

**CFTC  
FIVE-YEAR PLAN FOR  
INFORMATION RESOURCES  
MANAGEMENT**

**FY 2000-2004**



**March 2000**

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## **EXECUTIVE SUMMARY**

The futures industry is fast growing, information-intensive, and increasingly complex. The industry continues to expand into new markets and embrace electronic trading as a supplement to open-outcry trading, creating a virtual global market. This evolution makes it imperative that the Commodity Futures Trading Commission (CFTC or Commission) continue to develop and maintain automated information systems to support effective market surveillance and investigative activities as it shifts its emphasis from a front-line regulator to an oversight regulator. Without these systems, the Commission will be unable properly to protect market users and the public from manipulation, fraud, and other trading abuses.

### **New Requirements for Information Systems and Computing Infrastructure**

Over the past 15 years, the Commission has established a strong foundation of information systems that support programmatic and administrative functions. During these 15 years, the linking of personal computers into a network has empowered staff effectively to access and analyze information. This network environment has facilitated the agency's migration from its costly mainframe environment, in which the development of automated systems was impeded by older software, to a more cost-effective client/server environment, in which the rapid development of systems is made possible by more modern software.

In addition to the development of client/server systems to support specific business functions of the Commission, the CFTC conducts activities in two areas designed to strengthen its computing infrastructure. The first is the provision of services facilitating information delivery and relates to the manner in which the infrastructure meets the CFTC's information processing requirements. This includes office automation tools such as Microsoft Office and electronic mail (e-mail), training for staff in those and other products, and remote access facilities to allow staff to access the Commission's information resources while away from the office. The second area is the monitoring and adjustment of the infrastructure's capacity and performance to better support processing demands. Capacity and performance relate to the infrastructure's ability to accommodate the organization's processing demands and addresses such factors as communication speeds, data storage, and processor speeds.

## **PLAN DEVELOPMENT**

In developing this five-year Information Resources Management (IRM) Plan, CFTC:

- Conducted an extensive review of existing information systems and services;
- Conducted staff interviews to determine requirements for new or modified information systems and services;
- Determined infrastructure improvements required to support the planned use of information systems and services;
- Grouped new requirements into projects and activities;
- Prioritized projects and activities;
- Prepared staffing and funding estimates; and
- Developed an implementation plan for these projects and activities.

During the five years of this plan, the Commission will devote nearly half of its Office of Information Resources Management (OIRM) line staff resources to system development activities. One-third of those resources will be applied to the Commission's two mission-critical information systems, the Integrated Surveillance System (ISS) and the Exchange Database System (EDS). These systems enable the Commission to conduct market surveillance and trade practice investigations. The remaining two-thirds of system development resources will be focused on systems to support legal research, litigation tracking, financial surveillance, and administrative functions. Approximately one-third of the OIRM line staff resources not devoted to systems development activities will be applied to projects and activities that will further improve the Commission's computing infrastructure. Examples of high priority projects and activities in that area include continued development of the Commission's Intranet and upgrading of communications facilities in the Commission's three major offices.

### **Staffing, Funding, and Implementation Schedule**

OIRM allocates staff resources and funds to projects and activities in accordance with established priorities. Its highest priority is to complete the migration of applications from the Commission's mainframe computer in preparation for the closure of the CFTC mainframe Data Center in June 2000. OIRM will use the skills acquired during that migration in developing other systems to support the Commission's regulatory mandate and necessary administrative functions. During this time, OIRM will also enhance the Commission's computing infrastructure through the addition of new services and improved facilities.

OIRM's implementation schedule reflects its attempt to balance known priorities with available staff and funds. Whenever resources are available, OIRM will devote them to the highest priority project to which they can be most usefully applied.

## **Mechanism for Updating this Plan**

CFTC has an established IRM planning process under the direction of the Executive Director of the Commission and the Director of OIRM. The process includes a formal annual review as well as ongoing revisions as significant events occur which impact the plan. See Chapter V for details of the updating process.



# CHAPTER I

## INTRODUCTION

### **The Commission**

The CFTC was created by Congress in 1974 as an independent agency with the mandate to regulate futures and option markets in the United States. The Commission's mandate was renewed and expanded in 1978, 1982, 1986, and 1992. In 1995, the Commission was reauthorized through Fiscal Year (FY) 2000.

The CFTC is responsible for ensuring the economic utility of futures and option markets. To that end, the CFTC encourages the competitiveness and efficiency of these markets; ensures their integrity; and protects market participants from manipulation, abusive trade practices, and fraud. Through effective oversight regulation, the CFTC enables the futures and option markets better to serve their vital function in the nation's economy—providing a mechanism for price discovery and a means of offsetting price risks.

### **Futures Industry Environment**

Four aspects of the futures industry environment have particular significance for this plan:

- The sustained pattern of growth in futures and option trading;
- The information-intensive nature of the industry;
- The industry's self-regulatory responsibilities; and
- The increased and more complex interrelationships among global financial markets.

### **Pattern of Sustained Growth**

The volume of CFTC-regulated futures and option trading has doubled in the last ten years. In that period, the amount of money under management in CFTC-regulated pools and managed accounts has increased tenfold.

### **Information-Intensive Nature of the Industry**

To ensure the financial and market integrity of the nation's futures and option markets, in FY 1999 the CFTC, among other things:

- Monitored the activities of 61,235 firms and individuals who handle customer funds and orders, give trading advice, organize commodity pools, or execute

orders on exchanges. An emphasis of the agency's market surveillance program is on the activities of individuals, called large traders, whose high trading volume makes them most capable of price manipulation;

- Reviewed and approved 73 proposed futures contracts and more than 800 rule changes for existing contracts;
- Audited 38 firms for compliance with CFTC and self-regulatory organization (SRO) rules; and
- Reviewed more than 5700 financial reports filed by firms.

Each of the tens of millions of trades made annually is tracked and recorded through a network of information systems maintained by eleven exchanges, over 200 futures commission merchants (FCMs), and seven clearinghouses. Records of all futures and option transactions are submitted either routinely or on request to the CFTC so it can perform its oversight responsibility.

### **Self-Regulatory Responsibilities**

The futures industry in the United States is self-regulating with federal government oversight. The SROs include the exchanges, the clearinghouses, and the National Futures Association (NFA). Pursuant to the Commodity Exchange Act (CEA), the SROs investigate possible trade practice violations by:

- Conducting audit and financial surveillance to enforce the Commission's and the SROs' financial responsibility rules;
- Conducting commodity pool operator (CPO) and commodity trading advisor (CTA) reviews;
- Processing registration applications; and
- Taking adverse action, as needed, against market participants.

### **Increased and More Complex Interrelationships Among Global Financial Markets**

Several factors have driven market participants and the Commission to increase their use of automation. These factors include the globalization and increasingly competitive environment of the financial markets and the expansion of the worldwide electronic marketplace.



## Objectives and Assumptions

### Objectives

The major objectives of this plan are to:

- Identify the Commission's requirements for information systems and services;
- Define and prioritize projects and activities to provide the systems and services necessary to satisfy those requirements;
- Establish staffing and funding levels sufficient to conduct those projects and activities; and
- Develop an implementation schedule that balances needs with resources.

### Assumptions

In developing the plan, the following assumptions were made concerning the direction of the agency over the next five years:

- The CFTC will seek to maintain its regulatory presence in the futures and option industry as it shifts its emphasis from a front-line regulator to an oversight regulator;
- Recent changes such as globalization, electronic trading systems, and increased use of the Internet will further challenge the CFTC;
- The principal mechanism for regulation of the futures and option industry will continue to be self-regulation with CFTC oversight;
- The CFTC will seek to enhance its ability to respond to intermarket events and financial emergencies with expanded information resources;
- The CFTC will review the application of its existing regulatory framework to accommodate innovation in products and trading practices;
- The CFTC will seek to increase productivity through the expanded use of automation; and
- The CFTC will continue to enhance law enforcement, market surveillance, litigation support, and investigative support systems.

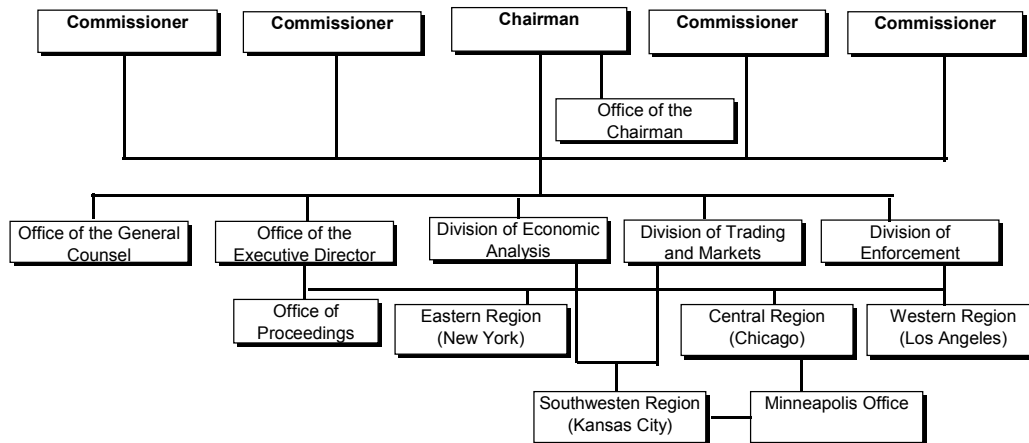
## Functional Overview of the CFTC

The Commission is comprised of five Commissioners appointed by the President of the United States with the advice and consent of the Senate. The Commissioners serve staggered five-year terms. No more than three Commissioners may belong to the same political party. The President nominates one Commissioner to serve as Chairman of the CFTC. The Chairman is responsible for presiding over Commission meetings and overseeing the management of the CFTC.

