**United States General Accounting Office** 

**GAO** 

Report to the Ranking Minority Member, Committee on Small Business and Entrepreneurship, U.S. Senate

October 2001

ELECTRONIC COMMERCE

Small Business Participation in Selected On-line Procurement Programs



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	Abbreviati	ons	
	CCR	Control Contro et an Pagistration	
	DLA	Central Contractor Registration Defense Logistics Agency	
	DMLSS	Defense Medical Logistics Standard Support	
	DOD	Department of Defense	
	ECRC	Electronic Commerce Resource Center	
	FAR	Federal Acquisition Regulation	
	FedBizOpps	Federal Business Opportunities	
	FPDS	Federal Procurement Data System	
	GSA	General Services Administration	
	HTML	Hypertext Markup Language	
	ITSS	Information Technology Solutions Shop	
	MEP	Manufacturing Extension Partnerships	
	NIST	National Institute of Standards and Technology	
	PRO-Net	Procurement Marketing and Access Network	
	PTAC	Procurement Technical Assistance Center	
	SBA SBDC	Small Business Administration Small Business Development Center	
	SDDC	onan dusiness development Center	



# United States General Accounting Office Washington, DC 20548

October 29, 2001

The Honorable Christopher S. Bond Ranking Minority Member Committee on Small Business and Entrepreneurship United States Senate

### Dear Senator Bond:

This letter responds to your request that we explore issues related to small business¹ participation in government on-line procurement programs and electronic commerce² education activities covered by selected federal programs for businesses in general. Over the past several years, the federal government has pursued various electronic initiatives to strengthen its buying processes in order to reduce costs and create a competitive "virtual" marketplace. These efforts have been augmented by the Administration's announcement in early 2001 that expanding the application of on-line procurements in the federal government was one of its major reform initiatives. Moreover, the use of electronic commerce in the U.S. economy at large is growing. For example, according to the U.S. Census Bureau, for the second quarter of 2001, retail electronic commerce increased 24.7 percent over the sales of the second quarter of 2000.³

Because of concerns that small businesses may be facing difficulties in participating in federal on-line procurement programs, you asked us to ascertain the share of procurement dollar awards made to small businesses in selected programs and to identify whether obstacles exist for small businesses in participating in electronic procurements. In addition, you were concerned about the extent of the government's business outreach and education programs related to electronic commerce and whether these programs are adequately coordinated.

<sup>&</sup>lt;sup>1</sup>For the purposes of government procurement, a small business is a concern that is independently owned and operated, is not dominant in the field of operation in which it is competing for government contracts, and is qualified as a small business under criteria and size standards prescribed by the Small Business Administration (FAR, sec. 19.001).

<sup>&</sup>lt;sup>2</sup>Electronic commerce encompasses all aspects of buying and selling electronically, including marketing end-to-end transactions with consumers, and on-line auctions. It is transacted through a variety of technologies, including electronic data interchange, electronic mail, electronic funds transfer, and Web-based applications.

<sup>&</sup>lt;sup>3</sup>United States Department of Commerce News, August 30, 2001.

Accordingly, our objectives were to (1) determine, for three federal on-line procurement programs, the differences between the small business share of federal prime contract dollars awarded by these programs and the small business share of all federal contract dollars awarded and to identify what, if any, obstacles exist for small businesses in conducting electronic procurements with the federal government and (2) review what steps four federal business assistance programs have taken to educate businesses on using electronic commerce and the extent to which these programs have coordinated their efforts.

To determine the comparative small business share of dollar awards at the three selected federal on-line purchasing sites, we calculated the percentage of small business awards to total awards for each program and compared them to the governmentwide small business share for federal procurements, as reported by the General Services Administration's (GSA) Federal Procurement Data System (FPDS)—the central repository for governmentwide procurement data. We addressed the reliability of the data of the selected programs by performing data consistency checks and reviewing reports on general system controls. To gather information on obstacles to small businesses in participating in federal electronic procurements, we performed a literature search and obtained comments from officials in selected federal business assistance programs and organizations representing or working with small businesses. 4 To review what steps selected assistance programs have taken to educate businesses in using electronic commerce and the extent to which they have coordinated their efforts, we reviewed documentation and interviewed headquarters and local and regional office officials for four federally funded programs. Appendix I provides more information on our scope and methodology.

## Results in Brief

For the three federal on-line procurement programs we reviewed, the dollar share of awards to small businesses exceeded the overall small business share of total federal contract dollars awarded in fiscal years 2000 and 1999. For fiscal year 2000, the small business share was 61 percent for the Defense Medical Logistics Standard Support E-CAT, 51 percent for GSA Advantage!, and 39 percent for GSA's Information

<sup>&</sup>lt;sup>4</sup>Some of these organizations also include members that are not small businesses.

<sup>&</sup>lt;sup>5</sup>The three on-line programs in our review accounted for about 0.5 percent and 1 percent of total federal procurement dollars in fiscal years 1999 and 2000, respectively.

Technology Solutions Shop, compared to the overall 22 percent governmentwide small business share. 6 While these figures indicate that small businesses successfully participated in these three programs, officials from organizations representing or working with small businesses, as well as related literature, still report that such businesses face obstacles in conducting electronic procurements with the government. Some of these reported obstacles pertain to the general capability of small businesses to conduct business transactions electronically (for example, having limited technical expertise), while others relate to difficulties with participating in the federal government electronic procurement environment, such as having knowledge of the government's multiple procurement Web sites. The federal government has taken, or is in the process of taking, actions to help address some of these obstacles, such as implementing a single point of entry on the Internet for vendors to access information on available government business opportunities greater than \$25,000.

Each of the four business assistance programs we examined had taken steps to educate its clients on electronic commerce as part of its operations. We could not fully determine the extent of these activities because they are conducted by hundreds of local and regional offices, and only the Defense Logistics Agency's (DLA)<sup>7</sup> Electronic Commerce Resource Center (ECRC) program collected performance metrics specific to electronic commerce. Nevertheless, all but 1 of the 24 local and regional offices we contacted reported that they provided some type of electronic commerce education, including sponsoring or participating in conferences, training, consulting, and technical assistance. The extent and content of electronic commerce education at the local and regional level varied but typically included (1) general introductory material; (2) technical issues, such as electronic data interchange; or (3) government-specific subjects. In addition, although coordination among the headquarters offices of these programs was limited, local and regional

<sup>&</sup>lt;sup>6</sup>GSA's calculation of the small business share of government procurements excludes certain types of procurements. For more information about the exclusions and the goal-setting process, see *Small Business: More Transparency Needed in Prime Contract Goal Program* (GAO-01-551, August 1, 2001).

<sup>&</sup>lt;sup>7</sup>The ECRC program was operated by DLA through the Defense Electronic Business Program Office. The Department of Defense Chief Information Officer has overall functional responsibility for the Defense Electronic Business Program Office, but the office receives its funding and personnel through DLA and the Defense Information Systems Agency. The ECRC program was terminated on September 30, 2001.

offices generally reported extensive coordination and cooperation. This included referring clients to other programs and providing specialized training (e.g., in some cases, Electronic Commerce Resource Centers conducted training for other assistance programs' staff and/or clients).

Commenting on a draft of this report, the Defense Logistics Agency, the Office of Management and Budget's Office of Federal Procurement Policy, GSA, and the Small Business Administration stated that they generally agreed with our report. The Department of Commerce provided updated online sales statistics.

## Background

Although it is still a small part of the U.S. economy, electronic commerce is growing rapidly. For example, according to the U.S. Census Bureau, retail electronic commerce dollar volume, though less than 1 percent of overall U.S. retail sales, increased in all but two of the last six quarters. Moreover, while precisely predicting future electronic commerce volume is difficult, in June 2000 we reported that business-to-consumer Internet sales were estimated to increase to between \$78 billion and \$143 billion in 2003, and that business-to-business Internet sales were estimated to increase to between about \$1.5 and \$2.2 trillion in that same timeframe. According to GartnerGroup, a private research firm, through 2006 the pace of innovation will increase as enterprises institutionalize electronic business, and small businesses "must embrace this transition or risk their long-term viability and survival."

