

December 2003

SATELLITE COMMUNICATIONS

Strategic Approach Needed for DOD's Procurement of Commercial Satellite Bandwidth





Highlights of [GAO-04-206](#), a report to congressional requesters

Why GAO Did This Study

In recent years, the Department of Defense (DOD) has come to rely more heavily on commercial satellite communications to plan and support operations and move toward a network-centric warfare environment. DOD acquires commercial satellite bandwidth services to support a variety of critical missions such as surveillance performed by unmanned aerial vehicles. GAO was asked to assess (1) whether DOD's process for acquiring these services is fair to vendors and providers, (2) whether the process meets users' needs, and (3) whether spending on these services is managed effectively and efficiently.

What GAO Recommends

GAO's recommendations to DOD focus on the need to develop and implement a strategic approach to acquire commercial satellite bandwidth services, along with correcting specific oversight and management weaknesses. To ensure the successful implementation of a strategic management framework, GAO recommends that DOD develop performance metrics to assess user satisfaction, strengthen core internal technical expertise and information systems, and assess whether the existing acquisition process requires changes to facilitate a strategic approach. In comments on a draft of this report, DOD generally concurred with GAO's recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-04-206.

To view the full product, including the scope and methodology, click on the link above. For more information, contact William T. Woods at (202) 512-4841 or woodsw@gao.gov.

SATELLITE COMMUNICATIONS

Strategic Approach Needed for DOD's Procurement of Commercial Satellite Bandwidth

What GAO Found

DOD has for many years augmented its internally owned and operated satellite communications capability by leasing commercial fixed satellite bandwidth services primarily through the Defense Information Systems Agency (DISA) and its Defense Information Technology Contracting Organization (DITCO). DISA does not acquire commercial bandwidth directly from satellite service providers. Instead, it procures bandwidth through several competitively selected vendors, which, in turn, compete among individual service providers.

GAO found that the process for acquiring commercial satellite bandwidth is fair to DOD's vendors and their subcontractors, which are the ultimate commercial satellite bandwidth service providers.

However, some major DOD users of commercial satellite bandwidth services are dissatisfied with DISA's process. They view the process as being too lengthy, particularly for time-critical military operations, and they believe that the cost is too high. They also indicated that the contracts resulting from the process are often too inflexible. As a result, some users are bypassing the DISA process, either by formally obtaining a waiver or by procuring services without a waiver. In fiscal year 2002, nearly 20 percent of DOD's reported spending on satellite bandwidth services occurred outside the process, and one DOD official stated that the true percentage is probably much higher. By allowing users to bypass the DISA waiver process, DOD is hampering its ability to ensure that its communications networks are interoperable and to minimize redundancies.

Further, DOD does not know exactly how much it is spending on commercial satellite bandwidth services, nor does it know much about its service providers or whether customer needs are really being satisfied. Without this knowledge, DOD cannot take steps to leverage its buying power, even though it is the largest customer for commercial satellite bandwidth. Moreover, neither DOD nor DISA is making a concerted effort to collect forecasts of bandwidth needs from users and ensure those needs can be met by the commercial sector. These are also important steps toward optimizing DOD's spending.

If DISA is to remain as DOD's primary agent to acquire satellite bandwidth, then it must implement a more strategic management approach—one that ensures that services can be acquired in a fair, timely, and cost-effective way that meets users' needs. Doing so will be a considerable challenge, however, given the current environment and potential resistance within DISA and from its users. Commitment is needed from senior leaders within DISA and DOD to overcome challenges associated with implementing a strategic approach.

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Abbreviations

ASD/NII	Assistant Secretary of Defense for Networks and Information Integration
CIO	Chief Information Officer
DISA	Defense Information Systems Agency
DITCO	Defense Information Technology Contracting Organization
DOD	Department of Defense
DSTS-G	Defense Information Systems Network Satellite Transmission Services-Global
FAR	Federal Acquisition Regulation
GIG	Global Information Grid
IDIQ	Indefinite-Delivery, Indefinite-Quantity
MTC	Managed Transponder Contract
ORBIT	Open-market Reorganization for the Betterment of International Telecommunications Act
RFS	Request for Service
TR	Telecommunications Request
TSO	Telecommunications Service Order
TSR	Telecommunications Service Request

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United States General Accounting Office
Washington, DC 20548

December 10, 2003

The Honorable John Ensign
Chairman
The Honorable Daniel K. Akaka
Ranking Member
Subcommittee on Readiness and Management Support
Committee on Armed Services
United States Senate

The Honorable James M. Inhofe
United States Senate

The Honorable Joseph I. Lieberman
United States Senate

The Department of Defense (DOD) relies on a vast network of ground and space-based systems to meet its telecommunications needs—both for military and business operations. Over the past 12 years, DOD has experienced a ten-fold increase in the demand for telecommunication bandwidth¹ from satellites to support the war-fighting combatant commands, the military services, and defense agencies, and some experts predict another fivefold or sixfold jump in demand by 2010.² Currently, DOD-owned and -operated satellites cannot satisfy all of DOD's telecommunication requirements, and both DOD and other sources project sizeable shortfalls in bandwidth capacity needed by the year 2010.³ As a

¹ Bandwidth is the range of frequencies that can pass over a given transmission channel. In the commercial satellite bandwidth leases DOD acquires, it is usually measured in millions of hertz, or megahertz (MHz)—such as 36 MHz, 54 MHz, or 72 MHz—which determine the rate at which information can be transmitted through the circuit.

² Andrew Bridges, "Pentagon Turns to Commercial Satellites to Ease Wartime Data Squeeze," the Associated Press, Mar. 27, 2003, quoting United States Space Command sources and Rand Corporation experts.

³ The amounts of data that can be received, processed, and transmitted by a satellite are commonly stated in megabits per second (one million bits of data per second) or gigabits per second (one billion bits per second). By 2010, DOD planners foresee the need for approximately 16 gigabits per second (Gbps) of bandwidth to support a large joint-service operation. While DOD plans to have capacity of 11 Gbps, other sources earlier had projected that DOD's capacity might be as low as 2 Gbps at that time.

result, DOD has been leasing bandwidth on commercial satellites to support a variety of critical missions such as surveillance being performed by unmanned aerial vehicles and communications between commanders and field units.

Given the importance of DOD's growing demand for commercial fixed satellite service⁴ bandwidth, you requested that we assess the effectiveness of its process for acquiring this service—specifically (1) whether the process is fair to vendors and providers, (2) whether the process meets user needs, and (3) whether spending is managed effectively and efficiently.

Results in Brief

DOD's process for acquiring commercial fixed satellite bandwidth services is fair to both its vendors and their subcontractors, which are the ultimate commercial satellite bandwidth service providers. Of 53 orders we reviewed that were issued between March 2000 and June 2003, all met general standards for ensuring fairness laid out in federal regulations. At the subcontract level, we also found that the satellite industry service providers have had ample and fair chances to create solutions and to compete for and win subcontracts under DOD's newest contracts for bandwidth. In 48 of the orders we reviewed, 12 service providers offered DOD a total of 211 potential solutions.

Some major DOD users of commercial satellite bandwidth services, however, are dissatisfied with the DOD's process, which is managed by the Defense Information Systems Agency (DISA). They view the process as being too lengthy, particularly for time-critical military operations, and they believe that the cost is too high. In some cases, they reported that they could acquire services directly from providers for hundreds of thousands of dollars less per year than if they used DISA's process and that they could do so in shorter time periods than DISA. They also indicated that the contracts resulting from the DISA process are often too inflexible. As a result, some users are bypassing the DISA process, either by formally requesting a waiver or by procuring services without a waiver. For fiscal year 2002, we were able to determine that, at a minimum, nearly 20 percent of DOD's reported spending on fixed satellite service

⁴ Fixed satellite service refers to a radio communication service between fixed earth stations at specific locations by means of one or more satellites; mobile satellite service refers to a radio communication service between mobile earth stations at varying locations by means of one or more satellites. This report addresses fixed satellite service only.

bandwidth occurred outside the DISA process, and one DOD official stated that the true percentage is probably much higher.

We identified a number of management and oversight weaknesses that preclude DOD from assuring the mandated DISA process⁵ is used, and more importantly, from optimizing its spending on commercial bandwidth services. Little attention is paid to collecting or addressing customer complaints; business processes are inefficient; and oversight is poor. In fact, DOD does not know exactly how much it is spending on commercial satellite bandwidth services, nor does it know much about its service providers or whether customer needs are really being satisfied. Without this knowledge, DOD cannot take steps to leverage its buying power, even though it is the largest customer for commercial satellite bandwidth. Further, neither DOD nor DISA is making a concerted effort to collect forecasts of bandwidth needs from users and ensure those needs can be met by the commercial sector. These efforts are also important steps toward optimizing its spending.