There are six major organizational units in the CFTC:

- Office of the Chairman
- Division of Economic Analysis
- Division of Enforcement
- Division of Trading and Markets
- Office of the General Counsel
- Office of the Executive Director

### Commodity Futures Trading Commission Organization Chart



### Office of the Chairman

The Chairman and Commissioners develop and implement agency policy. They provide overall direction through quarterly reviews of program accomplishments and objectives; public reviews of important proposals; and daily consideration of legal, economic, and administrative issues. In addition, they issue opinions ruling on appeals from decisions of administrative law judges or judgment officers. A majority vote of the Commissioners is required for approval of exchange designations, the adoption of

agency rules and regulations, and the authorization of enforcement actions.

Under the direction of the Office of the Chairman are the Office of the Inspector General, the Office of International Affairs, the Office of Legislative and Intergovernmental Affairs, the Office of Public Affairs, and the Office of the Secretariat.

### **Office of the Inspector General (OIG)**

The OIG conducts and supervises audits and investigations of programs and operations of CFTC. Those audits and investigations are focused on budget and fiscal operations, property management, human resource systems, and other management systems. The OIG also reviews existing and proposed legislation and regulations; monitors compliance with requirements for financial management and operational controls; and recommends policies to promote economy, efficiency, and effectiveness, and to prevent and detect fraud and abuse.

### **Office of International Affairs (OIA)**

The OIA is the focal point for the CFTC's international regulatory coordination efforts. The OIA enhances the Commission's ability to meet challenges posed by the globalization of financial markets by compiling information on the applicable law and procedure in various jurisdictions pertaining to issues of common interest. The OIA works with other Divisions and Offices within the CFTC to develop, implement, and coordinate the Commission's International Program.

### **Office of Legislative and Intergovernmental Affairs (OLIA)**

The OLIA is responsible for maintaining effective communication between the CFTC and members of Congress and their staffs. The OLIA monitors legislation affecting the CFTC, provides information to the Commission related to actions taken by the Congress, and ensures timely responses to all congressional inquiries. The OLIA also serves as liaison with the Office of Management and Budget (OMB) and other federal agencies.

### **Office of Public Affairs (OPA)**

The OPA serves as the Commission's liaison with the news media, producer and market user groups, educational groups, and the general public. The OPA informs such groups about the role of futures and option markets, market regulation, and the functions of the CFTC by disseminating educational information on a regular basis.

### **Office of the Secretariat (Secretariat)**

The Secretariat coordinates the preparation and dissemination of policy documents, controls the flow of information into and out of the Commission, and ensures timely responses to date-sensitive inquiries. The Secretariat also coordinates and schedules the CFTC's agendas and, in consultation with Commissioners, may schedule executive sessions. In addition, the Secretariat oversees implementation of the Freedom of Information Act and the Privacy and Sunshine Acts and maintains the Central Index and Records of the CFTC.

### **Division of Economic Analysis (DEA)**

The principal responsibility of the DEA is to ensure that the futures and option markets operate competitively, free of manipulation or congestion, and serve the risk-shifting and price-discovery needs of the U.S. and world economies.

DEA's **Market Surveillance Program** strives to maintain free and competitive futures and option markets by:

- Monitoring the futures and option markets to detect and prevent abusive trading practices that might lead to price manipulation and other major market disruptions. The primary focus of this monitoring is on the positions and activities of large traders;
- Monitoring daily all active futures price relationships and supply and demand conditions; and
- Monitoring compliance with the CFTC's speculative position limits.

DEA's **Market Analysis Program** reviews and analyzes each new futures and option contract application and subsequent rule change proposals. These reviews focus on ensuring that new and modified contracts support hedging and price discovery and that they are designed so as to minimize the chance of market disruptions and opportunities for manipulation of markets.

DEA's **Market Research Program**:

- Performs basic research on, and evaluation of, the economic functions and pricing efficiency of the futures, option, and over-the-counter (OTC) markets;
- Conducts economic research relevant to the formulation and implementation of Commission policy; and
- Provides economic analysis of market-related issues, enforcement investigations, and expert testimony for enforcement litigation.

## **Division of Enforcement (DOE)**

The DOE investigates and prosecutes alleged violations of the CEA and Commission regulations. Violations may involve futures or option trading on domestic futures exchanges or the improper marketing of investments. Enforcement actions cover such violations as price manipulation, fraud, illegal trades, and violations of management and reporting requirements. The Division takes enforcement actions against several groups, including:

- Individuals and firms registered with the Commission;
- Those engaged in futures and option trading on designated exchanges; and
- Those engaged in the unlawful offer and sale of futures and option contracts that are not traded on exchanges.

The Division bases investigations on information obtained in a variety of ways, including:

- Independent activities such as the monitoring of publications, web-sites, and chat-rooms;
- Referral by other Commission divisions; industry self-regulatory associations; and state, federal, and international authorities; and
- Public inquiries such as customer complaints.

At the conclusion of an investigation, DOE may recommend that the Commission initiate administrative proceedings or seek injunctive and ancillary relief on behalf of the Commission in federal court. Administrative sanctions may include orders suspending, denying, revoking, or restricting registrations and exchange trading privileges. Sanctions may result in civil monetary penalties, cease and desist orders, or orders of restitution. DOE may also obtain temporary restraining orders and preliminary and permanent injunctions in federal court to halt ongoing violations.

## **Division of Trading and Markets (T&M)**

T&M develops, implements, and interprets Commission rules, and oversees the implementation of and compliance with certain regulations by the SROs. Those regulations are designed to protect customer funds, prevent trading and sales practice abuses, and assure the financial integrity of the firms holding customer funds.

T&M's **Audit and Review Program** protects market participants by:

- Overseeing required SRO financial audit and sales practice compliance programs pursuant to the CEA and Commission regulations;
- Conducting audits and compliance reviews of selected registrants to test compliance with the CEA and Commission regulations, and to assess the quality of SRO compliance programs;
- Developing proposed financial and sales practice audit interpretations and audit guides;

- Assessing NFA's compliance with the Commission's regulations and requirements;
- Reviewing financial reports filed by FCMs and commodity pools;
- Reviewing and investigating reports from registrants, SROs, and public accountants of financial and recordkeeping issues filed pursuant to early warning notice rules; and
- Reviewing SRO rules and rule changes relating to financial integrity of member firms.

The Division's **Regulatory Development and Registration Program**:

- Provides legal counsel and staff support to the Director and T&M units;
- Drafts proposed Commission regulations, interpretations, and case-by-case exemptive relief in regulatory areas relevant primarily to financial intermediaries and futures market professionals; and
- Oversees the NFA's registration processing and fitness review programs.

T&M's **Contract Markets Program** oversees designated contract markets and the NFA through:

- Oversight of designated contract market compliance programs. Oversight is focused on trade practice and market surveillance, audit trail, disciplinary actions, automated systems, and arbitration programs;
- Trade practice investigations. The purpose of these investigations is to assess the quality of SRO programs and to detect possible violations of the CEA and Commission regulations;
- Review and analysis of SRO rules and rule changes; and
- Review of applications for contract market designations, including cross-border trading arrangements.

### **Office of General Counsel (OGC)**

The OGC provides legal services to the Commission, individual Commissioners, and the operating divisions of the CFTC in support of overall agency objectives. Services include defensive and appellate litigation, opinion writing, regulation drafting, and the provision of legal advice.

With respect to its role in litigation, the OGC:

- Briefs and argues appellate cases to Federal Circuit Courts of Appeal;
- Defends the CFTC when it is sued administratively or in district court; and
- Participates as *amicus curiae* to assist the courts in deciding issues involving interpretations of the CEA.

As the Commission's chief legal advisor, the General Counsel:

- Participates in the formulation of the regulatory policies developed by the CFTC;
- Acts as legal consultant on legislative matters; and
- Resolves issues arising under the Freedom of Information, Privacy, and Sunshine Acts, and the CFTC's Code of Conduct.

The OGC staff assists the Commission in performing its adjudicatory functions.

## **Office of the Executive Director (OED)**

The OED formulates and implements management and administrative policies for the Commission. In addition, the OED oversees agency-wide compliance with federal requirements enacted by Congress and imposed by OMB, the Department of the Treasury, the General Accounting Office (GAO), and the Office of Personnel Management (OPM).

OED's **Office of Financial Management (OFM)** administers financial programs to ensure an effective budget process and the proper utilization and accounting of agency resources. OFM functions include strategic planning, budget formulation and execution, financial accounting, purchasing, contracting, and travel management.