The federal government is taking steps to increase its use of electronic commerce, particularly in the area of conducting procurements on-line. For example, the President has designated expanding the application of on-line procurement a major reform for fiscal year 2002. Further, according to a recent Congressional Research Service report, agency Web

<sup>&</sup>lt;sup>8</sup>United States Department of Commerce News, August 30, 2001.

<sup>&</sup>lt;sup>9</sup>Sales Taxes: Electronic Commerce Growth Presents Challenges; Revenue Losses are Uncertain (GAO/GGD/OCE-00-165, June 30, 2000). To obtain sales estimates, we reviewed academic, government, and private sector studies. In the case of 2003 business-to-consumer Internet sales, the lower range of the estimate was from Jupiter Communications while the higher end of the range was from Forrester Research, Inc. For the 2003 estimate for business-to-business Internet sales, we used a Forrester Research, Inc. estimate and assumed a 20-percent margin of error because it was the only source for these data.

 $<sup>^{10}</sup> Ten\ Imperatives\ for\ SMB\ E-Business\ Success\ (Gartner Group,\ COM-13-0713,\ March\ 9,\ 2001).$ 

sites provided various information on federal procurement, including bid opportunities. Moreover, procurement opportunities for small businesses and for women- and minority-owned businesses were also often identified on these Web sites. Among the major federal agencies maintaining procurement Web sites are DLA, GSA, and the National Aeronautics and Space Administration.

One type of on-line procurement program is a multivendor Internet-based purchasing site, sometimes called an "electronic mall." An example of an electronic mall is GSA Advantage!, in which government buyers can search listings, compare prices, and purchase items on-line much as a private individual might purchase an item from an on-line retailer. As of July 1, all vendors on the GSA schedule were required to electronically submit product descriptions and price information to GSA Advantage!. <sup>12</sup> Another electronic mall is DLA's Defense Medical Logistics Standard Support (DMLSS) E-CAT program, which operates in a similar manner to GSA Advantage!, except that vendors must have an indefinite delivery/indefinite quantity contract with DLA to participate. A different type of on-line procurement program model is GSA's Information Technology Solutions Shop (ITSS) program, which is used for larger or more complex purchases. The ITSS on-line purchasing program maintains an inventory of contractors through which federal buyers can get quotations in response to requirements documents. Table 1 summarizes how each of these on-line programs works and the products that can be obtained using them.

 $<sup>^{11}</sup>Electronic$  Government: A Conceptual Overview (Congressional Research Service, July 9, 2001).

<sup>&</sup>lt;sup>12</sup>According to GSA, as of August 30, 82 percent of the vendors on the GSA schedule on January 31 have electronically submitted product data to GSA Advantage!. Vendors that made a good faith effort to comply with the July 1 requirement were given an extension to provide their information electronically to GSA Advantage!. In addition, vendors with new contracts are not required to submit data electronically to GSA Advantage! until 6 months after contract award.

Agency/ program	Services	Products	Acquisition process
DLA/ DMLSS E-CAT	Primarily a Web-based catalog ordering system	Labware, dental and optical consumable products, and medical equipment	Customers browse, compare, select and order items electronically, and orders are shipped directly from the vendors.
GSA/ GSA Advantage!	Web-based catalog ordering system	Over 2 million commercial products and services, many of which are office supplies and information technology products and services	Customers browse, compare, select, and order items electronically, and orders are shipped directly from the vendors or a GSA warehouse.
GSA/ ITSS	Web-based contracting services	Information technology products and services, from computer monitors to complete network installations	Customers enter requirements on-line GSA staff solicit quotes, issue purchas orders, and authorize payment electronically.

Source: GAO, based on DLA and GSA documentation.

These three on-line procurement programs are small but growing in comparison to overall federal procurement dollars. According to the Federal Procurement Data System (FPDS), <sup>13</sup> the government procured about \$232 billion and \$209 billion in goods and services in fiscal years 2000 and 1999, respectively. The three on-line programs in our review grew as a percentage of total federal procurement dollars from about 0.5 percent in fiscal year 1999 to about 1 percent in fiscal year 2000. Table 2 shows actual and estimated dollar volumes for the three programs and their growth over three fiscal years.

**Table 2: Actual and Estimated Sales in Three On-line Procurement Programs**Dollars in thousands

	Fiscal year sales		
On-line procurement program	(Actual) 1999	(Actual) 2000	(Estimated) 2001
DMLSS E-CAT	\$2,475	\$14,057	\$24,000
GSA Advantage!	85,687°	124,892 <sup>b</sup>	250,000
ITSS	977,472	2,258,709	3,700,000

<sup>&</sup>lt;sup>a</sup>This total includes about \$17 million in direct sales by vendors and \$69 million in sales of GSA purchased stock items.

Source: GSA and DLA.

<sup>&</sup>lt;sup>b</sup>This total includes about \$30 million in direct sales by vendors and \$95 million in sales of GSA purchased stock items.

<sup>&</sup>lt;sup>13</sup>FPDS collects data on all federal contract actions and calculates the governmentwide percentage of federal procurements awarded to small businesses based on procurement information received from the agencies.

Other on-line procurement Web sites also support government purchasing. These sites include the Department of Defense's (DOD) EMALL program, which is planned as the single DOD electronic mall, <sup>14</sup> and the National Institutes of Health Intramall program. The private sector also offers online procurement Web sites that support government buying activities.

Beyond its on-line procurement programs, the federal government also supports electronic commerce by sponsoring programs that provide electronic commerce education to businesses. For example, each of the four federally funded business assistance programs that you asked us to review provides electronic commerce education as part of its operations. Each program also uses nonfederal organizations such as nonprofit organizations or contractors to perform its education services. However, as shown in table 3, the programs differ in focus and the target clients served.

 $<sup>^{14} \</sup>rm The$  Strom Thurmond National Defense Authorization Act for Fiscal Year 1999—P.L. 105-261, sec. 332, 112 stat.1920, 1968 (1968)—called on DOD to develop a single, Defense-wide electronic mall system.

Table 3: Agency/Program, Focus, and Target of Business Assistance Programs Studied

		Number of		
Agency/program	Service providers	offices	Focus	Target clients
SBA/ Small Business Development Center (SBDC)	States, colleges and universities, and non-profit organizations	About 1000 <sup>a</sup>	Business management and technical assistance	Small businesses
Dept. of Commerce/ National Institute of Standards and Technology (NIST) Manufacturing Extension Partnerships (MEP)	States, colleges and universities, and non-profit organizations	About 400	Transfer of advanced manufacturing technologies and related management and implementation processes to manufacturers	Small and medium-sized manufacturers
DLA/ Procurement Technical Assistance Center (PTAC)	States, colleges and universities, and non-profit organizations	90	Assistance in contracting with federal, state, and local governments	Individuals or businesses, especially small and/or disadvantaged businesses
DLA/ Electronic Commerce Resource Center (ECRC) <sup>b</sup>	Contractors	17	Assistance in adopting electronic commerce, particularly with DOD	The U.S. civilian-military industrial base, including small and medium-sized businesses, DOD, and other government organizations

<sup>a</sup>SBA has cooperative agreements with about 60 lead offices which, in turn, contract with about 1,000 local service providers.

<sup>b</sup>The ECRC program was terminated on September 30, 2001. Before that date, it was operated by DLA through the Defense Electronic Business Program Office. DOD's Chief Information Officer has overall functional responsibility for the Defense Electronic Business Program Office but the office receives its funding and personnel through DLA and the Defense Information Systems Agency.

Source: GAO, based on SBA, NIST, and DLA documentation.