Our past work⁶ has identified specific practices that can be employed to manage services from a more strategic perspective, thereby enabling an organization like DOD to leverage its buying power and achieve significant savings. These practices include establishing a central agent or manager for acquiring services, gaining visibility over spending, and revising business processes to enable the organization to leverage its buying power. Our seven recommendations to DOD focus on the need to develop and implement a strategic approach, along with correcting specific oversight and management weaknesses. In comments on a draft of this report, DOD concurred with four recommendations and partially concurred with three recommendations.

⁵ Users are required to use the DISA acquisition process by Assistant Secretary of Defense for Command, Control, Communications, and Intelligence memorandum, *Policy for the Use of Commercial Satellite Communications (SATCOM)*, dated Nov. 8, 1993, and by a follow up memorandum, *Policy Clarification Letter—Long Haul and Regional Telecommunications Systems and Services for the Department of Defense*, dated May 5, 1997.

⁶ U.S. General Accounting Office, *Best Practices: Taking a Strategic Approach Could Improve DOD's Acquisition of Services*, [GAO-02-230](#) (Washington, D.C.: Jan. 2002); *Best Practices: Improved Knowledge of DOD Service Contracts Could Reveal Significant Savings*, [GAO-03-661](#) (Washington, D.C.: June 2003); *Contract Management: Taking a Strategic Approach to Improving Service Acquisitions*, [GAO-02-499T](#) (Washington, D.C.: Mar. 2002); and *Contract Management: High-Level Attention Needed to Transform DOD Services Acquisition*, [GAO-03-935](#) (Washington, D.C.: Sept. 2003).

Background

DOD has for many years augmented its internally owned and operated satellite communications capability by leasing additional external telecommunications capacity on commercially owned and operated satellites. Demand has been increasing in recent years, as the military has come to rely more heavily on commercial satellite communications to plan and support operations and move toward a network-centric warfare environment. According to industry sources, DOD's current estimated \$300-400 million spending on such services has made it the satellite communications industry's biggest customer.

DOD leases commercial satellite bandwidth services primarily through DISA and its Defense Information Technology Contracting Organization (DITCO). DISA does not acquire commercial bandwidth directly from satellite service providers. Instead it procures bandwidth through several competitively selected vendors, which in turn compete work among individual bandwidth service providers.

There are two primary contract structures through which DISA procures bandwidth through these vendors. The first is known as the Managed Transponder Contract (MTC). It was competitively awarded in 1995 to one vendor, and served as the primary acquisition vehicle for several years. The second is an indefinite-delivery, indefinite-quantity (IDIQ) multiple-award contract structure known as the Defense Information Systems Network Satellite Transmission Services-Global (DSTS-G) contracts. They were awarded competitively in February 2001, after users found the MTC contract to be inflexible, too costly, and limited in terms of the breadth of services it could provide. Awards were made to three small business vendors that acquire bandwidth for DISA from the ultimate service providers. Recently, DISA has been relying more on this second contract structure. The agency placed 48 orders for bandwidth under the DSTS-G contracts through June 2003 versus only 5 new orders under the MTC contract from March 2000 through June 2003.

DISA’s vendors obtain satellite services from a commercial satellite industry market segment that has been growing at a high rate. The commercial satellite industry is a global industry that includes many foreign-owned businesses as well as partnerships between U.S. and foreign corporations. Table 1 lists major global and regional satellite bandwidth providers. While there are 10 companies listed, only 6 of them have provided needed bandwidth through the DISA acquisition process during recent years.

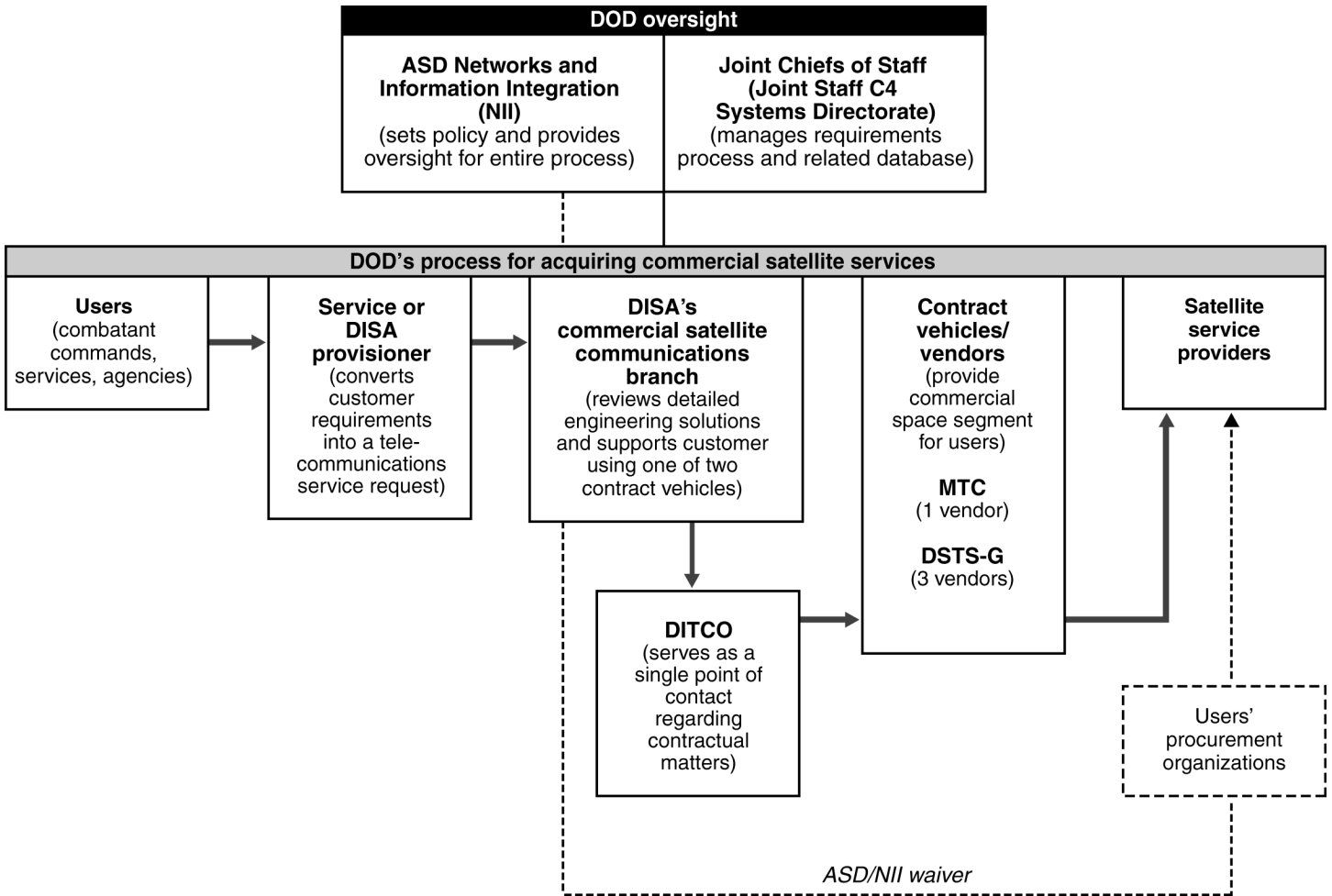
Table 1: Major Global and Regional Commercial Providers of Fixed Satellite Service Bandwidth

Global	Regional
• SES Global	• Eutelsat S.A. LLC
• Intelsat	• SES Americom
• PanAmSat	• Star One
• Loral Global Alliance	• Asiasat
• New Skies Satellites N.V.	• Arabsat

Source: GAO analysis of Satellite Industry Association data.

The acquisition process that DISA uses to determine user requirements and acquire bandwidth is similar to the process it uses to acquire other telecommunications services for its customers. Generally, the process begins with users identifying a need and contacting DISA to fulfill that need. Technical experts within DISA assist users in engineering a potential solution. Other offices within DISA decide how the service should be procured and prepare a request for the vendors to propose solutions. Once DISA has determined which contract structure to use and has asked for proposed solutions, an evaluation team within DISA reviews the proposals and awards a task order or delivery order under the winning vendor’s contract. Figure 1 and table 2 further detail this process.

Figure 1: Overview of DOD Commercial Bandwidth Acquisition Process



Source: GAO.

