

United States General Accounting Office

GAO

Report to the Chairman, Subcommittee  
on Foreign Commerce and Tourism,  
Committee on Commerce, Science, and  
Transportation, U.S. Senate

August 1989

# EXPORT PROMOTION

## Problems With Commerce's Commercial Information Management System



**RESTRICTED**—Not to be released outside the  
General Accounting Office unless specifically  
approved by the Office of Congressional  
Relations.



United States  
General Accounting Office  
Washington, D.C. 20548

National Security and  
International Affairs Division

B-208993

August 31, 1989

The Honorable John D. Rockefeller IV  
Chairman, Subcommittee on Foreign  
Commerce and Tourism  
Committee on Commerce, Science  
and Transportation  
United States Senate

Dear Mr. Chairman:

This report responds to your October 26, 1988, request that we analyze the U.S. and Foreign Commercial Service's (US&FCS) Commercial Information Management System (CIMS). You expressed concern about the management and cost of CIMS and asked us to provide you with information on its availability, data quality, budget, and the potential for full implementation. You also asked us to provide information on Department of Commerce plans to enhance CIMS as required by the Omnibus Trade and Competitiveness Act of 1988.

The US&FCS, a major component of the International Trade Administration (ITA), collects, analyzes, and distributes commercial information to the U.S. business community and to government trade policymakers to help U.S. firms establish themselves in the export marketplace. The ITA considers the timely collection and delivery of this information essential to its usefulness. CIMS is the ITA's third attempt since 1978 to develop a comprehensive, automated trade information data base to help achieve this objective. It is designed to link the US&FCS' 122 overseas posts and 47 domestic district offices, including branch offices, to a central data base of commercial information in ITA headquarters. The central data base is designed to contain three major files: (1) the client file (a list of domestic and foreign traders), (2) a research file (a repository of market research reports, cataloged by subject and country), and (3) an events file (a listing of upcoming trade promotion activities).

## Results in Brief

Although 83 of 169 overseas and domestic sites have some limited CIMS operational capability, it appears that CIMS will not be fully operational any time soon. Hardware, software, and telecommunications problems have limited CIMS usage and some of the information in the system is of limited quality and scope. Budgets have not been adequate to support CIMS development and implementation and we estimate that at least \$13.5 million in fiscal year 1990 would be needed to support a fully

operating CIMS and between \$9 million and \$11 million to support the system each year through 1993. This is significantly higher than funding that has been previously provided, which averaged about \$5 million a year from 1985 to 1988.

Even if these funds are provided, it is questionable whether adequate field staff is in place to implement CIMS as it is currently designed. US&FCS field staff, which is crucial to CIMS success, has been significantly reduced since CIMS inception.

In addition, Commerce does not plan to take any new actions to enhance or improve CIMS as a result of the requirement in the Omnibus Trade and Competitiveness Act of 1988 to create a National Trade Data Bank. Although the Act calls for the export promotion component of the National Trade Data Bank to be an expanded version of CIMS,<sup>1</sup> Commerce officials noted that additional funds were not provided for this effort. Therefore, Commerce plans only to repackage existing CIMS data together with information from other government agencies to form the National Trade Data Bank. According to Commerce officials, the resulting data base of raw trade and commercial data will be available in bulk to private users upon request.

Given the magnitude of the problems we identified, the cost to overcome them, and Commerce's decision on the National Trade Data Bank, we question whether CIMS is still a viable approach for meeting ITA's information needs.

The ITA is currently reviewing CIMS technical design and implementation strategy, as we recommended in our January 26, 1989 report, (Export Promotion: Problems in Commerce's Programs (GAO/NSIAD-89-44), and may decide to pursue other options for meeting its information needs. These reviews are designed to address the problems to be overcome in the CIMS program as well as the costs of different alternatives. The results of these assessments should give ITA the definitive data it needs to make an informed management decision about the future of CIMS.

---

## Principal Findings

Currently, 83 of the US&FCS' 169 district offices and overseas posts have some CIMS operational capability (23 sites use personal computers and 60

---

<sup>1</sup>The statute requires the establishment of an Export Promotion Data System as part of the National Trade Data Bank. The Export Promotion Data System is defined by the Act as CIMS; however, section 5406(c) requires the system to include elements not presently included on CIMS. Thus, the statute, in effect, mandates the expansion of the present system.

---

use minicomputers to run CIMS).<sup>2</sup> The US&FCS plans to have CIMS software installed in all remaining offices by the end of 1989 or early 1990; however, many technical, management, and resource problems will have to be overcome to meet this milestone. For example, CIMS software and training will be needed for the 86 remaining sites, the State Department will have to review and approve the installation schedule for these remaining sites, and travel funds will need to be made available for CIMS program staff to oversee the field installation.

In the locations where CIMS has been installed, it is not used extensively because of the following problems.

- Hardware deficiencies, such as insufficient storage capacity and slow operating speeds, particularly for site personal computers and the central data base computer, limit the ability of staff to access CIMS files.
- Software design deficiencies make it difficult and time-consuming to manipulate and update the commercial information in the system; as a result, it is difficult, if not impossible, to provide customers with an immediate response to information requests. Plans to develop new software to improve CIMS operating efficiency were suspended in January 1989 because of objections by Commerce's Inspector General to the contracting procedures being employed by the CIMS program office.
- CIMS client and market research files are of limited quality and scope. Although program officials told us that the CIMS data base now contains client files for 37 countries, which represent approximately 80 percent of the U.S. export market, the quality of some of this information is questionable. The majority of these files are records from the AITS system, the predecessor to CIMS, that were converted to the CIMS format. The value of these records is questionable, because files have not been consistently or systematically updated. For example, 95 percent of the 7,000 CIMS client records in Tokyo have not been updated in 4 years. Except for the offices in Kuala Lumpur and San Francisco, field officials generally complained that insufficient staffing and cumbersome software hampered their ability to update and maintain client files. One commercial officer we interviewed said he prefers to use commercially available client lists because they are more up to date and accurate. Although steps have been taken to update the market research report data base, it primarily consists of information on 10 high-technology sectors. These market research reports are intended to (1) identify and assess best sales prospects for U.S. exporters and (2) provide U.S. firms with information needed to plan and execute their export strategies.