The **Office of Information Resources Management** develops automated systems to support Commission activities, manages an end-user computing program, designs and manages network services such as an Intranet and access to the Internet, manages the Commission's telecommunications infrastructure, and oversees operation of the Commission's website. OIRM also reviews automated systems used by the regulated futures industry and manages the Commission's records management program.

The **Office of Human Resources (OHR)** designs and delivers training programs, services, and tools that facilitate effective human resources decisions and foster the development of a skilled and diverse workforce. OHR administers the Commission's payroll functions and is responsible for recruitment initiatives.

The **Office of Administrative Services (OAS)** provides support services for Commissioners and CFTC staff including facilities management, procurement, furnishings and supplies, printing, telephone and copier maintenance, physical inventory, and all contracted administrative support service requirements.

The **Commission Library** provides printed and on-line materials to assist employees in legal and economic research relating to the futures industry and its regulation.

The **Office of Proceedings** operates the Commission's Reparations Program which handles customer claims against persons or firms registered under the

CEA. The Office of Proceedings is divided into two sections. The Complaints Section receives and prepares customer claims. The Hearings Section examines customer claims in voluntary, summary, and formal proceedings and hears administrative enforcement cases brought by the CFTC against persons or firms alleged to have violated the CEA or the CFTC's rules and regulations.



## **CHAPTER II - EXISTING INFORMATION SYSTEMS AND COMPUTING INFRASTRUCTURE**

The Commission relies upon three types of information systems.

- Programmatic systems support specific activities related to accomplishment of the agency's central mission.
- Administrative systems support the agency's organizational and administrative operations.
- External information systems provide information that is only available from outside sources and is essential to the Commission's research and analytical activities.

### **Programmatic Information Systems**

The CFTC collects and processes a large volume of information to perform its industry oversight functions and to support its legal activities. The information generally concerns industry participants, trading activity, financial data, self-regulatory efforts, and the futures and option markets generally. In addition, tracking the agency's litigation activities is necessary to ensure effective representation in courts of law.

### **Industry Oversight**

The Commission's primary monitoring of the day-to-day activities of the futures and option markets is based upon data provided routinely by firms and industry self-regulatory organizations. However, some matters for investigation or legal action may result from telephone referrals, mailed information, or other sources. While most of the data in CFTC systems is derived from market participants and operators, information from other sources is also included.

### **Firm Oversight (ISS and FSIS)**

The CFTC is responsible for the oversight and review of firms that manage customer funds or provide trading advice to customers. The CFTC collects information from firms in order to review their actions and monitor their financial condition.

Since the Commission receives a large volume of data from hundreds of industry participants, automated review is imperative. The agency's Division of Economic Analysis uses the ISS to conduct this review. The ISS consists of modules that process exchange data; market participation; market statistics; market structure; and large trader positions for futures, option, and cash markets. The ISS contains daily information about the futures markets and is the Commission's most important system.

The Commission's Financial Surveillance Information System (FSIS) is the vehicle by which staff assesses the financial impact of major market price moves on large traders, on the capital of futures commission merchants, and on other clearing members. The FSIS combines open position data and position valuation algorithms collected by the ISS with company financial data collected by the Audit Branch of the Division of Trading and Markets. Operation of this system was temporarily discontinued in December 1999 as a result of the Commission having shut down its mainframe computer upon which this system had operated. A copy of this system will be made available in the Commission's client-server environment during the second half of FY 2000.

### **SRO Oversight (EDS and DART)**

The CFTC is also responsible for the oversight and review of the actions of a number of SROs: eleven commodity exchanges, seven clearing corporations, and the National Futures Association. The Commission collects information from SRO computer systems to review their actions as well as to reach and support legal and regulatory decisions.

The CFTC's EDS provides investigative support to the Contract Markets Section of T&M and the Division of Enforcement. It was designed to collect all information made available by exchange clearing houses, including specific information needed by the exchanges to conduct self-regulatory activities. EDS contains information about individual trades obtained from exchange trade register systems and market movement information obtained from exchange time and sales systems. The information is analyzed to produce reports that enable the agency to identify potential trade practice violations.

The Commission designed the Designations and Rules Tracking System (DART) to support the review process conducted by DEA and T&M for several exchange-related activities, including the FastTrack program for expedited review. DART stores information related to the Commission's review of exchange requests to designate new contract markets for trading or to revise rules related to existing contract markets. The system also stores information related to the internal operating rules of the exchanges.

### **Legal Support**

The CFTC acts as a regulatory and enforcement organization, judicial body, judicial appeals body, and occasionally as a respondent in other legal venues. The Commission employs two types of systems to support these roles. Litigation tracking systems, which include current information related to active investigations or cases, are used to manage and report on project activities. Legal history systems provide access to historical reference material that can provide a basis for current decisions and consistency with past decisions.

**Litigation Tracking (REPCASE, ACTS, MSR)**

Two systems were developed primarily for the Office of Proceedings and may be enhanced to address the litigation tracking needs of DOE and OGC. The Reparations Case Tracking System (REPCASE) contains information related to the processing and results of reparation cases, including details of sanctions. The Administrative Case Tracking System tracks information about the status of each administrative case brought by the DOE.

A separate system supports the DOE monthly status reporting process (MSR) which tracks preliminary inquiries, investigations, and litigation activities.

**Legal History (Proceedings Bulletin System, Reparations Sanctions System, Administrative Sanctions System)**

DOE generates and collects information about the agency's administrative and injunctive enforcement actions and statutory disqualification from registration proceedings. DOE maintains and generates reports from that information using the Proceedings Bulletin System. The principal report produced from that system is called the Proceedings Bulletin and lists the parties charged in each case, the violations charged, and the current status of each case, including sanctions. The Proceedings Bulletin is published annually and updated quarterly.

The Reparations Sanctions System is used to produce an annual report containing details about sanctions imposed on respondents in reparation cases. The Administrative Sanctions System is used to publish the annual list of respondents sanctioned as a result of an administrative case brought by the agency. The Office of Proceedings uses these two systems.

OIRM provides access from the Commission's Intranet to a number of electronic versions of books and collections of documents that improve access to reference materials for Commission staff, including an electronic version of the CEA and certain SRO rule books, currently those of the Chicago Mercantile Exchange (CME), the Kansas City Board of Trade, and the Chicago Board of Trade. Historic Commission opinions and DOE briefs are also electronically searchable.

## **Administrative Information Systems**

A number of systems have been developed to enhance the productivity of agency staff and to aid it in managing the Commission's operations.

### **Document Management (CCTS, EP3)**

Document management systems currently in place at the Commission include the Controlled Correspondence Tracking System (CCTS), a document indexing system (EP3), and a variety of office-specific correspondence tracking systems. The CCTS is used by the Office of the Secretariat and other offices to which correspondence is routed for review and/or action. This system enables the Secretariat to track the location and status of these time-sensitive documents. The EP3 system is used by DOE to maintain an index of all documents received during the course of litigation.

### **Financial Management (FMS, Treasury Systems)**

The Financial Management System (FMS) is a mainframe-based application that operates in accordance with OMB Circular A-127 requirements. Budget, procurement, and accounting data in the FMS comply with standards established by OMB, the Joint Financial Management Improvement Program Board, Federal Accounting Standards Advisory Board, the Chief Financial Officers Council, and the General Services Administration (GSA). The FMS supports requirements of the CFTC's Office of Financial Management for budgeting; accounting; generation of requisitions and purchase orders; processing of travel advances, orders, and vouchers; and internal and external reporting.

OFM also utilizes several systems operated by the Department of Treasury that provide electronic payment processing capabilities.

### **Payroll/Personnel Systems (NFC, Applicant Tracking System)**

The CFTC's Office of Human Resources uses a mainframe-based integrated payroll/personnel system operated by the U. S. Department of Agriculture's National Finance Center (NFC). This system enables personnel specialists to establish and maintain personnel records and process time and attendance data for Commission employees. The system also permits the generation of reports containing payroll and personnel data.

Agency timekeepers use a PC-based time and attendance data-entry system, PC-TARE, to prepare and transmit to the NFC the data necessary for the generation of payroll checks and statements.

The Commission's OHR also employs two other personnel systems. An Applicant Tracking System enables them to manage the receipt and processing of applications

for employment with the Commission. An SF-52 Tracking System enables them to track position and personnel actions.

**Library (Horizon)**

The CFTC library uses a management system that provides for such automated functions as cataloging, checkout, acquisitions, and the distribution of serials.

## External Information Systems

In the course of conducting research or performing analyses of activities or conditions in the futures and option markets, certain Commission staff requires access to legal and financial information available only from external information systems.

### Legal Information Systems (LEXIS-NEXIS, WESTLAW, CROSS POINT)

**LEXIS-NEXIS** – Access to LEXIS-NEXIS is provided from staff PCs via the Internet.

The LEXIS database contains a history of legal cases and opinions. It includes a complete compilation of both published and unpublished Commission adjudicatory orders. It also provides access to public records and news information regarding public and private companies and individuals that can be useful in identifying assets. The NEXIS database contains indexed news reports and articles relevant to futures law.

