



Solicitation and Offer for Basic Ordering Agreement

Section A - Agreement Form

Part I. Solicitation

1. Solicitation number: 6400016227	2. Offers due by: 09/20/2019, 12:00pm	3. Offers valid for 120 days unless a different period is entered here:
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4. The product classification for this procurement under the North American Industry Classification System (NAICS) is Code 541511 - Custom Computer Programming Services

5. Address offer to: UT-Battelle, LLC c/o Oak Ridge National Laboratory P.O. BOX 2008, BLDG. 5700 OAK RIDGE, TN 37831-6024	6. Solicitation issued to: Seller Number: 214342 Attn: SUPPLIER CONTACT ALL PROSPECTIVE OFFERORS UNKNOWN UNKNOWN TN 37830-8050
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7a. For information contact: W. R. Besancenez

7b. Email Address: BESANCENEZWR@ORNL.GOV	7c. Telephone: 865-576-1538	7d. Fax: 865-241-4082
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8. Brief description of supplies or services for which offers are sought:
GCC Accelerator Support

9. Type of subcontract anticipated: Basic Ordering Agreement

10. This procurement [] is, [X] is not a total small business set-aside. See block 4 for the applicable NAICS Code.

11. Table of Contents

(X)	Sec.	Description	(X)	Sec.	Description
X	A	Agreement Form	X	F	Performance Period and Payment Information
X	B	Supplies or Services and Prices/Costs	X	G	General Provisions
X	C	Specifications/Statement of Work	X	H	Special Provisions
	D	Delivery, Shipping, Packaging		I	List of Attachments
	E	Inspection and Acceptance	X	J	Representations and Instructions

Part II. Offer

The undersigned agrees to furnish and deliver the items or perform services to the extent stated in this document for the consideration stated in any resulting task orders. The rights and obligations of the parties to this agreement and any resultant task orders shall be subject to and governed by this document, task orders and any document attached or incorporated by reference.

12. Offeror DUNS establishment number:	13. Offeror Employer Identification number:	14. Offeror acknowledges receipt of amendments numbered:
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15. Name and address of offeror:	16. Remittance address (if different from block 15):
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17a. Signature of person authorized to sign:	17b. Date:
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17c. Name/Title of signer:

17d. Telephone:	17e. Email:	17f. Fax:
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SOLICITATION 6400016227 – GNU Compiler Collection INTRODUCTION AND PROPOSAL INSTRUCTIONS

1. Introduction

UT-Battelle, LLC is the managing and operating contractor of Oak Ridge National Laboratory (ORNL) for the Department of Energy (DOE). The Oak Ridge Leadership Computing Facility (OLCF) at ORNL fields some of the most powerful supercomputers in the world in support of the U.S. Department of Energy's scientific mission. The OLCF is charged with helping researchers solve some of the world's most challenging scientific problems.

This solicitation is a request to bring the implementations of OpenACC and OpenMP in the GNU Compiler Collection (GCC) compiler suite up to the latest versions of the standards and supporting the GPU-accelerators of interest to OLCF so that it becomes fully capable with respect to the needs of OLCF users on OLCF and other platforms. Secondly, there are some features from the most recent Fortran standard that we would like to be implemented in GCC, and we anticipate the need for maintenance and support of GCC (*not* limited to the new work described above) in terms of responding to bug reports and performance issues based on the guidance of designated Company staff. The details are in the Proposal Overview section below.

The solicitation instructions below outline how to prepare your proposal along with how the proposals will be evaluated. The Company intends to award one or more Basic Ordering Agreements (BOA) and fixed-price task orders will be awarded to accomplish the work described in the Statement of Work(SOW) contained within Attachment 1 Draft Basic Ordering Agreement pages 5-9.

The Company may award one or more BOAs. In this case, the ceiling value of the BOAs will be shared. A draft BOA is included as Attachment 1. The General Provisions of the resultant agreements will include the appropriate terms and conditions set. All articles and documents incorporated by reference in the draft BOA are made a part of this solicitation.

The attachments included in the solicitation are:

- Attachment 1 – Draft Basic Ordering Agreement
- Attachment 2 – Pricing Worksheet

2. Basis of Award - Tradeoff

(a) An award resulting from this solicitation will be made to the responsible Offeror that submits a proposal that is determined to provide the best value to the Company considering both technical merit and cost/price.

(b) The technical evaluation process consists of the proposals being reviewed, evaluated and rated using a graded system that assesses the degree of compliance with the Technical Criteria requirements and the level-of-performance risk.