---

<sup>2</sup>These numbers do not include the 19 US&FCS branch offices, none of which are CIMS operational.

---

Market research on such basic industries as coal, lumber, apparel, and mining machinery is limited or nonexistent. Program officials said limited staff and budgets have constrained their efforts to develop the data base.

CIMS has been implemented on a piecemeal basis as funds have become available from other programs. As of the first quarter of fiscal year 1989, about \$35 million had been spent on CIMS and its predecessors. Some of the equipment purchased under the CIMS program is used for office automation functions, such as word processing and electronic mail. We estimate that \$13.5 million will be needed in fiscal year 1990 to support the CIMS program, which includes funds to upgrade existing hardware, provide additional training, and procure additional market research. Between \$9 million and \$11 million will be needed, for each of the fiscal years 1991 through 1993, to meet recurring program costs.

The current design of the CIMS system requires extensive data input effort, particularly by the field staff, to keep the system current. Since domestic US&FCS staff was reduced from 368 positions in October 1985 to 298 in October 1988, it is questionable whether field staff, especially at domestic sites, will be adequate to support CIMS as presently designed.

Although the Omnibus Trade and Competitiveness Act of 1988 provides for the expansion of CIMS to form the export promotion component of the National Trade Data Bank, Commerce officials noted that Congress did not provide funding for this effort. Therefore, Commerce officials told us they plan to combine existing CIMS data with information from other agencies. Under this concept, CIMS data will be moved in bulk to the National Trade Data Bank. Users will be able to purchase a data disk with this information but will have to supply their own software to manipulate the data.

In addition, as currently structured, CIMS does not contain all the information called for in the Act, including data on tariffs, export financing, and transactions involving barter and countertrade. Commerce officials told us they do not yet have any firm plans for including this information in CIMS.

Commerce is in the process of commissioning independent technical and strategic reviews of CIMS as we recommended in our January 1989 report on ITA export promotion programs (Export Promotion: Problems in Commerce's Programs, (GAO/NSLAD-89-44)). The technical review is expected to provide an independent, expert analysis of CIMS' technical design, project

---

management, user support structure, potential for overcoming technical problems, and prospects for future enhancements. The strategic review is to include an assessment of CIMS user needs, future costs, and field support requirements. Commerce recently completed the statement of work for the technical review and will soon issue a Request for Proposals. A team of Commerce officials is now being assembled to conduct the broader strategic review, which will consider the findings of the CIMS technical review team and make recommendations as to how ITA should proceed.

During our audit work, we learned of several commercial trade data bases. We visited one firm and found that its software was much more sophisticated and easier to use than CIMS. This firm's data base contained financial, travel, and trade data, including research and statistical reports prepared by various government agencies. It is possible that some of ITA's information processing and distribution needs could be met by such private commercial networks. We discussed this possibility with ITA officials, and they agreed that their strategic review should include an examination of all viable options for meeting its information needs, including the potential for using private sector services.

---

## Conclusions

CIMS' implementation has been plagued by a host of operational, management, and resource problems. Commerce officials have recognized problems with CIMS and are implementing our recommendation for an independent management and technical review—which should provide the information needed to make an informed management decision about CIMS' future. Therefore, we are not making any additional recommendations. However, the approach that is ultimately taken as a result of the reviews needs to be fully supported by senior Commerce management. In addition, we believe the Secretary of Commerce needs to ensure that the resulting system fully complies with the requirements in the Omnibus Trade Act regarding the composition of the export promotion component of the National Trade Data Bank. If it is determined that the expansion of CIMS to include all items required by the law is not feasible or practical, the Secretary should seek legislative relief from this requirement.

As requested, we did not obtain formal agency comments on this report; however, we discussed it with appropriate Commerce Department officials and incorporated their comments where appropriate.

---

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date it is issued. At that time, we will send copies to the Secretary of Commerce and appropriate congressional committees and make copies available to other interested parties upon request.

The report was prepared under the direction of Allan I. Mendelowitz, Director, Trade, Energy, and Finance Issues. Other major contributors are listed in appendix V.

Sincerely yours,

A handwritten signature in cursive script that reads "Frank C. Conahan".

Frank C. Conahan  
Assistant Comptroller General



---

# Contents

---

Letter		1
Appendix I		10
Commerce's	Introduction	10
Worldwide	Availability	10
Commercial	Data Base Quality	14
Information	Budget	19
Management System		
Appendix II		23
Current and Future		
US&FCS Sites for		
CIMS (As of May 5,		
1989)		
Appendix III		26
Objectives, Scope, and		
Methodology		
Appendix IV		27
International Trade		
Administration		
Organization Chart		
Appendix V		28
Major Contributors to		
This Report		
Tables		
	Table I.1: US&FCS Field Staff Levels	17
	Table I.2: A History of CIMS Related Expenditures	20
	Table I.3: CIMS Budget Requirements	21

---

---

**Abbreviations**

AITS	Automated Information Transfer System
ATI	American Traders Index
CIMS	Commercial Information Management System
FTI	Foreign Traders Index
ITA	International Trade Administration
US&FCS	U.S. and Foreign Commercial Service

---

# Commerce's Worldwide Commercial Information Management System

---

## Introduction

A primary mission of the Department of Commerce's International Trade Administration (ITA) is to expand exports of U.S. goods and services. The ITA attempts to involve more U.S. businesses in exporting through various export promotion programs and services and through collecting and disseminating trade information. ITA has long recognized that an automated system could speed the delivery of this information worldwide and enhance the effectiveness of its export promotion efforts.

