

**IDA FINDINGS ON THE USE OF OTHER TRANSACTIONS AUTHORITY FOR THE  
ARMY'S FCS PROGRAM<sup>1</sup>**

Statement for the Air-Ground Subcommittee of the Senate Armed Services Committee

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IDA reviewed the management of the FCS program at the request of the Acting Secretary of the Army and the Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics) to identify “weaknesses in procedures, policies, or practices that could impact Future Combat System program development efforts.” The review addressed a number of specific questions posed by the Army’s senior leadership. In addition, the acting Secretary of the Army tasked IDA to identify *any* other issues that might pose risks to the successful execution of the program.

The fact finding for this review was performed between February and June, 2004. IDA observed ongoing FCS management activities, including the FCS Quarterly Management Review in March and the Design Concept Review in June. The study team conferred frequently with government and Lead System Integrator (LSI) officials. Boeing granted IDA access to the FCS Advanced Collaborative Environment, which provided essentially unlimited access to the program management information available within that computer database. Our findings are based on the management information developed by the program; IDA did not perform original assessments in such areas as system performance, technology feasibility, cost, or schedule.

As IDA performed this review of FCS management issues, the Army undertook a separate, close-hold programmatic review of FCS, resulting in a decision in late July to restructure the program. Although the IDA team was provided an overview after the restructuring was formally announced, we were not tasked to assess this action; our review of the restructuring plan was confined to determining whether our original findings and recommendations required any adjustment.

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<sup>1</sup> This statement is based on the IDA study report for this task. David R. Graham, Amy A. Alrich, Richard P. Diehl, Forrest R. Frank, Anthony C. Hermes, Robert C. Holcomb, Dennis O. Madl, Michael S. Nash, J. Richard Nelson, Gene Porter, David A. Sparrow, and Michael D. Spies, *IDA Review of FCS Management*, (Alexandria, Virginia, Institute for Defense Analyses, IDA P-3929), August 2004.

IDA's findings and recommendations were presented to the Army and OSD in our August, 2004 report. Presented here are IDA's findings concerning the terms and conditions of the agreement between the Army and Boeing, and IDA's response to the Army's request that we assess the suitability of using Other Transactions Authority, should Congress allow it, for the production phase of FCS.

### **USE OF OTHER TRANSACTIONS AUTHORITY AS THE BASIS FOR THE ARMY-BOEING AGREEMENT**

Congress created Other Transactions Authority to increase the government's flexibility to contract with firms that are not accustomed to doing business with the federal government. The original goals underlying the 1989 legislation were to:

- Contribute to a broadening of the technology and industrial base available for meeting Department of Defense needs;
- Foster within the technology and industrial base new relationships and practices that support the national security of the United States; and,
- Encourage commercial firms to join with the government in the advancement of dual-use technologies.<sup>2</sup>

Congress originally authorized only DARPA to enter into OTA agreements on a test basis for research and development related to weapons systems. That authority was to be used only when a contract, grant, or cooperative agreement was not feasible or appropriate. It also required that the non-governmental party contribute at least 50 percent of the funding.

In the 1994 Defense Authorization Act (Section 845), Congress extended this authority to include DARPA prototyping projects that were directly relevant to proposed weapons and weapons systems.<sup>3</sup> Congress also eliminated the cost share requirement and the limitation on its use to cases where a "contract, grant, or cooperative agreement was not feasible or appropriate." The Defense Authorization Act of 1997 (Section 804) extended this authority to the military departments.<sup>4</sup>

Because a considerable body of federal procurement law applies only to contracts, grants, and cooperative agreements, Other Transactions Authority provides a legal basis for government agencies to use agreement (contract) forms and clauses (terms and conditions) that are not governed by those laws and regulations. In particular, Federal Acquisition Regulation (FAR) clauses that are not essential to a particular situation may

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<sup>2</sup> See 10 U.S.C. § 2371 (h)(2) and 139 Congressional Record S11158, S11288 (daily edition, September 9, 1993).