Table 2: Details on Key Players in the DISA Process

Users	Users are the operating level units within the various DOD combatant commands, military services, and defense agencies that have the actual communication need. Users contact their organization's internal communications services focal point to begin processing their requirements. Each prepares an extensive document in accordance with DISA directives called a Request for Service (RFS), which is used to initially request telecommunications services.
DISA or service provisioners	DISA provisioners in regional offices around the world provide technical expertise to help decide how the user's need can best be satisfied: existing terrestrial links, DOD-owned satellites, or commercial satellites. For those needs to be satisfied by a lease of commercial bandwidth, the provisioners review RFS documentation and validate user funding. Once funding is validated, the RFS becomes a Telecommunications Service Request (TSR) and is sent back to the provisioners, who then add necessary technical direction and information, turning the TSR into a Telecommunications Service Order ^a (TSO), which is then transmitted to DISA's Commercial Satellite Communications Branch.
DISA Commercial Satellite Communications Branch	This office assists the user in preparing an accurate RFS that is subsequently converted into a TSR or TSO, decides whether the requirement can be best satisfied through the MTC, DSTS-G, or other contracts and transmits the final document and any additional procurement direction to its supporting contracting office.
DITCO	DITCO is a contracting organization within DISA. This office reviews the requirements, secures any needed contract action approvals, and creates a Telecommunications Request (TR), also known as an inquiry. This inquiry is then sent to either the MTC vendor or the three DSTS-G vendors, asking for technical solutions and prices for the specified requirements.
Vendors (prime contractors)	Vendors include the MTC contract holder, and the three DSTS-G contract holders, which are responsible for reviewing the requirement, formulating potential solutions, coordinating with various potential service providers, and submitting proposals to DISA.
Service providers (subcontractors)	Service providers are companies that receive requests for solutions from the vendors; help engineer the best (or lowest cost) solutions, depending upon the announced evaluation criteria; price the solutions; and submit one or more of them to the vendors.
Evaluation team	The team includes DISA's Commercial Satellite Communications Branch, supported by its technical support contractor, and the contracting office, DITCO. The Commercial Satellite Communications Branch evaluates the technical soundness of proposed solutions and DITCO reviews pricing proposals. The selection of the winning vendor and its solution is usually a joint process, and DITCO then issues an order under the winning vendor's contract.
Award of subcontract	This occurs when the winning vendor awards a commercial contract to the service provider that provided the winning solution input.

Source: GAO.

^aA Telecommunications Service Order is needed to start, continue, or stop the existence of a circuit.

If circumstances dictate, users can request a waiver through DOD's Global Information Grid (GIG) Waiver Panel⁷ to use an alternative network and alternative acquisition process instead of the DISA process. A business case must be made for the requested waiver and there must be plans outlined to migrate the outlying network back under the telecommunications infrastructure and to bring the resulting contract under the control of DITCO. After a waiver is approved, the user's procurement organization takes steps to procure the bandwidth.

DOD's Process Is Fair to Both Vendors and Service Providers

DOD's process through DISA for acquiring commercial fixed satellite service bandwidth is fair to both its vendors and their subcontractors, which are the ultimate commercial satellite bandwidth providers. The majority of bandwidth orders in recent years have been made under the DSTS-G contracts, where competition exists at both the vendor and service provider levels. Only five orders have been placed under the MTC contract, which by its nature is not as competitive as the DSTS-G contract, since it was designed to obtain service through one vendor.

The Federal Acquisition Regulation (FAR), as supplemented by DOD and DISA, requires DITCO to provide a fair opportunity to the three DSTS-G vendors at the prime contract level. Generally, this entails

- writing broad, needs-based requirements able to be satisfied by multiple vendors rather than only one;
- providing notice and opportunity to be considered⁸ to each of the vendors;
- giving notice of the evaluation criteria to be used to select a winning vendor; and
- evaluating proposals, conducting discussions, and awarding delivery orders or task orders in accordance with the evaluation criteria stated.

⁷ The GIG waiver process employs a GIG Waiver Board and a working-level GIG Waiver Panel, made up of principals or representatives from pertinent DOD staff offices. The GIG Waiver Panel reviews initial waiver requests and associated business cases, hears arguments for and against the waiver request, and develops the recommended decision to be presented to the DOD Chief Information Officer (CIO) for approval. If there is an appeal of that decision, the GIG Waiver Board may be convened to advise the CIO on the appeal.

⁸ Effective October 25, 2002, the Defense Federal Acquisition Regulation Supplement, section 216.505-70, required fair notice and fair opportunity to submit an offer and have it fairly considered for each order exceeding \$100,000. This provision implemented section 803 of the National Defense Authorization Act for Fiscal Year 2002 (Pub. L. 107-107, Dec. 28, 2001). DISA Acquisition Regulation Supplement, section 16.102, has imposed a similar requirement on all orders exceeding \$2,500 since March 1997.

We analyzed 48 task orders that were awarded under the DSTS-G contract from its inception in February 2001 through June 2003 to determine whether these criteria were generally followed.

DSTS-G Vendors Had Fair Opportunity to Win Task Orders

We found that the acquisition process employed by DISA and DITCO generally met FAR criteria, as supplemented, and was fair to competing vendors under the DSTS-G contracts. Though we found some orders awarded under exceptions established in FAR, the rationale for these exceptions was documented in each task order file.

The common set of technical questions that users are required to answer when submitting their bandwidth requests helps not only to document their technical environment but also to preclude writing an overly narrow or restrictive requirement. While a few valid user situations demanded a repeat solution or narrowed the range of possible solutions, they did not unduly impair the vendors' fair opportunity to compete.

Of the 48 task orders for bandwidth, 41 were competed among the three vendors; six were renewals of previously competed task orders; and only one was sole-source, awarded without vendor competition. Documentation justifying the one sole-source action was included in the task order file, as required.

The distribution of task order awards among the three vendors is illustrated in table 3. The table shows the number and percentage of the 48 task orders awarded to each of the three vendors under their respective DSTS-G contracts along with the associated dollar values and percentages.

Table 3: Total Number and Dollar Value of DSTS-G Task Orders for Bandwidth Awarded, by Vendor

	Number of task orders	Percent of total task orders awarded	Dollars awarded	Percent of dollars awarded
Vendor A	11	23	\$17,255,942	11
Vendor B	14	29	58,632,446	36
Vendor C	23	48	87,562,627	54
Total	48	100	\$163,451,015	100^a

Source: GAO.

^aPercentages of dollars awarded do not add to 100 percent due to rounding.

The evaluation criteria DISA used to select a winning vendor were contained in each inquiry that was competed. Evaluation of the proposals, discussions, and the award of task orders complied with the stated evaluation and selection criteria.

DISA used the following two selection frameworks to evaluate proposals:

- DISA awarded 18 of the 41 competitive task orders worth \$54,255,114 under a source selection process called “best value,” using a cost/technical trade-off process. Under this approach, the selection official trades off cost and non-cost factors, identified in the inquiry, in determining award decisions. In some cases, greater weight may be placed on a contractor’s technical approach resulting in the selection of what may not be the lowest priced proposal.
- DISA awarded the remaining 23 competitive task orders worth \$78,645,239 under the “lowest price technically acceptable” framework. Under this approach, the technical solution proposals are all evaluated by DISA’s Commercial Satellite Communications Branch and its supporting contractor and placed in either a “technically sufficient” category or “not technically sufficient” category. The winner is that proposal in the “technically sufficient” category with the lowest total evaluated cost.

While both evaluation methods are common under FAR procurements, best value with tradeoffs is more suitable where the risk of potential substandard performance does not leave room for errors or service degradation. Either method of evaluation requires a high level of technical expertise to effectively evaluate proposed solutions.

DSTS-G Subcontractors Have Also Had Ample and Fair Chances to Team with Vendors

At the subcontract level where the FAR criteria regarding fair opportunity generally do not apply to the business arrangements among commercial companies, we also found that commercial satellite service providers have had ample and fair chances to team with the three DSTS-G vendors to create solutions and to compete for and win subcontracts. All three vendors stated that they are motivated by competition to find technically sufficient and low-cost solutions to DOD’s needs and to involve all feasible service providers in doing so. Further, the vendors are also required by a FAR clause in their DISA contracts to select their subcontractors on a competitive basis.⁹ To determine which service providers are potentially

⁹ FAR 52.244-5, Competition in Subcontracting, requires that contractors shall select subcontractors on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

capable of fulfilling a given DISA requirement, the vendors told us they consider many factors, such as

- location of satellites,
- “look angle” at the desired location,
- power,
- bandwidth,
- age and condition of satellites,
- available capacity on satellites, and
- other factors, such as meeting schedule, acceptance of government terms and conditions, business relationships, and prices.

Our analysis showed that six different service providers have won subcontracts from one or more of the DSTS-G vendors. Each vendor has won task orders using at least four of the six providers, although more than 70 percent of the wins have been with just two providers. The distribution of task order awards to vendors and the service providers with which they teamed for each of the 48 task orders is illustrated in table 4.

