



ICBS Re-engineering Project

<http://icbs.nwcg.gov>

Report: COTS / GOTS ICBS Replacement System Market Search Results May 5, 2005

Synopsis:

As required by the Office of Management and Budget (OMB) under circular A-130 (please see Appendix 1) the ICBS Re-engineering (ICBS-R) Project Team conducted a market search for existing systems that could potentially replace the legacy ICBS cache application. A "Request for Information (RFI)" was posted on FedBizOpps on September 17, 2003. The government received responses from nineteen vendors with a variety of products – some relevant to the government's request and some not. It was determined that none of the described commercial-off-the-shelf systems (COTS) was a close match with the government's needs, and the government proceeded to develop a task order under GSA schedule 70 for the design and development of a replacement system.

The market search provided some insight into commercial and government products, and this information was used by the government when drafting the Statement of Work (SOW) for the design/development task order. The SOW was written in such a way as to invite vendors to submit a COTS product, a custom developed application, and/or a combination of the two approaches.

Background Information:

The core functionality of the legacy ICBS application contains is an inventory management system (IMS). It also includes the ability to track fiscal information related to the inventory (e.g. financial codes against which supply issues and refurbishment costs are charged), standard reporting, and forms that are printed and used to document various manual processes (e.g. work order, annual inventory, etc.). The Great Basin Cache in Boise, Idaho uses some additional ICBS functionality, developed in-house by BLM programmers, which allows its personnel to print specific reports and labels and bill purchases to customer-provided credit card numbers.

For more information on ICBS-R, please see the project website at: <http://icbs.nwcg.gov>

Market Search Results:

Of the nineteen responses to the FedBizOpps RFI, eleven described a COTS product with some sort of IMS or warehouse management system (WMS). The remaining eight proposals described system development or integration capabilities (but not COTS products), or COTS software lacking any type of IMS or WMS.

Among the eleven vendor responses describing COTS IMS/WMS products, at least five referenced use of its product by various government agencies. Government use was documented clearly in some proposals and very vaguely in others. True government use of any of these products would constitute GOTS (government-off-the-shelf) systems if the government owned complete rights to the software. The nineteen responses are summarized in Table 1. Notes in the right-hand column describe the products (and/or services) described in the proposals.

Given the system constraints and requirements outlined in the ICBS-R Charter, no existing COTS/GOTS product described in the RFI responses fully met the government's requirements as a replacement system for ICBS. All would require some modification to support the business processes currently in use at fire support caches hosted and staffed by the various federal and state agencies.

Some of the COTS/GOTS products outlined in the eleven responses to the FedBizOpps RFI could be customizable to meet the requirements of the ICBS-R Project. As with custom-developed software, any customized COTS/GOTS solution would raise at least three issues for consideration: the stability of the end product, ease of use by government cache personnel and future support of the customized portion of the software code. These factors would need to be weighed against the development of a replacement system specifically tailored to meet cache needs.

Proposals for COTS products, custom-developed applications, and/or a hybrid of the two approaches were allowed in the SOW.

Conclusion:

In December 2004 the Forest Service solicited proposals for the system task order and received seven proposals including a variety of technical approaches. These were evaluated by an interagency/interdisciplinary evaluation panel, and a Manugistics/Yantra/IBM proposal was selected. The Manugistics proposal incorporates built-in best practices SCM capability in the Yantra COTS application, as well as the ability to customize user screens and system functionality to match cache business processes. The evaluation panel felt that this proposal provided the best value to the government. The task order was awarded to Manugistics in May 2005, and design work has commenced.

Management of Federal Information Resources

8. Policy:

b. How Will Agencies Manage Information Systems and Information Technology?

(1) How will agencies use capital planning and investment control process?

(b) What must an agency do as part of the selection component of the capital planning process?

