

# **Operational Information Technology Plan**

**FY 1999 - FY 2003**

**International Trade Administration**

**Office of Information Resources Management**

**Revised as of November 3, 1999**

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## **Executive Summary**

Information technology (IT) plays a key role in supporting the mission activities of the International Trade Administration (ITA). This document provides a five-year plan for each of our major IT programs and systems, and describes new IT initiatives that we are proposing as part of the FY 2001 budget process. This plan is a companion document to ITA's Strategic Information Technology Plan and contains more detailed information regarding our major IT investments and the actions we are taking to achieve our strategic IT goals.

## **Plan Content**

We have restructured our plan to more clearly present the importance of IT to our mission activities, and in particular to emphasize the criticality of our world-wide IT infrastructure program. This year's plan identifies ITA's core business processes, maps each of our major IT investments to the business processes they support, and provides a projected five-year budget and schedule for each IT program and system. It also includes an appendix that provides answers to the OMB/DOC IT Investment Review Questions (Raines Rules) for each of our IT investments.

## **Current IT Investment Portfolio**

ITA spends slightly over \$20 million annually (about 7% of our budget) on IT. On average, about 85% of our IT dollar will go toward IT infrastructure (networks, computers, software and general-purpose systems). Another 11% supports activities related to the ITA Accounting System, and the remaining 4% is devoted to our mission-related systems.

## **FY 1999 Accomplishments**

During the past year, we completed the final phase of our multi-year IT modernization effort of the U.S. & Foreign Commercial Services (US&FCS) global infrastructure. This portion of the project involved upgrading the network and desktop platform for ITA's overseas field force and completing the deployment of the Client Management System (CMS).

This year brought significant changes in ITA's financial management program. Two important events occurred: a Deputy Chief Financial Officer (CFO) was appointed and ITA decided to replace its accounting system by converting to the Department of Interior's Federal Financial System (FFS), rather than migrating to the Commerce Administrative Management System (CAMS). Transition of ITA's core accounting activities to FFS will be completed by the end of FY 1999. This move should position ITA to meet the Secretary's mandate for clean financial audits.

FY 1999 was also a milestone in ITA's Y2K program. All of ITA's mission critical systems were Y2K-compliant as of March of this year, system contingency plans were put in place, and ITA's Business Continuity and Contingency Plan (BCCP) was completed.

## **IT Challenges**

Despite the achievements of the past year, important challenges remain. Issues that were identified in ITA's Strategic Information Technology Plan, and still demand attention include:

- ! Obtaining adequate telecommunications bandwidth and Internet access overseas;
- ! Sustaining a modern, interoperable infrastructure;
- ! Responding to Federal IT mandates and special initiatives; and
- ! Addressing the need for a Chief Information Officer (CIO).

Additionally, opportunities exist for using electronic commerce, along with Internet/web technology to improve ITA business processes - particularly in our trade promotion work. However, additional IT investments are required to effectively address these issues and opportunities.

## **New Initiatives**

We are proposing four new initiatives, totaling \$12 million, to leverage information technology to improve ITA mission performance and to implement objectives stated in our Strategic IT Plan. These initiatives described briefly as follows:

- ! Virtual Trade Show (E-Commerce) - funds several innovative uses of Internet/web technology to deliver export services to ITA clients, and includes upgrading overseas telecommunications services necessary to implement electronic commerce applications.
- ! IT Infrastructure - provides replacement equipment necessary to support e-commerce applications and desktop Internet access throughout ITA's overseas infrastructure; implements an innovative distance-learning system for ITA's global workforce.
- ! Document Management Automation - automates the submission, handling, storage, and public access of ITA's extensive document holdings associated with trade law enforcement activities.
- ! Chief Information Officer - establishes a CIO and supporting organization necessary to address ITA-wide IT policy and management issues.

These initiatives are vital to ITA's efforts to respond to emerging mission requirements and to address key Federal and Departmental IT mandates. Although we are making progress, additional resources must be invested if we are to capitalize on the opportunities offered by the Internet, and improve our management discipline to keep pace with the growing complexity of our IT environment.

## **Introduction**

This document describes ITA's operational approach to applying information technology (IT) to streamline business processes and improve delivery of ITA products and services to the American public. It is a companion document to the ITA Information Technology Strategic Plan, and provides additional detail regarding the actions we are taking to address the issues and achieve the goals that we consider strategic to achieving the mission of our organization.

The plan identifies ITA's core business processes, maps each of our major IT investments to the business processes they support, and provides a five-year plan for each IT investment. It also includes information that supports the IT-related budget increase proposals that are part of ITA's FY 2001 budget submission. The plan concludes with a status report on ITA's efforts to address key Federal and Departmental IT mandates and initiatives, and a financial summary of our IT investments. The plan divided accordingly into the following sections:

### *Introduction*

Describes the purpose of the plan and its structure.

### *ITA Mission, Organization and Business Processes*

Presents ITA mission goals, organizational structure, and core business processes.

### *Overview of IT in ITA*

Articulates our vision for information technology's contribution to mission performance, and identifies how our major IT investments support core business processes.

### *IT Investment Plans*

Presents a five-year plan for each major IT investment in our current portfolio.

### *New IT Investment Proposals for FY 2001*

Describes new IT initiatives that are the FY 2001 budget proposals.

### *Response to IT Mandates and Initiatives*

Explains ITA's approach to and progress in addressing Federal and Departmental IT policy and operational objectives.

### *Financial Summary of Major IT Investments*

Provides cost projections for each of our current and proposed IT investments.

# **ITA Mission, Organization and Business Processes**

## **Mission**

ITA's mission is to help U.S. companies sell products and services abroad in support of U.S. jobs at home. ITA has four major goals:

- ! *Enforce U.S. trade laws and agreements to promote free and fair trade* - by effective administration of U.S. trade laws and by taking prompt, aggressive action against unfair trade practices, and by ensuring that U.S. companies get the full benefit of agreements that other countries have signed with the United States.
- ! *Increase the number of small business exporters* - by delivering a comprehensive set of trade promotion products and services designed to stimulate the engagement and growth of Small and Medium Sized Enterprises (SMEs) in exporting.
- ! *Implement the President's National Export Strategy* - by leading the interagency Trade Policy Coordination Committee (TPCC) in implementing the President's mandate to "streamline, simplify and better focus U.S. trade and export programs."
- ! *Strengthen and institutionalize our trade promotion and advocacy efforts* - by enhancing our field resources, electronic links and product lines supporting promotion activities and improving the quality of the services provided by the Advocacy Center in helping U.S. firms win bids for projects and commercial transactions in foreign markets.

## **Organization**

ITA is headed by the Under Secretary for International Trade, who oversees a 2,400-member workforce and the operations of four principal units:

- ! *The U.S. and Foreign Commercial Service (US&FCS)*, which delivers export assistance through products and services to U.S. firms in 105 domestic locations and 167 overseas posts worldwide;
- ! *Trade Development (TD)*, which provides sector-based information and analysis to U.S. exporters and policy makers and operates the Trade Information Center (TIC) which provides export assistance via the 1-800-USA-TRADE hotline;
- ! *Market Access and Compliance (MAC)*, which works to expand access to overseas markets for U.S. goods and services, informs American business of its rights and benefits under existing trade agreements, and monitors foreign compliance with U.S. bilateral and multilateral agreements; and

- ! *Import Administration (IA)*, which safeguards the American economy from unfairly priced imports, through administration of U.S. trade laws.

## Business Processes

ITA business processes fall under three broad categories: Trade Promotion, Trade Law Enforcement, and Trade Policy. Each of these categories and the processes comprising them are summarized briefly below:

<b>Business Area/Process</b>	<b>Purpose</b>
Trade Promotion	Assist U.S. firms in selling their products and services in international markets
Business Counseling	Provide specialized advice to individual companies seeking to enter or expand their exporting activities
Trade Events	Help U.S. exporters showcase their products and services to potential overseas buyers
Advocacy	Intervene on behalf of U.S. firms encountering difficulty winning major projects abroad
Trade Law Enforcement	Promote free and fair trade practices
Agreements Compliance	Ensure that foreign countries abide by agreements negotiated with the U.S.
Antidumping/Countervailing Duties	Remedy unfair trading practices injurious to U.S. industries
Trade Policy	Support U.S. Government efforts to maintain a framework for international trade that supports U.S. economic and security interests
Policy/Strategy Formulation and Implementation	Conduct analysis and research necessary to support new and on-going policy initiatives, and support the negotiation and implementation of international trade agreements

## **Overview of IT in ITA**

### **ITA Vision for IT**

The Administration's National Performance Review (NPR) articulated a vision for IT as the great enabler of reinvention, and as a means for creating a government that works better and costs less. IT introduces the possibility of "electronic government," where technology streamlines government business processes and improves the delivery of government services to the American public. ITA has embraced this vision and interprets it as follows:

*ITA will lead federal agency efforts to increase U.S. exports and enforce U.S. trade laws by using modern technology to build an electronic global trade information environment that continually increases our ability to collaborate with our partners and stakeholders, and deliver products and services to our clients.*

### **Major IT Investments - Current Portfolio**

ITA spends approximately \$23 million annually on information technology systems and services, and expects to remain at that level through FY 2000. On average, approximately 85% of our IT dollar will go toward IT infrastructure: networks, computers, software, general-purpose systems and IT support services that enable ITA employees to perform their routine daily activities. This includes the Total Network Compatibility (TNC) Program, which is an integrated program for managing IT infrastructure across the ITA enterprise, and the Message Processing System (MPS), which distributes Department of State cables throughout Commerce. Another 11% will finance activities related to the ITA Accounting System, and the remaining 4% will be devoted to the development, modernization and operation of our three major mission-related application systems:

*Client Management System (CMS)* - which assists ITA trade specialists in managing their client-related activities.

