

**Department of the Interior
Bureau of Safety and Environmental Enforcement**

**SOLE SOURCE JUSTIFICATION
FAR Subpart 13.5 - Test Program for Certain Commercial Items**

**(Mandatory for Acquisitions > SAT)
(Optional for Acqs. ≤ SAT)**

1. Bureau and Contracting Activity [FAR 13.501(a)(1)(ii) and 6.303-2(b)(1)]

This acquisition is being executed by the Bureau of Safety and Environmental Enforcement (BSEE), Office of Administration (OA), Acquisition Operations Branch (AOB), 381 Elden Street (HE 2306), Herndon, VA 20170 for requirements developed by the BSEE, OA, Technical Services Division (TSD), Business Systems Branch (BSB). This document sets forth the justification and approval for a requirement that limits sources and is prepared in accordance with the FAR subpart 13.501 and under the authority of the test program for commercial items (section 4202 of the Clinger-Cohen Act of 1996).

2. Description of Supplies or Services [FAR 13.501(a)(1)(ii) and 6.303-2(b)(3)]

The BSEE intends on issuing a firm fixed price award to Gemini Solutions, Inc. to acquire Merlin software and its maintenance on a sole source basis. The BSEE requires software licenses and its accompanying maintenance for reservoir simulation software that is utilized by Gulf of Mexico Region engineers and geoscientists in Production and Development Office. Reservoir simulation is a key reservoir analysis function that evaluates proposed operator production strategies in order to independently assess and approve application from oil and gas industry operators that propose the highest recovery of oil and gas resources.

3. Requisition No.
0040170957

5. Name of Proposed Source(s)
Gemini Solutions, Inc.
DUNS: 036715522
702 Morton Street
Richmond, TX 77469

4. Cost Estimate (including options)[FAR 6.303-2(b)(3)]
\$ 308,494.00 (Base + Four Option Periods)

6. REQUESTING OFFICE CERTIFICATION

I certify that this recommendation contains the information required by FAR 13.501(a)(1)(ii) and 6.303-2(b) and its contents are accurate.

Requesting Office Rep. (Name & Title) Kelly Griggs, IT Specialist, COR	Signature: FOIA Exemption (b) (6)	Phone No: (504) 731-1451	Date: 14 Aug 2014
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7. ACQUISITION OFFICE CERTIFICATION

I certify that this justification is accurate and complete to the best of my knowledge and belief.

Contracting Officer (Name) Sagar S. Damania	Signature: FOIA Exemption (b) (6)	Phone No: (703) 787-1276	Date: 08/19/2014
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I certify that this justification is accurate and complete to the best of my knowledge and belief.

Chief of the Contracting Office (Name) Douglas M. Marr	Signature: FOIA Exemption (b) (6)	Phone No: (703) 787-1324	Date: 8/14/14
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Identify the authority being used to justify a sole source acquisition [FAR 13.501(a)(1)(ii)]. Refer to block number 10 for justification details.

8. **Section 4202 of the Clinger-Cohen Act of 1996 .**

9. **41 U.S.C. 428a - Services Acquisition Reform Act of 2003.**

10. JUSTIFICATION (Attach additional pages if needed)

(a) Demonstration that the proposed contractor's unique qualifications or the nature of the acquisition requires use of the authority cited [FAR 6.303-2(b)(5)]. [Prepared by Program Office]

Refer to attachment for detailed justification of the proposed contractor's unique qualifications.

(b) Describe the efforts taken to ensure offers were solicited from as many potential sources as is practicable, including whether a Government-wide point of entry (GPE) notice was or will be published as required by FAR 5.2 and, if not, which exception under FAR 5.202 applies. [FAR 6.303-2(b)(6)]. [Prepared by Program Office]

A special notice will be published announcing the Government's intent to issue a sole source award to Gemini Solutions, Inc. In addition, justification will be published to ensure that the public is aware of the intended activity.

10. JUSTIFICATION CONTINUED (Attach additional pages if needed)

(c) Demonstration that the anticipated cost to the Government will be fair and reasonable [FAR 6.303-2(b)(7)]. [Prepared by Contracting Officer]

The BSEE will obtain sufficient pricing details from the intended source to allow for thorough technical and price analysis to ensure pricing paid under this effort is comparable to market pricing and pricing is offered in accordance with the commercial best practices.

(d) Describe the market research conducted and the results or a statement of the reason market research was not conducted. [FAR 6.303-2(b)(8)]. [Initiated by the Program Office and finalized in collaboration with the Contracting Officer]

BSEE engineers and scientists investigated the utility of other comparable software solution but the date extracted from them provided partial imperative solution. There is no known software solution the marketplace that could provide complete production and development analysis to evaluate gas cap production applications, downhole commingling applications, resolve drainage issues, evaluate royalty relief, and secondary recovery applications., that Gemini Solutions, Inc. software solution offers to the Government.