The Commercial Information Management System (CIMS), developed by the U.S. and Foreign Commercial Service's (US&FCS) office of Export Promotion Services (see organization chart in app. IV), is ITA's third attempt to develop an automated, comprehensive trade information system. Its first attempt in 1978, the Worldwide Information and Trade System, was abandoned after the prototype stage because of high projected costs and opposition from members of the Information Industry Association, who contended that the government was competing with the private publishing sector. In 1981, a new project, the Automated Information Transfer System (AITS), was started. It was designed to be a decentralized system focused on automating existing client files and customer lists so that local data bases could be used to generate mailing lists and applied to other information services. Training, technical, and data base management problems limited AITS usefulness.

CIMS is designed to link the 122 overseas posts and 47 domestic district offices, including branch offices, of the US&FCS to a central data base in ITA headquarters. The central data base is designed to contain three major files: (1) the client file (a list of domestic and foreign traders), (2) a research file (a repository of market research reports cataloged by subject and country), and (3) an events file (a listing of upcoming trade promotion activities). Currently, the central data base includes only the client file and market research file. Plans to add the events file are on hold pending the completion of the strategic and technical reviews of CIMS. The client file consists of information from the Foreign Traders Index (FTI), which is developed by the foreign posts, and the American Traders Index (ATI), which is developed by the domestic offices.

---

## Availability

As of May 1989, 83 sites (24 domestic minicomputer sites, 23 domestic personal computer sites, and 36 overseas minicomputer sites) had the hardware, software, and training necessary to perform basic CIMS functions; 12 additional posts were scheduled for CIMS installation by the end

of June 1989 (See app. II for a list of all sites). As explained below, the 83 sites are not yet fully operational.

Although program officials told us that users at the 83 sites should be able to create, update, and manipulate local CIMS files and retrieve market research reports from the central data base computer in Washington, D.C., our review showed that users at all sites, except one, experienced difficulties using CIMS files because of hardware, software, or telecommunications limitations. As a result, CIMS appears to have had a limited impact on improving overall ITA information collection and dissemination.

Systemwide hardware problems could become more acute as additional sites become operational. Because the central data base is operating at capacity and is only in operation about 12 hours a day, some users complained that the system is difficult to access and has unacceptable response time. Connections that are made with the central data base computer are sometimes lost, further adding to response times. Many of the personal computers currently in use at the 23 domestic sites are outdated and slow and have limited storage capacity, which limits the ability of field staff to maintain local client records and to query the central data base. The fiscal years 1989 and 1990 budgets do not provide for funds to upgrade the central data base computer and personal computers. As a result, current hardware problems will become more acute as additional sites are added and the size of data bases increase.

Some users that we interviewed were especially critical of CIMS software, including the newest release, complaining that it is overly complicated and difficult to grasp, giving them little or no incentive to use CIMS. As stated in our January 23, 1989, report,<sup>1</sup> software maintenance and redesign have been complicated by the initial decision to use three different versions of CIMS software: (1) COBOL for overseas posts, (2) "Knowledgeman" for those with personal computers, and (3) "Speed II" for headquarters and district office minicomputers. The COBOL version was developed because the State Department allows only COBOL software to be used on its shared embassy systems.

---

<sup>1</sup>Export Promotion: Status of Commerce's Worldwide Commercial Information Management System (GAO/NSIAD-89-100).

Users at all overseas sites were also critical of the difficulties involved in communicating with the central data base in Washington, D.C. Overcoming this problem could be extremely costly and ITA is currently considering several options to reduce the amount of data that has to be transmitted by telephone line, including significantly expanding local data storage capabilities.

Although some sites, such as London, Kuala Lumpur, Los Angeles, and San Francisco, were using CIMS for client consultations and referrals, trade show recruitment, and mass mailings, other sites, such as Charleston (West Virginia), Columbia (South Carolina), Detroit, Mexico City, Paris, San Diego, and Tokyo, were limiting their use of CIMS because of hardware or software shortcomings.<sup>2</sup> In general, most foreign posts experienced difficulties in communicating with the central data base in Washington, D.C., because of faulty telecommunications links. Some of these sites maintain most of their local client lists on separate systems and do not update the central data base with this information, which defeats an important design objective of CIMS—to provide an automated mechanism to integrate the US&FCS's worldwide network of offices.

Highlights of our findings at 19 overseas and domestic US&FCS offices follow. At each site we visited, we made a standardized request for CIMS information to compare the consistency and quality of CIMS output among the offices we visited.

- Charleston staff said the limited storage capacity of the personal computers made the procedures for using CIMS too complicated. In response to an information request we made as part of our site visit, it took several hours to retrieve four market research articles from the central data base computer in Washington, D.C., because of difficulties in downloading information from the central data base to the site personal computer. The office also experienced numerous difficulties and spent almost 8 hours trying to retrieve and store 15 foreign client files from the central data base.
- Detroit staff said their hardware's storage space is inadequate, because the software takes up approximately 65 to 75 percent of the site computer's memory capacity, leaving little space for data manipulation. As a result, only three people in the office can use CIMS concurrently and only one can use it during the mid-morning peak hours or when extensive searches are in progress, or the system will discontinue processing.

---

<sup>2</sup>Charleston, Columbia, and San Diego are personal computer sites.

On occasion, Detroit's system also deleted or duplicated company listings without prompting from staff. The staff also was unable to retrieve some types of market research from CIMS, even though these studies were listed as available. It is not clear why these studies could not be accessed. Because of these types of problems, the staff said they often use sources other than CIMS in counseling or assisting business firms.