Table 4: Teaming among DSTS-G Vendors and Service Providers

Winning vendor	Task orders won	Satellite service providers					
		A	B	C	D	E	F
Vendor A	11	1	4.5	3	0.5	0	2
Vendor B	14	0	5	6	1	2	0
Vendor C	23	4	9	7	1	2	0
Total	48	5	18.5	16	2.5	4	2
Percent of total	100 ^a	10.4	38.5	33.3	5.2	8.3	4.2

Source: GAO analysis of DISA data.

Note: In the columns showing the teaming arrangements for each provider, a 0.5 is credited where the satellites of two different service providers were needed to satisfy a DISA requirement.

^aPercentage totals do not add to 100 percent due to rounding.

Another indicator of participation among service providers and access to the DSTS-G vendors is the opportunity to propose a solution for a DISA requirement. We determined that there were 211 bandwidth solutions proposed to DISA for the 48 task orders, or approximately 4.4 per task order. Removing the seven instances where there was only one proposed solution (because they were renewals of previously competed requirements or sole-source), the average number of proposed solutions

per competitive task order was 4.9, with a range from 2 to 15. Moreover, there were several additional potential teaming proposals considered by at least one of the vendors, but not ultimately submitted to DISA. Table 5 illustrates the teaming arrangements in the 211 proposed solutions.

Table 5: Proposal Submission Teaming among Vendors and Service Providers

Vendor	Number of proposals	Satellite service providers											
		A	B	C	D	E	F	G	H	I	J	K	L
Vendor A	63	2	24.5	23.5	3	5	5	0	0	0	0	0	0
Vendor B	52	4	21	19	3	4	1	0	0	0	0	0	0
Vendor C	96	12	32	28	4	10	3	2	1	1	1	1	1
Total	211	18	77.5	70.5	10	19	9	2	1	1	1	1	1
Percent of total		8.5	36.7	33.4	4.7	9.0	4.3	1.0	0.5	0.5	0.5	0.5	0.5
Percent of proposed solutions resulting in subcontracts		27.8	23.9	22.7	25.0	21.1	22.2	No award	No award	No award	No award	No award	No award

Source: GAO.

Note: In the numbers of proposals for each provider, a 0.5 is credited where the satellites of two different service providers were needed to satisfy a DISA requirement.

We noted that the top two service providers in terms of proposals submitted, labeled B and C in table 5, had more than 70 percent of the total proposals submitted. According to the vendors, this was because those two providers had large numbers of satellites located in the areas of interest to DOD over the past 2 years, were willing to offer multiple solutions, and had low prices for bandwidth. Some service providers did not always see DOD as a preferred customer, did not always have available capacity in the required areas, or declined to propose because they knew they did not have the best coverage or prices. All six of the service providers that won subcontracts had very similar percentages of winning proposals, all between 21 and 28 percent.

Despite the involvement of a number of competitors at the subcontractor level in the DISA acquisition process, we found several occasions where DISA directed and justified the use of a specific service provider. This occurred in 15 of the 41 competitive DSTS-G task orders. In all 15 of those cases, however, the acquisition team had adequate justifications in files to explain the need for directing that subcontract. Specifically, in 11 of the justifications, users or DISA technical staff determined that only one particular satellite could adequately satisfy certain technical parameters

contained in the requirement. In three cases, customers explained that any deviation from the existing satellite provider could cause an interruption of service and could potentially cause loss of life. In the remaining case, both justifications applied. These requirements were submitted by responsible officials in the combatant commands or military services and concurred in by the DISA provisioners, the DISA Commercial Satellite Communications Branch engineers, and the DITCO contracting officer. Directed subcontracts were justified for three different service providers, with none getting a disproportionately large share.

MTC Contract Is the Result of an Earlier Competition

The MTC contract was structured to award delivery orders to one vendor, thus competition, after the initial competition to select a vendor, has been limited. From March 2000 to June 2003, DISA awarded only five new delivery orders for bandwidth under the MTC contract. All were awarded directly to the incumbent contractor that had previously won a competition among four companies in 1995 to manage this contract for up to 10 years. These five new orders totaled \$17.8 million. There was also limited competition at the subcontract level. Three orders were awarded directly to service providers without competition. The remaining two orders were competed between two providers.

Some Major Users Are Dissatisfied with DISA Process for Acquiring Commercial Satellite Bandwidth Services

Some major users of commercial satellite bandwidth services are dissatisfied with the DISA process. In particular, they view the process as being too lengthy and costly. They also believe that the process results in contracts that are often too inflexible. As a result, some users have bypassed the process, either by formally requesting a waiver or by procuring services without a waiver. For fiscal year 2002, we determined that, at a minimum, nearly 20 percent of DOD's reported spending on services occurred outside the process, and one DOD official stated that the true percentage is probably much higher.

Users Do Not Believe Process Meets Their Needs

According to some major users, DISA's process takes too long to meet their needs, particularly for time-critical operations. Our analysis showed that on average from submittal of a request for service to the award of a task order under the DSTS-G contract took 79 days—more than a month longer than the average of 42 to 45 days advertised by DISA.¹⁰ Moreover, as

¹⁰ DISA Briefing, "DISA's Response to Navy Concerns," undated, p. 2; DISA Network Services Standing Operating Procedure (SOP) 02-02 (Apr. 15, 2002, encl. 2, p. 1).

table 6 shows, only 18 of the 48 task orders we reviewed were awarded in less than a month. In addition, only 29 were awarded within the DISA advertised time frame of 45 days.

Table 6: Time to Process Satellite Service Requests

Days to process	Number of actions	Percent of actions
30 days or less	18	37.5
31-60 days	15	31.3
61-90 days	5	10.4
91-120 days	5	10.4
Over 121 days	5	10.4
Total	48	100.0

Source: GAO analysis of DISA data.

Further, users told us they have to spend additional time before a Request for Service is submitted to DISA to seek out and determine all of the technical information required in that document, and there is also additional time between the task order award and the subcontract award to the winning service provider and for the set up or preparation before the start of the service. For example, under the DSTS-G contracts, the vendors have up to 30 days to provide required service in normal circumstances, or 5 days in emergencies. According to DISA, when users are not familiar with RFS development or satellite services, DISA spends substantial amounts of time educating users on requirement development, the acquisition process, and available satellite services. Timelines can also be extended for other reasons, according to DISA, including instances where customer equipment is not on hand when the service is available. Therefore, the actual time to fully satisfy a customer’s request from realization of the need to initiation of the service is even longer than the mean 79-day paperwork flow time.

By contrast, users told us that the time to receive bandwidth services outside the DISA process was considerably shorter. In one U. S. Army example, the user was able to acquire satellite bandwidth needed to operate a multimedia communications system during Operation Enduring Freedom in Afghanistan within a few weeks. In another example, a U.S. Navy office was able to acquire service to support its commercial wideband satellite program in less than a month after receiving the GIG waiver approval. It was critical that the Navy acquire this service quickly as it was notified that one of its leased satellites would fail within 30 days.

Users also reported that estimated prices they received under the DISA process were sometimes significantly higher than those that would be paid directly to a commercial company for the same or similar services. For example, the Army was able to acquire satellite services for the communications system supporting Operation Enduring Freedom for about \$34,700 a month. DISA had quoted a price estimate earlier at \$139,000 a month. When the Army later found it needed to install another ground terminal for this system, it acquired services for about \$240,000, whereas DISA's initial price estimate was \$579,000. In another example, in acquiring service to support its commercial wideband satellite program, a U.S. Navy office found that the monthly price for the service it could acquire outside the DISA process ranged from \$30,000 to \$90,000 a month less than the initial DISA estimate. Over the 5 years projected for the task order, the savings on bandwidth was nearly \$4.6 million. These projected savings, while not always calculated on a strict "apples-to-apples" basis, were nevertheless deemed significant enough that the GIG Waiver Panel used them when deciding to grant waivers to these organizations to buy outside the DISA process.

The current pricing structure of the DISA acquisition process can result in users being charged from 9 to 12 percent more than the bandwidth cost from the service provider. Part of this added cost is due to profit and overhead charges that DISA vendors add on to bandwidth cost. This can total between 1 and 4 percent of the price of the service and is kept low because of the competition among vendors to win each task order.