**WESTLAW** – Access to Westlaw is provided from staff PCs via the Internet. The information contained in this legal reference service complements the information found in LEXIS-NEXIS. Westlaw contains over 10,000 databases of legal information spanning a variety of jurisdictions, practice areas, and disciplines. A document service enables staff to retrieve state and federal court cases and statutes and federal regulations.

**CROSS POINT** – This system enables investigators in the DOE to obtain current addresses for individuals and corporations from their own PCs.

### Financial Information Systems (BridgeStation, Bloomberg, Reuters News 2000)

**BridgeStation** – Bridge provides online financial news covering 400,000 instruments on 170 exchanges in 63 countries. Bridge provides real-time and historical pricing and volume; a complete list of technical indicators; corporate stock and action data for 20,000 companies; industry group and sector rankings; 24-hour news from extensive news sources; and a research library of SEC filings, institutional holdings, earnings estimates, and broker reports. Access to the Bridge system is provided from selected PCs.

**Bloomberg** – Bloomberg is a global distributor of financial information services, combining news, data, and analysis for all financial markets and businesses. The information contained in this financial information service complements the information found in BridgeStation. The service provides real-time and historical pricing, indicative and fundamental data, customized analytics, print and multimedia news, and electronic communications on demand 24 hours a day. The Commission leases dedicated dual-screen workstations that deliver Bloomberg information.

**Reuters News 2000** – This news service provides coverage of international financial news which has become increasingly important to the Commission in its analyses of the impact of the global economy on the domestic futures and option markets. Access to this service is provided from a single dedicated workstation in the Office of Public Affairs.

**Other External Systems (NFA Registration System, OCLC, OMB ROCIS, NCIC)**

**NFA Systems** – The NFA operates two systems that are used by Commission staff. A registration system for FCMs, CPOs, CTAs, introducing brokers (IB), the associated persons (AP) of these classes of registrants, floor traders (FT), and floor brokers (FB) enables staff to verify the compliance of market professionals with registration requirements. The other NFA system enables Commission staff to analyze financial and compliance information obtained by NFA about its members. Access to these systems is provided from the PCs of appropriate staff.

**Online Computer Library Center (OCLC)** – This online database system provides technical support services for shared cataloging, interlibrary loans, serials check-in, and acquisitions. Access to OCLC is provided from the PCs of Library staff.

**OMB ROCIS** – This internet-based system provides a method by which the Commission can submit to OMB, on a biannual basis, the agency's Unified Agenda entries and Regulatory Plan.

**National Crime Information Center (NCIC)** – The Division of Enforcement accesses the National Crime Information Center (NCIC) database to determine if a potential witness or defendant has a criminal history, to obtain their driving record(s), and to obtain the registration status of vehicles. The criminal history records of over 25 million persons are accessible on the NCIC system through a cooperative federal and state effort known as the Interstate Identification Index (III).

Access to the NCIC is accomplished via the Justice Telecommunications System (JUST) using a dedicated workstation made available to headquarters staff in DOE.

## Computing Infrastructure

The Commission's information systems operate in a computing environment which consists of network servers, communications equipment, and personal computers. This computing environment, or infrastructure, offers a variety of services to facilitate the delivery of information. For example, the Commission's Internet service provides access to the Lexis-Nexis system described earlier. OIRM develops or selects and implements a variety of services to support the information processing needs of the Commission.

The agency's use of its systems and services places processing demands on the infrastructure. Performance and capacity indicators measure the ability of the infrastructure to accommodate these processing demands. OIRM monitors these indicators on an ongoing basis and replaces or reconfigures the infrastructure components as indicated. A number of OIRM's projects and activities are focused on developing and maintaining the agency's computing infrastructure.

## Services

**Client/Server Applications** – The CFTC has created a standardized client/server computing environment which combines the benefits of a mainframe's shared databases with the user-friendliness and flexibility found in a PC environment. The server, on which the data resides, performs such functions as record selection and sorting, thereby reducing network traffic. This server-based functionality reduces the burden on the workstation to application-specific tasks, such as display formatting. The client/server environment embodies a number of features that provide a more reliable and cost-effective computing environment. These include accelerated development life cycles, improved user interfaces, distributed processing capabilities, redundant data-stores, and other disaster-recovery features.

**End-user tools** – The implementation of client/server computing at the CFTC has enabled OIRM to introduce software tools that give Commission staff greater control of information. Tools that simplify the issuance of ad hoc queries, such as Excel, Access, SAS, and SQL Report generators, are now available to end-users at the CFTC.

**Internet** – Over the last four years, the Commission has gradually increased access to and use of the Internet. All CFTC staff has access to Internet e-mail and full web-browsing capability from their desktops through a firewall-protected high-speed connection. Internet e-mail has facilitated communication between agency staff and other government and industry officials. The web-browsing facility has proven to be a cost-effective research tool that provides quick and easy access to a large body of free information. Such access has also enabled the CFTC to expand its surveillance activities to the Internet.



In October 1995, the Commission established a website. In September 1998, staff redesigned the website to improve its appearance and to add several new features, including a search facility and a site map. The CFTC website provides valuable information on the Commission's mission and activities, and enables industry participants and the public to communicate electronically with the Commission.

**Intranet** – The Commission maintains an Intranet to capture, organize, maintain, and deliver essential information to CFTC staff nationwide through a standard interface. Through the Intranet, information is made available to employees quickly and easily at their desktops. CFTC employees can search, locate, and retrieve information quickly and efficiently without having to leave their offices. The Intranet currently provides information to staff on:

- Current CFTC news and events, such as weekly advisories, press releases, Federal Register releases, and legislative developments;
- Agency programs and benefits such as training, pay, travel, employment, bonds, and retirement;
- Reference links to information sources critical to CFTC staff, including legal, market, federal, exchange, and news sources;
- A CFTC organizational chart and staff directory;
- Regional office information and links;
- A Commission-wide calendar of events;
- A notice board; and
- A search facility.

**Remote Access** – Selected staff can access the CFTC's internal network and facilities using a modem and telephone line from locations outside CFTC offices. Support for remote access is provided in the Chicago, New York, and Washington, DC offices.

**Desktop Applications** – The current operating system on most agency desktops is Windows 95, although new desktop computers are being purchased with Windows NT. The current office suite is Microsoft Office 97 Professional, which includes Word for text documents; Excel for financial spreadsheets; Access for databases; PowerPoint for presentations; and Outlook for e-mail, calendar maintenance, and task management. The OIRM Help Desk Team provides the support required for the staff's effective use of these applications. Agency staff benefits from the multi-tasking and data-sharing features of the Microsoft Office Suite and can create and publish professional documents, collect and analyze evidence, and analyze trading and market data. Focus Workshops are offered regularly to train staff in the effective use of these applications.

The OIRM Applications Services group integrates the selection of additional required software with training and technical support services.

**Automated Software Maintenance** – There are more than 800 computers in use at the Commission. Upgrading any of the software products contained on those computers results in a considerable resource drain. OIRM staff at headquarters has recently begun to automate selected upgrade processes. The evolution of this service during FY 2000 will result in the expansion of its use for additional upgrade processes and its extension to the regional offices.

**Imaging** –The Commission produces and receives a large volume of printed material to which electronic access is required. Imaging systems are used to meet those requirements. The Office of Proceedings uses imaging to capture information from reparations and administrative cases. The Office of the Secretariat uses imaging to facilitate the processing of FOIA requests and to publish comment letters received in response to Federal Register announcements on the Commission's website. The Office of Public Affairs uses imaging to maintain an information base of past Commission and futures industry news. The Division of Economic Analysis uses imaging to maintain information related to its review of requests for market designations.

**Remote Computing** –About 50 laptop computers configured with standard CFTC office software are assigned to Commissioners and Commission staff.

## **Performance and Capacity**

**Network Servers** – The typical server in use at the CFTC is equipped with a single 300 MHz Pentium II central processor unit (CPU) and 128 MB of random access memory (RAM). This typical server can accommodate a second CPU and a maximum of 512 MB of RAM. Such a server also has approximately 27 gigabytes (GB) of storage organized as three nine-GB disk drives. A one-GB disk drive can store one billion characters of data. These disk drives are used to store shared data files, network applications software, e-mail, and other network-related information. Operational policy limits the use of these disk drives to 80 percent of capacity. Average current use is less than 70 percent. Such a server can accommodate a maximum of six disk drives internally with a total capacity of 126 GB. Additional disk drives can be added using an external drive chassis.

**Desktop Computers** – The typical PC in use at the CFTC is equipped with a single 166 MHz Pentium processor and 32 MB of random access memory (RAM). This typical PC can accommodate a maximum of 128 MB of RAM. Such a PC is also equipped with a two-GB disk drive used to store desktop applications and data files and can accommodate up to a nine-GB disk drive. Although the agency does not impose a percentage limit on the use of this capacity, a typical PC disk drive is only 50 percent utilized.