Small Businesses
Actively Participate in
Federal Electronic
Procurements, but
Obstacles Reportedly
Remain

The small business share of federal procurement dollars awarded through three on-line procurement sites was higher than the governmentwide small business share, as reported by FPDS, the central repository of governmentwide procurement data. However, obstacles to conducting electronic business with the federal government continue to be cited by organizations representing or working with small businesses and business assistance program officials. Some of these obstacles relate to the general readiness of small businesses to conduct electronic commerce while others are specific to how the government has implemented electronic procurement activities. The government has taken, or plans to take, actions that are expected to address some of the government-specific obstacles.

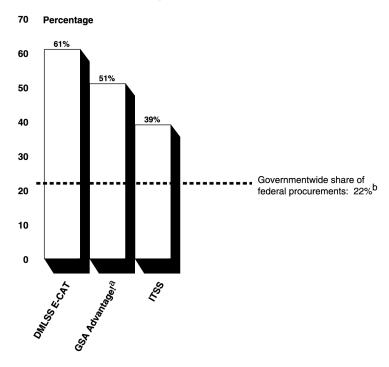
Small Business Share of Awards in Three On-line Procurement Programs is Greater Than Reported Share of Governmentwide Procurement Awards

As figures 1 and 2 illustrate, the share of procurement dollars awarded to small businesses through the three on-line programs in fiscal years 2000 and 1999, respectively, was greater than their governmentwide share, as reported by FPDS. <sup>15</sup> These on-line procurement programs also exceeded the governmentwide goal of a 23-percent share for small businesses. <sup>16</sup> Most of the contract awards made through DMLSS E-CAT and GSA Advantage! were small, which may at least partially account for the relatively large share of dollars awarded to small businesses in these programs. Small businesses generally obtain a greater percentage of contract awards of \$25,000 or less (e.g., 43 percent for non-credit-card awards in fiscal year 2000), and, in fiscal year 2000, 91 percent of DMLSS E-CAT awards and 93 percent of GSA Advantage! awards were \$25,000 or less. (Only 3 percent of ITSS awards were \$25,000 or less.)

<sup>&</sup>lt;sup>15</sup>SBA directed GSA to exclude several types of contracts when calculating the percentage of federal procurements awarded to small business in FPDS. These exclusions fall within three types of contract actions: (1) those for which small businesses' chances to compete are limited or nonexistent, (2) those using nonappropriated funds, and (3) those made by agencies that are not subject to the Federal Acquisition Regulation or are otherwise exempted from statute from following procurement rules. The governmentwide percentage also does not include credit card sales because federal agencies do not report detailed data on purchase card expenditures to FPDS.

<sup>&</sup>lt;sup>16</sup>The governmentwide goal for participation by small business concerns must be established at not less than 23 percent of the total value of all prime contract awards for each fiscal year. 15 U.S.C. sec. 644(g)(1).

Figure 1: Fiscal Year 2000 Small Business Share of Procurement Dollars for Three On-line Procurement Programs Compared to Governmentwide Share



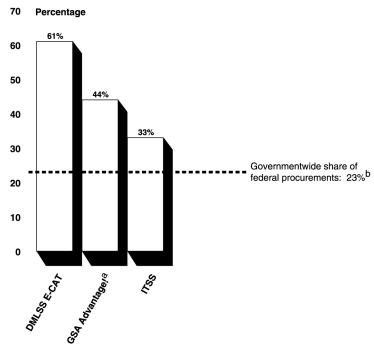
Note: For a discussion of data reliability, see appendix I.

<sup>a</sup>The GSA Advantage! percentage is based on direct sales by vendors (about \$30 million in fiscal year 2000).

Source: GAO analysis, based on data provided by GSA and DLA.

<sup>&</sup>lt;sup>b</sup>As reported by FPDS.

Figure 2: Fiscal Year 1999 Small Business Share of Procurement Dollars for Three On-line Procurement Programs Compared to Governmentwide Share



Note: For a discussion of data reliability, see appendix I.

<sup>a</sup>The GSA Advantage! percentage is based on direct sales by vendors (about \$17 million in fiscal year 1999).

<sup>b</sup>As reported by FPDS.

Source: GAO analysis, based on data provided by GSA and DLA.

Obstacles to Small Businesses Conducting Electronic Procurements With the Government Reported Although small businesses received a higher share of awards in the three on-line procurement programs than the governmentwide share, some small businesses still face reported obstacles to successfully participating in on-line government purchasing activities. Obstacles reported generally fall into two categories: (1) those relating to general readiness—the willingness and ability of small businesses to conduct business electronically and (2) those specific to conducting procurements

electronically with the federal government.<sup>17</sup> Table 4 lists the reported obstacles by category. While these obstacles were reported in the context of small businesses, some—such as security and privacy—also apply to all businesses.

<sup>&</sup>lt;sup>17</sup>In addition to obstacles pertaining to conducting procurements electronically, small business organizations cited other concerns related to federal contracting in general, such as contract bundling. This is the consolidation of two or more procurement requirements previously provided under separate smaller contracts into a solicitation of offers for a single contract that is likely to be unsuitable for award to a small business concern. For more information on bundling, see *Contract Management: Small Businesses Continue to Win Construction Contracts* (GAO-01-746, June 29, 2001) and *Small Businesses: Limited Information Available on Contract Bundling's Extent and Effect* (GAO/GGD-00-82, March 31, 2000).

Number of sources citing obstacles **Business Organizations** Studies and assistance representing or surveys providers working with small businesses<sup>b</sup> (out of 6 (out of 24 Reported obstacle (out of 8 total) total) total) **Obstacles Related to General Electronic Commerce Readiness** Need to make a business case: Small businesses may be reluctant to make the investment to implement electronic commerce. Limited technical expertise: Small businesses can lack the necessary technical skill sets. Internet access issues: Small businesses may have difficulty obtaining 4 affordable high speed Internet access. 6 Concerns about security and/or privacy: Small businesses are concerned about inappropriate disclosure of proprietary business information that governments collect from companies, consumer fraud, and the adequacy of 3 security afforded a transaction on the Internet. 5 **Obstacles Related to Conducting Electronic Procurements With the** Government Monitoring various federal procurement information Web sites for business opportunities: The government has multiple Web sites that list contracting Differing requirements for on-line purchasing programs: The government has multiple on-line purchasing Web sites that have different formats and 2 Lack of a single vendor registration system: Vendors must generally complete multiple registrations and profiles to do business with more than one 0 2 government office. 6

Table 4: Commonly Reported Obstacles for Small Businesses in Federal Electronic Procurements

Source: GAO analysis.

As the relatively large small-business share of awards made through the three federal on-line procurement programs shows, some small businesses are overcoming these reported obstacles. Still, as the federal government continues to implement electronic procurement initiatives, it is essential

1

Problems related to technical data and drawings: Businesses can have difficulty in locating, transmitting, downloading, and printing on-line

Difficulty in obtaining help with problems and marketing assistance: Vendors can have difficulty reaching someone at the buyer's or program office who is able and willing to help, particularly with technology-related problems and/or

Uncertainty about the government's electronic procurement strategy: Since government agencies are pursuing different approaches to implementing electronic purchasing, small businesses hesitate to make investments in any

specifications and drawings.

one electronic commerce system.

marketing questions.

5

4

2

5

<sup>&</sup>lt;sup>a</sup>These studies and surveys were published between early 2000 and mid 2001.

<sup>&</sup>lt;sup>b</sup>Some of these organizations also include members that are not small businesses.

that it consider the obstacles that some small businesses face and work to implement solutions that address these obstacles. Small businesses, in turn, must act to develop, maintain, operate, and evolve effective Webbased approaches to improve the likelihood of their successfully conducting business with the government.

Appendix II provides additional information on these reported obstacles and various government actions being taken to address some of them. An example of such an action is GSA's Federal Business Opportunities (FedBizOpps) Web site, which has been designated the single governmentwide point of electronic entry on the Internet where vendors can access all the information they need to bid on available government business opportunities greater than \$25,000.

