicable to Hawaii, and DoN and DoD Priorities.

Priority will be given to projects which promote Hawaii's strengths and advantages in:

- Unmanned system sensors to detect smoke, fire, biological contamination signatures, chemical signatures, toxic gases, radiological contamination, change and/or motion, human presence, weapons, explosives, trip wires, mines, muzzle flashes, shock waves, acoustical signatures.
- Robotic components for systems in support of established DoD Robotics activities including, but not limited to, miniature sensors for perception, range, sensor fusion, intruder detection, and human-robot interaction.
- Wheeled, tracked, crawling, or other mobility technologies to enable an unmanned vehicle to traverse rough terrain.
- Energy source technologies to support unmanned vehicle platform and mission packages.
- Software and sensors to detect, diagnose, predict and recover from failures or degradation in performance for unmanned vehicles and systems.
- Wire-line, wireless, data, directional, frequency spectrum management, and other technologies for maintenance of communication links between operators and unmanned systems.
- Human unmanned systems communications and control including, but not limited to, perception for man portable systems, and manipulation of man portable systems.
- Intelligent behaviors and intelligence systems for unmanned operations to deal with perception, navigation, path planning, mission planning, tactical behaviors, cooperative behaviors, learning and adaptation, computational hardware.
- Lifecycle support system technologies.
- Aerial IED detection technologies.
- Human visual perception, cognition and decision-making for rapid and accurate human decision performance enhancement technologies.
- Soft-kill and equipment disabling technologies.
- Biometrics.
- BioTerrorism.
- BioInfomatics.
- Detection, classification, tracking, targeting, and non-lethal attacking technologies.

HTDV is particularly interested in projects commercializing DoN, DoD, or internally developed technologies with significant commercialization and/or DoD transition and Hawaii economic development potential, including early stage or "seed funding" projects.

Contract awards shall be based on proposal merit and funding availability. Proposed work should be structured with a base period of performance of up to 12 months. Options to extend the period of performance may be included in proposal plans but is not guaranteed.

HTDV anticipates that initial contractor selections will be made during August 2009 from submissions received by PICHTR in Honolulu, Hawaii by 12 PM Noon, Hawaii Standard Time, July 13, 2009. However, properly formatted proposal abstracts received after initial contractor selections and before 12 PM Noon, Hawaii Standard Time, July 27, 2009 will be considered for award if funding is available.

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

## **PROPOSAL PROCESS**

To be considered, offerors shall submit an unclassified abstract of the proposed effort to HTDV in Honolulu, Hawaii, by 12 PM Noon, Hawaii Standard Time, July 13, 2009. The abstract should provide an overview of the project and associated costs. Additional details may be included as attachments or appendices and will not count against the page limit. To be eligible for consideration, the offeror must be a commercial, for-profit enterprise.

Abstracts should be submitted electronically through the e-mail to [htdv@pichtr.org](mailto:htdv@pichtr.org) according to other procedures outlined in this document. The submissions shall be prepared in either PDF or Microsoft Word 2003 for IBM-compatible formats and each project should have a separate submission.

Abstracts submitted by any means other than what is specified will be disregarded. Abstracts shall be prepared in the following format: 8.5 x 11 inch plain paper, single or double spaced, in at least twelve-point typeface, with margins not less than one inch, and pages numbered. HTDV will attempt to respond no later than August 31, 2009, to companies whose project abstracts are received on or before 12 PM Noon, Hawaii Standard Time, July 13, 2009.

The abstract shall consist of a cover page and up to four (4) additional pages of project information, including figures and tables. Abstracts exceeding five (5) pages will be rejected. Additional details may be included as attachments or appendices and will not count against the page limit. However, there is no guarantee that technical reviewers will be able to read and digest all of the materials contained in attachments or appendices.

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 project's Problem, Product, Process, Importance and Price.

The Abstract shall include the following sections, each clearly labeled:

- A. Problem. Stating the technical problem and Hawaii/Department of Navy (DoN)/Department of Defense (DoD) technical need addressed, describing the technical rationale for the proposed effort, and summarizing the technical objectives of the work.
- B. Product. Describing the work's expected results and discussing the anticipated application of the result, and patents or other intellectual property that may result from the work.
- C. Process. Describing the technical approach and methods to be used, including work schedules, task assignments, and major project milestones. This section should summarize special capabilities of the work team, and special techniques or facilities to be used for the proposed work. The prime offeror must perform the substantial portion of work.
  - If a subcontractor or subcontractor facilities are to be included in the project, include an approved draft of the subcontract agreement and/or approval for use of subcontractor facilities, as appropriate. Such agreements are not subject to the page limitation for the submission.
- D. Importance. Stating specific technical advances and innovation that will be demonstrated by the work, describing the work's anticipated benefits to military and/or commercial technology and discussing the advances to state-of-the-art expected and their relevance to HTDV program objectives.
- E. Price. Consisting of an estimate for a not-to-exceed level of effort project, including the principal cost elements, direct material costs, direct labor costs, other direct costs, and indirect costs.