Another part of the added costs is attributable to surcharges that DISA adds to prices in order to recoup their costs for tasks they perform in acquiring the service. The surcharges—6 percent of the total price from the vendor for DISA's Commercial Satellite Communications Branch's efforts and another 2 percent for DITCO's efforts—are a normal practice for DISA and other DOD activities that operate under the Defense Working Capital Fund, which is designed to ensure that defense activities that carry out business operations for others can recover their costs—neither making a profit nor incurring a loss in the course of their work. If users acquired the service themselves, they may well incur similar administrative costs, but those costs would not be as visible to them as when receiving an itemized bill from DISA for services. However, they would not normally have to pay extra for an intermediary agent when procuring services directly from industry.

Some portion of the user-reported projected savings may be attributable to high initial estimates provided by DISA based on outdated pricing

proposals of vendors' contract line item prices. While DISA stated that users were advised that the actual prices might be significantly lower, users still had to commit their budget in the amount of the original estimate. Use of this high initial estimate has been a long-standing flaw in the DISA acquisition process that DISA has only recently taken steps to correct. However, DISA's solution to this problem—asking the vendors to produce more detailed and more realistic original price estimates—will likely result in more days added to an already lengthy process.

Another reason for the difference between DISA's estimates and industry quotes may be that DISA's estimates are based on features in its contracts with vendors that may call for a different level of services or equipment than required. For example, in one U.S. Army case, the bandwidth acquired to operate its communications network was less than the minimum bandwidth capacity that satellite providers were required to provide under the DSTS-G contract.

In addition, users told us that the DISA process results in contract terms that are often too inflexible. Some of the features that are common in commercial contracts for satellite services are not in the contracts awarded through the DISA process. For example, DISA's contracts for commercial bandwidth, according to the three DSTS-G vendors, do not contain the common commercial clause, "Portability of Services," or anything comparable. This clause would typically allow a user to transfer the remaining time from one satellite, in an area no longer requiring coverage, to another satellite, where service is now required, at no additional cost. Industry representatives cited this clause as an example of flexibility that commercial customers have sought, as a best practice, but DOD has not.

Further, DOD users often do not have the ability to change or cancel requirements, if necessary, without continuing to pay for the original ones. For example, while DISA's contracts with vendors contain the "Termination for Convenience" clause, which should allow the government to terminate service that is no longer needed and to stop incurring costs for the unused portion, vendors' contracts with service providers do not have this clause. In fact, the contracts that vendors have with the service providers reflect an industry practice that holds the vendors responsible for the remainder of the noncancelable lease, regardless of whether the government terminates the vendors' contract. Therefore, any remaining lease costs would be paid to the service provider by the vendor and then submitted as part of the vendor's termination

settlement proposal to DOD, which would then bear some or all of these costs as agreed to in the negotiated termination settlement.

Some Users Are Bypassing the DISA Process to Get Timely, More Flexible, and Less Costly Services

Some users are bypassing the DISA acquisition process to acquire commercial bandwidth through alternative processes, either by formally requesting a waiver from the DISA process or by improperly procuring services without a waiver. We identified 10 instances where bandwidth was procured through an alternative process. In four of these, waiver requests were submitted and approved in advance of the procurement action, as called for in DOD policy. In the remaining six instances, however, users had independently procured bandwidth without processing waivers, inconsistent with DOD policy.

We were initially given access to information on the four procurement actions with approved waivers and on three of the actions that had occurred without waivers. These latter three procurements had been brought to the attention of the Chairman of the GIG Waiver Panel, who then made the offending organizations process “after-the-fact” waivers. While we were interviewing user organization representatives on these, we uncovered three additional procurement actions that should have had waivers processed, but had not. We turned this information over to the Chairman of the GIG Waiver Panel, who will determine whether “after-the-fact” waivers are also to be processed for these cases. Representatives of the offices that had bypassed the DISA process and used an alternative acquisition process to acquire needed bandwidth indicated in interviews and in briefing documents that they had been able to achieve faster procurements, often resulting in more flexible contract instruments, and at lower (sometimes significantly lower) prices.

According to DOD officials, users throughout DOD have been independently acquiring bandwidth, without an approved waiver, for years. One knowledgeable DISA official estimated that, if all the services and DOD entities had accurately reported their fixed satellite service bandwidth usage costs for fiscal year 2002, the total would likely have been \$200 million higher than the amount actually reported, nearly doubling the reported amount of \$221.7 million. As it was, we determined that, at a minimum, \$42.4 million, or nearly 20 percent of the \$221.7 million self-reported dollars spent, was spent outside the DISA process.

Lack of Strategic Approach to Managing Services Diminished DOD's Ability to Optimize Spending

Our past work has identified specific practices that can be employed to manage services from a more strategic perspective, thereby enabling an organization like DOD to leverage its buying power and achieve significant savings.¹¹ These include establishing a central agent or manager for acquiring services, gaining visibility over spending, and revising business processes to enable the organization to leverage its buying power. While there are challenges to implementing this process, DOD has recognized its importance and called on agencies to embrace a strategic approach for acquiring services. Even though DISA is supposed to serve as a central manager for the acquisition of satellite bandwidth services, it is not following a strategic approach. Little attention is paid to collecting or addressing customer complaints, business processes are inefficient, and oversight is limited. Moreover, neither DOD nor DISA is making a concerted effort to collect forecasts of bandwidth needs from users, ensure those needs can be met by the commercial sector, and take steps needed to leverage its buying power with commercial providers.

Strategic Approach Is Paramount to Optimizing Acquisitions of Services

Our previous work has found that leading organizations have adopted practices and activities that enabled them to acquire services in a more strategic manner and in turn achieve dramatic cost reductions and service improvements. Faced with an increased dependence on services, growing market pressures, and an economic downturn, the companies we studied examined their service spending and found that they did not have a good grasp of how much was actually being spent and where these dollars were going. These companies found that responsibility for acquiring services resided largely with individual business units or functions, hindering efforts to coordinate purchases across the company. They also came to realize that they lacked the tools needed to make sure that the services they purchased met their business needs at the best overall value.

To turn this situation around, these companies reengineered their approaches to buying services. This began with taking a hard look at how much they were spending on services and from whom. By arming themselves with this knowledge, the companies could identify opportunities to leverage their buying power, reduce costs, and better manage their suppliers. The companies also instituted a series of structural, process, and role changes aimed at moving away from a

¹¹ U.S. General Accounting Office, *Best Practices: Taking a Strategic Approach Could Improve DOD's Acquisition of Services*, GAO-02-230 (Washington, D.C.: Jan. 2002).

fragmented acquisition process to a more efficient and effective enterprisewide process. For example, the companies we studied often established or expanded the role of corporate procurement organizations to help business managers acquire key services and made extensive use of crossfunctional teams to help the companies better identify service needs, select providers, and manage contractor performance. These companies also developed information systems to enable them to track their spending and better match their needs with potential providers. They also implemented performance measures to track their progress and make further enhancements to their processes wherever needed. Taking a strategic approach clearly paid off, as companies found that they could save millions of dollars and improve the quality of services received by instituting these changes.

DOD Process Is Hampered by Oversight and Management Weaknesses

DOD's current process for acquiring commercial satellite bandwidth is not strategic. While DISA is supposed to serve as a centralized acquisition function, some users are, in effect, allowed to bypass the process, and there is little visibility over what is actually being spent on commercial satellite bandwidth services.

For example, DOD has a formal waiver process—the GIG waiver process—in place to ensure that any acquisition made outside the DISA process is justified and that the service being procured is not duplicative of other existing services, preserves interoperability, and meets network control requirements. But the waiver process, at least until recently, has not been enforced. This past year, officials who manage this process recognized the problem and are now requiring users that already bypassed the process to obtain waivers after-the-fact. According to DOD officials, some users have been acquiring services outside the DISA process for years.

In addition, other DOD organizations responsible for overseeing the DISA process—including the Assistant Secretary of Defense for Networks and Information Integration and the Office of the Chairman of the Joint Chiefs of Staff—have not been enforcing requirements for reporting, nor have they developed, nor required DISA to develop, performance metrics that could be used to assess user satisfaction, timeliness, and other factors that would give them a better sense of whether the process is efficient and effective. DOD directives since at least 1998 have required that DISA prepare a use and associated cost report on commercial bandwidth. DISA only recently submitted its first report. Further, no acquisition process measures exist at the oversight level, and DISA itself has not yet developed

performance metrics to measure customer satisfaction. Officials indicated that preliminary data have been collected from customers, but there was no evidence of their being used to improve any parts of the process.

Moreover, neither DOD nor DISA has developed a complete picture of what is being spent on bandwidth—the cornerstone to identifying what can be done to improve the process and to leverage DOD’s buying power. Our analysis indicated that the information contained in the fiscal year 2002 report on users and costs is incomplete, inaccurate, lacks proper identification of users, and contains costs associated with fiscal year 2003, impairing its reliability. Figure 2 highlights examples of our findings. Moreover, the self-reported user information that DISA collected did not reflect many purchases that were made outside of the DISA process. A 1998 DOD Inspector General report also found that DOD could not determine the total leased satellite communications bandwidth used among component commands or the total costs associated with obtaining that capacity.