Federal Programs
Provided Locally
Coordinated
Electronic Commerce
Education to
Businesses

Each of the four federally funded business assistance programs in our review provided electronic commerce education as part of its operations, although the level of involvement varied. Three of these business assistance programs are oriented toward management issues and addressed electronic commerce as only one part of their responsibilities. In contrast, the fourth program, ECRC, focused entirely on electronic commerce. The ECRC program was terminated September 30, 2001. While coordination at the headquarters level for these programs was limited, the local offices generally coordinated their various electronic commerce activities.

Business Assistance Programs Provided Electronic Commerce Education

Although officials from the three management-oriented programs stated that they expect local offices to address electronic commerce issues, the standard agreements for these three programs do not require local entities to report performance metrics associated with electronic commerce. Accordingly, nationwide statistics on the electronic commerce education activities for the three management programs are not available. As a result, we contacted six local offices for each of these programs to determine whether they provided electronic commerce education. All but one of the local offices we contacted indicated that they offered electronic commerce education or assistance to their clients. Table 5 shows the types

<sup>&</sup>lt;sup>18</sup>In addition to addressing management issues, the MEP program provides U.S. manufacturers with implementation services to assist them in adopting new, more advanced manufacturing technologies.

of electronic commerce assistance activities provided by the six local offices in each program we contacted.<sup>19</sup> For example, local offices provided formal training as well as counseling or technical assistance to individual clients.

Table 5: Number of Local Offices Providing Various Types of Electronic Commerce Assistance [Out of Six Offices We Selected for Each Program]

	Number of local offices providing service			
Type of service provided	SBA/SBDC	NIST/MEP	DLA/PTAC	
Counseling, consulting, or technical				
assistance	5	6	5	
Conference sponsorship, presentation,				
and/or exhibitor	4	4	6	
Classroom training <sup>a</sup>	5	1	5	
On-line training	2	1	1	
Other	3	5	3	

<sup>&</sup>lt;sup>a</sup>In some cases, this training was fully dedicated to electronic commerce while in others it was just one of several topics covered in the course.

Source: GAO analysis.

Subjects covered by the three management-oriented programs' local offices in their electronic commerce assistance activities are shown in table 6. These subjects ranged from general introductory material to technical or government-specific topics. According to local and regional office officials, offices tailor the types of topics offered to meet local and individual client needs.

<sup>&</sup>lt;sup>19</sup>Because the local offices of the management-oriented programs generally did not specifically track electronic commerce assistance and because electronic commerce content was often embedded in other training, we were unable to determine how many clients received electronic commerce education or assistance.

Table 6: Electronic Commerce Topics Covered by Local Offices [Out of Six Offices We Selected for Each Program]

	Number of local offices providing service			
Topic covered	SBA/SBDC	NIST/MEP	DLA/PTAC	
Introduction to electronic commerce, including marketing on the Internet	4	6	5	
Web-site development	4	3	1	
Electronic data interchange	0	1	4	
Selling to the government	2	0	6	
DOD electronic commerce initiatives	0	0	2	
On-line vendor registration with the				
government	2	0	6	
Other	1	1	1	

Source: GAO analysis.

As for the ECRC program, each of the centers was required to make available a standard set of training courses that was centrally maintained. Standard training courses that ECRCs provided included introductory material as well as technical and DOD-specific courses. In fiscal year 2000, ECRCs reported providing 3,468 training courses with a total enrollment of 53,800 students of whom 37,968 were DOD staff and 15,832 were non-DOD staff, including business owners or employees (some of these may be multiple courses taken by the same client). Among non-DOD staff, the courses with the highest number of participants, accounting for about two-thirds of non-DOD training were

- Hypertext Markup Language (HTML), 20 (2,987 non-DOD participants);
- Marketing on the Internet (2,907 non-DOD participants);
- Internet as a business platform, (1,772 non-DOD participants);
- Getting started with electronic commerce (1,620 non-DOD participants);
   and
- Business opportunities with DOD through electronic data interchange (1,494 non-DOD participants)

The six regional ECRCs we contacted also reported providing other types of electronic commerce education, such as one-on-one technical assistance, conference presentations, and on-line training in electronic commerce.

<sup>&</sup>lt;sup>20</sup>HTML is the language used to create World Wide Web pages.

The following examples illustrate how the four assistance programs helped businesses in the electronic commerce arena and also demonstrate the differences in approach between the more management-oriented SBDCs and MEPs and the more federally and technically oriented PTACs and ECRCs.

- An SBDC helped two high school students set up an Internet advertising business. The company is now incorporated, and the proprietors received the 2001 SBA Young Entrepreneur of the Year Award.
- A MEP helped a small cabinet manufacturer develop a complete marketing plan, introduced it to electronic business, and designed a company Web site
- A PTAC helped clients with the on-line DOD central contractor registry and trained them on how to search FedBizOpps.
- An ECRC provided hands-on training on DLA bid boards and showed the client the award notification menu on one bid board that displayed a contract award to the client, issued 5 weeks earlier, of which the client had been unaware.

The ECRC program was discontinued on September 30, 2001. Reaction to this decision at the local offices of the management-oriented programs was mixed—six were concerned about losing access to expertise or about not having the staff or resources to address issues handled by the ECRCs, while four did not have such concerns (most of the remaining eight offices did not express an opinion). According to DLA officials, materials for the ECRC training courses will be turned over to its PTAC program, which plans to make them available to local PTACs via downloads from a DLA Web site. Neither DLA's Electronic Business Program Office nor its PTAC program plans to keep the course materials up to date.

Business Assistance Programs Coordinated Activities at the Local Level

The four business assistance programs generally coordinated their efforts through, for example, referrals and jointly delivered training; however, such coordination occurred largely at the local level. At the headquarters level, there is no ongoing process for coordinating electronic commerce activities, although discussions on specific issues have taken place.<sup>21</sup> In

<sup>&</sup>lt;sup>21</sup>While SBA and DLA signed a memorandum of understanding in which they agreed to work cooperatively to help small businesses benefit from the procurement and electronic commerce assistance they provide, a DLA official stated that the agreement was intended only to document an existing relationship and that no action to implement it was necessary or planned.

contrast, all but one of the local offices we contacted reported that they coordinated with at least one of the other programs. Coordination at the local level is important because each program has its own specific focus and may lack expertise found in the other programs. In one example, two ECRCs reported that they trained the local staffs of two of the management-oriented programs on selected electronic commerce issues. In other cases, ECRC staff provided electronic commerce training for the clients of these business assistance programs. Finally, in one other case, the regional rural area management-oriented business assistance offices met quarterly to determine the most appropriate program to address the clients' needs.

Table 7 indicates the types of coordination activities with one or more of the other programs that the local offices of each of the business assistance programs reported. While the local offices of the four programs generally coordinated their efforts, this coordination was not universal in that we found instances in which such coordination was not occurring. For example, in five cases, the local or regional official we spoke with was not familiar with one or more of the other business assistance programs.

Table 7: Types of Coordination Performed by Local Offices [Out of Six Offices We Selected for Each Program]

_	Number of local offices reporting various coordination activities			
Type of coordination	SBA/SBDC	NIST/MEP	DLA/PTAC	DLA/ECRC <sup>a</sup>
Referrals from one program to another	5	5	6	6
Joint sponsorship of conferences or seminars	3	4	3	5
Participation as speaker or exhibitor in the other's events and/or including the other		_	_	_
organization in their events	2	3	6	5
Training developed and/or delivered jointly	4	2	3	5
Shared staff, facilities, or other resources <sup>b</sup>	2	4	3	3
Other	0	0	1	3

<sup>a</sup>The ECRC program was operated by DLA through the Defense Electronic Business Program Office. DOD's Chief Information Officer has overall functional responsibility for the Defense Electronic Business Program Office but the office receives its funding and personnel through DLA and the Defense Information Systems Agency.

<sup>b</sup>In nine cases, the local offices of two or more of these programs were part of the same organization.

Source: GAO analysis.