**Network Bandwidth** –The standard Local Area Network (LAN) bandwidth provided within CFTC offices is ten Mb (i.e., 10 million bits/second), shared by all

computers attached to that LAN. The typical LAN at CFTC supports a maximum of 50-75 computers. At headquarters, the LAN bandwidth can be increased to 100 Mb by replacing the centralized communications hardware, a FY 2000 project. Rewiring the buildings is necessary to increase bandwidth in all other CFTC offices, in addition to replacing the centralized communications hardware. That work is scheduled for FY 2000 for the Chicago and New York offices. The Wide Area Network bandwidth provided between CFTC offices ranges from 56 Kb (i.e., 56 thousand bits/second) to 512 Kb. The Wide Area Network bandwidth can be increased, without replacement of communications hardware, to a maximum of 1536 Kb.

**Monitoring and Tuning** – OIRM currently employs a variety of tools and techniques to monitor the degree to which the Commission's network servers, desktop computers, and communications facilities approach capacity and performance limits. Thresholds are established at a sufficiently low level to allow adequate time to respond effectively to normal growth situations.

For disk drive limitations, potential responses include: replacement with larger disk drives, redistribution of files from overloaded disk drives to underutilized disk drives, installation of spare disk drives in equipment with available disk drive space, and purchase and installation of external disk drive chassis and disk drives. For RAM limitations, upgrades are generally cost-effective and relatively easily accomplished. For CPU limitations in network servers, the addition of a second CPU is cost-effective and easily accomplished. For CPU limitations in desktop computers, it is generally most cost-effective to replace the computer.

Since data communications facilities are typically shared by multiple users whose instantaneous bandwidth requirements cannot be anticipated, determining an optimal network bandwidth is difficult. The complexity of the communications infrastructure and the tools necessary to monitor those facilities imposes significant classroom and on-the-job training requirements. Selected members of the OIRM staff are trained in the use of these tools. Potential responses to limitations of the communications facilities range from purchase of additional bandwidth from long-distance carriers to replacement of hardware and/or wiring.

OIRM employs both informal and formal monitoring and tuning procedures as part of the testing phase of applications development and implementation and as part of its infrastructure maintenance program. These practices enable OIRM to achieve the highest level of performance and capacity possible within the constraints of available resources.



## **Chapter III - Information Systems and Infrastructure Projects and Activities**

This chapter lists the projects and activities currently underway or planned which address the information systems and infrastructure requirements that have been identified. These projects and activities are listed in chronological and alphabetical sequence within two priority groups. Table IV-3 at the end of Chapter IV summarizes these projects and activities and provides a detailed breakdown of staffing requirements and scheduling.

- Priority 1 projects and activities are deemed essential and urgent.
- Priority 2 projects and activities are deemed essential but can be delayed.

Each project has one or more sponsors for whom the project will be undertaken. In some cases OIRM has specified a particular division or several divisions as having accepted responsibility for maintenance of the system's information, as well as one or more divisions with a need to access the information. The designation of maintenance responsibility and need for access represents the current understanding of the obligations that Commission offices will accept when the systems are implemented.

The determination of priorities was influenced by the following factors:

- The Commission continues to migrate from a mainframe-operating environment to a client/server architecture. This direction conforms to OMB Circular 96-02 (Data Center Consolidation). This migration requires the re-engineering or porting of three mission-supporting applications. The objective is to provide a transition from the current mainframe environment that results in minimal interruption and distributes migration costs to match CFTC budgets. All projects and activities necessary to this end have been initiated and will be completed during FY 2000;
- The Commission's emphasis on the development of programmatic systems;
- Some systems and infrastructure development projects rely on facilities provided by prerequisite projects. For example, the Legal History System project is dependent on the document scanning facilities that will be provided by the Imaging System project.

## **Priority 1 Essential and Urgent Projects and Activities**

**Project Name:** Financial Information System Replacement

**Purpose:** The Commission must have access to current information about events that have the potential to impact the stability of the markets. Events in the areas of finance and business are of primary concern, although politics, natural disasters, weather, and other major events all provide opportunities for increased market volatility. The Commission must also have access to current information about conditions in futures and option markets, as well as other national and international markets. The Commission relies upon several external sources for such information which, because of their high cost, are made available only to a limited number of staff. The purpose of this project was to resolve a Year 2000 problem with one of the systems that provides access to this information.

**Users:** The Chairman's Office and the Divisions of Economic Analysis and Trading and Markets

**Requirements:** One of the external information systems used by the Commission for acquisition of this information, Bridge MoneyCenter, was not Year 2000 compliant. This project identified and acquired a Year 2000 compliant replacement system, BridgeStation for Windows NT, that meets the Commission's information requirements.

**Development Priority:** One

**Estimated Resources Requirements:** This project required one-tenth of a staff year.

**Status:** Completed in the 1<sup>st</sup> quarter of FY 2000.

**Project Name:** Financial Management System (FMS) Migration

**Purpose:** The CFTC is required by regulation and operational necessity to perform budgeting and accounting activities; to process travel advances, orders, and vouchers; and to generate requisitions and purchase orders and accounting reports. The FMS enables the Commission to perform those activities accurately and efficiently. Since the Commission is required by OMB Circular 96-02 to close its mainframe Data Center by June 2000, it was necessary to provide an alternative solution to meet these requirements. This project resulted in the migration of the FMS to a mainframe computer operated by the Department of Interior (DOI). It also provided the Office of Financial Management with a time-sharing agreement that will enable it to continue the operation of this essential system.

**Users:** The OFM operates and uses outputs from the FMS. All other divisions provide input to and use outputs from this system.

**Requirements:** The immediate requirement for this project was to provide the OFM with continued access to the FMS when the Commission's mainframe data center is closed in 2000. This project was accomplished through a contract with the DOI which uses a version of the same FMS used by OFM. The Commission contracted with DOI to provide time-sharing services on its mainframe computer. The contract also provides for a number of enhancements to the FMS required by OFM. Those enhancements are all related to electronic integration between the FMS and other automated systems used by OFM. Those enhancements will improve data integrity and reduce OFM's data-entry workload.

**Development Priority:** One

**Estimated Resources Requirements:** This project required three-tenths of a staff year and \$207,000 in other costs.

**Status:** Migration of the FMS was completed in the 2<sup>nd</sup> quarter of FY 2000. The enhancement component of this project is ongoing.

**Project Name:** Remote Access

**Purpose:** The Commission relies on the ability of staff to access the communication and information services provided by its network. Access to those services has become essential to staff both in and out of the office. Remote access enables authorized staff on travel to access the CFTC network and enables authorized staff at home to connect to their local network and access its services.

Remote access was a component of the Commission's Year 2000 contingency plan and provided the Commission with a contingency plan for continued access to its essential computer services regardless of staff's ability to gain access to the local network at their office.

**Users:** All offices of the Commission

**Requirements:** This facility must provide a reliable and easy-to-use method for staff using PCs provided and/or configured by the Commission to access the Commission's communication and information services. Access must be provided to all major network services including e-mail, scheduling, desktop applications, Commission-specific systems, the Internet, and other external information systems. This facility must include sufficient security features to protect the agency's information resources from unauthorized intrusion.

This facility is also intended to provide disaster-recovery capabilities. A component of the Commission's Year 2000 contingency plan called for the use of this facility as an alternative to accessing the network in the event that a building could not be occupied, for example, during a loss of electrical power in the Chicago office. In such a case, a staff member at home in Chicago with a computer could connect to the headquarters network to access his or her e-mail and other network services. The Commission has implemented and is using such facilities at its offices in Chicago, New York, and Washington, DC to provide controlled access for selected staff to all of the Commission's network facilities. Additional staff will be provided assistance in the use of these facilities on an ongoing basis.

**Development Priority:** One

**Estimated Resources Requirements:** This project required one-tenth of a staff year and \$75,000 in other costs.

**Status:** Completed in the 2<sup>nd</sup> quarter of FY 2000.



**Project Name:** Year 2000 Program Management

**Purpose:** In order to continue its mission-critical regulatory functions in the 21<sup>st</sup> century, the Commission must have access to and use of certain computer systems and network services. Those include internal and external systems and services as well as data exchanges with external organizations. Continued access to and use of those systems and services could only be provided if the Commission's computing hardware, software, and communications infrastructure were made Year 2000 compliant. Accomplishment of those goals required the coordinated efforts of all groups within OIRM. This project provided for the direction and management of those efforts. This project also provided support for the many reporting requirements to Congress, OMB, GAO, and the public regarding the Commission's progress in becoming Year 2000 compliant.

**Users:** Office of the Chairman and Office of the Executive Director

**Requirements:** This project involved defining, coordinating, providing oversight, and reporting on all phases of the Commission's Year 2000 program—inventory, assessment, remediation, testing, implementation, validation, and contingency planning. That work required:

- Development and maintenance of a master schedule for OIRM's efforts to achieve Y2K-compliance for the Commission's computer systems and computing infrastructure;
- Acquisition and maintenance of a master schedule for the office building management's efforts to achieve Y2K-compliance for environmental control systems and infrastructure;
- Frequent contacts with program managers in OIRM and building managers to track progress;
- Coordination of activities and necessary adjustments to the master schedule for internal efforts;
- Development of reports to internal management, Commissioners, and government oversight organizations, including Congress, OMB, and GAO;
- Development of a Business Continuity and Contingency Plan (BCCP) for the Commission; and
- Coordination of activities related to implementation of the BCCP.