*Tariff Quick-Service Program (TQP)* - a new system planned for development in FY 2000, which will provide ITA staff and clients with direct access to tariff, tax and customs information comparable to that offered by the European Commission to European exporters.

*Trade Policy Information System (TPIS)* - which provides the U.S. Government trade community with time-series trade data and the analytical capabilities for conducting trade policy analysis and research.

A summary of the five-year spending projections for our current IT investment portfolio is shown below<sup>1</sup>.

#### Current IT Investment Portfolio

IT Investment Category	5-year Average	
	(\$K)	Percent
IT Infrastructure		
Total Network Compatibility (TNC) Program	18,154	
Message Processing System	821	
Subtotal	<b>18,975</b>	85%
Administrative Systems		
ITA Accounting System	2,449	
Subtotal	<b>2,449</b>	11%
Mission Systems		
Client Management System (CMS)	207	
Tariff Quick-Service Program (TQP)	102*	
Trade Policy Information System (TPIS)	539	
Subtotal	<b>848</b>	4%
Grand Total	22,272	100%

\*The 5-year average for TQP reflects development and implementation costs of \$509K in FY 2000. Outyear costs are incorporated in TNC outyear costs.

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<sup>1</sup>The financial data on which this is based is included in Appendix A.

## Proposed FY 2001 Investments

As part of the FY 2001 budget process, ITA is submitting four IT-related budget increase proposals, totaling \$12 million. Two of the initiatives fund infrastructure improvements supporting US&FCS activities, one supports a new system initiative for Import Administration, and another provides the resources required to establish a Chief Information Officer (CIO) position and organization for ITA. Each of these initiatives is described briefly below. More detailed information is presented later in the plan.

*US&FCS Virtual Trade Show (E-Commerce) Initiative (\$3M)* - funds several innovative uses of Internet/web technology to deliver services to US&FCS clients, creates a US&FCS web presence that is more accessible to overseas constituents, and finances overseas telecommunications services upgrades necessary to support e-commerce applications and critical headquarters to field data exchange.

*US&FCS IT Infrastructure Initiative (\$6.5M)* - provides equipment upgrades necessary to maintain the technology currency of the field infrastructure, funds network security devices required to permit desktop Internet access for overseas posts, and leverages the US&FCS global infrastructure to deliver distance learning for world-wide US&FCS staff.

*AD/CVD Document Management Automation (\$1.1M)* - automates the handling and storage of extensive document holdings associated with the administration of Anti-dumping and Countervailing Duty investigations and reviews.

*Creation/Staffing of Office of the CIO (\$1.8M)* - establishes a CIO and supporting organization with resources necessary to address high-priority IT management issues involving architectures, capital planning and infrastructure security.

## IT Support for Business Processes

The table below links ITA's major IT investments to the business processes that they support. The two symbols used in the ITA investment columns indicate the relative contribution of the IT component to the business process. A black circle (●) indicates a strong contribution to the business process, either in terms of importance or frequency of use. An open circle (○) indicates support for the business process, but in a secondary way. The table includes both existing IT investments and new initiatives (shown in italics) proposed as FY 2001 budget increase requests.

Business Area/Process	IT Investment								
	Infrastructure				Admin Systems	Mission Systems			
	TNC	MPS	<i>US&amp;FCS VTS<sup>1</sup></i>	<i>US&amp;FCS ITI<sup>2</sup></i>		Accounting System	<i>AD/CVD DMA<sup>3</sup></i>	CMS	TQP
<b>Trade Promotion</b>									
Business Counseling	●	●	●	●			●	●	F
Trade Events	●	●	●	●	●		●		
Advocacy	●	●	F	F				F	F
<b>Trade Law Enforcement</b>									
Agreements Compliance	●	●	F	F				F	●
Antidumping/Countervailing Duties	●	●	F	F		●		F	F
<b>Trade Policy</b>									
Policy/Strategy Development	●	●	F	F				F	●
<b>Management and Administration</b>									
Financial Management	●	●	F	F	●				

Key: ● Strong Support, F Secondary Support  
Notes: (1) US&FCS Virtual Trade Show (E-Commerce) Initiative  
(2) US&FCS IT Infrastructure Initiative  
(3) AD/CVD Document Management Automation

Infrastructure investments generally support all business processes, because they (1) provide the day-to-day tools for document preparation, information sharing and computation that support all program activities, and (2) serve as the technical platform for hosting or accessing mission and administrative systems that support specific business processes. The Message Processing System (MPS) is shown as supporting all business processes because virtually every ITA office is a recipient of State Department cables, and depends on them as a routine source of information.

The two US&FCS infrastructure initiatives (Virtual Trade Show and IT Infrastructure) are listed as infrastructure investments because they include a large complement of generic IT capabilities such as hardware upgrades and telecommunications services. They contribute mission support most directly to those functions carried out primarily by US&FCS: business counseling and trade events. The infrastructure improvements included in these two initiatives will also (1) contribute to improved performance for the ITA-wide mission activities (trade law enforcement and trade policy) in which the US&FCS participates, and (2) provide the bandwidth required to enable US&FCS international posts and domestic field offices to access to the ITA Accounting System.

It should be noted that several of the projects contained in the Virtual Trade Show initiative could also be considered as mission systems or activities, because they comprise specific applications of infrastructure capabilities, rather than just the deployment of general infrastructure services. However, since the majority of the initiative consists of bandwidth upgrades, the initiative as a whole has been categorized listed as a infrastructure, rather than a mission initiative.

### Trade Promotion

An essential part of our trade promotion activity is providing information to potential exporters, and our TNC infrastructure is the vehicle for our electronic information dissemination programs. ITA has close to 200 websites that provide a wealth of information to our clients via the Internet. These websites represent all of our domestic and foreign field offices as well as each major ITA program and organization. All of the sites are integrated into a unified web presence via the ITA home page. Our electronic information dissemination activity complements the one-on-one business counseling performed by trade specialists in our field offices and by the staff of the Trade Information Center (TIC), our national exporter hotline service.

The Client Management System (CMS), which will reach full deployment in US&FCS this year, is the primary business process tool used by our field trade specialists to manage all of their activity with clients. It assists each trade specialist in tracking the products and services they provide to exporters, including the involvement of their clients in trade events sponsored by ITA. Since these events are fee-based, ITA financial systems provide the support necessary to ensure appropriate collection and processing of trade event funds. The Tariff Quick-Service Program (TQP), planned for FY 2000, will significantly improve the ability of the TIC's trade specialists to respond to one of the most frequently demanded types of client-requested information -- foreign tariff rates on specific U.S. products.

ITA's IT infrastructure also provides a platform for a wide variety of small systems and databases that support the activities of ITA offices and organizations. The Advocacy Center project database is one such example. It provides a central repository of information regarding the status of individual cases where ITA is assisting U.S. companies to win major contracts overseas.

### Trade Law Enforcement

Our trade law enforcement activities depend on our TNC infrastructure for IT support. TNC provides both information dissemination and computational capabilities that are vital to this business process. ITA is using the web to make information regarding international agreements available to U.S. exporters. This information assists U.S. companies that may be having difficulty in international markets to become aware of the rights they have as part of trade agreements the U.S. has signed with other countries. ITA also uses the web to make information available to the public on the status of ITA investigations and reviews of potential violations of U.S. import laws by foreign companies. In performing these investigations and determinations, ITA depends heavily on TNC capabilities to (1) perform statistical analysis of foreign firm sales transactions, (2) develop, maintain and archive all the legal documents associated with each case, and (3) monitor the status of all the work products and administrative deadlines involved in case processing.

### Trade Policy

The Trade Policy Information System (TPIS) is an important source of information and analytical capability used by ITA and other federal agencies to assess the impact of developments in the international marketplace on U.S. economic security. It contains detailed historical U.S. and foreign merchandise trade statistics in a time-series format. TPIS is used by analysts and policy makers to assess the potential effect of proposed trade policies, formulate strategies for addressing international trade practices injurious to U.S. interests, and study the long-term effectiveness of U.S. trade agreements and policy. Our TNC infrastructure also provides the day-to-day tools to support staff involved in trade policy work. It provides statistical capability for processing data from sources such as TPIS, furnishes an environment to house the data and documents associated with various trade policies and agreements, and supports information sharing activities critical to the policy formulation process.