- San Diego staff said software problems have prevented them from becoming fully operational. As a result, the office is not using CIMS to create or maintain office files but is using another data base management system called "Find-It" to manage their client files.
- The Singapore office had CIMS installed in May 1988 but has not been able to use it since August 1988 because of software problems.
- Brasilia and Mexico City staff were unable to retrieve information from the domestic U.S. client files stored in the central data base in Washington, D.C. The staff in Brasilia said software problems were responsible for their inability to make these retrievals, while the staff in Mexico City said technical problems such as power surges and outages and telecommunications difficulties have hampered their efforts. Mexico City staff also said that the lack of sufficient access to the State Department's embassy computers have complicated their efforts to use CIMS. A State Department official told us that greater access to the embassy computer will not be provided unless Commerce is willing to pay for the additional access. The official said that Commerce, unlike other agencies that use the embassy computer system, does not contribute any money or equipment to support the computer's operations. US&FCS officials in Mexico told us they doubt that Commerce would be able to provide the funds to resolve the dispute.
- Paris and London staff were unable to make any retrievals from the central data base's domestic client files because of the lack of adequate telecommunications links between the posts and the central data base in Washington, D.C. In Paris, a working telecommunications link between US&FCS headquarters and Paris is not yet established. In London, the embassy's computer system officer complained that current State Department telecommunications links are not intended for long data transmissions, as often required by CIMS, but for short bursts of data which are less likely to be disrupted by line static. This official told us that CIMS transmissions to the central data base in Washington, D.C., frequently failed, even if almost complete, because of occasional static in the line. He said that, until recently, the telecommunications line between London and US&FCS headquarters in Washington had to be turned off at least once a week because CIMS data transmissions frequently overloaded transmission lines. Although the personnel in London were able to partially retrieve file names, they questioned

whether the overseas requests for ATI client files worked adequately, because their data search produced no names.

- In Tokyo, CIMS was installed in May 1988, but did not become operational until February 1989 because of difficulties in getting the software to operate properly and various system integration problems. The CIMS coordinator needed 7 days to retrieve a list of building construction firms in Washington, D.C., one of the three subjects included in our standardized information request, and could not complete a retrieval for the other two subjects. We could not determine whether the difficulties were incurred because of equipment, operating problems, or lack of adequate training.
- Buenos Aires and Kuala Lumpur staff told us they are presently unable to access the market research reports in CIMS because of difficulties in establishing communications links with the central data base. Trade specialists we interviewed said that access to CIMS market research reports was not essential, because they used hard copies of the reports which are available upon request and which are preferable in light of the time and expense needed to retrieve the information from CIMS.

---

## Full Implementation Delayed

Currently, CIMS development is at a standstill. New equipment purchases and additional software development have been delayed pending the outcome of technical and strategic reviews of CIMS which we recommended in our January 26, 1989 report.<sup>3</sup> The technical review will provide an independent, expert analysis of CIMS' technical design, project management, and user support structure. The strategic review will include an assessment of CIMS' user needs, future costs, and field support requirements. Commerce has issued a statement of work and will soon issue the Request for Proposals for this technical review. Commerce officials are currently assembling the management team for the strategic review; they anticipate the review panels will conclude their reviews around October 1989.

---

## Data Base Quality

The CIMS data base is limited in scope and the quality of certain output is questionable. Although some of the district staff we interviewed were supportive of CIMS, especially because of its word processing and electronic mail features, many were reluctant to use CIMS because of concerns about the quality of certain client information and research file limitations. Concerns over the quality of client information stemmed from inconsistencies in the way local data bases were developed and

---

<sup>3</sup>Export Promotion: Problems in Commerce's Programs, (GAO/NSIAD-89-44)

from maintenance problems. The inconsistency of client information results from the lack of standards for data base development and the lack of adequate support staff in some locations, especially the domestic sites, for keeping the client lists updated. As a result, the accuracy and relevancy of some CIMS records is questionable and trade specialists sometimes use other sources.

We identified the need for data base standards in our January 26, 1989, report and concluded that US&FCS needs to issue guidelines to the overseas posts and district offices to assist them in developing criteria for data collection and client file maintenance. Although some US&FCS staff indicated that they had received sufficient guidance through training and the CIMS manual, no official instructions have been issued to help trade specialists determine the types of data which should be included in CIMS.

The techniques used by different US&FCS offices to identify local firms to be included in CIMS client files have a direct impact on the number and types of firms in the data base. For example, the Cleveland and Chicago offices entered only their active client names into CIMS, while the Detroit and Columbia offices included names from manufacturers' directories as part of their client data bases. Other US&FCS offices enter client names based on responses from questionnaires, personal contacts, or knowledge of the firms. As a result, CIMS users have no assurance that the names of firms they receive from the CIMS client files are necessarily those with high export potential and interest. In addition to addressing software and staffing problems, the US&FCS needs to issue guidelines to its posts and district offices on data base development and maintenance.

The currency of the information included in CIMS is also a concern among US&FCS staff because files have not been consistently or systematically updated due to a lack of support staff. For example, 95 percent of the Tokyo office's 7,000 client files are at least 4 years old. Except for the offices in Kuala Lumpur and San Francisco, users generally complained that insufficient staffing and cumbersome software hampered their ability to update and maintain client files. Many of the field staff said that additional support staff is needed to enter, update, and edit these files.

Some offices, however, are attempting to keep their files current. For example, the London and the Los Angeles district offices have instituted file maintenance procedures. In London, a relatively structured updating process has been established. A certain percentage of reports are automatically flagged by the system every month and letters are sent to

these firms asking them to update the data in the CIMS records. Firms that do not respond to these inquiries are referred to the cognizant trade specialist, who decides whether to purge the records from the data base or to do additional follow-up work. In Los Angeles, the district office director periodically deletes old records to avoid storing out-of-date information. However, because the software is slow and cumbersome and trade specialists are unable to devote the necessary time to this task, the Los Angeles district office plans to use college interns to update its files.

Several staff complained about the limited number of industrial sectors and geographical areas covered by CIMS in the market research file. Although some trade specialists and designated systems administrators have been impressed by recent efforts to improve the quality of the market research data base,<sup>4</sup> the market research reports are concentrated on 10 industrial sectors and the foreign client files cover only 37 countries. Program officials told us that these countries account for about 80 percent of U.S. export markets. Some trade specialists we interviewed complained that the information provided is not sufficient to respond to the wide variations in client requests; for example, the present market research covers high-technology industrial sectors, such as computer equipment and peripherals. Market research on such commodities as coal, lumber, apparel, and mining machinery, which is of interest to users in West Virginia and South Carolina, is limited or non-existent. Some users also complained that market research reports generally do not include data on African and Caribbean countries. Program officials acknowledged these limitations but said that limited resources require them to channel their efforts toward countries which have the greatest export potential and the US&FCS staff to exploit these opportunities.