**Development Priority:** One

**Estimated Resources Requirements:** This project required two-tenths of a staff year.

**Status:** Completed in the 2<sup>nd</sup> quarter of FY 2000.

**Project Name:** Year 2000 Program Support

**Purpose:** In order to continue its mission-critical regulatory functions in the 21<sup>st</sup> century, the Commission must have access to and use of certain computer systems and network services. Those include internal and external systems and services as well as data exchanges with external organizations. Continued access to and use of those systems and services could only be provided if the Commission's computing hardware, software and communications infrastructure were made Year 2000 compliant. Accomplishment of those goals required the support of OIRM staff. This project provided that necessary support.

**Users:** Commissioners and all Commission staff

**Requirements:** OIRM staff was required to perform a variety of tasks in support of this program. Those tasks spanned the range of program phases: inventory, assessment, remediation, testing, implementation, validation, and implementation of contingency plans. Due to the immutable deadline associated with this project, the tasks had to be accomplished within strict time frames. Contingency planning had to account for the possibility that, despite everyone's best efforts, systems that support mission-critical needs might be unavailable and would require alternative solutions.

**Development Priority:** One

**Estimated Resources Requirements:** This project required six-tenths of a staff year.

**Status:** Completed in the 2<sup>nd</sup> quarter of FY 2000.

**Project Name:** Data Center Closure

**Purpose:** The Commission's mainframe data center is scheduled to be closed during FY 2000. This project will address the preparatory activities required to accomplish that closure. Those activities include the disposition of mainframe equipment and software, termination of licensing agreements and service contracts, offsite storage of historical data, disposition of excess floor space, and reassignment of the OIRM staff who operate and support the data center.

**Users:** OIRM data center staff

**Requirements:** The disposal of equipment and software must be accomplished in accord with manufacturers' licensing agreements and relevant federal guidelines. Historical data must be inventoried prior to removal to an offsite location. Plans must be developed for disposition of the space. The reassignment of staff must be accomplished sufficiently in advance of the data center closure to provide opportunities for necessary training or other preparations. This activity will require the identification of potential reassignments, coordination of discussions between staff and candidate managers, and facilitation of the transition to new work assignments. It will require coordination with candidate managers and personnel specialists and will perhaps require the establishment of new positions and development of position descriptions.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require three-tenths of a staff year.

**Status:** This activity was started in the 1<sup>st</sup> quarter of FY 1998 and is scheduled for completion in the 3<sup>rd</sup> quarter of FY 2000.

**Project Name:** Document Management System (CFTC-Docs)

**Purpose:** The Commission prepares and stores a large number and variety of documents to which ongoing access is required by Commission staff nationwide. To date, such documents have been stored in paper and electronic formats in various locations throughout the Commission. In 1989, the Commission began using a proprietary Document Management System (DMS) which is outdated and is approaching full capacity. The Commission's document collections are currently scattered and access is inadequate to the needs of staff. The Commission recently began development of a new DMS that has been named CFTC-Docs. CFTC-Docs will be a centralized document management system that will provide improved access, version control, routing facilities, security, and full text search and retrieval capabilities for many Commission documents.

**Users:** Commissioners and all Commission staff

**Requirements:** CFTC-Docs must provide a standard browser-based interface to key Commission information and reduce administrative costs and increase productivity. This important component of the Intranet will provide easy access to historic and current documents. Some of the more important document collections that will be housed in CFTC-Docs are:

- Official CFTC correspondence;
- Legislative history information, including proposed and adopted legislation, committee reports, hearing transcripts, and Congressional debates pertaining to the CEA;
- CFTC appellate briefs;
- Division of Enforcement complaints, briefs, and other pleadings;
- CFTC interpretative, no-action, and exemptive letters; and
- Rule enforcement reviews.

CFTC-Docs will provide document level security and will maintain a complete history of each document. Finally, this document repository will provide the Commission with a means to leverage its scattered knowledge base and diminish the negative impact of the loss of institutional memory due to job attrition.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 2.3 staff years and \$90,000 in other costs during the life of this plan.

**Status:** This project began in FY 1999 and will continue through FY 2004.

**Project Name:** Enforcement System Modernization

**Purpose:** The agency's mandate to ensure an open and competitive market is in large part accomplished through its enforcement program. The Division of Enforcement acquires and generates a large body of documents and detailed tracking and status information during the course of its investigative activities and litigation. The current method of manually recording, updating, accessing, and reporting on this information is inefficient and ineffective. The automation tools to be provided by this project will enable DOE to improve staff productivity, accuracy, and consistency during preliminary inquiries, investigations, and litigation.

**Users:** Division of Enforcement

**Requirements:** The DOE requires an automated system to manage documents and track events associated with preliminary inquiries, investigations, and litigation. Information to be maintained in the system includes:

- Details about the firms and individuals being investigated or charged, and about the customers contacted during those processes;
- Important investigative records, such as subpoenaed documents, deposition transcripts, and other investigative testimony;
- Schedules of interviews, testimony, and hearing dates;
- On-going case status information;
- Investigation and case results; and
- Sanctions imposed on any firms or persons as a result of a case.

DOE's final requirement is for automated preparation, review, and storage of documents from a repository of standard documents prepared by Commission attorneys. These documents are currently individually created and can be over 30 pages in length. Such automated preparation would significantly reduce the amount of professional time required to produce documents such as complaints, pleadings, and interrogatories.

Due to the sensitive nature of much of this information, this system must provide adequate security features. The system also must allow DOE staff to selectively grant access to staff in other divisions based upon rights determined by DOE.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 4.2 staff years.

**Status:** This project began in FY 1999 and is scheduled for completion in the 4<sup>th</sup> quarter of FY 2001.

**Project Name:** Exchange Database System (EDS) Port

**Purpose:** An important aspect of the CFTC's mission is to ensure market integrity and protect market participants against manipulation, abusive trade practices, and fraud. The Commission pursues this mission through detection of illegal trading activities to ensure compliance with the CEA and Commission trade practice regulations. The Commission's contract markets section collects information from the exchanges and clearing houses to operate a monitoring system to carry out this mission. A major long-term re-engineering project is underway to provide the Commission with a full-featured replacement for this system that is capable of keeping pace with technological changes as they occur. The current mainframe-based system must be relocated to a new computer system before June 2000 to comply with OMB Circular 96-02.

**Users:** The Division of Trading and Markets operates and uses outputs from the EDS. The Division of Enforcement also uses outputs from this system.

**Requirements:** Trade practice investigators must be able to obtain data related to trading activities on the floors of the exchanges. Such data includes details about the traders involved; the commodity; and the price, quantity, and time of each trade. The EDS porting project will enable users to collect and analyze this information when the mainframe Data Center is closed in 2000. The few requirements for enhancements that will be addressed by this project include the collection and reporting of newly added audit trail data and data related to trading on Globex, and facilities for downloading information from EDS into desktop applications such as Access and Excel.

**Development Priority:** One

**Estimated Resource Requirements:** This project will require 1.5 staff years.

**Status:** This project began in FY 1998 and is scheduled for completion in FY 2000.

**Project Name:** Imaging Data Conversion

**Purpose:** The Commission has used a proprietary Document Management System since 1989 and has created a document library containing approximately 25 gigabytes of files. The system is outdated and the optical storage system is approaching full capacity. The Commission is in the process of implementing a new DMS, CFTC-Docs, and a new imaging system. The files contained in the proprietary DMS must be converted into files that are compatible with CFTC-Docs.

**Users:** Commissioners and all Commission staff

**Requirements:** The Commission's older DMS was operating on a VINES network server that was not Year 2000 compliant and conversion of the existing files is necessary to end the Commission's reliance on that system. Conversion of the existing files was to be completed by December 1, 1999. Difficulties in securing an appropriate contractual vehicle have delayed this project. Upgrading the operating system software on the VINES network server to a Year 2000 compliant version provided a temporary solution. The requirement to convert the files to a format that is compatible with the Commission's new DMS, CFTC-Docs, has yet to be satisfied.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require five-tenths of a staff year and other costs of \$60,000.

**Status:** This project began in FY 1999 and will be completed in FY 2001.

**Project Name:** Imaging System Implementation

**Purpose:** The Commission has and receives a large volume of printed material to which electronic access is desirable. This material includes collections of historic documents, evidentiary documents obtained during investigations, documents officially submitted to the Commission by exchanges and other industry participants, and other printed material of reference value to Commission staff. An imaging system will allow the conversion of this printed material to electronic images and indices, which can then be stored within the Commission's new DMS, CFTC-Docs, to provide rapid access to these materials.

**Users:** Commissioners and all Commission staff

**Requirements:** The imaging system must be capable of accurately scanning large volumes of documents containing both textual and graphic content, performing optical character recognition (OCR) and indexing functions, and creating standard format image files for use by CFTC-Docs.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require four-tenths of a staff year and \$40,000 in other costs.

**Status:** This project was started in the 4<sup>th</sup> quarter of FY 1999 and is scheduled to be completed in FY 2000.