Figure 2: Highlights of Analysis of DISA's Commercial Satellite Communications Utilization Report—Fiscal Year 2002

Excerpt from DISA report

Combatant command/ service/agency	Reported fixed satellite service costs
United States Marine Corps	\$257,239
United States Joint Forces Command	0
United States Southern Command	443,900
United States Army	50,972,936
United States European Command	0
United States Special Operations Command	16,827,200
United States Transportation Command	5,467,334
United States Air Force	24,600,000
United States Strategic Command	0
United States Central Command	0
United States Navy	45,963,291
National Security Agency	14,042,432
Defense Information Systems Agency	63,129,000
Total	\$221,703,332

Our analysis

The report is not accurate. For example, DISA reported that the U.S. Transportation Command had incurred fixed satellite bandwidth services totaling \$5,467,334 during fiscal year 2002. Based on our review of the Command's submitted cost report, however, we found that reported costs totaled \$5,059,334, or \$408,000 less than the amount DISA reported. Though we brought this error to the attention of DISA Commercial Satellite Communications Branch officials on April 9, 2003, the report, issued on July 15, 2003, failed to include the correction.

The report is not complete. For example, DISA and we both recognized that the Department of the Air Force had not reported any spending amounts at all for the "Fixed Satellite Services (FSS)" category in its data submission. DISA constructed an amount (\$24,600,000) thought to represent the amount that the Air Force had procured through the DISA process, but DISA could not verify this total. Moreover, there are indications that the Air Force procured services outside the DISA process, but information on such purchases was not obtained, even though, according to DISA, several attempts were made. DISA even included a note in the report acknowledging that the reported data for the Air Force were incomplete.

The report does not accurately reflect commercial satellite communication users and costs. Instead it documents which organization funded the satellite communication service, not necessarily who used it. For example, DISA itself is listed as the largest of the "users" with an amount of \$63,129,000. However, DISA is not a "user" of bandwidth services but rather a funding source for other direct users. Moreover, we learned from DOD officials that the predominate recipients of the \$63,129,000 were the U.S. Central Command, which shows no usage at all in the report, and the DOD Joint Staff, another non-user that evidently allocated bandwidth use to other unnamed users.

The \$63,129,000 number itself is overstated, as we have confirmed that at least \$16,200,000 of the total was spent to fund renewals of three of these leases for use in fiscal year 2003, which should be reported in the next report.

Source: GAO analysis of DISA data.

DOD also does not routinely maintain information on its ultimate providers of bandwidth services. While DOD maintains summary totals for task orders awarded to its three DSTS-G vendors, these data do not provide detailed information such as which actual bandwidth service providers competed the most, or least, or which ones were actually providing the most or next most service in terms of numbers of procurements or dollars to DOD.

Steps Have Not Been Taken to Leverage Buying Power

Even though DOD is the largest buyer of bandwidth in the commercial market, neither DOD nor DISA has taken steps essential to fully leveraging that buying power and to ensuring that future needs can be met by the commercial sector. There are options based on common commercial practices that are available to DOD for doing so, such as requesting most favored customer status with providers or maximizing business volume discounts. Table 7 discusses several of these options and their possible application to DOD's current practices in more detail.

Table 7: Options That Could Improve DOD’s Practices in Leveraging Its Buying Power

Alerting current and new providers about projected requirements to provide them the opportunity to develop additional capabilities. Application: While there have been isolated instances of this practice occurring, it was initiated by the DSTS-G vendors, not DOD. This could include launching new satellites or repositioning current assets, focusing more on DOD’s security needs, and creating more flexible solutions.

Requesting “Most Favored Customer” status with service providers. Application: Through DOD’s mandated DISA process, DOD typically cannot order bandwidth in large quantities or for long durations as commercial customers can do. However, DOD, in the aggregate, is the market segment’s largest single customer, which should warrant DOD some favored status. DOD could use its position to request such treatment; however, it does not, according to two major service providers we spoke with.

Maximizing business volume discounts. Application: Some large service providers do provide DOD some volume discounts. However, total DOD spending volume is fragmented among three DSTS-G vendors, the MTC prime contractor, and an unknown number of individual procurement organizations that are used by those customers/users that avoid the DISA process. By eliminating this fragmentation, DOD could aggregate its buying power to obtain better business volume discounts.

Requesting portability of services to other satellites or other areas of coverage. Application: A couple of the service providers, which have larger numbers of satellites in various locations, have been willing to offer bandwidth on alternate satellites when the original satellite and its location were no longer needed. DOD could request that all service providers agree to this provision in its subcontracts. Such a request, however, would probably have a cost associated with the risk to the service providers, but the added flexibility may well be worth the increased cost.

Obtaining “Promised Duration” discounts. Application: Two major service providers told us they would be willing to give discounts for lease durations of more than 1 year, the standard ordering term for DOD. They said that DOD could obtain better prices by committing to longer lease periods, thus getting it out of the “spot market” and into the long-term market, where most of their commercial customers operate. DOD cannot normally commit to periods of service beyond 1 year, because DOD gets its operations and maintenance funding 1 year at a time and current law requires funding to be available up front to cover multiple-years’ obligations of termination liability.

Requesting discounts for use of new satellites and/or older satellites. Application: Being the first or one of only a few customers on a new satellite, or likewise being willing to use an older satellite which has gone into an inclined orbit can result in substantial savings. Such instances are rare, but if DOD is in a position to know about the possibility and can make quick decisions, DOD can benefit. This requires up-to-date knowledge of the service provider industry.

Obtaining “Termination for Convenience” protections. Application: Currently, DOD is not fully protected in the event it must terminate a task order before its completion. DOD has required the three DSTS-G vendors and the MTC contractor to accept this clause and the risk that goes along with it. The vendors do not have such a clause with their providers, so the vendors are potentially in the position of receiving a Termination for Convenience from the DOD but having to continue to pay for the leased bandwidth with the provider for the remaining lease period. DOD allows these payments on the remainder of the lease period to be submitted by the vendor as part of the termination settlement proposal, and thus DOD would bear some or all of the costs for the unused portion of the lease.

Source: GAO.

While these options would position DISA to achieve cost savings, they require DISA to be able to project its future requirements and to be more proactive in dealing with its vendors. This is not being done. Instead, bandwidth is usually purchased on the “spot market” on an as-needed basis—when it is most expensive compared to longer duration leases. With few exceptions, individual small requirements are not aggregated by DISA to take advantage of DOD’s potential leverage in acquiring bandwidth in larger and less expensive quantities. According to DISA, users often decline opportunities to aggregate their requirements with other users. Two providers we interviewed indicated that they would be willing to develop creative solutions for consolidated requirements but would need to know in advance about future requirements to do so effectively.

Several DOD and industry officials told us that DOD could benefit if bandwidth were acquired through a program office with central funding authority for that bandwidth. In this situation, it would be necessary for users to submit their plans and forecasts of requirements to the central program office. Currently, users have their own bandwidth funding and generally do not forward forecasts of requirements to DISA. If all user requirements were submitted to this single program office, it would then be able to aggregate bandwidth requirements in order to leverage buying power. In addition, some of these officials indicated that such a program office could allow increased visibility and control over DOD-wide bandwidth acquisitions.

Adopting a Strategic Approach Will Be Challenging

Longer-term changes to the DISA process that are necessary to implement more strategic management processes—including establishing better visibility over spending, revamping business processes, strengthening technical expertise within the agency, and securing a commitment from senior leadership—will be challenging to implement. DOD is aware of these challenges and has begun to study its processes.

We found that leading organizations that applied a strategic approach to their purchases of services often spent months piecing together data from various financial and management information systems and examining individual orders just to get a rough idea of what they were spending on services. The companies found it was necessary to develop new information systems that could provide them with reliable spending data in a timely fashion. The task of gaining accurate visibility over spending will be equally, if not more, difficult for DOD given the lack of information

systems available to provide spending data and the magnitude and breadth of spending involved with commercial satellite bandwidth services.

Companies we studied also found that in establishing new procurement processes, they needed to overcome resistance from individual business units reluctant to share decision-making responsibility and to involve staff that traditionally did not communicate with each other. While DISA will likely face similar resistance within the agency, we believe it will also need to overcome resistance from users that manage their own operations and maintenance funds and have long been dissatisfied with the DISA process. Another challenge for DISA is obtaining the expertise needed to review complex technically sophisticated solutions proposed by vendors. Industry representatives and some vendors believe that DISA currently lacks the appropriate level of expertise.