---

## Declining Support Structure

CIMS is being implemented in an environment that is substantially different than existed at the time of its inception. As table I.1 shows, US&FCS field staff has declined since 1985, when the concept for CIMS, which is heavily dependent on field staff, was formulated. Domestic office field staff levels have been reduced the most, falling from 368 positions in 1985 to 298 in 1988. According to Commerce officials, these field staff reductions have been made as part of an Office of Management and

---

<sup>4</sup>81 percent of the approximately 1,400 market research reports have been completed since 1987. Market research reports are designed to (1) identify and assess best sales prospects for U.S. exporters and (2) provide U.S. firms with the information they need to plan and execute their export strategies.

Budget initiative encouraging state governments to assume a greater role in export promotion and to help offset the increase in foreign post operating costs caused by the depreciation of the dollar. In addition to staff reduction, the US&FCS has also experienced a large number of staff vacancies, which cannot be filled because of a lack of funds. For example, 18 of 59 authorized positions in the US&FCS western region, a high-volume exporting region, are now vacant. This region includes the San Francisco, Los Angeles, and San Diego district offices.

**Table I.1: US&FCS Field Staff Levels**

	Oct. 1985	Oct. 1986	Oct. 1987	Oct. 1988
Domestic field staff	368	335	319	298
Overseas field staff	696	683	655	647
Total	1,064	1,018	974	945

These reductions have made it more difficult for US&FCS field staff to manipulate and maintain CIMS information. Even if the funds were provided to purchase the additional items necessary to complete CIMS and improve its operations, it is questionable whether the US&FCS presently has an adequate field structure to implement CIMS as currently designed. Under the current design, trade specialists, who are responsible for assisting businesses on a wide range of trade matters—such as individual counseling, export licensing, and trade promotions—are also responsible for creating and updating files.

Most of the posts and offices we contacted said that staff reductions and vacancies have limited their ability to perform these functions, which are more time-consuming than originally envisioned. For example, district office staff said the process of updating files is time-consuming because CIMS has several screens to scroll through for each update. When a trade specialist wants to change a contact name, he must scroll through five screens, make the change, and then wait for a message to be displayed on the screen that the record is stored. The trade specialist must then retrace his or her steps and sequentially exit the same five screens before exiting CIMS or going to another file.

## Competing Sources of Information

Problems with CIMS software and concerns about its data quality have led some district offices to use other data bases to maintain their client files. We found that the Charleston district office still uses the Dialogue system files, which are about 2 years old, because they are easier to use

than CIMS. Dialogue is a commercial network to which Commerce subscribed before CIMS was developed; access to this system is now provided through the state trade office at no cost to Commerce. US&FCS staff in Columbia continue to use AITS software and hardware, the predecessor to CIMS, to manage their local client files because they believe AITS is easier and simpler to use. San Diego maintains its client files by using separate software known as "Find-It".

---

### Data From Other ITA Offices Not Included in CIMS

Other ITA offices have export data that is not shared with CIMS; therefore it is not readily available to US&FCS field staff, key contact points for U.S. firms interested in exporting. For example, according to a May 1989 Commerce Inspector General report, the office of International Economic Policy has two divisions that maintain client files of potential use to US&FCS trade specialists. The Office of Western Europe data base includes the names and addresses of approximately 3,000 firms that have exhibited interest in exporting to Western Europe. Approximately 300 of these firms have been identified as having high export potential. The Office of Africa data base includes over 900 firms which may also be useful to US&FCS trade specialists. Since these data bases are not included in and not interactive with CIMS, trade specialists charged with the responsibility of counseling firms interested in expanding their exports to these areas do not have immediate access to these lists of potential export contacts.

---

### National Trade Data Bank

CIMS program officials told us they had expected the Omnibus Trade and Competitiveness Act of 1988 to enhance CIMS status and to be the impetus for expanding and improving its capability. The Act requires Commerce to establish a National Trade Data Bank by August 23, 1990. The data bank is to consist of two data bases, the International Economic Data System and the Export Promotion Data System. Section 5401(4) of the Act specifically defines the Export Promotion Data System as "the Commercial Information Management System (CIMS) which is maintained and operated by the United States and Foreign Commercial Service..." However, section 5406(c) requires the system to include elements not presently included in CIMS. Thus the statute effectively provides for the expansion of the present system. In addition, the Conference Report to the Act states that the "Export Promotion Data System is expected to be an expansion of the current Commercial Information Management System..." However, Commerce officials told us that Congress did not appropriate new funds to implement this initiative.

Commerce officials told us they plan to create a data base of raw information, including data from other government agencies, that will include data from CIMS. As mentioned above, CIMS, as currently structured, does not contain all of the information called for in the Act, including data on tariffs, export financing, and transactions involving barter and countertrade. Commerce officials told us they do not yet have any firm plans for including this information in CIMS.

Under current plans, CIMS data will be moved in bulk to the National Trade Data Bank. This data base will include raw economic, statistical, and trade data from various federal agencies. Commerce officials said this is a low-cost approach for satisfying the legislative mandate to create the National Trade Data Bank. Users will be able to purchase a data disk with this information but will have to supply their own software to manipulate the data. In contrast, CIMS is an integrated network connecting Commerce's worldwide operations to a central computer in Washington and provides customer specific, finished products to the end user.