## Conclusions

As the federal government's electronic procurement presence grows, the participation of small businesses in this activity is critical if the government is to meet its small business procurement goals. Small businesses successfully obtained a relatively large share of federal procurement dollars in three specific on-line procurement programs, compared to the governmentwide share of federal procurements that were awarded to small businesses. At the same time, concerns about obstacles to small business participation in electronic procurements are still expressed in studies and surveys and by organizations representing and working with small businesses. These entities report that small businesses continue to face obstacles in conducting electronic procurements with the federal government, including a lack of (1) technical expertise and (2) knowledge about the government's electronic procurement strategy. Key to the success of small businesses' participation in government electronic procurements is that both parties—the government and the businesses themselves—continue to work on overcoming these and any future obstacles that may arise. The government has taken, or plans to take, actions that are expected to address some of these obstacles.

In the larger electronic commerce arena, federally funded programs are providing assistance to businesses in a variety of ways. For four specific programs, this assistance included not only helping businesses with federal electronic procurements but also providing assistance in performing electronic commerce in the economy at large. The four business assistance programs in our review also were coordinating their activities at the local level.

# **Agency Comments**

In oral comments on a draft of this report, officials representing GSA and the Office of Management and Budget's Office of Federal Procurement Policy stated that they generally agreed with our report. In written comments, DLA and SBA also stated that they generally agreed with our report. DLA submitted technical corrections, which have been included in the report. In written comments, the Department of Commerce provided updated online sales statistics and stated that they believed the services provided by the Electronic Commerce Resource Centers should be continued. SBA also included information on their electronic government vision. The written comments we received from DLA, SBA, and Commerce are reprinted in appendixes III and IV, respectively.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report for 30 days. At that

point, copies of this report will be sent to the Chairman, Senate Committee on Small Business and Entrepreneurship; Chairman and Ranking Minority Member, Senate Committee on Governmental Affairs; Chairman and Ranking Minority Member, House Committee on Small Business; Chairman and Ranking Minority Member, House Committee on Government Reform; Chairman, House Subcommittee on Technology and Procurement Policy, Committee on Government Reform; and other interested congressional committees. We are also sending copies to the Secretaries of Defense and Commerce, the Administrators of the General Services Administration and the Small Business Administration, and the Director of the Office of Management and Budget and other interested parties. We will also make copies available to others upon request.

If you have any questions on matters discussed in this report, please contact David McClure at (202) 512-6257 or David Cooper at (202) 512-4587 or by email at mcclured@gao.gov and cooperd@gao.gov, respectively. Other contacts and key contributors to this report are listed in appendix V.

Director, Information Technology

and I. McClure

David El Corer

Management Issues

David E. Cooper

Director, Acquisition and

Sourcing Management

# Appendix I: Scope and Methodology

To determine the small business share of procurement dollars awarded by three on-line procurement programs (GSA Advantage!, ITSS, and DMLSS E-CAT) and the small business share of all federal contract dollars awarded, we obtained fiscal year 1999 and 2000 award data for these programs and interviewed applicable GSA, DLA, and contractor officials. We calculated the percentage of small business awards to total awards for each program and compared them to the governmentwide small business share, which we calculated based on the aggregate FPDS data reported in GSA's Federal Procurement Report for fiscal years 1999 and 2000. We assessed the reliability of the GSA Advantage!, ITSS, and DMLSS E-CAT data by (1) performing electronic tests of relevant fields (for example, we tested for completeness by checking key fields for missing data and checked for accuracy and reasonableness by examining summary statistics for values that were in proper and expected ranges) and (2) requesting and reviewing, if available, related program and system design documentation, audit and system reviews, and reports. The results of our assessment showed that the DMLSS E-CAT data were reliable enough for use in this report. However, the results of our assessment of the GSA Advantage! and ITSS data were inconclusive in large part because of concerns related to limitations on available documentation and security weaknesses reported in GSA's Fiscal Year 2000 Annual Report. Nevertheless, we determined that the reliability of the data provided is adequate for the comparative purposes of this report. We will be providing additional information on the GSA Advantage! and ITSS document limitations in a separate letter.

To identify what, if any, obstacles exist for small businesses in conducting electronic procurements with the federal government, we performed a literature search. We also interviewed selected SBDCs, PTACs, ECRCs, and MEPs about their clients' experiences with obstacles and officials from SBA's Office of Advocacy and Office of Government Contracting. In addition, we obtained comments from organizations representing or working with small businesses to obtain their members' views on

<sup>&</sup>lt;sup>1</sup>The FPDS Federal Procurement Report is published annually and contains "snapshot" statistics on the procurement activities of over 60 agencies. The figures in the Federal Procurement Report are only as accurate, timely, and complete as the data provided by the reporting agencies.

<sup>&</sup>lt;sup>2</sup>In June, GSA launched a new version of GSA Advantage!. We did not assess the data reliability of the new version.

obstacles. The following are the organizations that provided information on small business obstacles:

- Association of Government Marketing Assistance Specialists
- Coalition for Government Procurement
- Contract Services Association of America
- National Black Chamber of Commerce
- National Small Business United
- U.S. Pan Asian American Chamber of Commerce
- Small Business Legislative Council
- U.S. Hispanic Chamber of Commerce

We contacted 13 other organizations, such as the U.S. Chamber of Commerce and the National Women's Business Council, but they did not provide us with any information on obstacles small businesses had in performing electronic procurements with the federal government.

In addition, to review what steps four federal business assistance programs have taken to educate businesses on electronic commerce and the extent to which they have coordinated their efforts, we interviewed headquarters staff of the programs and reviewed applicable program documents, such as grant and cooperative agreements and contracts. We also interviewed officials from 24 local and regional offices of these programs and obtained and reviewed available documentation from these offices. We judgmentally selected six offices from each program based on the following:

• For each program, we chose at least one office from each of the four U.S. census regions. Overall, we chose at least two local offices from each census Division. The census divides the United States into four regions and nine divisions—Northeast region (New England and Middle Atlantic divisions), Midwest region (West North Central and East North Central divisions), South region (West South Central, East South Central, and South Atlantic divisions), and the West region (Pacific and Mountain divisions).

 For each program except ECRCs,<sup>3</sup> we chose at least two offices serving less populous areas, based on the Office of Management and Budget's classification of a metropolitan area.<sup>4</sup>

Based on the above criteria, we interviewed officials from the following offices:

### **ECRCs**

Bremerton, WA Cleveland, OH Dallas, TX Fairfax, VA Scranton, PA

### **MEPs**

Arkansas Manufacturing Extension Network California Manufacturing Technology Center Idaho Techhelp Iowa MEP Maine MEP Maryland Technology Center

### **PTACs**

Alabama Small Business Development Consortium California Central Valley Contract Procurement Center Minnesota Project Innovation National Center for American Indian Enterprise Development New Hampshire Office of Business & Industrial Development George Mason University Procurement Technical Assistance Program

### **SBDCs**

Bronx SBDC of Lehman College Danville Area SBDC (Illinois) Joplin SBDC (Missouri) Northern Virginia SBDC Western Kentucky University SBDC Wyoming SBDC, Region 2

<sup>&</sup>lt;sup>3</sup>Because ECRCs serve multi-state regions, they serve both rural and urban areas.

<sup>&</sup>lt;sup>4</sup>A metropolitan area consists of a large population nucleus, together with adjacent communities having a high degree of social and economic integration with that core.

Appendix I: Scope and Methodology

We performed our work at SBA headquarters in Washington, DC, GSA offices in Crystal City, VA, and Washington, DC; DLA headquarters at Fort Belvoir in VA; Defense Supply Center, Philadelphia; NIST in Gaithersburg, MD; and the offices of business assistance providers and business organizations in Maryland, Virginia, and Washington, DC. We conducted our review between January and August 2001 in accordance with generally accepted government auditing standards.

Obstacles reported by various studies and surveys as well as from comments provided by officials in selected federal business assistance programs and organizations representing or working with small businesses generally fall into two categories: (1) those related to general readiness—the willingness and ability of small businesses to conduct business electronically and (2) those specific to conducting procurements electronically with the federal government.

## Electronic Commerce Readiness

Commonly cited obstacles for small businesses in this category include the following.