It must:

(i) Evaluate each investment in information resources to determine whether the investment will support core mission functions that must be performed by the Federal government;

(ii) Ensure that decisions to improve existing information systems or develop new information systems are initiated only when no alternative private sector or governmental source can efficiently meet the need;

(iii) Support work processes that it has simplified or otherwise redesigned to reduce costs, improve effectiveness, **and make maximum use of commercial, off-the-shelf technology;**

(iv) Reduce risk by avoiding or isolating custom designed components, using components that can be fully tested or prototyped prior to production, and ensuring involvement and support of users;

Table 1 Synopsis of Nineteen Responses to FedBizOpps RFI

Vendor/Product	Notes
1. Opal Soft Consulting Opal CMMS and SCMS	<ul style="list-style-type: none"> • CMMS “Contract Management and Maintenance System” software includes an “inventory control” module
2. Virtual Team Works Stinger Inventory	<ul style="list-style-type: none"> • Stinger is a COTS inventory tracking system based on Lotus Domino platform and using bar code scanners.
3. MRO Software, Inc. Maximo	<ul style="list-style-type: none"> • Maximo “strategic asset management” application tracks fleet and large equipment (e.g. maintenance records, etc.); manufacturing materials and organizational records.
4. Symplicity	<ul style="list-style-type: none"> • Web-based full-feature IMS* (no client side software).
5. K2 Systems	<ul style="list-style-type: none"> • Full-feature COTS Mini-ERP Inventory System
6. Lion Apparel Total Care Inventory System	<ul style="list-style-type: none"> • Java-based COTS IMS incorporating 2D bar coding (could be customized for RFID)
7. Majure Data RF Navigator	<ul style="list-style-type: none"> • RF Navigator is a Warehouse Mgt. System consisting of “software, hardware and services,” and incorporates RF and bar code scanning.
8. Manhattan Associates WM for Windows	<ul style="list-style-type: none"> • WM for Windows web-based Warehouse Mgt. System which supports RF scanning with PC or portable data terminals (PDTs).
9. Manugistics Webconnect, Networks Order Management	<ul style="list-style-type: none"> • Proposes a two-pronged approach: Enterprise Resource Planning (ERP) and Supply Chain Management (SCM)** solutions • Manugistics suggests that ICBS be replaced by a Manhattan Associates warehouse mgt. system and a Manugistics SCM – integrated by IBM
10. SAP mySAP SCM	<ul style="list-style-type: none"> • The “mySAP” Business Suite includes mySAP SCM which is full-featured J2EE-compliant inventory mgt. system with standard/ad hoc reporting, bar code/RFID scanning input
11. CDO Technologies CDO IMS	<ul style="list-style-type: none"> • CDO would work with ICBS-R to modify this application to meet the cache system’s needs. • Extensive use of AIT (linear and 2D, RFID, smart cards and biometrics)
12. Winware, Inc. CribMaster tool cabinets and software	<ul style="list-style-type: none"> • ToolBox, Toolbox Slave, ToolCubes, Lockers are hardware/software for tool/supply checkout and tracking utilizing pocket PC scanners, bar code printers, etc.

Vendor/Product	Notes
13. Oracle Various Oracle applications	<ul style="list-style-type: none"> • Would enhance existing ICBS and ROSS applications by adding COTS modules (e.g. SCM, asset management, etc.). • Could incorporate bar code scanning, ordering, reporting, etc.
14. IBM Business Consulting IBM Data Collection; WMS; system development	<ul style="list-style-type: none"> • Systems integrator having partnerships with several vendors offering COTS software products
15. MTC Integration (MTC)	<ul style="list-style-type: none"> • System integrator specializing in Enterprise Resource Planning (ERP) and custom applications
16. OTS Inc. (Outstanding Technical Solutions LLC)	<ul style="list-style-type: none"> • Oracle Discoverer implementation or application rewriting
17. Thought Inc. CoCo Base	<ul style="list-style-type: none"> • CoCo Base “relational database mapping tool” used for software design work and to provide applications access to databases
18. Open Systems Inc. AppStream	<ul style="list-style-type: none"> • AppStream is a COTS “business process management platform” for process modeling and deployment
19. D3Data LLC NETVM video camera software	<ul style="list-style-type: none"> • NETVM software for managing “any IP camera and DVR (Digital Video Recorder)” equipment

*IMS = Inventory management system. This could be any generic inventory system (e.g. one that could track tools, vehicles, financial products, information technology files, etc.) or a specific warehouse management system (WMS).

**SCM = Supply Chain Management. A system tailored specifically to managing all aspects of a complete supply chain from suppliers to manufacturers/wholesalers/retailers to customers.