(c) The Technical Criteria are listed below:

Qualification Criteria

Offeror must have prior experience successfully upstreaming contributions into the GCC mainline.

Criterion 1: Technical Understanding and Approach

This criterion will evaluate the Offeror's understanding of the required tasks and the Offeror's approach for accomplishing the objectives of the project. This criterion will evaluate the Offeror's proposed solution for meeting all technical and functional requirements and preferences as stated in SOW, Section 3. The proposed schedule and feasibility of the Offeror's proposed schedule shall be evaluated for timeliness of deliverables.

Criterion 2: Previous Experience

This criterion will evaluate the Offeror's proven experience in the performance of work similar or related to the work described in the SOW.

Criterion 3: Personnel Qualifications

This criterion will evaluate the degree to which your proposal demonstrates the requisite range of skills, qualifications, and experience required for providing the required services. It will evaluate the relevant experience and qualifications of key personnel and project staff; the staff's familiarity with similar tasks conducted with the same or similar clientele base; the quality of performance by individual team members on past projects addressing similar topics; and expertise and accomplishments of key personnel in the related field.

Criterion 4: Participation in Relevant Communities

This criterion will evaluate the Offeror's level of involvement in communities considered relevant to success in completing the work described in the SOW:

- The OpenACC standards organization
- The OpenMP standards organization
- The SPEC High-Performance Group

Criterion 1 and 2 are of equal importance and are of greater importance than criterion 3 and 4. Criterion 3 is of greater importance than criterion 4.

(d) Each Technical Criteria will be graded based on the following ratings:

(1) Blue - Proposal exceeds the performance or capability requirements necessary for acceptable subcontract performance; provides little or no risk to the Company.

(2) Green - Proposal meets the performance or capability requirements necessary for acceptable subcontract performance; provides low to moderate risk to the Company.

(3) Yellow - Proposal marginally meets the performance or capability requirements necessary for acceptable subcontract performance; provides moderate to high risk to the Company.

(4) Red - Proposal fails to meet the performance or capability requirements necessary for acceptable subcontract performance; provides unacceptable risk to the Company.

(e) An overall Technical Rating will also be assigned based on the individual ratings and their relative

importance. The overall color rating may include increments represented as plus (+) or minus (-).

(f) In addition to the evaluation of technical criteria, cost/price will also be evaluated. In determining the best value, the total cost/price, including options (if applicable) and other cost factors, is considered to be less important than technical merit.

If applicable, a determination of total cost/price will include, but not be limited to: (1) transportation, (2) travel, (3) coordination of contract performance, and (4) technical interface challenges.

(g) We may solicit information concerning your record of performance and use it in evaluation.

3. Representations and Instructions

(a) Representations and Certifications. If response exceeds \$10,000, you must return a completed Representations and Certifications form (available at <https://web.ornl.gov/adm/contracts/documents.shtml>).

(b) General Solicitation Instructions. Responses are subject to the provisions of the General Solicitation Instructions form (available at <https://web.ornl.gov/adm/contracts/documents.shtml>).

(c) Sales Tax. DO NOT INCLUDE SALES OR USE TAX IN QUOTED PRICES. See Blanket Certificate of Resale at <https://web.ornl.gov/adm/contracts/documents.shtml>.

4. Preparation of Offers

(a) Offers must be:

(1) Submitted on the forms furnished by the Company or on copies of those forms.

(2) Manually or digitally signed. The person signing an offer must initial each erasure or change made to any form.

(b) If this solicitation is amended, all terms and conditions that are not amended remain unchanged.

5. Technical and Business Management Proposal

Offerors are required to submit a technical and business management proposal in response to the full requirements of the Statement of Work, Attachment 1.

(a) To aid our evaluation, your proposal must be in two separate files in a .pdf format; a Technical Proposal and a Business Management Proposal. The file name, as well as the first page of each proposal document, should identify it as the Technical Proposal or the Business Management Proposal and include the Offeror's name and the solicitation number. Your proposal must be submitted electronically, via email, to the contact listed in Section A.7. of this solicitation. NOTE: Each email is restricted to 26-MB in total size by the ORNL Exchange server.

(b) **Format for Technical Proposal.** The Technical Proposal should not exceed ten (10) pages; excluding:

- Cover Page.
- Table of Contents.
- Responses to the functional requirements and schedule in the SOW located in section C of the Attachment 1 – Draft Basic Ordering Agreement.

You must provide technical information in enough detail to allow the Company to fully evaluate your

proposal against all Technical Criteria. The Company may assume that the Offeror fails to comply with the solicitation if this section is incomplete. The Technical Proposal must be in the following format:

(1) **Table of Contents.** Provide a table of contents with page numbers for each chapter or section and subsections.