**Project Name:** Integrated Surveillance System (ISS) Reengineering

**Purpose:** An important aspect of the CFTC's mission is to foster open and competitive markets. The Commission's market surveillance section collects data from the futures exchanges, clearing members, foreign brokers, and large traders to operate a complex monitoring system to carry out this mission. A recent significant enhancement to the database is the collection of daily large trader positions in all commodity option markets. This enhancement has necessitated the redesign of the entire surveillance system to integrate the voluminous data collected so that Commissioners and agency economists can effectively monitor the markets to ensure that they remain open and competitive.

**Users:** All divisions of the Commission use information from the ISS. The Commissioners are briefed formally each week on potential problems in the markets. Those briefings are based substantially on information obtained from the ISS.

**Requirements:** Surveillance economists must be able to obtain a broad variety of data on the futures and option markets, including cash prices, large trader positions, open interest, volume of trading, historical information, and trends to address a large variety of market situations. This creates significant requirements for on-line data storage and prompt retrieval. There are monitoring requirements for adherence to speculative position limits that involve complex interrelationships among futures, option, and cash market positions, and a requirement for generation and preservation of historical records on a variety of market indicators and statistics.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require three staff years.

**Status:** This project began in the 4<sup>th</sup> quarter of FY 1996 following the agency's determination that this mission critical system had to be reengineered to accommodate changing market conditions if the Commission was to fulfill its responsibilities. This project will be completed during FY 2000.

**Project Name:** Library System Replacement

**Purpose:** The Commission Library develops, maintains, and facilitates a program which provides for access by Commission staff to a collection of reference books and other publications specifically focused on the legal and economic aspects of the futures industry. The Library uses an automated system to support these activities. The current DOS-based system is antiquated, is difficult to maintain, and no longer meets the requirements of the Library. This project will provide a replacement system that will better support the Commission's needs for timely and convenient access to appropriate reference material.

**Users:** Commission Library, Commissioners, and all Commission staff

**Requirements:** OIRM will provide assistance to the library in the installation and implementation of the replacement system and in the conversion of the existing library data.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require two-tenths of a staff year plus other costs of \$65,000 for the replacement system.

**Status:** This project was started in the 4<sup>th</sup> quarter of FY 1999 and will be completed during the 3<sup>rd</sup> quarter of FY 2000.

**Project Name:** Local Area Network (LAN) Bandwidth Improvement

**Purpose:** One of the critical indicators of the value of a computer system is its responsiveness. Computer systems that impose long delays between each user action and the associated computer response not only cause a loss of productivity but also discourage use of the system. One of the major factors in providing adequate responsiveness in a network environment is the effective bandwidth, or capacity for transferring data, of that network. This project will enable the Commission to maintain a level of responsiveness required in a productive work environment, while adding new systems and services that demand a greater bandwidth.

**Users:** Commissioners and all Commission staff

**Requirements:** Bandwidth requirements are expected to increase significantly on a local level during this five-year period. The demand for increased bandwidth will be a result of a number of initiatives, including the use of new client/server applications, the introduction of the Intranet, and the increased performance of newer computers. In response to those demands, it will be necessary to increase the available bandwidth of LANs in Chicago, New York, and Washington. In those offices, upgrading the current 10-Megabit (10 million-bits/second) capacity of LANs to 100 Megabits will increase the available bandwidth.

Since data communications facilities are typically shared by multiple users, whose instantaneous bandwidth requirements cannot be anticipated, providing an optimal bandwidth is a difficult process. OIRM has a variety of tools for monitoring the use of the Commission's communications facilities. However, the complexity of that infrastructure, and the inherent complexity of the tools required for conducting analyses, impose significant classroom and on-the-job training requirements. In order to determine the appropriate increase in bandwidth for each office and to develop cost-effective strategies for accomplishing those increases, OIRM will need to place an increased emphasis on development and use of these technical skills.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require five-tenths of a staff year and \$542,000 in other costs.

**Status:** This project was started in the 3<sup>rd</sup> quarter of FY 1999 and will be completed in FY 2000.

**Project Name:** Proceedings Automation

**Purpose:** The Commission's Reparations program, administered by the Office of Proceedings, enables the public to seek compensation for losses as a result of illegal actions on the part of registered futures industry professionals. The Office of Proceedings needs to increase the efficiency of the office workflow processes and reduce the time required for maintaining and publishing that information.

**Users:** Office of Proceedings

**Requirements:** The primary requirement of this project is to automate existing manual processes and upgrade existing OIRM-developed computer systems. The emphasis of this project will be to reengineer several antiquated systems to improve their functionality and allow for integration with other Office of Proceedings systems. Additionally, document management functions, such as generating and storing CFTC forms, letters and documents, and scanning and electronically storing case-related documents, need to be automated. This project will address requirements for enhancements to the Reparations Case Tracking System and reengineering of the Reparations and Administrative Sanctions Systems and the Administrative Case Tracking System.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 1.2 staff years.

**Status:** This project was started in FY 1998 and is scheduled for completion in FY 2001.

**Project Name:** VINES to Windows NT Migration

**Purpose:** In the mid-1980s, because of its superior security features, global directory services and Wide Area Network communications support, the Commission selected the Banyan VINES network operating system over the industry favorite, Novell, for provision of network services. During the mid-1990s, Windows NT overcame Novell as the network operating system of choice and VINES began to lose its leadership role in those areas for which it had been selected. In 1994, OIRM adopted the use of Windows NT to support the development and use of new client/server applications, while retaining VINES for all other network services. In 1998, OIRM began the migration of existing services from VINES to Windows NT when it adopted the use of Microsoft Exchange and Outlook for electronic mail. OIRM continued on that path when it migrated file and print services to Windows NT during the winter of 1998/99. This project will complete the migration to Windows NT for the remaining specialized VINES services.

**Users:** Commissioners and all Commission staff

**Requirements:** In the spring of 1999, there were five specialized network services that required migration to Windows NT. The most important of those, a 3780 file transfer facility used to transmit payroll data to the National Finance Center, was migrated in early June 1999. Migration of three of the remaining four services was completed during the fall of 1999. Difficulties in identifying an appropriate contractual vehicle delayed the migration of the fifth service, an electronic imaging system. Efforts to identify an appropriate contractual vehicle for migration of the electronic imaging system are ongoing. Having been unable to accomplish that migration prior to the end of 1999, OIRM initiated its contingency plan for continued support of that application in the Year 2000. The details of that plan are described in the project titled "Imaging Data Conversion".

**Development Priority:** One

**Estimated Resources Requirements:** This project will require two-tenths of a staff year.

**Status:** This project was started in FY 1999 and will be completed in conjunction with completion of the imaging data conversion project during FY 2001.

**Project Name:** Contracting Officer Technical Representative (COTR) Administrative Tasks

**Purpose:** To meet Commission requirements, at times OIRM must employ contractors to perform technical work. Since contracting officers are not typically qualified to perform some of the tasks related to awarding and monitoring such technical contracts, OIRM must designate a COTR for each such contract. The OIRM COTR performs those aspects of contract management that require technical skills. The purpose of this project is to support the efforts of multiple COTRs within OIRM.

**Users:** Office of Financial Management

**Requirements:** The functions of the COTR can best be described in relation to the life-cycle of a contract. The functions prior to the contract award are to:

- Prepare specifications/Statement of Work;
- Ensure clearances/funding is obtained;
- Prepare Justification for Other than Full and Open Competition;
- Prepare technical evaluation criteria;
- Perform technical evaluation of proposals; and
- Participate in negotiations.

COTR functions after the award of a contract are to:

- Alert the Contracting Officer to contractual difficulties;
- Ensure contractor performance is satisfactory;
- Ensure all reports and deliverables are received;
- Review and approve invoices for payment;
- Provide final inspection and acceptance of all work;
- Evaluate and participate in negotiation of contract modifications; and
- Provide formal evaluation of contractor's performance.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 1.6 staff years during the life of the plan.

**Status:** Ongoing

**Project Name:** Critical Infrastructure Protection

**Purpose:** The Commission relies upon the availability and integrity of computing and telephone systems, services, and information to perform its mission. These facilities and the information they contain are under the direct control of OIRM. This project supports OIRM's efforts to ensure the protection and integrity of these systems, services, and information and their continued availability to Commission staff.

**Users:** Commissioners and all Commission staff

**Requirements:** OIRM must provide protection against both physical and cyber-attacks. Although OIRM routinely includes good security practices in its planning and operational activities, it has not previously done so within the context of a formal security program. This project will support the development and implementation of a formal security program, to include:

- Security awareness training;
- Protective actions that prevent individuals from attempting to or succeeding at destroying or incapacitating critical infrastructures;
- Mitigation actions that reduce or eliminate the effects of an attack. Such actions include provision of alternative systems, systems redundancy, and system fault tolerance;
- Responsive actions that are designed to halt the progress of an attack, reduce its impact, and handle immediate safety and security problems; and
- Recovery actions that restore a critical infrastructure to its full operating capability following an attack.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 1.8 staff years during the life of the plan.