---

## Budget

Although a total of \$35 million<sup>5</sup> has been spent on CIMS and its predecessors, annual funding has not always been timely or sufficient, and we estimate that spending levels significantly higher than in prior years will be needed to achieve full implementation. As we stated in our January 23, 1989, interim report, funding for the CIMS project has often been delayed, inadequate, or uncertain. In the early years (1984 and 1985), funding for equipment purchases was delayed because of inadequate requirements documentation and other administrative and management concerns of various Commerce and ITA organizations. In recent years, funding has not been sufficient to meet the implementation schedule, and it has not always been clear how much could be spent and when the funds would be available. According to US&FCS officials, sporadic or uncertain funding may have contributed to some questionable procurement decisions. A history of actual expenditures is shown in table I.2.

---

<sup>5</sup>This amount includes funds spent on US&FCS office automation.

**Appendix I  
Commerce's Worldwide Commercial  
Information Management System**

**Table I.2: A History of CIMS Related Expenditures**

Dollars in thousands			
<b>Fiscal year</b>	<b>Appropriated funds</b>	<b>Trust Fund account<sup>a</sup></b>	<b>Total</b>
1979 (WITS) <sup>b</sup>	\$526.0	\$0.0	<b>\$526.0</b>
1980 (WITS)	3,185.0	0.0	<b>3,185.0</b>
1981 (WITS)	2,844.0	0.0	<b>2,844.0</b>
1982 (WITS/AITS)	2,608.0	0.0	<b>2,608.0</b>
1983 (AITS) <sup>c</sup>	2,123.0	0.0	<b>2,123.0</b>
1984 (AITS)	2,088.0	0.0	<b>2,088.0</b>
1985 (CIMS)	5,251.0	0.0	<b>5,251.0</b>
1986 (CIMS)	3,043.0	2,506.0	<b>5,549.0</b>
1987 (CIMS)	4,551.3	237.9	<b>4,789.2</b>
1988 (CIMS)	4,906.5	235.9	<b>5,142.4</b>
1989 (CIMS) <sup>d</sup>	805.0	25.6	<b>830.6</b>
	<b>\$31,930.8</b>	<b>\$3,005.4</b>	<b>\$34,936.2</b>

<sup>a</sup>The trust fund includes money collected from ITA export promotion activities, such as trade shows and the sale of information products and services.

<sup>b</sup>Worldwide Information and Trade System.

<sup>c</sup>Automated Information Transfer System.

<sup>d</sup>Includes only first quarter of 1989.

**Future Funding Needs Not Likely to Be Met**

We estimate that it will cost at least \$13.5 million to achieve full operating capacity for CIMS and between \$9 million and \$11 million to support the system each year thereafter. (See table I.3.) These totals include funds to correct the following system deficiencies.

- Upgrading hardware, such as the aging and obsolete personal computers in the field and the central data base computer in Washington, D.C.
- Increasing headquarters staff to expand the hours of operation. Current staffing allows only for a 12 hour day, resulting in a daily backlog of unfilled requests.
- Providing improved software and training.
- Providing improved telecommunication services to selected overseas posts.
- Providing an increased level of market research.

We developed these cost estimates after studying CIMS requirements and identifying the funding necessary to complete and maintain the system. We discussed our estimates with program and budget officials, who

Appendix I  
 Commerce's Worldwide Commercial  
 Information Management System

agreed that the estimates are reasonable but cautioned that actual costs could be substantially higher, particularly the costs of market research.

Table I.3: CIMS Budget Requirements

Dollars in millions				
	Fiscal Year			
	1990	1991	1992	1993
<b>Base budget:</b>				
Personnel	\$1.8	\$1.8	\$1.8	\$1.8
Travel and training	0.3	0.3	0.3	0.3
Software development and maintenance	3.1	3.1	3.1	3.1
Other	0.3	0.3	0.3	0.3
<b>Subtotal</b>	<b>5.5</b>	<b>5.5</b>	<b>5.5</b>	<b>5.5</b>
<b>Additional requirements:</b>				
Staff to maintain a 24-hour system	0.25	0.25	0.25	0.25
Hardware upgrades	1.90	0.15	0.15	0.15
Telecommunication services	1.50	1.50	1.50	1.50
Market research analysts	0.30	0.30	0.30	0.30
Contractual market research	4.00	3.00	1.30	1.00
<b>Subtotal</b>	<b>8.00</b>	<b>5.20</b>	<b>3.50</b>	<b>3.20</b>
<b>Total</b>	<b>\$13.50</b>	<b>\$10.70</b>	<b>\$9.00</b>	<b>\$8.70</b>

Collections Will Not Underwrite Support Costs

Much of the early deliberations on CIMS costs and benefits centered on the revenues that the system would generate. It was envisioned that revenues would be sufficient to fund the market research program and to offset expected reductions in appropriated funds for export promotion activities. As stated in our January 26, 1989, report, the early deliberations on pricing apparently did not take into account the existing statutory restrictions limiting the amounts ITA may collect as user fees. On January 6, 1989, Commerce's General Counsel issued an opinion stating that under 15 U.S.C. 1525, fees collected for information products and services must be limited to actual or estimated costs. The General Counsel's position was reaffirmed in the Omnibus Trade and Competitiveness Act of 1988, which states that Freedom of Information Act pricing guidelines should be applied to CIMS products. These restrictions, which become effective in August 1990, limit the fees collected for information products and services to the actual or estimated costs of accessing the data and generating the products.

In addition, our discussions with field staff indicate that in some cases even these nominal fees will not be collected because of concerns about the quality and completeness of the CIMS data. Some trade specialists prefer to use their own judgment in determining whether or not to charge a client, because they do not have enough confidence in the CIMS system and in the quality of CIMS information. We were told that a fixed pricing schedule is not followed in many instances and that in some cases CIMS information is simply given away if there are sufficient concerns about its quality. Furthermore, because the fees collected for US&FCS services are not returned to the specific office that collected them, there apparently is little incentive for an office or trade specialist to sell higher volumes of services or products. Finally, some trade specialists said they must convince companies that they have valuable and useful commercial information that could lead to export sales. To gain these companies' confidence, the trade specialists sometimes provide some of the commercial information at no cost.