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. A discussion concerning intellectual property and patents is important to supporting the effort, especially if such intellectual property is to be secured from other sources.

## **EVALUATION CRITERIA**

The following criteria apply to both Abstracts and full proposals requested under this announcement. HTDV will select for award those projects offering the best value and, except for the first criterion (Item A), will give equal weight to each of the following criteria. Item A will receive twice the weight of any other criterion in the evaluation.

- A. Quality. Technical quality of the proposed effort and its potential for success by advancing the technical state-of-the-art and military technical competence; relevance to Hawaii/DoN/DoD technical needs; potential importance to intended recipients of the developed product(s); and the transition and commercialization potential of the developed product(s).

- B. Approach and Capabilities. Realism of the proposed technical approach and methods and their 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 management and plans.

The prime offeror must perform the substantial portion of technical work for the project. Abstracts and/or Proposals submitted on behalf of a subcontractor, whereby the subcontractor performs the substantial portion of technical work, will not be accepted.

HTDV reserves the right to require that key managers or principals have completed government contracting and/or project management training. Copies of certificates and/or other validation/confirmation of the completion of such training shall be included in evaluation materials provided to HTDV.

- C. Anticipated Benefits. Potential to advance military and/or commercial capabilities at reasonable cost and in a timely manner, potential for sustained, significant benefit to the DoN, DoD and the State of Hawaii; potential for generating intellectual property or follow-on support from sources other than HTDV; and potential for transition and/or commercialization of product(s).
- D. Costs and Budget. Cost realism and value of anticipated results for funding requested and schedule presented; leveraged, cost-saving, or value added aspects to the proposed effort. Cost is considered a substantial evaluation criterion but is secondary to technical excellence.

Furthermore, each technically qualified project will be scrutinized for military operational significance and near-term application. Letters indicating interest from government acquisition agents will be strongly considered if such interest can be independently verified.

### **OTHER REQUIREMENTS**

HTDV plans to make up to \$5.0 million available to fund proposals in response to this announcement. Specific funding depends on funding availability and out-year funding has not been defined. Multiple, cost-reimbursable (fixed ceiling) contract awards are anticipated as a result of this announcement, contingent upon funding. HTDV encourages submission of proposals involving multiple entities ("teaming") to leverage capabilities, develop technology in Hawaii, and address priority Department of Defense technology needs. Non-commercial, not-for-profit and/or government entities may be part of project teams but the team must be headed by a commercial enterprise. Awards are not expected to exceed \$300,000, however exceptions may be made depending on a number of factors including, but not limited to, near commercial/transition product development, cost sharing and other leveraging factors. No profit, fee or facilities cost of capital shall be allowed. All lower tier subcontracts shall be executed on a cost-reimbursable, no fee or profit basis. No fixed price subcontracts shall be executed.

Contract awards will be based on proposal merit and funding availability. HTDV may require that successful offerors deliver at least one technical presentation in Hawaii as part of the project. Successful offerors will be required to participate in government contracting and accounting, project management and other training organized by HTDV unless offerors can demonstrate that responsible staff persons have previously completed such training.

This solicitation will remain open for ninety (90) days from the date of this announcement. However, to be considered in the initial award period, a properly formatted abstract must be received by HTDV in Honolulu, Hawaii by 12 PM Noon, Hawaii Standard Time, July 13, 2009.

Offerors responding to this announcement are wholly responsible for timely submissions. It is HTDV policy to treat all submissions as competitive information and to disclose the contents only for the purposes of evaluation. HTDV may use selected contractors as special resources to evaluate abstracts and proposals. These contractors are restricted by contract from disclosing proposal information or using it for purposes other than the technical assessments for HTDV.

By submitting an abstract to HTDV, an offeror agrees that the project's technical, and business and management information may be disclosed to selected contractors and evaluators for the limited purpose stated above or unless otherwise required by law. Any information submitted to HTDV that an offeror intends to exclude from such limited release must be clearly marked proprietary and submitted apart from other proposal material.

All abstracts submitted under this announcement must be unclassified. If offerors propose to undertake classified work or require access to classified information, they must be able to 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.

An invitation from HTDV 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 cost reimbursable sub-agreement with the Pacific International Center for High Technology Research (PICHTR) and contract payments shall be contingent upon the receipt of federal funds.

### **ADDITIONAL INFORMATION**

Information about HTDV is available through the website at [www.hitdv.com](http://www.hitdv.com).

Contact Point. Questions relating to this announcement are to be directed to Harold S. Masumoto, Project Director, or Keith T. Matsumoto, Technical Director, HTDV Project Office, 2800 Woodlawn Drive, Suite 192, Honolulu, Hawaii 96822, phone: (808) 237-5160.

All responsive sources may submit a proposal abstract, which shall be considered by HTDV. HTDV reserves the right to select for award all, some, or none of the proposals received in response to this announcement. The program described in this announcement is contingent upon funding availability.