- Need to Make a Business Case. Our literature search and discussions with industry groups and business assistance program officials indicated that some small businesses may have difficulty in making a business case for adopting electronic commerce because of their inability to ascertain costs, benefits, and risks. They may have little working knowledge of the Internet and other electronic commerce technologies and insufficient information about the benefits and applicable implementation strategies appropriate for their business models. As a result, such businesses may be reluctant to make the investment to implement electronic commerce. For example, an August 2000 survey of 50 Idaho manufacturers' use of Internet technologies showed that of the 23 respondents with Web sites, 74 percent were not engaged in electronic commerce. The primary reasons companies with Web sites cited for not moving to electronic commerce were a lack of knowledge and a concern that implementation was too time-consuming and costly. One researcher concluded that for small businesses, adopting electronic commerce requires low, predictable cost; minimal changes in employee behavior; and compelling benefits over alternatives.2
- Limited Technical Expertise. A June 2000 Organization for Economic Cooperation and Development report on enhancing the competitiveness of small and medium-sized enterprises noted that many small businesses do

<sup>&</sup>lt;sup>1</sup>Survey of Idaho Manufacturers' Use of Internet Technologies and eBusiness Principles (Idaho TechHelp Manufacturing Extension Program, August 2000). While this survey was not limited to small businesses, 92 percent of its respondents were businesses with 550 or fewer employees.

<sup>&</sup>lt;sup>2</sup>The Five Immutable Laws of Universal Supply Chain Connectivity by Larry R. Smeltzer (Arizona State University, February 2001).

not know how to profitably develop their electronic commerce capabilities or how to cope with the "complex rules" governing this area.³ This report and other studies point out that the lack of appropriate human resources, in terms of technical and/or managerial staff familiar with the information technology environment, constitutes a major barrier for small businesses wanting to adopt electronic commerce technologies and strategies.⁴ Business assistance program officials also noted that their small business clients lack the skill sets necessary to participate in electronic commerce. They stated that small businesses need help with building Web sites, selecting Web site designers and Internet service providers, and integrating electronic commerce into their business processes. However, small businesses may not have such experience and expertise on staff and may not be able to afford to recruit and retain technical staff with these skills.

• Internet Access Issues. PTAC, MEP, ECRC, and SBDC business assistance program officials reported that small businesses, particularly in rural areas and on Indian reservations, have difficulty obtaining affordable high-speed Internet access sufficient for electronic commerce activities. For example, a PTAC official in a rural state said that many individuals and companies in his state have only dial-up modem service. Moreover, according to an official working on programs to assist American Indian enterprise development, reservations often lack Internet infrastructure. She estimated that only 40 percent of her clients on reservations have e-mail service. The continuing expansion of electronic commerce requires widespread high-speed Internet access. However, as we noted in February 2001, there is less availability of broadband high-speed, high-capacity connection to the Internet in the rural areas of America. Similar to other studies, our survey found the availability of broadband technology to be most prevalent in large metropolitan areas.

<sup>&</sup>lt;sup>3</sup>Realizing the Potential of Electronic Commerce for SMEs in the Global Economy (Organization for Economic Co-operation and Development, June 2000).

<sup>&</sup>lt;sup>4</sup>See also *Towards Digital eQuality*, (U.S. Government Working Group on Electronic Commerce Second Annual Report, December 1999) and *Survey of Small and Mid-sized Businesses*, *Trends for 2000* (Arthur Anderson and National Small Business United, June 2000).

<sup>&</sup>lt;sup>5</sup>Telecommunications: Characteristics and Choices of Internet Users (GAO-01-345, February 16, 2001).

<sup>&</sup>lt;sup>6</sup>See also Falling Through the Net: Toward Digital Inclusion (Department of Commerce, October 2000).

Concerns About Security and/or Privacy. Ensuring the security of payments and proprietary information and privacy of personal data are a top priority for small businesses considering electronic commerce as a means to sell their products and services. According to the U.S. presentation before the Free Trade Area of the Americas electronic commerce committee, because of their small size and limited financial resources, small businesses may not be prepared to take on the kinds of security and privacy risks that larger companies can more easily face. Security and privacy concerns of small businesses include inappropriate disclosure of proprietary business information that governments collect from companies, consumer fraud, and the adequacy of security over a transaction on the Internet. For example, some small businesses fear bidding on-line because they do not believe that it is secure. They want assurances that their pricing and other proprietary information would be accessed only by intended recipients and not by competitors. These concerns are not unjustified. For example, we have designated information security a governmentwide high-risk area since 1997. Our latest high-risk report noted that progress in strengthening federal information security has been mixed.8

# Federal Electronic Procurements

Commonly cited obstacles in this category include the following.

Monitoring Various Federal Procurement Information Web Sites for Business Opportunities. The federal government has multiple Web sites that list contracting opportunities and related procurement information that businesses need for deciding whether to pursue a business opportunity. For example, an August 2001 search for federal "contracting opportunities" on www.firstgov.gov—the federal government's portal for accessing government on-line information—provided links to over 1,000 Web sites listing procurement opportunities and related information. Among the first 10 "hits" were links to sites with information on contracting opportunities for the Departments of Housing and Urban Development, State, and Transportation, the Army Corps of Engineers, and GSA. Organizations representing or working with small businesses

<sup>&</sup>lt;sup>7</sup>Issues Faced by SMEs In Utilizing the Internet as a Medium for Electronic Commerce (U.S. presentation before the Free Trade Area of the Americas Joint Government-Private Sector Committee of Experts on Electronic Commerce, April 30, 2000).

<sup>&</sup>lt;sup>8</sup>High-Risk Series: An Update (GAO-01-263, January 2001).

point out that small companies with limited resources and staff cannot afford to spend several hours a day "surfing the Net" for potential work.

To help address this issue, a May 2001 Federal Acquisition Regulation change designates the FedBizOpps Web site as the single governmentwide point of electronic entry on the Internet where vendors can access all the information they need to bid on available government business opportunities greater than \$25,000. After subscribing, vendors can receive various announcements automatically via email, including solicitations and post-award notices. Agencies must provide access to all applicable actions by October 1, 2001. Because the requirement to use FedBizOpps is new, its impact on simplifying access to the government's procurements is not yet known. Moreover, information about contracting opportunities expected to be \$25,000 or less does not have to be posted on FedBizOpps. As noted earlier, small businesses generally obtain a significantly higher share of these contract opportunities.

Differing Requirements for On-line Purchasing Programs. The federal government has multiple on-line purchasing programs that federal buyers can access to search vendor catalogs and purchase goods and services from suppliers with government contracts. According to three business assistance program officials, the process for posting listings on these sites is inconsistent and time-consuming because vendors may have to upload their electronic catalogs to multiple sites, involving different formats and procedures. For example, the GSA Advantage! and DMLSS E-CAT programs have different requirements for formatting catalog data. An industry group representing companies that conduct business with the federal government told us that small businesses often must hire thirdparty service providers because they lack the ability to manage multiple electronic catalog formats, revisions, and uploads. Moreover, according to one research report, some commodity suppliers may perceive an on-line catalog to be impractical, due to the sheer number of their products and the complexity of their pricing. 10 As of mid-August, GSA Advantage!,

<sup>&</sup>lt;sup>9</sup>Past surveys of small business users' feedback to the centralized electronic posting of contract opportunities have been positive. See *Acquisition Reform: NASA's Internet Service Improves Access to Contracting Information* (GAO/NSIAD-99-37, February 9, 1999) and the statement of the former Administrator for Federal Procurement Policy before the House Subcommittee on Government Programs and Oversight, Committee on Small Business, April 11, 2000.

<sup>&</sup>lt;sup>10</sup>Attitudes of SME Owners and Managers Toward Doing E-Business with DOD and Prime Contractors within IDEs and Trading Exchanges (Argentieri Marketing Research, June 5, 2001).

DMLSS E-CAT, and others were in the initial stages of considering implementing a single catalog process for medical materiel.