---

## Other Alternatives Available

During our review, we identified one private trade information data system whose software was much more sophisticated and easier to use than CIMS. The private firm's data base includes research and statistical reports prepared by various government agencies, including the Department of Commerce. Private commercial networks typically charge user fees for access to and time spent on their systems. During discussions on a draft of this report, ITA officials agreed that it is possible that commercially available software to manage its trade information data base exists—which was not the case when the CIMS concept was developed in 1985. They further agreed that this option should be explored by the technical review panel.

According to program officials, although some immediate dollar savings would probably be realized from the cancellation of the pending CIMS software development contract, use of private vendors to meet all or a portion of US&FCS information management needs probably would not result in a cost savings. US&FCS' central data base minicomputer and a certain number of field office computers would probably need to remain in place to collect information, and a certain number of headquarters staff would still be needed to maintain the office automation systems. Program officials estimate that an annual expenditure of at least \$5 million would be needed to maintain basic US&FCS office automation functions, even if the CIMS concept were eliminated. The potential advantages in using private vendors would be improved data analysis and manipulation capabilities and ease of operation.

# Current and Future US&FCS Sites for CIMS (As of May 5, 1989)

## District Offices using CIMS on personal computers

1.	Phoenix	Arizona
2.	Little Rock	Arkansas
3.	San Diego	California
4.	Savannah	Georgia
5.	Honolulu	Hawaii
6.	Indianapolis	Indiana
7.	Des Moines	Iowa
8.	Louisville	Kentucky
9.	New Orleans	Louisiana
10.	Jackson	Mississippi
11.	Kansas City	Missouri
12.	Omaha	Nebraska
13.	Reno	Nevada
14.	Oklahoma City	Oklahoma
15.	Portland	Oregon
16.	Pittsburgh	Pennsylvania
17.	San Juan	Puerto Rico
18.	Columbia	South Carolina
19.	Nashville	Tennessee
20.	Houston	Texas
21.	Salt Lake City	Utah
22.	Charleston	West Virginia
23.	Milwaukee	Wisconsin

## District Offices using CIMS on minicomputers

1.	Birmingham	Alabama
2.	Anchorage	Alaska
3.	Los Angeles	California
4.	San Francisco	
5.	Denver	Colorado
6.	Hartford	Connecticut
7.	Miami	Florida
8.	Atlanta	Georgia
9.	Chicago	Illinois
10.	Baltimore	Maryland
11.	Boston	Massachusetts
12.	Detroit	Michigan
13.	Minneapolis	Minnesota
14.	St. Louis	Missouri
15.	Trenton	New Jersey

(continued)

**Appendix II**  
**Current and Future US&FCS Sites for CIMS**  
**(As of May 5, 1989)**

16.	Buffalo	New York
17.	New York	
18.	Greensboro	North Carolina
19.	Cincinnati	Ohio
20.	Cleveland	
21.	Philadelphia	Pennsylvania
22.	Dallas	Texas
23.	Richmond	Virginia
24.	Seattle	Washington
<b>Overseas Posts with CIMS installed</b>		
1.	Buenos Aires	Argentina
2.	Sydney	Australia
3.	Vienna	Austria
4.	Brussels	Belgium
5.	Brasilia	Brazil
6.	Sao Paulo	
7.	Montreal	Canada
8.	Ottawa	
9.	Toronto	
10.	Santiago	Chile
11.	Bogota	Columbia
12.	Cairo	Egypt
13.	Paris	France
14.	Athens	Greece
15.	Bombay	India
16.	New Delhi	
17.	Jakarta	Indonesia
18.	Tel Aviv	Israel
19.	Milan	Italy
20.	Rome	
21.	Abidjan	Ivory Coast
22.	Tokyo	Japan
23.	Nairobi	Kenya
24.	Mexico City	Mexico
25.	Lagos	Nigeria
26.	Lima	Peru
27.	Riyadh	Saudi Arabia
28.		Singapore
29.	Johannesburg	South Africa
30.	Barcelona	Spain
31.	Madrid	
32.	London	United Kingdom

(continued)

---

**Appendix II**  
**Current and Future US&FCS Sites for CIMS**  
**(As of May 5, 1989)**

---

33.	Caracas	Venezuela
34.	Bonn	West Germany
35.	Frankfurt	
36.	Belgrade	Yugoslavia
<b>Overseas Posts scheduled for CIMS installation by June 1989</b>		
1.	Beijing	China
2.	Copenhagen	Denmark
3.		Hong Kong
4.	Dublin	Ireland
5.	Naples	Italy
6.	Seoul	Korea
7.	Wellington	New Zealand
8.	Manila	Philippines
9.	Stockholm	Sweden
10.	Bern	Switzerland
11.	Bangkok	Thailand
12.	The Hague	The Netherlands