<sup>3</sup> Section 845 of the Defense Authorization Act for Fiscal Year 1994: Public Law Number 103-160, 107 Stat. 1547 (1993). Section 845 authority initially extended only until the end of fiscal year 1998. The National Defense Authorization Act for Fiscal Year 1999 extended that authority through September 30, 2001.

<sup>4</sup> P.L. 104-201, 110 Stat. 2422, 2605 (1996).

be excluded, replaced by locally crafted clauses, or modified to meet the particular needs of the parties.

OTA provides the capability to create an agreement that is carefully and closely crafted for the specific transaction, without the inclusion of nonessential verbiage. However, it also creates the possibility that important issues normally addressed by standard clauses may be omitted. Critics of the OTA see risks in the flexibility afforded by OTA and prefer the prescribed format of a FAR-regulated contract as a strength, because this structure has been established in law and regulation based on decades of experience.

The flexibility provided by OTA is illustrated by contrasting the agreements that governed the CTD and SDD phases of FCS. Both agreements - the first awarded by DARPA and the second by the Army - were structured and awarded under the authority of Section 845, Public Law 104-201, as amended. And both follow the overall format established by DARPA in its 2002 DARPA-Boeing CTD agreement. A few statistics suggest the degree of difference:

- The DARPA OTA agreement is 30 pages, with an additional 8 pages of attachments, with a value of \$130 million;<sup>5</sup>
- The Army-Boeing agreement is 81 pages, plus a Statement of Work (Attachment 1) of 28 pages, and Attachments 2 through 14, which total an additional 195 pages, with a value of \$14.8 billion..<sup>6</sup>

### ***The Army-Boeing Agreement***

The Army-Boeing agreement provides for flexibility in managing FCS, but overall it implements a very conservative approach for employing OT authority, and as a consequence is very much like a conventional defense contract based on the Federal Acquisition Regulations. The top half of Table 1 summarizes selected provisions dealing with such key issues as cancellation, dispute resolution, cost management and reporting, change control, and data rights.<sup>7</sup> This agreement makes extensive use of standard government contractual terms and conditions. Some provisions are taken verbatim from the FAR; others have been modified after negotiation between the government and Boeing. (By contrast, the earlier CTD-phase agreement includes no FAR clauses and incorporated none by reference.)

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<sup>5</sup> Agreement number MDA972-02-9-0005, Order numbers M995/00 and N196/00.

<sup>6</sup> Agreement number DAAE07-03-9-F001, Modification number PZ0007.

<sup>7</sup> The FCS agreement was shaped through Army-Boeing negotiations. Initial Army drafts included over 120 FAR/DFARS clauses. Incorporated by reference within the Army-Boeing agreement are 24 FAR clauses and 16 DFARS clauses. Additionally, a review of the agreement clauses themselves shows that local clauses relate to the subject matter of 63 additional terms and conditions that would be required to be included as clauses within a cost reimbursement research and development FAR contract. See FCS Other Transaction Agreement, Information Briefing, Use of FAR/DFARS Clauses in FCS Other Transaction Agreement for System Development and Demonstration, dated 25 April 2003.

**Table 1. Selected Provisions of the FCS Agreement**

<b>Protection of Parties' Interests</b>	<b>OTA Articles/Clauses</b>	<b>Flow-down?</b>
Termination	FAR 52.246-6 Termination (Cost Reimbursement) (9/96) incorporated by reference	Yes
Dispute Resolution	TACOM Principal Assistant for Contracting (PARC) the final authority—Boeing can seek redress in court of competent jurisdiction after final decision.	Different Procedures
Allowable Costs	FAR 52.216-7 (Allowable Cost and Payment) and 52.216-8 (Fixed Fee) Incorporated by Reference	Yes
Cost Accounting and Audits	Option to use FAR cost accounting standards or generally accepted accounting principles (GAAP)—locally crafted Government access (TACOM/Comp Gen) for audits	52.230-2 Cost Accounting Standards IBR
Changes	FAR 52.242-15 (Stop Work Order Alt 1) & 52.243-7 (Notification of changes ) IBR—Normally bilateral.	52.242-15 IBR 52.243-7 IBR SAIC Only
Data Rights	FAR 52.227-12 IBR—Various Rights to the Government	52.227-12 IBR
<b>Management Flexibility</b>		
Flexible "Requirements"	ORD and O&O are Reference Documents Specific specifications shaped through trade study process Trade studies define contractual deliverables	Subcontracts specify commodity deliverables
Government-Industry Collaboration	IPT and decision-making structure outlined in the OTA—"One Team" approach with Government/Boeing Leads/Co-Leads	"One Team" does not flow-down—standard Subs
Subcontracting terms and conditions	OTA requires flow-down of certain clauses dependent upon value of subcontract — FAR clauses IBR do so also.	Boeing T&Cs standardized—IBR many FAR clauses
Production Planning	OTA IBR FAR & DFARS Production Clauses—Boeing identified as follow-on production LSI	Yes—Production FAR & DFARS Clauses IBR