Lastly, the companies we studied found that they needed to have sustained commitment from their senior leadership; to clearly communicate the rationale, goals, and expected results from reengineering efforts; and to measure whether the changes were having their intended effects. We believe similar commitment will need to be secured not only from DISA leadership, but also from leaders within DOD and the user communities.

DOD has recognized many of these challenges and is in the process of awarding a contract for a study to determine if it should change its approach to identifying, acquiring, and managing commercial satellite services. According to a DOD official, DOD has also initiated a study that will address ways to arrange for multiyear leasing and bulk discounts based on projected customer requirements.

Conclusions

DOD recognizes it has an increasing need to supplement its own satellite bandwidth capacity with capacity from the commercial sector. But it does not have a firm idea on how much bandwidth it will require in the short or long term or whether the private sector can even continue to support its requirements. Moreover, though it has become the largest consumer of satellite bandwidth, it still buys its bandwidth on an as-needed basis, thereby missing significant opportunities to leverage its buying power and to achieve considerable savings as a result. Moreover, by allowing users to bypass the DISA waiver process, DOD is hampering its ability to ensure that its communications networks are interoperable and to minimize redundancies. If DISA is to remain as DOD's primary agent to acquire satellite bandwidth, then it must implement a more strategic management approach—not only one that continues to ensure that acquisitions are

processed fairly, but also one that ensures services can be acquired in a timely and cost-effective way that meets users' needs. Doing so will be a considerable challenge, however, given the current environment and potential resistance within DISA and from its users. Commitment is needed from senior leaders within DISA and DOD to overcome challenges associated with implementing a strategic approach.

Recommendations for Executive Action

To strengthen DOD's ability to obtain commercial bandwidth effectively and efficiently, we recommend that the Secretary of Defense direct the Assistant Secretary of Defense for Networks and Information Integration to develop, in coordination with the Joint Staff and the Director of DISA, a strategic management framework for improving the acquisition of commercial bandwidth. Specifically, this framework should include provisions for

- inventorying current and potential users of commercial bandwidth to determine their existing and long-term requirements;
- identifying and exploiting opportunities to consolidate the bandwidth requirements of combatant commanders, the military services, and defense agencies;
- adopting, when appropriate, commonly used commercial practices, such as conducting spend analyses and negotiating pricing discounts based on overall DOD volume, to strengthen DOD's position in acquiring bandwidth; and
- improving the current funding structure by considering new funding approaches, such as centralized funding of commercial bandwidth, and seeking legislative authority for multiyear procurements.

To ensure the successful implementation of this strategic management framework and to better leverage DOD's buying power and increase user satisfaction, we recommend that the Secretary of Defense direct the Assistant Secretary of Defense for Networks and Information Integration to

- develop performance metrics to assess user satisfaction with the timeliness, flexibility, quality, and cost in acquiring commercial satellite services;
- strengthen DOD's capacity to provide accurate and complete analyses of commercial bandwidth requirements, spending, and the capabilities of commercial satellite providers by enhancing core internal technical expertise and information systems; and

-
- assess, and implement as needed, changes to the key elements of the existing acquisition process—including requirements generation, solution development and evaluation, and contract vehicles—to facilitate a more strategic approach to bandwidth acquisition.

Agency Comments and Our Evaluation

DOD, in commenting on a draft of this report, generally concurred with our findings, conclusions, and recommendations. Specifically, DOD concurred with four of our recommendations and partially concurred with the remaining three recommendations.

DOD concurred that a strategic management framework for improving the acquisition of commercial bandwidth be developed to include inventorying current and potential users to determine their current and future needs, and adopting, where appropriate, commonly used commercial acquisition practices. It also concurred in developing performance metrics to assess user satisfaction with its process and in assessing and changing its process to facilitate a more strategic approach to commercial bandwidth acquisition.

DOD partially concurred with our recommendations addressing consolidating user requirements, improving the current funding structure, and enhancing core internal technical expertise and information systems. In its comments DOD indicated it had initiated a review of its current approach to determine if process changes were necessary and is waiting to decide whether or how to act on these three issues until after the review is complete. While we agree it is important to review these issues, we also believe that actions, along the lines of our recommendations, will be necessary in order to develop a strategic framework to acquire commercial satellite bandwidth more efficiently and effectively.

DOD also provided informal technical comments, which we incorporated as appropriate.

Scope and Methodology

To determine whether DOD's process for acquiring fixed satellite services is fair and meets the needs of DOD users, we met with officials from DOD component organizations involved in procurement of these services, including officials from agency contracting offices, DISA, Assistant Secretary of Defense for Networks and Information Integration, and Joint Staff. We also interviewed the four DOD vendors (Lockheed Martin Global Telecommunications; Arrowhead Global Solutions, Inc.; Artel, Inc.; and Spacelink International, L.L.C.) that procure the needed bandwidth from industry, and officials from three commercial service providers, which are major suppliers of commercial bandwidth to DOD. We obtained available DISA data on all contractual actions awarded since enactment of the Open-market Reorganization for the Betterment of International Telecommunications (ORBIT) Act in March 2000, the beginning date given to us by our congressional requestors. We reviewed contract file documentation, as well as applicable sections of the FAR, as supplemented, and DOD policies and procedures, to determine the extent to which competition was obtained for each delivery or task order included in the universe under either the MTC or the DSTS-G contracts. For those orders not awarded competitively, we reviewed task order files to obtain sole-source or directed subcontractor justifications. We obtained details on all GIG waiver requests for fixed satellite service commercial bandwidth procurements processed since enactment of ORBIT. To determine the elapsed calendar days required to award the 48 DSTS-G task orders, we reviewed task order files to extract pertinent dates. For 11 of the task orders where we were unable to obtain the start date, we imputed the start date (request for service) based on 37 task orders for which we had actual start dates.

To determine what DOD does to oversee spending on fixed satellite services and ensure cost-effective results, we reviewed policies and procedures DOD uses and interviewed DOD officials on oversight practices. We obtained and analyzed cost data reported by combatant commands, military services, and defense agencies. We reviewed task and delivery order documentation, including applicable modifications and amendments, awarded under the MTC and DSTS-G contracts since enactment of the ORBIT Act. We analyzed the current DSTS-G contract to identify the terms, conditions, and benefits available to large volume customers and compared our results to the reported practices of private sector buyers purchasing similar bandwidth capacity. We reviewed available contracts for bandwidth from U.S. Army and U.S. Navy sources, and we analyzed reported cost data to see if they included satellite bandwidth capacity obtained through sources outside of the DISA process.

We conducted our review from February to October 2003 in accordance with generally accepted government auditing standards.

We are sending copies of this report to other interested congressional committees; the Secretary of Defense; the Deputy Secretary of Defense; the Secretaries of the Army, Navy, and Air Force; the Under Secretary of Defense (Acquisition, Technology, and Logistics); the Under Secretary of Defense (Comptroller); and the Director of the Defense Information Systems Agency. We will also provide copies to others on request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you have any questions regarding this report, please call me at (202) 512-4841 or John Needham at (202) 512-5274. Other major contributors to this report are Gary L. Delaney, John D. Heere, Oscar Mardis, Marie P. Ahearn, and Gary Middleton.



William T. Woods
Director
Acquisition and Sourcing Management

Appendix I: Comments from the Department of Defense



ASSISTANT SECRETARY OF DEFENSE
6000 DEFENSE PENTAGON
WASHINGTON, DC 20301-6000

DEC - 4 2003

NETWORKS AND INFORMATION
INTEGRATION

Mr. William T. Woods
Director, Acquisition and Sourcing Management
U.S. General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Woods:

This is the Department of Defense (DoD) response to the GAO draft report, 'CONTRACT MANAGEMENT: Strategic Approach Needed for DOD's Procurement of Commercial Satellite Bandwidth,' dated November 10, 2003, (GAO code 120200/GAO-04-206).

The Department generally concurs with the report and its recommendations. The DoD recognizes that satellite communications requirements are ever expanding and that commercial systems will and must play a strategic role in the overall DoD SATCOM architecture in the foreseeable future.

In parallel with your review, I have directed the Director, Defense Information Systems Agency (DISA) and my staff to review the policies and practices associated with planning, acquisition, vulnerabilities, and management of commercial SATCOM services to determine if we should make a course change in our approach to the use of commercial SATCOM. Your findings and recommendations will provide an important contribution to our review and determination of the appropriate approach for DoD utilization of commercial SATCOM in the future.

The Department appreciates the opportunity to comment on the GAO draft report. Detailed comments on the report's recommendations, and requested changes to correct factual errors are attached.