### Management and Administration

The only major administrative system that ITA operates is our accounting system. ITA depends primarily on Departmental systems to support activities such as human resources management, payroll processing, and property inventory. However, our IT infrastructure serves as the means for accessing these systems and is therefore considered critical to the effective operation of our administrative processes. It also hosts some of our smaller administrative systems (e.g. Controlled Correspondence System) and provides an electronic forms capability for producing standard Federal, Commerce and ITA forms.

## **IT Investment Plans - Current Portfolio**

This section briefly describes the status of, and outlook for, each of our major IT investments. Infrastructure is presented first, followed by each of the major systems. We then conclude with summaries of ITA's involvement in important Departmental IT initiatives.

### **IT Infrastructure Investments**

#### **Total Network Compatibility (TNC) Program**

The Total Network Compatibility (TNC) program is a management approach for modernizing and maintaining ITA's information technology infrastructure. This infrastructure consists of the networks, computers, software and general-purpose systems and IT-related support services that enable ITA employees to perform their daily work. The Office of Information Resources Management (OIRM), which has responsibility ITA-wide infrastructure planning and oversight, leads the TNC program. Each of the four major ITA business units funds and operates its own IT infrastructure, with OIRM providing resources for some of the shared systems and services. The primary vehicle for planning, coordination and decision-making regarding infrastructure activities is the Information Technology Management Council (ITMC), which is chaired by OIRM and includes senior IT and management representatives from each business unit. The TNC program provides the framework for collaboration to ensure that the independently managed segments of ITA's global infrastructure form an integrated and technologically sound environment.

#### *Background*

TNC was originally conceived in 1990 to assist ITA in making the transition from a minicomputer-based office automation environment to a more modern PC and network-oriented IT infrastructure. The original goals of the program were to achieve a 1-to-1 staff-to-PC ratio, and to establish an ITA-wide integrated networking environment. An infrastructure plan was created to serve as a blueprint for individual ITA business units to follow as they modernized and expanded their IT infrastructure. This plan included hardware, software and networking guidelines, which were developed under the auspices of ITA's Office Automation User Group (OAUG), a cross-cutting council on which each of the major ITA business units had representatives<sup>2</sup>. These goals were largely realized by 1994, by which time ITA had established two network environments: a Banyan/Vines network (referred to as the US&FCS Network) serving the US&FCS, and a Novell/NetWare network (ITA Local Area Network, or "ITA LAN") supporting the rest of ITA's headquarters organizations. A recently completed modernization effort in US&FCS has now replaced the Banyan environment with a Microsoft/NT infrastructure.

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<sup>2</sup>This group was replaced in 1998 by the Information Technology Management Council (ITMC).

### Current IT Infrastructure

ITA's infrastructure is global in scope, supporting the ITA workforce that is located throughout the U.S. and in 70 countries abroad. Slightly under half of the organization is headquartered in the Herbert C. Hoover and Ronald Reagan Buildings in Washington, D.C., with the remainder distributed among 269 field locations. The number of ITA employees at any given domestic office or foreign post can range from a single individual up to 30 people. In addition to supporting the office-based needs of ITA staff, the infrastructure also must accommodate the highly mobile segments of the workforce. These include domestic trade specialists which spend much of their time on the road visiting clients, industry and country specialists traveling abroad to trade shows and trade negotiations, and compliance specialists involved in import investigations at overseas sites. The following table provides an overview of the scale of this environment

Network Environment	Business Unit	No. Sites	Location	No. LANs <sup>1</sup>	Seats <sup>2</sup>		
					ITA	Other <sup>3</sup>	Total
ITA Local Area Network (ITA LAN)	Administration, Office of the Under Secretary	1	Washington, D.C. Hoover Building	1	221	0	221
	Import Administration			1	496	37	533
	Market Access and Compliance			1	230	0	230
	Trade Development	1	Washington, D. C. Reagan Building	1	495	2	497
Subtotal		2		4	1,442	39	1,481
US&FCS Network	US&FCS Headquarters Units	1	Washington, D.C. Hoover Building	1	286	0	286
		1	Washington, D. C. Reagan Building				
	US&FCS Domestic Operations	102	50 States	50	561	39	600
	US&FCS International Operations	167	70 Countries	103	1,296	71	1,367
Subtotal		271		154	2,143	110	2,253
Total		271 <sup>4</sup>		158	3,585	149	3,734

Notes:

- (1) Does not include stand-alone LANs (not connected to ITA-wide networks)
- (2) The total number of desktop PCs (networked and standalone) and laptops that are available for use.
- (3) The total number of desktop/laptop PCs dedicated for use by staff of partner organizations (PC or laptop equipment being used by contractors and temporary employees working for ITA should be included in the "ITA" column)
- (4) Hoover Building/Reagan Building are sites for both ITA LAN and US&FCS Network; total reduced by 2 to avoid double-counting.

### Architectural Characteristics

Each of the two ITA network environments (the ITA LAN and the US&FCS Network) are constructed similarly and provide a common set of features to their users. These two infrastructures share a common Lotus Notes infrastructure, provide users access to “corporate” ITA web servers and exchange e-mail (both internally and externally) by means of SMTP gateways. The three tables below describe the operating system and application system platforms that are prevalent in each environment.

Server Operating System Platforms

Server Function	Operating System	
	ITA LAN	US&FCS Network
File & Print Servers	Novell NetWare	Microsoft NT
Email Servers	Novell NetWare	Microsoft NT
Application Servers	Microsoft NT	Microsoft NT
Web Servers	Novell NetWare HP-UX <sup>†</sup>	Microsoft NT

<sup>†</sup>Being phased out

Desktop Operating System Platforms

Desktop Type	Operating System	
	ITA LAN	US&FCS Network
Standard User (Default)	Microsoft Windows 95/98	Microsoft Windows 95/98
Statistical Analysis*	Microsoft Windows NT	N/A
System Developer/Administrator	Microsoft Windows NT	Microsoft Windows NT

\*Primarily Import Administration (IA)

## Application System Platforms

Function	Product	
	ITA LAN	US&FCS Network
Database Systems	Lotus Notes Microsoft SQL Server	Lotus Notes
Web Publishing	Lotus Domino NCSA <sup>†</sup> Netscape Enterprise Server <sup>*</sup>	Lotus Domino

<sup>†</sup>Being phased out  
<sup>\*</sup>In testing

*Current Capabilities*

ITA Network users are provided with a suite of software that covers all of the general-purpose functions they perform. Help desk services are available to assist users with problems associated with standard software products.

## Desktop Tools

Function	Product	
	ITA LAN	US&FCS Network
Email/Calendar	Novell GroupWise <sup>†</sup>	Lotus Notes
Word Processing	Corel WordPerfect	Microsoft Word
Spreadsheet/Graphics	Corel Suite Lotus Suite	Microsoft Office Suite
Web Browsing	Netscape Navigator	Microsoft Internet Explorer
Statistical Analysis	Statistical Analysis System (SAS)	N/A

<sup>†</sup>Lotus Notes is also available to all ITA LAN users, but is used primarily as a database and webpublishing environment. It is not supported as the primary email system for ITA LAN users.

Desktop tools in use in the two environments are somewhat different as the result of successive IT modernization efforts in US&FCS.

**!** Email

When the TNC program was initiated several years ago, GroupWise was selected and the email system for headquarters, and Banyan Mail for the US&FCS. This was primarily due to the benefits of the integration of each of these two email

systems with the network operating systems chosen for each of these environments (NetWare for ITA LAN and Vines for US&FCS).

When the US&FCS Banyan networking environment was replaced by Microsoft NT as part of the US&FCS IT Modernization Program, Lotus Notes was selected as the email system, based on the technical requirements of US&FCS and success of Notes applications in the US&FCS domestic field organization. Integration with the ITA LAN email environment was achieved through the use of SMTP and X.400 email gateways, just as it had been with the former Banyan Mail environment. During FY 1999, X.400 support was dropped when the Department determined to discontinue its use of X.400 internally, and now ITA LAN and US&FCS Network email is exchanged through a SMTP gateway.

! Office “suites”

The TNC program includes software guidelines that establish the standard Commercial-Off-The-Shelf (COTS) software products for general-purpose use in ITA. The original guidelines, adopting in 1993, specified WordPerfect and Lotus products for word processing and spreadsheet analysis, respectively. In FY 1998, the US&FCS proposed adopting Microsoft products, in conjunction with their transition to a Microsoft networking infrastructure.

A working group was formed under the ITMC to study the issue and determine the potential impacts of such a proposal on ITA’s software guidelines. The working group conducted a user survey within ITA and interviewed other organizations inside and outside of Commerce. The final recommendation of the group, endorsed by the ITMC and ITA management was to (1) retain the existing guidelines (use of WordPerfect and Lotus) as the ITA standards, and (2) grant a waiver to US&FCS, based on their business for the equivalent functions. Any potential document/data interchange problems were addressed by requiring US&FCS to convert their files before sending them to any users in the non-US&FCS component of ITA.