\* IBR = This provision is incorporated by reference in the Army-Boeing agreement.

T&C = Terms and Conditions

The form of the Army-Boeing agreement at least in part reflects the fact that Boeing Integrated Defense Systems is an experienced defense contractor. Unlike the nontraditional or commercial firms that OT authority was created to address, Boeing's defense business operations are adapted to a FAR-based style of contracting; Boeing management, at least in its defense business, apparently considers the FAR framework to be a "best practice."

Table 1 also summarizes the flow-down provisions for the Tier 1 subcontractors. While the OTA gave Boeing the flexibility to adopt innovative contractual forms, Boeing officials told the study team that they followed government contracting practices because these were well-understood by the participants - predominantly large, traditional defense contractors. The "nontraditional" suppliers are iRobot from Burlington, MA (\$25.2 million) and Austin Information Systems from Austin, TX (\$56.6 million). Although there eventually may be others at the lower tiers, for now, the \$14.78 billion is being shared almost entirely by defense industry giants.

A review of the subcontracts awarded by Boeing and SAIC to Tier 1 subcontractors shows that those subcontracts largely follow the conventions of traditional defense contracts, including format. Boeing terms and conditions come from a standard list, are accessible through their web site, and are generally of the same scope, complexity, and breadth of coverage as the FAR system.<sup>8</sup>

The lower half of Table 1 identifies some of the provisions that provide flexibility for managing the FCS program. The Army-Boeing agreement provides additional flexibility through the creation of the Integrated Product Team (IPT) structure, the specification definition process, and the subcontracting system employed.

### ***Observations***

The Army's conservative approach in creating the FCS agreement does much to defuse potential criticism - often heard in the past with respect to programs operating under an OTA agreement - that the use of an agreement based on OTA creates special risks for the program. Moreover, Boeing liberally used standard FAR and DFARS clauses in its subcontracts - all of which are in standard FAR format.

### **POTENTIAL USE OF OTHER TRANSACTIONS AUTHORITY FOR FCS PRODUCTION**

The potential benefits of employing Other Transactions Authority in the production phase of any program are expected to be:

- Attracting non-traditional suppliers, thereby broadening the technology and industrial base available for meeting Department of Defense needs;
- Fostering new relationships and practices that improve efficiency and effectiveness;
- Reducing costs by eliminating unnecessary FAR-required cost drivers.

Language has been added to bills being drafted by various Congressional committees to extend OT authority to production phases, but that language has not survived committee mark-ups. While Congress has supported the employment of OTA in appropriate contexts, it does not view OT authority as a substitute for, or as a way to circumvent, standard contracting processes and procedures. In particular, the committees responsible for extending the authority in the FY 1999 Defense Authorization Act were concerned that OT authority be used in a limited manner:

“[S]ection 845 authority should only be used in exceptional cases where it can be clearly demonstrated that a normal contract or grant will not allow sufficient access to affordable technologies. The Conferees are especially concerned that

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<sup>8</sup> The subcontracts follow the format of FAR 15.204-1. Moreover, Boeing uses standard contract terms and conditions, which incorporate by reference numerous FAR and DFARS clauses. The subcontracts incorporate by reference the FAR and DFARS provisions and clauses incorporated by reference within the OTA, and also take account of others not included (e.g., FAR 52.246-15 Certificate of Conformance, 52.247-34 F.O.B Destination, 52.245-17 Special Tooling).