Sincerely,

John P. Stenbit

Enclosures:
As stated



GAO DRAFT REPORT - DATED NOVEMBER 10, 2003
GAO CODE 120200/GAO-04-206

“CONTRACT MANAGEMENT: STRATEGIC APPROACH NEEDED
FOR DOD’S PROCUREMENT OF COMMERCIAL SATELLITE BANDWIDTH”

DEPARTMENT OF DEFENSE COMMENTS
TO THE RECOMMENDATIONS

BACKGROUND

The DoD leases commercial satellite communications (SATCOM) services to augment the services available from DoD-owned “military satellite communications” (MILSATCOM) systems. The bulk of these leases are for Fixed SATCOM services to augment capacity available from the Defense Satellite Communications System (DSCS).

Since 2001 the leasing of commercial SATCOM services has been accomplished via a “fee for service” business model wherein military services and other DoD organizations and agencies that have identified a need for commercial SATCOM capacity place funds into a Defense Working Capital Fund (DWCF). Current DoD policy is that the Defense Information Systems Agency (DISA) contracts for the commercial SATCOM capacity, and uses the funds in the DWCF to pay for the contracts. This business model provides the flexibility of leasing the capacity when and where it is needed, and only for as long as it is needed.

Recognizing that the assumptions made in developing the current business model have changed in recent times, the Department has initiated a review of our approach for use of commercial SATCOM to determine if process changes are required. ASD(NII) and DISA are coordinating the review, which will provide a comprehensive analysis of our commercial SATCOM practices including planning and requirements analysis, acquisition strategies and contract vehicles, vulnerabilities, operations management, and relations/impacts to collateral programs.

The following are responses to the specific recommendations made by the GAO.

RECOMMENDATION 1: The GAO recommended that the Secretary of Defense direct the Assistant Secretary of Defense for Networks and Information Integration to develop, in coordination with the Joint Staff and the Director of the Defense Information Systems Agency (DISA), a strategic management framework for improving the acquisition of commercial bandwidth. **Specifically, this framework should include provisions for inventorying current and potential users of commercial bandwidth to determine their existing and long-term requirements.** (p. 21/GAO Draft Report)

DOD RESPONSE: The Department concurs with this recommendation.

The DoD currently has a process in place whereby user requirements for satellite communications services are obtained and maintained in a centrally managed Satellite

Note: Page numbers in the draft report may differ from those in this report.

Database (SDB). The requirements are segmented in the database according to the timeframe when they are needed – current (in the next two years) and future (beyond the next two years). One of the areas being reviewed by ASD NII and DISA is whether we have adequate and accurate information in the SDB regarding current and future requirements for commercial SATCOM, and whether we can perform critical analysis of this information to determine possible trends in the Department’s use so we can plan for the future.

RECOMMENDATION 2: The GAO recommended that the Secretary of Defense direct the Assistant Secretary of Defense for Networks and Information Integration to develop, in coordination with the Joint Staff and the Director of the Defense Information Systems Agency (DISA), a strategic management framework for improving the acquisition of commercial bandwidth. **Specifically, this framework should include provisions for identifying and exploiting opportunities to consolidate the bandwidth requirements of combatant commanders, the armed services, and DOD agencies.** (p. 21/GAO Draft Report)

DOD RESPONSE: The Department partially concurs with this recommendation.

Consolidating bandwidth requirements makes sense if the primary object is to lease bulk amounts of commercial satellite capacity. However, the current business model for acquiring commercial SATCOM services is generally based on the philosophy of “acquire as needed”, so bulk capacity purchases are not always an option. There are cases where like requirements have been identified and bulk capacity buying was accomplished from a single satellite service provider. In addition, for those requirements specified through the SDB process, DISA makes every attempt to engage in multi-year leases when the user organization agrees to obligate funding for the expected period of the contract. As part of the DoD review of the current processes we will be evaluating methods for exploiting opportunities to consolidate the bandwidth requirements of combatant commanders, the armed services, and DoD agencies..

RECOMMENDATION 3: The GAO recommended that the Secretary of Defense direct the Assistant Secretary of Defense for Networks and Information Integration to develop, in coordination with the Joint Staff and the Director of the Defense Information Systems Agency (DISA), a strategic management framework for improving the acquisition of commercial bandwidth. **Specifically, this framework should include provisions for adopting, when appropriate, commonly used commercial practices, such as conducting spend analyses and negotiating pricing discounts based on overall DOD volume, to strengthen DOD’s position in acquiring bandwidth.** (p. 21/GAO Draft Report)

DOD RESPONSE: The Department concurs with this recommendation.

The ongoing DoD review is investigating improving the methods and procedures for acquisition of commercial SATCOM capacity, including the types of contracting methods, the terms and conditions included in our contractual requirements, and ways to improve and leverage DoD’s buying power in the commercial SATCOM industry.

RECOMMENDATION 4: The GAO recommended that the Secretary of Defense direct the Assistant Secretary of Defense for Networks and Information Integration to develop, in coordination with the Joint Staff and the Director of the Defense Information Systems Agency (DISA), a strategic management framework for improving the acquisition of commercial bandwidth. **Specifically, this framework should include provisions for improving the current funding structure, by considering new funding approaches such as centralized funding of commercial bandwidth and seeking legislative authority for multi-year procurements.** (P. 21/GAO Draft Report)

DOD RESPONSE: The Department partially concurs with this recommendation.

The Department agrees that steps need to be taken to improve the current funding structure in order to realize savings associated with bulk leases and multi-year contracts. However, centralized funding for acquisition of commercial bandwidth, combined with existing regulations regarding multi-year procurements could pose a significant burden on the organization tasked to execute and manage the multi-year procurements. This is because multi-year procurements require a multi-year obligation of funds (subject to their availability in the budget) to cover contract costs and potential contract termination liability charges, and these funds must be protected against non-specific budget cuts. This would result in other programs having a disproportionate impact from non-specific budget cuts.

The Department will evaluate strategies for improving the current funding structure once the current review is completed.

RECOMMENDATION 5: To ensure the successful implementation of the recommended strategic management framework, to better leverage DOD's buying power and to increase user satisfaction, the GAO recommended that the Secretary of Defense direct the Assistant Secretary of Defense for Networks and Information Integration **to develop performance metrics to assess user satisfaction with timeliness, flexibility, quality, and cost in acquiring commercial satellite services.** (p. 21/GAO Draft Report)

DOD RESPONSE: The Department concurs with this recommendation.

Properly developed customer surveys and process performance metrics are arguably important aspects of any quality improvement program. DISA has recently developed a customer survey and distributed it to its commercial SATCOM customers. The ongoing Department study will ascertain what metrics are appropriate for future customer surveys based on the business model developed.

RECOMMENDATION 6: To ensure the successful implementation of the recommended strategic management framework, to better leverage DOD's buying power and to increase user satisfaction, the GAO recommended that the Secretary of Defense direct the Assistant

Secretary of Defense for Networks and Information Integration to **strengthen DOD's capacity to provide accurate and complete analyses of commercial bandwidth requirements, spending, and the capabilities of commercial satellite providers by enhancing core internal technical expertise and information systems.** (p. 21/GAO Draft Report)

DOD RESPONSE: The Department partially concurs with this recommendation.

The Department agrees with the need for strong core internal technical expertise and information systems. We feel that DISA, using both government and contract personnel, possesses the requisite technical expertise to evaluate existing information, use existing tools, and operate under the current business model.

In responding to Recommendation #1 we noted that one of the areas being reviewed by ASD NII and DISA is whether we have adequate and accurate information regarding current and future requirements for commercial SATCOM, and whether we can perform critical analysis to determine possible trends in the Department's use so that we can plan for the future. In addition, our review is also focusing on providing tools and applications that would significantly increase utilization efficiency and reduce costs. When these tools and information systems have been selected and implemented the Department will ensure that we have appropriate technical expertise, at all levels within the Department, for their use.

RECOMMENDATION 7: To ensure the successful implementation of the recommended strategic management framework, to better leverage DOD's buying power and to increase user satisfaction, the GAO recommended that the Secretary of Defense direct the Assistant Secretary of Defense for Networks and Information Integration to **assess, and implement as needed, changes to the key elements of the existing acquisition process-including requirements generation, solution development and evaluation, and contract vehicles-to facilitate a more strategic approach to bandwidth acquisition.** (p. 21/GAO Draft Report)

DOD RESPONSE: The Department concurs with this recommendation.

In summary, the DoD is engaged in a comprehensive review of our commercial SATCOM practices including planning and requirements analysis, acquisition strategies and contract vehicles, operations management and the relations to collateral programs. The results of this review will be used by the Department to restructure, as appropriate, our approach and processes for integration of commercial SATCOM into the overall DoD SATCOM architecture.

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