### *Relationship of IT Infrastructure to ITA Major Systems*

ITA's information technology infrastructure typically supports ITA major systems in one of two ways. Either it provides the means for ITA staff to access systems that are outside of the ITA environment, or it provides the technology platform for hosting ITA-managed systems.

<b>Access Support</b>
<p>Message Processing System (MPS)</p> <p>MPS is a self-contained system, isolated from the ITA network infrastructure because of security requirements. However, ITA email systems provide the transport mechanism for DOC customers who wish to send or receive unclassified MPS message electronically. Unclassified messages are transferred from the MPS to the ITA email system (for distribution throughout Commerce) by means of an "air-gap" arrangement that provides a physical separation between the two systems.</p> <p>ITA Accounting System</p> <p>The ITA network provides the means for users to access this system (via a dedicated frame-relay link), which runs on a mainframe operated by the Department of Interior.</p> <p>Trade Policy Information System (TPIS)</p> <p>ITA networks provide the means for ITA users of TPIS to access the system, via client software that is loaded on their desktops. The ITA network infrastructure also provides the means for TPIS users in other agencies to access TPIS over the Internet. TPIS itself operates on dedicated hardware which is separate from, but connected to the ITA network.</p>
<b>Platform Support</b>
<p>AD/CVD Document Management Automation*</p> <p>Although the architecture for this system is yet to be determined, it will likely be integrated into the existing ITA infrastructure.</p> <p>Client Management System (CMS)</p> <p>CMS is a Lotus Notes application, which runs on Lotus Notes servers that are within the ITA network infrastructure.</p> <p>Tariff Quick-Service Program (TQP)</p> <p>The ITA network will provide the platform to house this new system.</p>

\* Proposed as a FY 2001 budget increase initiative

*Issues***!** US&FCS Network - International bandwidth needs

The current bandwidth available in the overseas wide-area-network is inadequate to effectively support the current email and database traffic, much less the planned Internet and e-commerce initiatives. This issue has been highlighted in past ITA strategic and operational plans. The State Department's Diplomatic Telecommunications Program Office (DTS-PO) is the service provider for all U.S. Government telecommunications services overseas, and is in the process of upgrading the services available at overseas locations. However, acquiring the additional bandwidth from DTS-PO will incur substantial on-going costs. The FY 2001 Virtual Trade Show (E-commerce) initiative, described later in this plan, includes a component to cover the costs associated with the bandwidth upgrade.

**!** US&FCS Network - Desktop Internet access abroad

Having Internet access on the desktop of all overseas trade specialists located at U.S. Embassies and Consulates is critical to supporting core business processes and interacting with clients. However, DTS-PO security requirements mandate the installation of special telecommunications security equipment in order to protect State Department networks. Current funding is inadequate to address this need, and additional funding for this purpose has been incorporated into the FY 2001 US&FCS IT Infrastructure initiative, described later.

**!** US&FCS Network - Infrastructure renewal

By FY 2001, a significant portion of the IT infrastructure put in place by the US&FCS IT Modernization program (FY 1997-FY 1999) will have reached replacement age. Additional funding is required to maintain the overall infrastructure at an acceptable level of technology currency. A request for the necessary resources has been included in the FY 2001 US&FCS IT Infrastructure initiative, described later.

**!** Interoperability

Interoperability between the two ITA network infrastructures is not a significant problem, although a greater degree of uniformity could offer some advantages. Potential opportunities that will be considered in the future are:

- converting to a single email system (e.g. Lotus Notes)
- standardizing on a single "office suite"

## Planned Activities

The table below summarizes the schedule for the key projects involving both technical and management activities associated with the TNC program.

Schedule

Mo/Yr	Technical Capabilities/Services	Management Activities
5/1999*	! Complete International Trade Center network implementation	
6/1999*	! Complete overseas modernization	
8/1999*	! Upgrade enterprise network (ITA LAN) management system	
9/1999*	! Implement new virus protection product (ITA LAN)	
9/1999	! ISDN Video-conferencing implementation (75% completion)	
12/1999	! Migrate to new webserver platform	
12/1999	! Resolve any remaining Y2K issues	
3/2000	! Next software upgrade cycle: major version upgrades of network operating systems, groupware and standard COTS/Office Suites (NetWare 5, NT 5, Lotus Notes 5, Windows 2000, Corel 2000, MS Office 2000)	! Complete infrastructure architecture documentation (5/2000) ! Bring TNC IT Security Plan(s) into compliance with NIST SP 800-18 (5/2000) ! Evaluate "Seat Management" (5/2000)
3/2000	! Implement additional firewall(s) in headquarters	
3/2000	! FTS2001 Transition -Domestic	
5/2000	! Address enterprise network (WAN/LAN) requirements	
5/2000	! Complete ISDN Video-conferencing network	
10/2000	! FTS2001 Transition - International	
12/2000	! Provide desktop Internet access to overseas posts <sup>②</sup>	
3/2001	! Upgrade overseas telecommunications bandwidth <sup>①</sup>	
9/2001	! Replace/upgrade aging equipment <sup>③</sup>	
10/2001 - 9/2002	! Replace/upgrade aging equipment ! Next software upgrade cycle: major version upgrades of network operating systems, groupware and standard COTS/Office Suites	
10/2002 -9/2003	! Replace/upgrade aging equipment	

\*Completed

<sup>①</sup> Submitted as part of FY 2001 budget initiative: "US&FCS Virtual Trade Show"

<sup>②</sup> Funding for equipment required to implement this is included in FY 2001 budget initiative: "US&FCS IT Infrastructure"

<sup>③</sup> Funding necessary for US&FCS headquarters and field replacements is included in FY 2001 budget initiative: "US&FCS IT Infrastructure"

### Performance Measures

Next to adherence to IT architectural guidelines and standards, maintaining the technological currency of the IT infrastructure is one of the most critical factors in sustaining the interoperability of ITA's enterprise-wide IT infrastructure. Therefore, hardware and software currency has been selected as the key infrastructure performance measure.

Performance Measures					
Measure	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Technological Currency (%)					
Hardware <sup>1</sup>	90%	75%	95% <sup>†</sup>	95% <sup>†</sup>	95% <sup>†</sup>
Software <sup>2</sup>	95%	95%	95%	95%	95%

Notes:

- (1) Hardware considered current if (a) within one year of general market availability or (b) within one generation of the current product, and its support/replacement parts are still available. Three years is the estimated system life for most hardware.  
 (2) Software is considered current if within one major revision of the current release.

<sup>†</sup> Funding necessary to maintain this level of currency is included in FY 2001 budget initiatives - US&FCS IT Infrastructure

### Information Technology Obligations (in \$000)\*

Resources	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Hardware	4,757	2,424	3,072	2,306	2,436
Software	623	438	615	410	438
Services	10,175	11,007	10,865	10,677	10,698
Other	1,208	1,373	1,030	2,014	2,022
Personnel	1,955	2,267	2,417	2,740	2,805
<b>Total</b>	<b>18,718</b>	<b>17,509</b>	<b>17,999</b>	<b>18,147</b>	<b>18,399</b>

\* This table does not include FY 2001 infrastructure-related budget initiatives. It covers the baseline TNC program only.

## Message Processing System (MPS)

The DOC Telecommunications Center (TCC), operated by the ITA Office of Information Resources Management, provides access to the Department of State's (DOS) world wide telecommunications system for the Office of the Secretary and all Commerce operating units. The TCC is located in the Herbert C. Hoover Building in Washington, D.C. Central to the operation of the TCC is the Message Processing System (MPS), which distributes cable traffic from the DOS system to Commerce recipients and enables Commerce units to send cable traffic overseas via the DOS network. The MPS is connected to the DOS network via a switching station located in Beltsville, Maryland.

The MPS is operational 16 hours a day, 7 days a week and all other times a duty officer is on-call. Cables are sent with a priority assignment, and ITA has guaranteed a 1-hour delivery for all urgent messages during normal operating hours. Cable traffic from the MPS is distributed to DOC customers in either hard copy or electronic format, based on customer preference and the security level of the traffic. Most deliveries are in hard copy format. Based on customer preference, unclassified cables can be distributed via e-mail. An "air gap" is used to separate the MPS from the e-mail network.

Each DOC organization that is a TCC customer has a unique code assigned to it and an associated "profile" which defines the type of cable traffic they are interested in receiving. In addition to receiving traffic directly addressed to them, the MPS profiling system employs a very sophisticated text searching and analysis capability that enables customers to request traffic based on message content.

The MPS is a proprietary system, developed and maintained by the Xerox Corporation, and performs the same function for Commerce as do similar systems operated by the DOS and other foreign affairs agencies.