such authority not be used to circumvent the appropriate management controls in the standard acquisition and budgeting process.”<sup>9</sup>

The relevance and desirability of an OTA agreement for the FCS production phase will depend on the potential availability and the production readiness of non-traditional suppliers at various tiers. There may be instances where “nontraditional” suppliers might find it attractive to support the FCS production program if they could do so under an OTA agreement structured to provide relief from clauses typically considered onerous by non-traditional contractors. The Army-Boeing agreement illustrates that there is considerable flexibility to create an agreement that protects government interests, whether by using traditional FAR language or by developing new language specifically crafted to suit the transaction. Prudent use of the OTA conceivably could make the defense marketplace more attractive to potentially valuable suppliers. An OTA agreement also might be a viable contracting framework to support “spiral out” development strategies for FCS concepts and capabilities for use by current forces. IDA has not discovered anything to indicate that this is the case within the current FCS program, however. Indeed, the Army’s conservative use of OTA in establishing the current FCS OTA agreement will make it difficult for the Army to present a fully developed business case for expanding the current OT authority beyond the prototype development threshold.

#### ***Future Competition for Production in the FCS Program***

Whether competition for FCS production will prove to be the most cost-effective acquisition approach will depend on a number of program factors that remain to be determined. In general, the desirability and feasibility of sustaining an option for future competition for FCS production depends on three factors:

- First, there has to be a viable industrial base that is sustaining alternative suppliers. Most of the major defense contractors are already participating in their respective areas of expertise, which may restrict the Army to a competition for relative program shares among the current team members, at least in Tier 1 commodities. At the 2nd tier and below, it is still too early to assess the potential for follow-on competition because the source selections have not yet been made.
- Second, preserving the option for competition requires an investment to provide adequate technical data, accompanied by appropriate government rights.
- Third, the competitive process itself requires significant investments of time and resources.

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<sup>9</sup> The *Final Report of the Integrated Product Team on the Services’ Use of 10 U.S.C. §2371 “Other Transactions” and 845 Prototype Authorities*, dated June 10, 1996. Quote extracted from *Department of Defense Other Transactions: An Analysis of Applicable Laws*, A Project of the Ad Hoc Working Group on Other Transactions Section of Public Contract Law, American Bar Association, 2000, quoting H.R. Conference Report Number 105-736, at 590 (1998).

These three factors, in combination, argue that the cost-effective competitive strategy will depend on a number of variables that remain to be defined. So, it is premature to commit to a particular course of action at this early stage of the program. At the same time, preserving the option for future competition would require the Army to act now to ensure that it will receive, through Boeing, sufficient access to the technical data needed to support a competition for production.

At the LSI level, the OTA agreement lays the groundwork for Boeing to continue as the LSI through initial production and into full-rate production:

- There are references to a subsequent production contract with Boeing throughout.<sup>10</sup>
- Boeing's incentive fee structure is predominantly weighted (3.5 of 5 percent) toward the two initial production decision reviews.<sup>11</sup>
- R&D incentives are geared to production costs.<sup>12</sup>
- Defense Federal Acquisition Regulation Supplement (DFARS) clauses are incorporated into the OTA agreement in contemplation of Boeing's and its subcontractors' continuance into production, including long-lead-item procurements initiated during the SDD phase.<sup>13</sup>
- Section 3 of the Statement of Work<sup>14</sup> contains sub-paragraphs related to production operations planning and product assurance and other post-SDD requirements.

At the subcontractor level, the Army has taken the position that it has secured adequate rights to access all of the necessary technical information. But, we found some ambiguity on the status of government rights to technical data associated with future system support as well as future competition for FCS production. We therefore recommended that the Army review the current provisions of the Boeing agreement to confirm that it will have access to the needed technical data.

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<sup>10</sup> See Article III, paragraph B of the Agreement.

<sup>11</sup> See Article VII of the Agreement.

<sup>12</sup> See Paragraph 11 b(2), Article VII of the Agreement.

<sup>13</sup> See Article XXXII of the Agreement.

<sup>14</sup> See Attachment 1 to the Agreement.