(2) **The following information is mandatory:**

Section 1: Proposal Overview

Provide a concise summary in your proposal addressing all Technical Criteria. Offerors shall summarize their understanding of the objectives and requirements of this solicitation. Offerors shall briefly identify key information about their organization. Offerors shall describe how the organization is qualified to perform and complete the work described in the solicitation. The recommended page limit is one (1) page.

Section 2, Qualification Criteria

Provide descriptions and examples of prior experience successfully upstreaming contributions into the GCC mainline.

Section 3: Technical Understanding and Approach

- a) Demonstration of your technical understanding of each area of the Statement of Work (SOW), with an emphasis on each of the task areas in SOW, Section 3 - Technical and Functional Requirements.
- b) Description of your planned approach to fulfilling the requirements by providing a high-level Project Execution Plan, which includes the design and development efforts, proposed milestones and/or interim deliveries of working software and identified risks and mitigation strategies. Describe the approaches and implementation technologies to be used in each stage of your execution plan, to ensure that software supplied will meet the requirements as outlined in the SOW.
- c) Provide a project schedule for proposed milestones and deliverables. Provide information to demonstrate and describe how your firm will meet the proposed schedule.
- d) Description of your Software Quality Assurance (SQA) practices, as well as relevant experience in getting open source software upstreamed to the original authors and maintainers.

Section 4: Previous Experience

- a) The Offeror shall provide examples of prior involvement in OpenACC implementation within GCC, briefly describing the features or capabilities developed and the GCC release in which they first appeared.
- b) The Offeror shall provide examples of prior involvement in OpenMP implementation within GCC, briefly describing the features or capabilities developed and the GCC release in which they first appeared.
- c) The Offeror shall provide examples of prior involvement in providing support for GPU accelerator hardware as a compilation target within GCC, briefly describing the features or capabilities developed and the GCC release in which they first appeared.
- d) The Offeror may provide 1-4 references of past experience/performance in developing a similar product. The references shall include company name, point of contact, telephone number, email address, and a brief description of the project, including any related problems and resolutions.

Reference Checks: The Company may solicit information concerning your record of performance and

use it in the evaluation process. Any reference checks will be conducted at the Company's discretion.

Section 5: Personnel Qualifications

- a) Description of the Offeror's team, including resumes of key personnel.
- b) A listing of all Sub-tier Subcontractors (if any) for this effort. The Offeror must also identify the responsibilities of each subcontractor as it pertains to their portions of the requirements and the associated percentage of work to be completed by each.

Section 6: Participation in Relevant Communities

- a) A description of involvement to date, if any, in the organizations listed above, including personnel involved and roles.
- b) A description of plans for future participation, if any, in the organizations listed above.

(c) **Format for Business Management Proposal.** The Business Management Proposal must be in the following format:

(1) A completed, signed copy of the Solicitation and Offer and Subcontract forms.

(2) **Price Information.**

Note: All pricing shall be included in the Pricing Worksheet, Attachment 2.

a) Tasks 1 – 9: Include pricing for pricing for tasks 1 – 9. The pricing for these tasks shall include milestone events/deliverables in order to support milestone payments. The milestones and the associated payments are to be included in the labeled tabs on the Pricing Worksheet, Attachment 2.

b) Task 10 General Support & Maintenance: Provide yearly pricing for task 10. Maintenance support will be paid quarterly in arrears.

c) Additional Tasks: In support of potential additional tasks, provide labor categories and associated fully burdened hourly rates that will be utilized to develop fixed pricing for said tasks.

(3) **Royalty Information.**

(A) Cost or charges for royalties. If your proposal includes costs or charges for royalties totaling more than \$250, you must include the following information for each separate item of royalty or license fee:

- (i) Name and address of licensor;
- (ii) Date of license agreement;
- (iii) Patent numbers, patent application serial numbers, or other basis on which the royalty is payable;
- (iv) Brief description, including any part or model numbers of each contract item or component on which the royalty is payable;
- (v) Percentage or dollar rate of royalty per unit;
- (vi) Unit price of contract item;
- (vii) Number of units; and
- (viii) Total dollar amount of royalties.

(B) Copies of current licenses. In addition, at our request before execution of the subcontract, you must furnish a copy of the current license agreement and an identification of applicable claims of specific patents or other basis upon which the royalty may be payable.