### *Current Capability*

Based on the figures for the first half of the year, the MPS will distribute approximately 1,832,000 copies for FY1999. An average of 7 copies per message are delivered, making that figure 262,000 messages received. Approximately 95% of the traffic is incoming, the remaining 5% being outgoing. There are currently 253 TCC customers (cable codes) spread throughout the following Commerce operating units: Secretary's Office, ITA, ESA, Census, OIG, NIST, NTIS, NOAA, NTIA, BXA, PTO and Technology Administration. Currently 73% of the copies are distributed to ITA. Archived messages are stored for about 60 days.

During FY1999 the TCC began distributing unclassified cable traffic directly via e-mail to approximately 100 United States and Foreign Commercial Service (US&FCS) domestic field sites.

Schedule - Mo/Yr	
3/1999	! Y2K Compliance
6/1999	! Y2K IV&V Assessment
1/2000	! Completion of Lease-To-Purchase Period
10/2000 -9/2001	! Normal Operations
10/2001 -9/2002	! Normal Operations
10/2002	! Begin Modernization Planning

Performance Measures					
Measure	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Messages Distributed Electronically (%) (vs. Hardcopy)	40%	47%	56%	61%	65%
E-MAIL*	27%	32%	38%	40%	42%
Diskette*	13%	15%	18%	21%	23%

\* Planned

### Information Technology Obligations (in \$000)

Resources	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Hardware	291	99	8	8	8
Software	7	8	8	8	8
Services	173	175	177	177	177
Other	20	21	22	22	22
Personnel	527	535	535	535	535
<b>Total</b>	<b>1,018</b>	<b>838</b>	<b>750</b>	<b>750</b>	<b>750</b>

## Administrative System Investments

### ITA Accounting System

The ITA Accounting System is a central accounting and reporting system which integrates internal accounting and budgetary data input with data provided from external sources, and produces fiduciary and management reports. The system is cost based, and includes obligation and disbursement reporting.

#### *Current Capability*

ITA has recently replaced its accounting system as part of an overall effort to modernize and integrate ITA's financial and administrative management systems and streamline related business processes. ITA has planned this for some time and was anticipating utilizing CAMS. However, when directed by the Department to pursue other solutions, we conducted an analysis that identified outsourcing to the Department of the Interior (DOI) as the best overall solution for meeting ITA's financial systems services needs. DOI's National Business Center (NBC) operates as a federally-authorized franchise providing financial services to 15 other federal agencies (including Commerce's Patent and Trademark Office). The NBC purchased and operates the Federal Financial System (FFS), a system developed by American Management Systems. ITA has entered into an agreement with the NBC and has converted to FFS. NOAA disbursements were transferred to DOI on April 1, 1999 and, with the exception of some property accounting functions supported by the National Finance Center (NFC), all other functions were transferred during August and September 1999.

<b>Schedule - Mo/Yr</b>	
4/1999	! NOAA disbursements transferred to NBC (completed)
7/1999	! Conversion of accounting functions to NBC (completed)
9/1999	! Transfer of capitalized property data to NBC (completed)
10/1999 -9/2000	! Revise Financial reports as appropriate ! Conversion of accountable property from NFC to NBC ! Automate the interface of the credit card for collection and for purchases to FFS ! Test expansion of FFS to clients (outside of Finance Office)
10/2000 -9/2001	! Test implementation of travel system interface, if available from FFS or other sources. ! Expansion of FFS to clients (outside of Finance Office).

Performance Measures					
Measure	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Next Day Reporting Capability and the ability to generate reports as needed.					
Planned	100%	100%	100%	100%	100%
Meeting established servicing levels on payments.					
Planned	100%	100%	100%	100%	100%

#### Information Technology Obligations (in \$000)

Resources	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Hardware	0	0	0	0	0
Software	0	0	0	0	0
Services	2,646	2,099	2,500	2,500	2,500
Other	0	0	0	0	0
Personnel	0	0	0	0	0
<b>Total</b>	<b>2,646</b>	<b>2,099</b>	<b>2,500</b>	<b>2,500</b>	<b>2,500</b>

## Mission System Investments

### Client Management System (CMS)

CMS was developed by the U.S. and Foreign Commercial Service (US&FCS) to assist trade specialists in the domestic Export Assistance Centers in servicing their clients. The system's scope of operation has since been expanded to US&FCS' headquarters and international sites. CMS, a Lotus Notes application, includes both client tracking and management reporting capabilities. Any significant contacts with a client will be recorded in the system, including a record of all products and/or services provided. Each client will be uniquely identified in the system, and any CS staff member will be able to easily access the database and review the complete history of contacts with most clients. The data collected will be a key component in ITA's performance measurement strategy.

#### *Current Capability*

The Lotus Notes platform, which supports CMS, has been a desktop tool for ITA's domestic field trade specialists since 1998. First deployed domestically and then in internationally offices, CMS is used in their daily work to keep track of client contacts and to record the ITA products and services provided as part of their business counseling activities.

CMS has become the primary performance measurement tool for ITA's business counseling functions. Plans to expand the use of CMS to other units of ITA are under consideration.

Schedule - Mo/Yr	
3/1999	! Y2K Contingency Plan (completed)
1/2000	! Development enhancements and expanding information collection
10/2000 -9/2001	! Update software version ! Continue with development enhancements and expanding information collection
10/2001 -9/2002	! Development enhancements ongoing and expanding information collection
10/2002 -9/2003	! Development enhancements ongoing and expanding information collection

*Performance Measures*

Effective client tracking is key to ITA's ability to support our clients and to produce meaningful performance measurement data. Since CMS offers the opportunity to have a client tracking system, its performance will be measured by its ability to capture data from significant contacts. In other words, the system's degree of success is directly tied to the progress of its adoption and usage. Performance will be measured by achievement of CMS utilization as depicted in the following schedule:

Performance Measures					
Measure	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Implement System Worldwide					
Planned	100%				
Develop and Deploy Enhancements					
Planned		20%	40%	60%	80%
Expand Information Collection from Clients					
Planned	20%	40%	60%	80%	100%

**Information Technology Obligations (in \$000)**

Resources	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Hardware	0	0	0	0	0
Software	5	5	5	5	5
Services	100	40	40	40	40
Other	0	0	0	0	0
Personnel	240	125	127	130	130
<b>Total</b>	<b>345</b>	<b>170</b>	<b>172</b>	<b>175</b>	<b>175</b>

Tariff Quick-Service Program (TQP)

The Tariff Quick-Service Program (TQP) is a new system planned for development in FY2001. The system will bring the U.S. Government's tariff/taxes and customs information services for exporters up-to-date to be competitive with those offered by the European Commission to European exporters. U.S. exporters need information quickly on tariffs/taxes assessed on their goods by foreign countries to quote prices to their customers and agents and analyze or monitor the price competitiveness of their products. Small and medium sized firms without overseas offices or extensive research budgets particularly rely on the Commerce Department for individual tariff/tax rates, not readily available elsewhere. Without this service, U.S. exporters are at a disadvantage compared to their European counterparts, who are some of our major competitors in international markets.

*Current Capability*

ITA currently provides tariff/tax information on individual products to U.S. exporters, primarily small and medium sized companies. With only a few countries' tariff schedules on the Internet and other electronic sources very expensive, ITA staff currently uses a clumsy process of looking up most tariff rates manually in often out-of-date, dilapidated books.

TQP will be used primarily by ITA's Trade Information Center (TIC) staff, who provide export counseling via telephone, email, and the web. Tariff information is currently one of the most commonly requested services, but one of the most difficult to provide quickly because the information is not readily accessible in electronic form. The TQP will enable rapid retrieval of more accurate tariff data and more efficient dissemination of this information by TIC staff.

*Planned Activities*

Development of the TQP, accession of the data, and loading the information into the database will be contracted out to the private sector.

Schedule - Mo/Yr	
10/2000	! Develop solicitation
12/2000	! Initiate acquisition
2/2001	! Award contract
9/2001	! Develop and Deploy the Tariff Quick-Service Program

*Performance Measures*

Tariff Information Updates: After the year 2000, the tariff/tax information in the database will be updated semiannually.

Response Time: The time required to respond to written exporters' tariff/tax inquiries will be reduced.

Country Database Updated: The country databases, published on the Internet and used by the TIC to answer country-specific, non-tariff inquiries, will be systematically updated, as staff time is freed from tariff work.

Performance Measures					
Measure	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Tariff Updates					
Planned	0	1	2	2	2
Response Time - in days					
Planned	5-7	3-5	2-4	1-2	1-2
Country Databases Updated					
Planned	0	1	2	3	3

**Information Technology Obligations (in \$000)**

Resources	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Hardware	0	10	0	0	0
Software	0	0	0	0	0
Services	0	499	0	0	0
Other	0	0	0	0	0
Personnel	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>509</b>	<b>0*</b>	<b>0*</b>	<b>0*</b>

\* Outyear costs are included in TNC

## Trade Policy Information System (TPIS)

TPIS is part of the data automation programs activity of the Office of Trade and Economic Analysis, in Trade Development. The purpose of the TPIS is to provide government analysts a single consistent source of trade information that is powerful and flexible enough to meet the diverse needs of the Federal Government trade community to provide business counseling services, to support trade policy analysis, to conduct legal and investigative activities related to import protection, export licensing, national security issues, and trade negotiations, to support export promotion activities, and to engage in other investigative or analytical activities of the U.S. Government as it relates to international trade statistics.