---

# Objectives, Scope, and Methodology

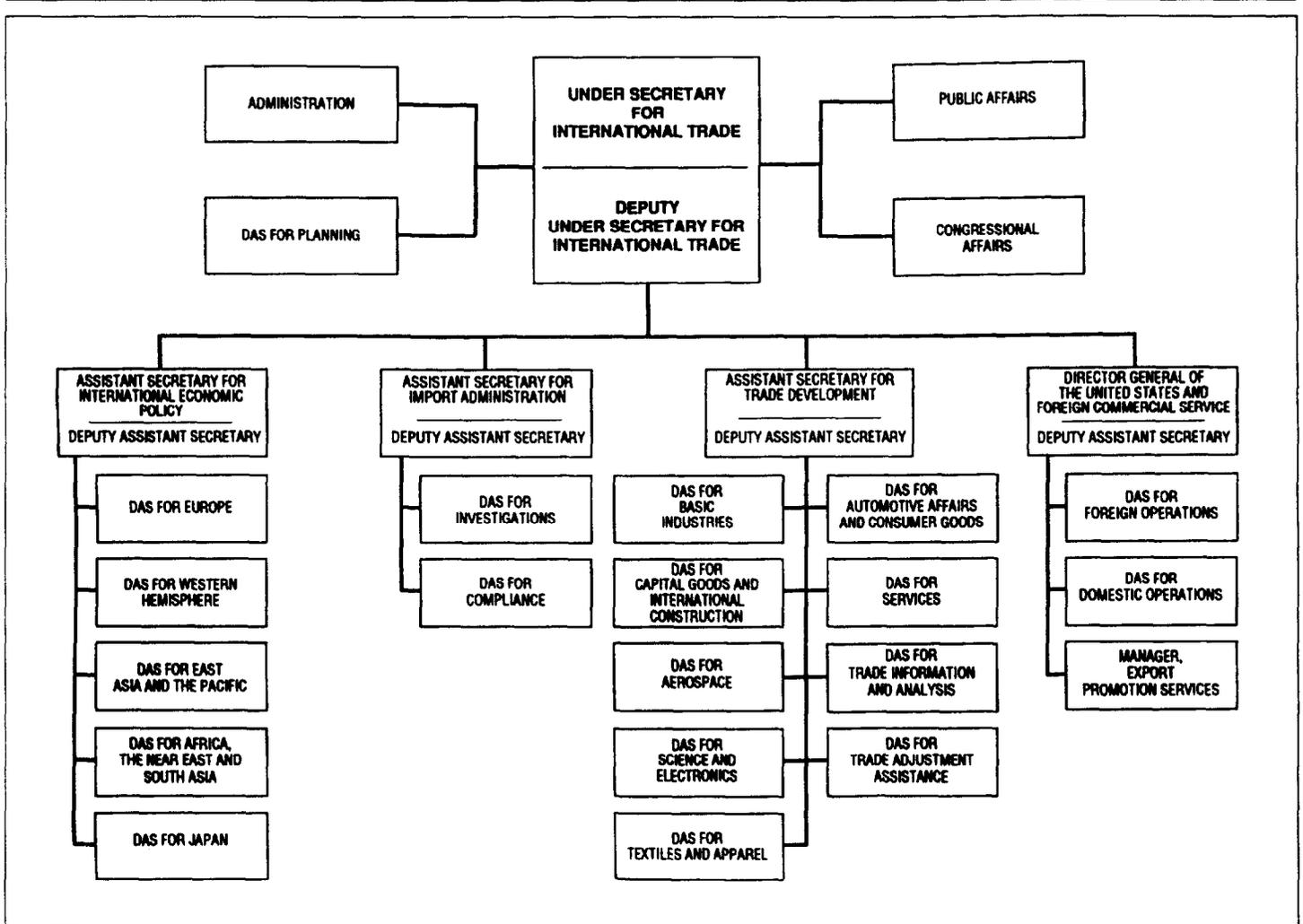
Concerns about the management and costs of the Department of Commerce's Commercial Information Management System prompted the Chairman of the Subcommittee on Foreign Commerce and Tourism, Senate Committee on Commerce, Science and Transportation, to request that we review CIMS operations. Specifically, in an October 26, 1988, letter, we were asked to assess CIMS availability, data collection methods, quality of information, and budgetary requirements for full implementation. On January 23, 1989, we issued an interim status report, (GAO/NSIAD-89-100), and agreed to address additional budget issues in more detail in our final report.

To obtain a better understanding of the system, from December 1988 to March 1989, we visited 19 US&FCS domestic and overseas posts where CIMS is currently installed: Detroit, Cleveland, Chicago, Los Angeles, San Francisco, San Diego, New York, Atlanta, Miami, Columbia, S.C., Charleston, W. Va., London, Paris, Bonn, Tokyo, Kuala Lumpur, Mexico City, Buenos Aires, and Brasilia. We also interviewed US&FCS staff in Frankfurt, Honolulu, and Singapore. We participated in a comprehensive CIMS demonstration at ITA headquarters in December 1988, held numerous discussions with ITA officials, and reviewed agency management and planning documents.

We used structured interview techniques to interview district office managers, systems administrators, trade specialists, senior commercial officers, and embassy representatives responsible for maintaining CIMS to assess the availability of CIMS, the data collection methods employed by US&FCS staff, and the quality of CIMS output. At each site we visited, we made a standardized request for CIMS information to compare the consistency and quality of CIMS output among the sites. Additional telephone interviews were conducted with US&FCS representatives in district offices where no site visits were made.

To fully address the Subcommittee's concerns regarding budget requirements, we interviewed ITA and US&FCS budget officials and CIMS program officials to determine the cost of completing CIMS. We obtained a history of budget requests and expenditures for the current system and its predecessors and developed estimates of the CIMS full implementation and maintenance costs. Our field work was conducted from December 1988 to April 1989 in accordance with generally accepted government auditing standards.

# International Trade Administration Organization Chart



International Trade Administration

---

# Major Contributors to This Report

---

National Security and  
International Affairs  
Division, Washington,  
D.C.

Allan I. Mendelowitz, Director, Trade, Energy, and Finance Issues  
(202) 275-4812  
Benjamin Nelson, Assistant Director  
Stephen Lord, Evaluator-in-Charge  
Alison Pascale, Evaluator  
Olivia Parker, Evaluator

---

Detroit Regional Office

Jean Shanahan, Evaluator

---

Los Angeles Regional  
Office

Larry Thomas, Evaluator

---

European Office

Paul Aussendorf, Evaluator

---

Far East Office

Joanna Stamatiades, Evaluator

---

Latin American Office

David Jones, Evaluator

---

**Requests for copies of GAO reports should be sent to:**

**U.S. General Accounting Office  
Post Office Box 6015  
Gaithersburg, Maryland 20877**

**Telephone 202-275-6241**

**The first five copies of each report are free. Additional copies are \$2.00 each.**

**There is a 25% discount on orders for 100 or more copies mailed to a single address.**

**Orders must be prepaid by cash or by check or money order made out to the Superintendent of Documents.**