• Lack of a Single Vendor Registration System. Vendors who want to conduct business with more than one government office generally must complete multiple registrations and profiles, providing redundant business information to each site in different formats. Officials from several business assistance programs and organizations representing small businesses spoke of the need for the government to set up a single point of vendor registration. Many reiterated the point made in a 1994 government report on electronic commerce that it is much easier for a business to maintain its single repository of registration information than to submit the same information or some variation of it many times to numerous contracting activities. Moreover, the Federal Acquisition Streamlining Act of 1994 required the establishment of a "single face to industry" for conducting procurements.

To help address concerns about multiple vendor registrations, DOD developed a centralized, electronic registration process—the Central Contractor Registration (CCR) system—as the single registration point for vendors that want to conduct business with DOD. As part of its efforts to expand electronic government, the Administration has tasked agencies in fiscal year 2003 to use the CCR as the single validated<sup>12</sup> source of data on vendors interested in contracting with the government. According to an OMB official, the governmentwide single point of vendor registration should help to standardize the registration process, eliminate redundancies, and provide a common method of gathering and reporting vendor information.

Even if a single governmentwide registration system is implemented, small businesses may still wish to register on SBA's Procurement Marketing and Access Network (PRO-Net),<sup>13</sup> that is an Internet-based database of information on thousands of small businesses which federal buyers can use to search for small businesses fitting specific profiles. According to a

<sup>&</sup>lt;sup>11</sup>Final Report: Streamlining Procurement Through Electronic Commerce (Federal Electronic Commerce Acquisition Team, October 13, 1994).

<sup>&</sup>lt;sup>12</sup>Vendors provide data to the CCR, which performs a validation of selected data elements by checking them against DOD and private sector databases.

<sup>&</sup>lt;sup>13</sup>While registering in PRO-Net is optional for most small businesses, firms applying for 8(a), HUBZone, or small disadvantaged business certifications are required to register.

DLA official, SBA's PRO-Net was provided access to CCR small business vendor information data on August 24, 2001. 4 SBA officials told us that they did not yet know how they were going to use the CCR data but that vendors cannot be automatically registered in PRO-Net without their consent. Accordingly, small businesses wanting to register in both CCR and PRO-Net will have to reenter some of the same information in both systems.

- Problems Related to Technical Data and Drawings. Posting technical data and drawings (required by businesses preparing bids) on the Web or otherwise making them available electronically is beneficial because vendors do not have to visit contracting offices to obtain copies or have technical data packages mailed to them. However, business assistance program officials and industry groups voiced concerns about the difficulties, frustration, and time involved in locating, transmitting, downloading, and printing on-line specifications and drawings. Some of the problems reported included incomplete and inadequate technical data packages for manufactured items, on-line manuals that are difficult to decipher and use, out-of-date drawings, or the lack of availability of CD-ROMs containing drawings that are too large to download. A representative from one trade organization noted that there can be technical problems with downloading specifications in that often a fast Internet connection and powerful computer system are needed, and the software versions required by different agencies may differ or conflict with one another. ECRC and PTAC officials said that many agencies fail to recognize that small businesses have limited electronic resources and need more simplification and software standardization for on-line solicitation materials to be readily accessible. In a mid-August meeting, DLA officials agreed that the quality of electronic technical data and drawings and the delivery of this information were problems.
- Difficulty in Obtaining Help With Problems and Marketing Assistance. Another obstacle for many small businesses attempting to participate in on-line government purchasing programs is not knowing where to go for help or not having knowledgeable contacts. According to officials of

<sup>&</sup>lt;sup>14</sup>According to a DLA official, vendors who register in PRO-Net will not be automatically registered in CCR because CCR requires additional information, such as the vendor's electronic funds transfer account, which is not in PRO-Net. However, DLA has started an initiative to use PRO-Net data to validate the representations of certain vendors that they have been certified by SBA as 8(a), HUBZone, or small disadvantaged businesses. A DLA official stated that the implementation date for this initiative is currently being determined.

several business assistance programs and trade association representatives, small businesses often have difficulty reaching someone at the buyer's or program office who is able and willing to help, particularly with technology-related problems and/or marketing questions. For example, one trade organization representative said that small businesses trying to market in an on-line environment have problems reaching federal procurement officials to discuss their products and services. When they call to arrange meetings with buyers, they may be referred instead to Web sites, which can be complex and confusing and may not contain the information they really need. In other cases, phone calls and e-mails were not returned when there was a problem. In particular, two industry groups and five business-assistance program officials mentioned difficulties in obtaining assistance to deal with problems associated with GSA Advantage!. For example, one ECRC official said that the GSA Advantage! Web site explanations are insufficient to address vendor questions and GSA technical support staff are also unable to answer questions from vendors about getting their products listed. In mid-August, GSA officials stated that improvements in GSA Advantage! vendor support and assistance were made in the spring and summer of 2001, such as increasing help-desk staffing, employing classroom training, and implementing a lab in which vendors are helped in loading their data onto the system.

In earlier testimony on electronic government initiatives, we pointed out that the government's use of Internet and Web-based technologies should force organizations to reconsider their customers—specifically, how their customers need, perceive, and digest information and services in a viewable, electronic format. Moreover, the National Electronic Commerce Coordinating Council suggests that organizations implement a customer relations management structure. <sup>16</sup>

• Uncertainty About the Government's Electronic Procurement Strategy. Industry groups and business assistance program officials told us that since government agencies are pursuing different approaches to implementing electronic purchasing, small businesses hesitate to invest in any one electronic commerce system. According to one PTAC program

<sup>&</sup>lt;sup>15</sup>Electronic Government: Challenges Must Be Addressed With Effective Leadership and Management (GAO-01-959T, July 11, 2001).

<sup>&</sup>lt;sup>16</sup>E-Government Strategic Planning: A White Paper (National Electronic Commerce Coordinating Council, December 13, 2000).

official, when businesses look closely at their government customers' electronic commerce capabilities, they find a "very mixed bag." In addition, officials in four of the six ECRC offices we contacted noted that the government has pursued many different electronic commerce solutions and has not adopted a uniform "single face" approach to the vendor community. ECRC officials cited the government's Federal Acquisition Computer Network—better known as FACNET—and electronic data interchange initiatives as examples of electronic commerce initiatives that were not fully implemented or were changed before investment returns were realized. For example, in our 1997 report on FACNET implementation, we discussed the limited use of FACNET by government agencies and the need for a coherent strategy and implementation approach for carrying out the agencies' acquisition requirements using various electronic commerce technologies and purchasing methods.<sup>17</sup>

<sup>&</sup>lt;sup>17</sup>Acquisition Reform: Obstacles to Implementing the Federal Acquisition Computer Network, (GAO/NSIAD-97-26, January 3, 1997).

# Appendix III: Comments From the Defense Logistics Agency



## **DEFENSE LOGISTICS AGENCY** HEADQUARTERS 8725 JOHN J. KINGMAN ROAD, SUITE 2533 FORT BELVOIR, VIRGINIA 22060-6221

IN REPLY REFER TO J-67

SEP 2 7 2001

Mr. David L. McClure Director, Information Technology Management Issues U.S. General Accounting Office 441 G Street, NW, Room 4T21 Washington, DC 20548

Dear Mr. McClure:

Page 33

This is the Department of Defense (DoD) response to the GAO Draft Report. "ELECTRONIC COMMERCE: Small Business Participation in Selected Online Procurement Programs," dated August 31, 2001 (GAO Code 310404/GAO-02-1). DoD concurs with the subject draft report. We respectfully request that the following change be made. Please note the necessary edit on page 12, last paragraph, and first sentence. This sentence should read, "DLA announced earlier this year that the ECRC Program would end on September 30, 2001.'

The rationale for the change is that the decision to end the ECRC Program was not made by DLA as implied in the report's original wording.