### *Current Capability*

ITA has for years provided certain automated data services to the United States Government (USG) Trade Community through TPIS. The Department of Commerce accounts for about half of TPIS's use, and other agencies (ITC, Agriculture, USTR, etc.) making up the remainder.

- ! TPIS is a computer-based repository of detailed current and historical trade data including:
  - Detailed U.S. merchandise trade statistics (originating with the Bureau of the Census);
  - Trade statistics of over 170 countries (from the U.N.); and
  - Multi-country statistics on international finance, direction of trade, and developing country debt (from the International Monetary Fund).
  
- ! TPIS is distinguished by its ability to do retrieval and manipulation operations on a variety of consistent, detailed and extensive data series that are maintained up-to-date. Thus, it:
  - Enables comprehensive trade policy analysis for decision makers;
  - Reduces reaction time for factual research supporting trade policy decision-making;
  - Assures that data used are timely;
  - Makes data available with consistent values throughout the USG trade community; and
  - Provides a processing capability equally important as the data, equipped with special tools for extensive analysis and customized reports.
  
- ! Other distinguishing characteristics of TPIS are:
  - All the updating can be done in batch mode;
  - "Queries" can be very complex and large, in the sense of involving many retrievals, sorts, indexed secondary retrievals, and so on, potentially involving a great deal of data, and should be processed in a reasonable session time; and

- The database is quite large, approximately 180 gigabytes.
- !
- Clients need it for:
- Trade policy development; *e.g.*, identifying unusual trade patterns indicating trade barriers;
  - Trade policy implementation; *e.g.*, developing tariff line item retaliation lists, monitoring textile/apparel and other import quotas/restraints;
  - Trade transportation and district analysis.
  - Publishing reports which contain data on U.S. exports and imports by product group and trading partner; and
  - Export promotion planning; *e.g.*, analysis of U.S. export capabilities and global competition; and

#### *Changes in the Last Year*

TPIS is an evolving system. On-going maintenance and enhancements are being handled by the in-house support staff. Additional server capacity has been added, running on a Windows NT platform. Server upgrades are being made to our UNIX base platform to improve performance and replace obsolete equipment. Additional databases are being added this year. A thin client via web browsers is now available for selected TPIS databases and is being expanded to include access to all TPIS databases. A more powerful Windows client interface is also being added. A number of improvements to TPIS' computational power have been implemented thus far in FY 1999, and several more will be added by the end of the year.

#### *TPIS Value To Trade Community*

TPIS indisputably is needed by the USG Trade Community (as found in a recent independent review). It is presently used about 8,000 times each year by approximately 100 users in a couple of dozen agencies and fulfills needs not met elsewhere. The long historical series of trade data contained in the TPIS are unique in the trade community. Also unique is the capacity of the TPIS system to produce large volumes of output for users. As usability improves and performance is improved over the next couple of years, usage is expected to roughly triple.

Schedule - Mo/Yr	
3/1999	! Y2K Contingency Plan (completed)
11/1999	! Move to 32 Bit Windows Client and Web Browser Client, Add State Export Data. Improve performance
3/2002	! Add Industry data. Add Historical UN HS
6/2003	! Enhanced Reporting, and Printing
3/2004	! Add high-end analytical tools

Performance Measures					
Measure	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
# of Users					
Planned	100*	175	250	300	300
# of Lines of output (millions)					
Planned	10M	12M	15M	18M	22M
# of Data Requests					
Planned	8,000	11,000	14,000	17,000	20,000

\* Actual

### Information Technology Obligations (in \$000)

Resources	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Hardware	60	40	50	80	60
Software	35	80	80	30	30
Services	40	30	35	35	40
Other	5	5	5	6	6
Personnel	361	371	382	394	406
<b>Total</b>	<b>521</b>	<b>526</b>	<b>552</b>	<b>555</b>	<b>542</b>

# **New IT Investment Proposals for FY 2001**

## **IT Infrastructure Investments**

### **US&FCS Virtual Trade Show (E-Commerce) Initiative**

This proposal includes funding for five separate e-commerce projects designed to bring small- and medium-sized enterprises (SMEs) into exporting via virtual trade missions and trade shows.

- **Virtual Trade Show (VTS)** – (\$50,000) -- This project will fund contracted services of a support person in the US&FCS field plus the installation of a Domino Enterprise Server to ensure reliable availability of the VTS product. Included in the proposal are leased line charges, Domino Web Server hardware and software, and contracted person-hours. This project will take advantage of the Internet platform to bring buyers and sellers together in a timely, cost effective manner. This type of approach is particularly important for distant markets and SMEs. A field-based web-hosting capability will be implemented that operates in concert with headquarters web-hosting capabilities and acts as a high-capacity site to support maximum customer access.
- **Webcasting** -- (\$430,000/4 FTE) – Building on the anticipated upgrade of the US&FCS network to Release 5 of Lotus Notes, this project will extend the RealVideo® license that is included with R5 servers to a world-wide client license. This project will foster timely, worldwide dissemination by supporting the capability to broadcast live and taped video material to US&FCS clients, to the exporting community at-large, and to US&FCS employees worldwide. US&FCS will offer live webcasts of US&FCS content and product providers, as well as US&FCS management to US&FCS employees worldwide and US&FCS clients. Webcasting under this plan will be delivered appropriately to broad-band clients (i.e., those with high-speed Internet connections) as well as narrow-band clients.
- **Push project** -- (\$75,000) -- Using commercial-class “push” technology such as Backweb® servers, this project will put in place a US&FCS HQ capability to respond to staff and client needs as well as market new content and products. This project will market US&FCS opportunities to client desktops by developing high-capacity delivery using web- and FAX-based networks to allow clients and staff to receive hyper-linked newsletters. Weekly newsletters will be instituted in order to direct the attention of clients and staff to updated market research content as well as other information available from the US&FCS content network.
- **Bandwidth** -- (\$2,000,000) -- This project will fund necessary increases in wide-area-network bandwidth to support current (e-mail) and planned initiatives (Internet/e-commerce). This project will also continue to fund increases in

network capacity at US&FCS sites abroad. US&FCS will procure expanded bandwidth in through the Diplomatic Telecommunications Service-Program Office (DTS-PO) and continue its aggressive program of connecting to a wider number of sites in a more efficient manner. All overseas sites will be upgraded to a minimum of 19.2Kbps bandwidth over a two-year period. The requested bandwidth is the minimum required to support the planned e-commerce applications. 64 Kbps service will most likely be provided to the majority of sites under this proposal.

- US&FCS Website -- (\$475,000) -- This project will fund necessary IT components needed to eliminate congestion and increase reliability of the US&FCS website. US&FCS will build upon its FY1999/2000 website, including expected increases in traffic, by instituting “mirror” sites in Europe, Africa, South America, and Asia. Using production-quality webserver equipment and Lotus Domino application servers, this proposal handles the traffic appropriately in overseas regions with separate telecommunications lines to the Internet, separate server equipment, and contractual services. For legal and privacy reasons, e-commerce transaction servers would remain in US&FCS HQ. This proposal creates identical server sites that mirror the content of the US&FCS website in each overseas region. The domestic field would be adequately served by the central headquarters-based website server. As a result of this proposal, worldwide access to US&FCS content and services will be supported and guaranteed.

#### *Current Capability*

- Virtual Trade Show -- Currently as a pilot program, this project takes advantage of the internet platform to bring buyers and sellers together in a timely, cost effective manner. This type of approach is particularly important for distant markets and SMEs.
- Webcasting -- Currently, the US&FCS has no in-house capability to foster timely, worldwide dissemination to broadcast live and taped video material to clients, to the exporting community at-large, and to US&FCS employees worldwide.
- Push project -- Pilot projects in FY1998 and FY1999 have supplied metrics that demonstrate client demand and tolerance for reactive publishing. Currently, US&FCS has no capability for high-capacity delivery of newsletters and other timely market information using web- and FAX-based networks.
- Bandwidth -- Currently, the US&FCS is suffering from lack of wide-area-network bandwidth overseas.

- US&FCS Website – Currently US&FCS maintains a number of store-front websites that are not fully developed and are not sufficiently interactive to support the day-to-day counseling efforts.

Schedule - Mo/Yr	
9/2000 -4/2001	<ul style="list-style-type: none"> <li>! Fully deploy the Virtual Trade Show concept</li> <li>! Deliver live webcasts of programs and services to broad/narrow-band clients</li> <li>! Begin “push” project of weekly newsletters to clients and staff</li> <li>! Begin upgrade all overseas sites to a minimum 19.2 Kbps bandwidth over a two year period</li> <li>! Create mirror web server sites in Europe, Africa, South America, and Asia</li> </ul>
9/2001	! Complete upgrade of all overseas sites to minimum 19.2 Kbps bandwidth.