10. JUSTIFICATION CONTINUED (Attach additional pages if needed)

(e) Any other facts supporting the use of a sole source acquisition. [FAR 6.303-2(b)(9)]. [Prepared by Program Office]

The Bureaus have 35 Merlin licenses (33 BOEM, 2 BSEE) combined and under this effort the BSEE intends to purchase another two licenses and maintenance to four licenses in total during the option years. Because BSEE and BOEM has a substantial investment in the tool and the fact that the data analysis must be consistent within a single tool, Merlin application must be used for Production and Development (PD) analysis to prevent duplication of effort and is used as follow-on to the pre-lease and post-lease evaluation process implemented by the Bureau of Ocean Energy Management (BOEM), Resource Evaluation (RE) program area. The software licenses from Gemini Solutions are required to enable a seamless transition for the BSEE interpreters, and to provide the functionality necessary to approve industry Exploration Plans in the time frames set forth in the federal regulations.

(f) List sources, if any, that expressed, in writing, an interest in the acquisition. [FAR 6.303-2(b)(10)]. [Prepared by Program Office]

No other sources have expressed interest in this acquisition to date.

(g) Statement of the actions, if any, the agency may take to remove or overcome any barriers that led to competition before any subsequent acquisition for supplies and services. [FAR 6.303-2(b)(11)] [Initiated by the Program Office and finalized in collaboration with the Contracting Officer]

The BSEE Technical Services Division will reassess its future needs for this requirement at the end of the performance period of the award and accordingly review the marketplace for alternatives to the reservoir modeling software.

**SOLE SOURCE JUSTIFICATION (ATTACHMENT)
FAR 13.5 – TEST PROGRAM FOR CERTAIN COMMERCIAL ITEMS**

Demonstration that the proposed contractor's unique qualifications or the nature of the acquisition requires use of the authority cited at section 4202 of the Clinger-Cohen Act of 1996

The proposed source for this action is Gemini Solutions, Inc. (GSI), the manufacturer and sole owner of the Merlin software suite and the only provider of this software and its maintenance. As such, these applications and their maintenance must be purchased exclusively from this source.

Reservoir simulation is part of the Geological Interpretive Tools program, a major BSEE Information Technology (IT) initiative that provides geoscientists and engineers with software to evaluate highly technical data generated and used by Outer Continental Shelf lease operators. This program allows BSEE to carry out sophisticated, independent analyses routinely performed by industry, and generate timely determinations and decisions. Reservoir simulation is a key reservoir analysis function. BSEE requires this technology to evaluate proposed operator production strategies in order to independently assess the proposals and approve only those applications which meet regulatory requirements i.e. yield the highest ultimate recovery of oil and gas resources.

GSI is the only responsible source to provide the software licenses and support services required by BSEE for this follow-on effort which is for the continued development and production of a critical interpretation platform and highly specialized software. The current level of accumulated experience, training, and software development that enables BSEE for Production and Development analysis would have to be replicated should the Government move away from its current interpretive suite of software inclusive of Merlin software suite provided by GSI. GSI has built a unique tool that has provided the Government with extensive customization to a commercial product that GSI makes available to all of its customers.

This follow-on acquisition will allow GSI to provide the Government with continued development and production of a critical interpretation platform and highly specialized software. GSI has quickly implemented many significant improvements to its commercially-available software package that provide value-added opportunities to specifically analyze reservoir modeling, all of which would require extensive time and duplication of effort if attempted by a new vendor.

Reservoir simulation is used to evaluate gas cap production applications, downhole commingling applications, resolve drainage issues, evaluate royalty relief, and secondary recovery applications. The findings from these evaluations are used to assess the economic, environmental, operational, and safety factors of a proposed development scenario. BSEE would realize a significant risk to the disruption of the well permitting process should the software and workflow be acquired from a new vendor. In addition, an award to any other source would result in substantial duplication of cost to the Government that is not expected to be recovered through competition, as well as unacceptable delays in fulfilling the agency's requirements if a new platform would have to be implemented. The software licenses from GSI are required to enable

a seamless transition for the BSEE interpreters and to provide the functionality necessary to approve industry Exploration Plans in the timeframes set forth in federal regulations.

If the existing software was replaced with a different product, the BSEE would lose all of the technological, human, and financial capital that has been invested in defining this most critical of BSEE business processes.

At a minimum, a transition to a new software product for reservoir modeling analysis would require an unnecessary investment of man hours on structured software training to achieve the level of technical competency currently deployed with the existing solution. A transition to new software would also result in a significant duplication of cost to the U.S. Government as new training requirements and learning opportunities would replicate the sunk cost that BSEE has already invested in commercial training.