> Director, Information Operations Chief Information Officer

# Appendix IV: Comments From the U.S. Small Business Administration



U.S. SMALL BUSINESS ADMINISTRATION WASHINGTON, D.C. 20416

OFFICE OF THE ADMINISTRATOR

OCT - 4 2001

Mr. David L. McClure
Director
Information Technology Management Issues
U.S. General Accounting Office
441 G Street, NW, Room 4T21
Washington, DC 20548

Dear Mr. McClure:

Thank you for forwarding copies of the U.S. General Accounting Office's (GAO) draft report entitled "Electronic Commerce: Small Business Participation in Selected Online Procurement Programs" (GAO-02-1) for our review and comment.

We agree generally with the report's overall findings. We also offer additional information, for possible inclusion in the report, on SBA's electronic Government (e-gov) vision and the progress we have made toward making that vision a reality. We define e-gov more broadly than GAO, i.e., using telecommunications and computers to conduct business in three functional areas: access to information, access to services or markets, and transactions. The GAO report dealt primarily with the last category. Our objective is to make it easier for small business customers to deal with Government by assisting small firms learn how to use the Internet and by making our goods and services available 24/7. Enclosed is a summary of our vision, strategies and accomplishments on e-gov.

We look forward to receiving the final report. Should you have questions regarding these comments, please contact James VanWert, Senior Advisor, on 202-205-7024.

F. 11

Hector V. Barret
Administrator

Enclosure

#### **Electronic Government**

#### Vision:

- To improve customer accessibility of programs and services;
- To expand the quality and quantity of information and training deliverables;
- To reach more customers more effectively;
- To connect, leverage and share Agency resources across programs; and
- To increase effectiveness and efficiency.

A majority of small businesses have access to the Internet and its use is so widespread that it has become an important delivery channel of information, knowledge, goods and services. SBA's website is becoming an important channel to reach out to small businesses. It is projected that usage will double every year for the near future.

### Strategies:

- Access to Transactions. At the core of SBA's Internet strategy is to conduct its business
  online: approving loan guarantees, certifying small businesses for procurement preference
  programs, providing online access to Government contracts and grants, providing answers
  online, and doing paperless disaster loans.
- Access to Information, Education, and Counseling. SBA is providing anytime, anyplace
  access to Government information and services through its own website, the US Business
  Advisor, and program specific gateways, e.g., Women's Online Business Center, SCORE
  online. We also offer businesses online counseling, distance learning, online classrooms, and
  web-based tutorials to provide management assistance and solutions to business questions.
- Access to Matchmaking. Increasingly, the SBA is taking on the role of providing a platform
  for buyers and suppliers to connect and transcend the boundaries of time and distance. SBA
  has created networks for Government contracts Procurement Marketing and Access
  Network (PRO-Net), for subcontracting opportunities Subcontracting Network (SUB-Net),
  for trade leads (TradeNet), and for innovation and research grants Technology Network
  (TECH-Net).

### Implementation:

SBA is committed to using the Internet for each of its core businesses and the Intranet for its internal administrative management processes. For instance, SBA plans to develop:

- Intergovernmental, electronic legal and regulatory assistance tool (Businesslaw.gov);
- On-line financial assistance;
- Procurement marketplace;
- Business distance learning;
- · On-line disaster loan application process;
- Electronic Surety Bond Tool; and
- On-line administrative management systems.

In the procurement field, small businesses need the same access to information, markets and services, and transactions. SBA will be a cooperating partner with the General Services Administration and the Department of Defense over the next 24 months to help create an integrated acquisition portal that includes the best of all sites.

SBA, through the following Internet applications, is helping small firms sell to the Government:

- US Business Advisor (<a href="http://www.business.gov/busadv/maincat.cfm?catid=24">http://www.business.gov/busadv/maincat.cfm?catid=24</a>) SBA is developing a portal in the "Buying and Selling to Government" section that offers procurement opportunities, contracting information, a procurement library, and hundreds of links to procurement sites.
- Online Classroom (<a href="http://www.sba.gov/classroom">http://www.sba.gov/classroom</a>) In addition, to localized training by all of SBA's resource partners, SBA offers online centralized E-Commerce training programs. This training is utilized by many of SBA's resources, other Government and private resources and small business customers.
- TradeNet's Export Advisor (<a href="http://www.tradenet.gov/bin/display.pl?id=97">http://www.tradenet.gov/bin/display.pl?id=97</a>) SBA is providing business opportunities and information electronically on doing business internationally in this cross-agency portal.
- Businesslaw.gov (<a href="http://www.business.gov/buslaw">http://www.business.gov/buslaw</a>) SBA is completing this site which provides laws and regulatory information from all 50 states. Each state provides links on business opportunities, instructions for bidders, and contract terms and conditions. Our goal is to take people to the resources, nationally and state by state, that can assist the small entrepreneur sell to Government.
- PRO-NET (<a href="http://pro-net.sba.gov">https://pro-net.sba.gov</a>) This site is one of SBA's key tools in ensuring that small businesses participate fully in the Federal market for goods and services, to provide searchable size standards by industry. PRO-Net is a database of more than 210,000 small businesses seeking to do business with the Government, including small disadvantaged businesses, veteran-owned small businesses, HUBZone small businesses, and women-owned small businesses.
- HUBZone certification (https://eweb1.sba.gov/hubzone/internet) SBA is making online
  processing a reality by completing the development this electronic application and creating
  the "Contracting Officer's Gateway" to assist acquisition agencies identify HUBZone firms
  and their capabilities.
- Procurement Marketplace SBA is taking the best of all Government sites and creating a
  one-stop vendor registration, certification, and procurement opportunities site that offers
  small businesses one place to take full advantage of the major Government procurement
  systems. The Marketplace should reduce duplication and link the potential vendor more cost
  effectively to yield transactions. The goal is to create a true marketplace. A beta version has
  been developed.

# Appendix V: Comments From the Secretary of Commerce



Mr. David L. McClure
Director, Information Technology Management Issues
U.S. General Accounting Office
441 G Street, NW
Washington, D.C. 20548

Dear Mr. McClure:

Thank you for the opportunity to review your draft report entitled *Electronic Commerce: Small Business Participation in Selected Online Procurement Programs* (GAO-02-1). In general, we found the report to be quite informative and we plan to use it as a guide as we pursue our internal e-procurement efforts to ensure that small businesses are given the opportunity to participate. We offer the following specific comments for your consideration:

- 1. The U.S. Census Bureau first quarter online retail sales statistics were cited on pages 1 and 3 of the report. Second quarter statistics were released on August 30, 2001, and are available at www.census.gov/estats. We recommend the report be revised to reflect these latest statistics as follows:
  - a. Page 1, paragraph 1, last sentence, revise to read: "For example, according to the U.S. Census Bureau, for the second quarter 2001, retail electronic commerce increased 24.7 percent over the sales of the second quarter 2000."
  - b. Page 3, paragraph 1 under BACKGROUND, revise to read: "For example, according to the U.S. Census Bureau, retail electronic commerce dollar volume, though less than 1 percent of overall U.S. retail sales, increased in all but two of the last six quarters."
- We recommend that the services provided by the Electronic Commerce Resource Centers (ECRCs) be continued, preferably through specific appropriation or at a minimum by transferring the ECRCs to the Procurement Technical Assistance Center (PTAC) (see page 6 of the report). As e-procurement continues to increase at a rapid pace, it is vital that small businesses are provided access to training and information to enhance their participation in e-procurement. This will not only assist the government in meeting its public policy and economic development objectives (e.g., employment), but will also increase competition and provide the best value to the government.

If you have questions or want to discuss these (202) 482-4797.	-2- comments, please call Tom Pyke on
	Warm regardy,

# Appendix VI: GAO Contacts and Staff Acknowledgments

$C\Delta$	$\cap$	Contacts
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David L. McClure, (202) 512-6357 David E. Cooper, (202) 512-4587

Linda J. Lambert, (202) 512-9556 Hilary C. Sullivan, (214) 777-5652

# Acknowledgments

Barbara Johnson, Rosa Johnson, Beverly Ross, Patricia Slocum, and Glenn Spiegel made key contributions to this report.

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