Performance Measures*			
Measure	FY 2001	FY 2002	FY 2003
Number of Reports Distributed			
Planned	+400	+800	+800
Number of Trade Events (virtual)			
Planned	+4	+8	+8
Number of Firms			
Planned	+75	+150	+150

\* increase to base program performance measures attributable to this initiative

### Information Technology Obligations (in \$000)

Resources	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Hardware	0	0	62	62	62
Software	0	0	0	0	0
Services	0	0	578	578	578
Other	0	0	2,171	2,167	2,167
Personnel	0	0	219	279	279
<b>Total</b>	<b>0</b>	<b>0</b>	<b>3,030</b>	<b>3,086</b>	<b>3,086</b>

FTE	0	0	3	4	4
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## US&FCS IT Infrastructure Initiative

This proposal includes several IT infrastructure development projects, to include replacing IT equipment in the field and US&FCS headquarters, the addition of BorderGuard® telecommunications security equipment, and increased use of technology to centralize and support distance learning. These projects will strengthen US&FCS' information technology platform in critical ways that will enable US&FCS to fulfill its mission to bring small- and medium-sized businesses into exporting.

### IT Infrastructure Equipment

- Vintage replacements – (\$4,000,000) -- By FY2001, a significant portion of the desktops and servers put in place as a result of the FY1997-1999 US&FCS IT Modernization will have reached their replacement age. This proposal funds the purchase and installation of replacement equipment in the field sites and US&FCS headquarters.
- BorderGuard® – (\$1,200,000) -- Required telecommunications security equipment needed to provide desktop internet access for international locations—deliver “internet to the desktop” at US&FCS sites in U.S. Embassies and Consulates. Working with DTS-PO staff, US&FCS plans to procure and install BorderGuard® security equipment at each of 100 local-area-network sites. This equipment allows secure delivery of Internet traffic using DTS-PO communications lines and prevents network penetration.

### Commercial Service Institute Component - (\$1,255,000/ 2 FTE)

The Commercial Service Institute will be rolled out as a comprehensive distance learning program for professional skills development for a worldwide workforce and, eventually, U.S. SME exporters. In order to maintain its standard of high quality service, the Commercial Service must provide frequent and rigorous training to its global workforce. This proposal is designed to use technology to centralize and support distance-learning.

At a modest equipment cost, the CSI can be supported at US&FCS headquarters with a production-quality computer server and distance learning software. Equipment and software estimates are in keeping with the Lotus Domino platform and the Lotus LearningSpace® distance learning package. The two new staff positions will support the IT needs of the CSI and ensure content updates and monitor service delivery. Funds will be applied to the development of five distance-learning courses, at a cost of approximately \$200,000 each.

*Current Capability*

IT Infrastructure Equipment

- Desktops and Servers – US&FCS is just completing its modernization program begun in FY 1997 requiring the scheduling of replacements for the Year 2001.
- Overseas Internet Access and Security - Currently US&FCS is unable to deliver desktop Internet access for international locations because field offices lack proper telecommunications security equipment.

Commercial Service Institute

US&FCS has initially created and piloted use of The Commercial Service Institute as a potential centralized, comprehensive distance learning program for professional skills development. Currently, training is provided through the several sectors of the Commercial Service, and in most cases, it is not systematic or responsive.

<b>Schedule - Mo/Yr</b>	
10/2000	<ul style="list-style-type: none"> <li>! Purchase and install replacement IT equipment in the field sites and US&amp;FCS headquarters</li> <li>! Procure and install BorderGuard® security equipment</li> <li>! Centralize and support distance learning by adding FTE and IT equipment</li> <li>! Develop five distance learning courses</li> </ul>
10/2001 -9/2002	! Maintain operations
10/2002 -9/2003	! Maintain operations

*Performance Measures*

Overall, this initiative will increase staff productivity by

- Fostering client service and product delivery;
- Increasing US&FCS’ ability to serve more clients, and
- Increasing the number of employees receiving training at regular intervals.

Additional benefits that result from each component of this initiative are summarized below.

#### IT Infrastructure Equipment

- Vintage replacements – New server hardware will eliminate server failures, and modernization of desktop PC equipment will yield staff productivity increases due to increased speed and reduced “downtime.”
- BorderGuard® -- Installation of this equipment will enable Internet access within security tolerances accepted by State Department’s Office of Diplomatic Security, and allow US&FCS staff at posts to benefit from rapid access to Internet sites and content.

#### Commercial Service Institute

- The CSI will be fully-supported in-house under this proposal, and will generate cost savings relative to leasing webspace on a commercial distance-learning provider. The CSI will eventually operate under a partial cost recovery system through providing how-to-export training to SME clients.

Performance Measures*			
Measure	FY 2001	FY 2002	FY 2003
Number of Clients			
Planned	+100	+400	+600
Number of Custom Agency Reports			
Planned	+50	+100	+100
Number of New-to-Export Firms			
Planned	+25	+50	+75
Number of New-to-Market Firms			
Planned	+75	+150	+225

\* increase to base program performance measures attributable to this initiative

**Information Technology Obligations (in \$000)**

Resources	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Hardware	0	0	5,409	5,409	5,409
Software	0	0	0	0	0
Services	0	0	564	564	564
Other	0	0	274	270	270
Personnel	0	0	208	266	266
<b>Total</b>	<b>0</b>	<b>0</b>	<b>6,455</b>	<b>6,509</b>	<b>6,509</b>
FTE	0	0	3	4	4

## Mission System Investments

### AD/CVD Document Management Automation

This increase enables Import Administration (IA) to develop and implement a plan to automate and electronically store AD/CVD case files. This increase supports the Department's goal to enforce U.S. trade laws and agreements to promote free and fair trade.

While IA has applied available technology to simplify tasks in most areas of its operations, insufficient resources have delayed the undertaking of this substantial business process re-engineering and systems initiative. IA performs complex calculations on desktop computers, distributes information worldwide over the Internet, operates a state-of-the-art local area network, maintains a 300,000 records abstract database, and sends and receives email from around the world, yet continues to receive, maintain, and distribute all its records on paper. Technology will not only provide for electronic storage of AD/CVD case documents currently in hard copy form, but also provide for the electronic receipt of documents from the public, thereby eliminating hard copy submissions whenever possible.

#### *Current Capability*

Official IA case records holdings comprise in excess of 15 million pages stored in more than 4,500 boxes and grow at about 4 cubic feet or 2,000 pages per day. IA pays \$30 per sq. ft. per year of storage space in Herbert C. Hoover Building. In the current hard copy storage environment spanning multiple rooms and government facilities, much of this valuable data is not accessible to IA staff or to the public. IA is required by the Trade Act of 1979 to make the non-proprietary portions of the record of its proceedings publicly available. In order to continue to fulfill that requirement IA must find ways to make its information management systems more efficient and modern.

#### *Planned Activities*

This initiative involves a two-phased approach:

1. Hire a business process re-engineering and systems contractor to:
  - ! analyze the AD/CVD document flow throughout the CRU and IA overall to determine need and access requirements;
  - ! analyze the AD/CVD case document short- and long-term storage needs and issues;
  - ! recommend business process changes needed to accommodate electronic automation; and
  - ! develop a blueprint plan to electronically automate document flow and storage.

2. Implement the blueprint plan by:

- ! independently testing the viability of the plan;
- ! developing procurement plans for short- and long-term hardware and software purchases and installation;
- ! hiring a contractor to complete actual installation and complete follow-up system modifications and maintenance as necessary;
- ! providing training on systems implementation and maintenance of appropriate staff; and
- ! conducting internal and external outreach to fully implement the system.

<b>Schedule - Mo/Yr</b>	
6/2000 -11/2000	! Pre-solicitation activities
1/2001-3/2001 4/2001 5/2001-7/2001 8/2001-9/2001	! Conduct acquisition ! Award contract ! Perform Business Process Reengineering study ! Develop Implement a blueprint plan prepared by the systems contractor
10/2001	! Operate system

*Performance Measures*

Several benefits will accrue from implementation of an electronic document management system for IA case records:

- ! greater accessibility of case documentation to IA analysts and the public,
- ! reduction in the rate of increase of hard-copy storage costs, and
- ! additional resources available for case processing, as some of the resources associated with manual case records management can be redirected.

These benefits will translate into more efficient and effective processing of AD/CVD reviews, as reflected in the performance measures below.