(4) Other Information. You must include in this section:

(A) Any exceptions that you take to the provisions of this solicitation. Be advised that taking exceptions will be taken into account in evaluating your proposal and may result in your offer being considered non-responsive.

(B) A completed, signed copy of the form entitled "Representations and Certifications."

(C) If you are not a small business concern and your proposal exceeds \$2M, a completed, signed copy of the form entitled Cost Accounting Standards Notices and Certification.

(D) If your proposal exceeds \$650,000, either a copy of your Small Business Subcontracting Plan (see FAR 52.219-9) or the Company form Representations Regarding Subcontracting Plan with an explanation of why you are not required to submit a small business subcontracting plan. If you are required to submit a subcontracting plan, you should use the form available at http://www.ornl.gov/adm/contracts/art_forms.shtml. At a minimum, your plan is to mirror or exceed the Small Business Administration's public goals. These goals are:

Small Business - 23%

Woman-Owned Small Business - 5%

Small Disadvantaged Business - 5%

HUBZone Small Business - 3%

Veteran-Owned Small Business - 3%

Service-Disabled Veteran-Owned Small Business - 3%

You should take into consideration these goals when developing your proposal.

(E) A completed, signed copy of the form entitled "Exhibit 2 - Representation of Limited Rights Data and Restricted Computer Software."

(F) This solicitation includes the "Organizational Conflicts of Interest" clause. If your proposal exceeds \$150,000.00, the statement required by paragraph (c) of the provision entitled "Organizational Conflicts of Interest Disclosure - Advisory and Assistance Services," which is made a part of this solicitation.

(G) If your proposal exceeds \$10 million, a copy of the EEO Preaward Clearance Request form with Items 3, 4, 8, 9, 11, and 12 completed. [Prospective awardees of subcontracts of \$10 million or more are subject to preaward compliance evaluations by the Office of Federal Contract Compliance Programs (OFCCP), unless within the preceding 24 months OFCCP has conducted an evaluation and found the prospective awardee to be in compliance with Executive Order 11246.]

(H) A completed Exhibit 17 – Rights to Proposal Data (Technical).

6. Certified Cost or Pricing Data – Not Applicable

7. Number of Awards

The Company intends to make one or more awards.

Shared Ceiling: This BOA may be one of multiple BOAs awarded by the Company under this solicitation. All BOAs awarded will share an estimated ceiling of \$_____ (TBD). The total amount of task orders issued under the multiple BOAs will not exceed this estimated ceiling capacity. For purposes of contract administration, each individual BOA will have a ceiling price of \$_____ (TBD); however, this does not infer that the Seller will be awarded the full amount. Task orders issued under these BOAs may be issued competitively or non-competitively based on programmatic needs.

NOTE: All award documents will be digitally signed by the Company.

8. Data Universal Numbering System (DUNS) Number

(a) The Offeror shall enter on the Solicitation and Offer form the DUNS number that identifies the Offeror's name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun & Bradstreet (D&B).

(b) If the Offeror is located within the United States and does not have a DUNS number, it should contact D&B directly to obtain one at their website at <http://fedgov.dnb.com/webform>. The Offeror should be prepared to provide the following information:

- (1) Company name.
- (2) Company address.
- (3) Company telephone number.
- (4) Line of business.
- (5) Chief executive officer/key manager.
- (6) Date the company was started.
- (7) Number of people employed by the company.
- (8) Company affiliation.

(c) Offerors located outside the United States may obtain the location and phone number of the local D&B Customer Service Center from the D&B website at <http://www.dnb.com/utility-pages/global-customer-service-centers.html>

9. Access to ORNL Site

(a) Vendor personnel may come onto the ORNL site only if they have a current ORNL badge or a visitor's pass.

(b) Persons who need visitors' passes to deliver offers or participate in site visits must provide their e-mail address to the Procurement Officer on a workday at least 24 hours in advance.

(c) The Procurement Officer will send a link to a secure portal (via-email) where vendor personnel provide the following information: (i) Full name, (ii) employer, (iii) social security number, (iv) date of birth, (v) gender and (vi) country of citizenship.

(d) Visitors' passes must be picked up at the Visitor Center, Building 5200. Photo identification is required.

10. Withdrawal of Offers

Offers may be withdrawn by written notice received at any time before award. Offers may be withdrawn in person by an Offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the offer before award.

11. Questions

(a) Questions concerning this solicitation must be submitted in writing to the person identified in block 7 on the Solicitation and Offer form before **4:00 p.m., 09/13/2019**.

(b) Information given to one prospective Offeror will be furnished to all prospective Offerors if lack of the information would be prejudicial to them.