**Information Technology Obligations (in \$000)**

Resources	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Hardware	0	0	24	24	24
Software	0	0	0	0	0
Services	0	0	0	0	0
Other	0	0	966	966	966
Personnel	0	0	104	132	132
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1,094</b>	<b>1,122</b>	<b>1,122</b>
FTE	0	0	3	4	4

## IT Architecture and Planning Investments

### Creation/Staffing of Office of the CIO

Increased resources are required for ITA to establish and staff an effective CIO office. If this initiative is funded, a Chief Information Officer position and office will be created. The CIO will report to the Deputy Under Secretary for International Trade. A CIO and three additional staff members will be hired with expertise in various phases of IT planning, analysis, and oversight. The CIO will participate as a key member of ITA executive management team and will use her/his skills to create an understanding among the executive management team of the value of IT as a mission enabler. Existing IT staff and operations will come under the purview of the CIO. All IT planning, systems development, operations and data telecommunications will be managed by the CIO's office. Increased contractor support will be used to analyze, recommend and develop a variety of policies, procedures and documents dealing with IT architecture, planning, security, messaging, telecommunications, etc. The CIO's office will be in a position to manage IT as an investment using clear performance measures to monitor progress on all IT initiatives. The CIO will be responsible for formulation and execution of all IT budget initiatives working in conjunction with the cognizant program managers.

### *Current Capability*

ITA does not have an official CIO or CIO organization as envisioned in Departmental guidance. The Director of ITA's Office of Information Resources Management (OIRM) currently serves as the defacto CIO, along with having responsibility for a wide range of operational IT activities. However, the current arrangement is adequate to address the IT policy mandates and Department CIO initiatives associated with:

- Information technology architecture;
- IT capital planning and investment analyses;
- Expanded use of electronic commerce (Digital Department);
- IT security;
- Protection of minimal essential infrastructure;
- Messaging standardization; and
- Enhanced global telecommunication.

Schedule	
4/2001	<ul style="list-style-type: none"> <li>! Create CIO position and office</li> <li>! Hire CIO and 3 office staff with expertise in planning, analysis and oversight</li> </ul>

### *Performance Measures*

This initiative will contribute to several significant improvements to ITA programs and mission. It will enhance distribution of information products and services to our customers; increase customer satisfaction with ITA's information collection and dissemination activities; increase compliance with the spirit and requirements of the Clinger-Cohen Act and Departmental CIO guidance; and improve utilization of ITA's IT resources.

Performance Measures			
Measure	FY 2001	FY 2002	FY 2003
Systems in Compliance with IT Architecture			
Planned	2	3	4
Approval of Systems Security Plans			
Planned	3	4	5

#### Information Technology Obligations (in \$000)

Resources	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Hardware	0	0	0	0	0
Software	0	0	75	0	0
Services	0	0	1,295	1,281	1,281
Other	0	0	116	116	116
Personnel	0	0	314	403	403
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1,800</b>	<b>1,800</b>	<b>1,800</b>
FTE	0	0	3	4	4

## **Response to IT Mandates and Initiatives**

### Year 2000

ITA's mission critical systems are all Y2K-compliant as of March of 1999. System contingency plans are in place and ITA's Business Continuity and Contingency Plan (BCCP) has been completed. Department-sponsored reviews of our Y2K work performed on several of our systems found no major problems.

### Presidential Decision Directive 63 (Critical Infrastructure Protection)

ITA has determined the none of its IT assets meet the criteria necessary to be designated as Minimum Essential Infrastructure (MEI) for the purposes for PDD 63. We, therefore, have not prepared Critical Infrastructure Protection Plan. However, we are monitoring the progress of these efforts at the Departmental level and intend to apply any pertinent lessons-learned to ITA's requirements.

### Reducing Paperwork Burden

Paperwork reduction plans have been submitted separately from this document. ITA's general strategy to reduce paperwork burden for our clients is to use electronic forms. The first step will be to enable a client to *view and print* forms from an ITA website. The second step will be to enable a client to *fill out and print* the forms. Our third and final step will be to enable a client to *fill out and submit the form electronically*. Plans are underway to pilot a web-based version of one of ITA's most-used public forms, the Trade Event Participation Agreement. We have recently nominated staff to participate in the DOC Electronic Forms Affinity Group, and look forward to collaborating with the other operating units throughout the Department on this issue.

### Clean Financial Audits

Our transition to a new accounting system should set the stage for ITA to achieve a unqualified audit opinion in the near future. Migration to the new system is underway and should be completed by October 1999.

### Digital Department

We concur with the spirit of the Digital Department initiative and have been working over the past several years to take maximum advantage of Internet technologies to interact with our customers. This year's plan includes several Internet-related budget increase proposals aimed at furthering our progress on this front. The table below outlines our current plans in this regard for each of our major IT investments.

## ITA Implementation of Digital Department Goals

Investment	Plans
Infrastructure Investments	
Total Network Compatibility (TNC) Program	! migrate to full enterprise-wide IP-based network in FY 2000 ! maintain up-to-date browsers and web access tools for ITA users
<i>US&amp;FCS Virtual Trade Show Initiative</i>	! <i>includes implementation of new E-commerce applications for interacting with ITA customers</i>
<i>US&amp;FCS IT Infrastructure Initiative</i>	! <i>provides bandwidth necessary for access for ITA overseas posts to participate in E-commerce applications</i>
Message Processing System	No plans - this is a secure system
Administrative System Investments	
ITA Accounting System	! Internet/web tools will be used as the interface for users to obtain access to system reports
Mission System Investments	
<i>AD/CVD Document Management Automation</i>	! <i>Provide a public interface to case documentation through the web</i>
Client Management System (CMS)	

## IT Security Program

An assessment of the ITA IT Security Program was included with our Strategic IT Plan submitted earlier this year. We have been unable to meet the targets established at that time, primarily as a result of resources constraints. However, in addition to resource issues, the other primary hindrance is the lack of a cost-effective risk assessment methodology. We are now in the process of conducting a review/certification exercise of the Message Processing System (MPS), one of our classified systems, as a joint exercise with the Office of Security. We are hopeful that the process used to conduct this review can serve as a model for our other systems. If so, we should be able to make substantial progress toward meeting the objectives outlined in the CIO's memo of June 9<sup>th</sup>, i.e.

- ! submitting updated IT security plans by September 1999, for those systems whose plans are out-of-date, and
- ! bringing all security plans into compliance with National Institute of Standards and Technology (NIST) Special Publication 800-18 by May 2000.

## IT Training and Retention

ITA has no significant initiatives underway in this area and is looking to the Department and the experience of other Federal agencies for guidance. The total number of Government IT professionals in ITA is relatively small (approximately 45 individuals), the majority of whom are involved in management or oversight of activities associated with IT infrastructure. Most of the IT work associated with system development, network administration and operations, and user support, is performed by contractors. The ratio of Government IT staff to contractor averages around 1-to-2.5. Since we depend so heavily on outsourcing, much of the burden for retaining and training IT staff that support ITA activities actually falls to our contractors. The administrative organization in ITA has recently initiated an Individual Development Plan (IDP) program, so IT training needs for central IT management and planning staff (those involved in performing CIO management functions) will be addressed through this vehicle. For the remainder of the IT workforce, classes available through commercial vendors and Government sources are the primary means of training. Historically, turnover of Government IT staff has been relatively low, so retention has not been seen as a major challenge. This may be changing, however, as we have recently experienced the departure of two high-level IT managers.

## Financial Summary of Major IT Investments

The table below reflects the planned obligations for each of ITA's major IT investments, both current and planned. New initiatives proposed for funding in the FY 2001 budget are shown in italics.

Information Technology Obligations (\$000)					
Cost Category	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Infrastructure Investments					
Total Network Compatibility (TNC) Program	18,718	17,509	17,999	18,147	19,399
<i>US&amp;FCS Virtual Trade Show Initiative</i>			<i>3,030</i>	<i>3,086</i>	<i>3,086</i>
<i>US&amp;FCS IT Infrastructure Initiative</i>			<i>6,455</i>	<i>6,509</i>	<i>6,509</i>
Message Processing System	1,018	838	750	750	750
Subtotal	<b>19,736</b>	<b>18,347</b>	<b>28,234</b>	<b>28,492</b>	<b>28,744</b>
Administrative System Investments					
ITA Accounting System	2,646	2,099	2,500	2,500	2,500
Subtotal	<b>2,646</b>	<b>2,099</b>	<b>2,500</b>	<b>2,500</b>	<b>2,500</b>
Mission System Investments					
<i>AD/CVD Document Management Automation</i>			<i>1,094</i>	<i>1,122</i>	<i>1,122</i>
Client Management System (CMS)	345	170	172	175	175
Tariff Quick-Service Program (TQP)	509	*	*	*	*
Trade Policy Information System (TPIS)	554	571	594	623	652
Subtotal	<b>866</b>	<b>1,205</b>	<b>1,818</b>	<b>1,852</b>	<b>1,839</b>
IT Architecture and Planning Investments					
<i>Creation/Staffing of Office of the CIO</i>			<i>1,800</i>	<i>1,800</i>	<i>1,800</i>
Subtotal			<b>1,800</b>	<b>1,800</b>	<b>1,800</b>
TOTAL	<b>23,248</b>	<b>21,651</b>	<b>34,352</b>	<b>34,644</b>	<b>34,883</b>

\*Outyear costs are included in TNC