**Status:** Ongoing.

**Project Name:** Database Administration

**Purpose:** The Commission increasingly relies on database systems to support mission-critical and other core business functions. The quality and integrity of the data contained in these systems can only be assured through the efforts of senior-level staff members who understand the meaning of the data collected and generated by the Commission and apply a disciplined approach to representing and storing that data. This project establishes and supports the work efforts of multiple database administrators.

**Users:** Commissioners and all Commission staff

**Requirements:** The database administrator must understand, from the end-user's perspective, the nature and purposes of the data to be collected and generated and must accommodate the potentially disparate needs of program offices. The database administrator is responsible for:

- Creating views of the data that accommodate different uses;
- Granting authorization to use the data;
- Modifying the database to accommodate changes in the data or in usage patterns;
- Providing information about all data to program office staff, application developers, and support staff;
- Specifying and ensuring backups of the database; and
- Performing database maintenance and repair activities.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 7.8 staff years during the life of the plan.

**Status:** Ongoing



**Project Name:** Desktop Computer Hardware Upgrade

**Purpose:** Commission staff relies upon a variety of computer applications to accomplish its work. The performance of those applications is dependent upon a number of factors, including the performance of the desktop computer. As the Commission increases its use of client/server applications, the performance requirements of the underlying system software for those applications also increase. When performance requirements reach a level that exceeds the capability of a desktop computer, that computer must either be upgraded or replaced with a more capable model. This project will provide Commission staff with desktop computers capable of supporting the performance requirements of the applications upon which that staff depends.

**Users:** Commissioners and all Commission staff

**Requirements:** The Commission's policy with regard to desktop hardware upgrades assumes a four-year life expectancy for PCs and recognizes that opportunities may exist to significantly increase the performance and/or capabilities of existing PCs by upgrading components. Dramatic changes to performance requirements, such as those associated with the Commission's planned migration to Windows NT, scheduled for completion by the spring of 2001, may at times necessitate upgrading components in PCs not yet four years old. Approximately 600 of the Commission's 800 PCs will need to be replaced or will require a memory upgrade to meet the performance requirements of Windows NT. Following its four-year life expectancy policy, the Commission has budgeted for the replacement of approximately 350 PCs with Windows NT ready PCs during FY 2000 and FY 2001. It will be necessary to upgrade the memory of the remaining 250 PCs during that time period.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require three staff years and \$500,000 in other costs (\$490,000 for new PCs and \$10,000 for memory upgrades) during the life of the plan.

**Status:** Ongoing

**Project Name:** Development of IRM Plan

**Purpose:** The Commission's information resources are a valuable asset whose effective use in the accomplishment of the Commission's mission requires strategic planning. Commission staff requirements for computer support annually exceed available resources. In order to apply resources to those projects that will best support accomplishment of the Commission's mission, and to address the most important staff requirements, it is essential that OIRM develop and be guided by a long-term strategic plan. The purpose of this project is to develop and maintain that strategic plan.

**Users:** Commissioners and all Commission staff

**Requirements:** The following actions are required to accomplish this project:

- Develop an understanding of the organizational structure of the Commission and the business functions that are performed by those organizations;
- Develop an inventory of existing information systems, the computing infrastructure in which those systems operate, and the support services that facilitate the use of these information resources;
- Identify the requirements not currently addressed and define projects to meet such requirements; and
- Prioritize and, in coordination with budget and staff resource estimates, schedule the implementation of those projects.

Once the Commission has approved the plan, it is adopted and then updated on an annual basis, or more frequently as required by special circumstances.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 1.3 staff years during the life of the plan.

**Status:** Ongoing

**Project Name:** Focus Workshops Support

**Purpose:** Commission staff requires training in the use of software products. That training is conducted in dedicated training facilities located in Chicago, New York, and Washington. Those facilities and their equipment require certain preparation prior to each training session. This project provides the support necessary to accomplish such preparation.

**Users:** Commissioners and all Commission staff

**Requirements:** OIRM staff within the Application Services group must prepare the training room computers prior to each training session. This includes refreshing workfiles, testing equipment for proper operation, and reestablishing default settings. The group must also ensure that the equipment and furniture is in the correct locations and that the room is otherwise orderly.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 2.5 staff years during the life of the plan.

**Status:** Ongoing

**Project Name:** Help Desk End-User Support

**Purpose:** Commission staff relies upon the availability and proper operation of its personal computers, the network to which they are connected, and the applications and information systems that are provided by these facilities. The OIRM Help Desk is the first point of contact for staff who experiences any problem in the use of these facilities. The purpose of this project is to develop and operate a help desk facility that will be effective in coordinating the resolution of these problems.

**Users:** Commissioners and all Commission staff

**Requirements:** The Help Desk facility must be operational during normal business hours Monday through Friday. Requests for assistance can be made by telephone or e-mail. All requests are recorded and progress in responding to and resolving the problem is tracked. Help Desk staff makes an initial attempt to identify and correct problems and have at its disposal the assistance of staff from all groups within OIRM, as well as third-party vendors and outside consultants. Operational problems are given top priority. Guidelines for Help Desk staff emphasize communication with end-users and each other, courtesy, professional development, and mentoring.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 24.1 staff years during the life of the plan.

**Status:** Ongoing

**Project Name:** Industry Systems Review

**Purpose:** In the course of its review of initiatives undertaken by exchanges, clearing houses, and other major participants in the futures and option industry, the Commission must address issues involving automation. These issues arise in a broad range of activities including:

- Reviewing applications for approval of proposed electronic trading systems;
- Assisting with the development of standards for screen-based trading systems; and
- Evaluating requests for confidential treatment of technical materials received by the Commission.

The purpose of this project is to provide the necessary technical support for these activities.

**Users:** Commissioners and all Commission staff

**Requirements:** The broad scope of technical issues that must be addressed, and for which analyses and recommendations must be provided to the Commission, require that support be provided by a senior staff member with a comprehensive background in all aspects of the computer field. These tasks must often be accomplished within strict time frames due to regulatory requirements or business imperatives.

This work often requires direct communication by telephone or in person with industry technologists and/or senior industry management. Meetings with industry representatives often require travel.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require one staff year during the life of the plan.

**Status:** Ongoing

**Project Name:** Internet Maintenance and Enhancements

**Purpose:** The Commission maintains a website for the purpose of communicating its mission and programs and delivering services to industry participants and the public. The purpose of this project is to maintain the currency of the information on the website, to enhance the graphical presentation of the website, to support and enhance existing website services, to develop and implement new website services, and to monitor the operation and performance of the website for the purpose of specifying and coordinating changes to the website configuration.

**Users:** Commissioners and all Commission staff

**Requirements:** The informational content of much of the website, although provided by program offices, must be monitored by OIRM staff for quality control. Changes to the content, structure, and operation of the website are also made or coordinated by OIRM staff. As Internet technology evolves, changes to the functional design and software used to operate the website will be made by OIRM staff. All such changes will require testing in a development environment to assess performance characteristics and potential requirements for upgrading website hardware, software or communication components, satisfaction of functional requirements, security controls, and presentation characteristics.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 2.2 staff years during the life of the plan.

**Status:** Ongoing

**Project Name:** Intranet Maintenance and Enhancements

**Purpose:** The Commission's Intranet provides essential information to CFTC staff nationwide. This facility enables CFTC employees to search, locate and retrieve information quickly and efficiently without having to leave their office. The Intranet has become an integral component of the daily operation of the Commission.

The purpose of this project is to maintain current information on the Intranet, to support and enhance existing services, to develop and implement new services, and to monitor the operation and performance of the Intranet for the purpose of implementing changes to the Intranet configuration.

**Users:** Commissioners and all Commission staff

**Requirements:** The CFTC Intranet will enable OIRM to meet many of the information requirements identified during development of the Commission's five-year Plan. The Intranet provides a standard, easy-to-use interface to CFTC information and improves access to and sharing of information Commission-wide. In addition, the Intranet will facilitate communications throughout the organization, improve staff efficiency and productivity, and reduce costs in money and time. OIRM staff is responsible for maintaining the currency of the informational content of the Intranet and designing and implementing enhancements. Current plans for enhancements to the Intranet include the addition of:

- A document management system called CFTC-Docs, which will provide staff with centralized access to the large collections of historic and current information throughout the CFTC;
- An imaging component of CFTC-Docs for printed documents that can be scanned;
- A profiling component of CFTC-Docs for printed documents that cannot be scanned;
- Interactive forms;
- Forums for reading and posting comments and information on different topics; and
- A universal search engine for locating information on the Intranet.

As Internet technology evolves, OIRM staff will make changes to the functional design and software used to operate the Intranet. All changes will require testing in a development environment to assess performance characteristics and potential requirements for upgrading hardware, software or communication components, satisfaction of functional requirements, security controls, and presentation characteristics.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 4.7 staff years during

the life of the plan.

**Status:** The Intranet was made available to CFTC staff in April 1999. The document management system, CFTC-Docs, an integral part of the Intranet, is currently being implemented and will be introduced to the Commission in the 3<sup>rd</sup> quarter of FY 2000. The Intranet and the document management system involve ongoing developmental work that will continue throughout the life of the plan. This system will meet long-term requirements such as the continued integration of existing CFTC databases into the Intranet, the distribution of on-line training resources, and the provision of a search capability for the entire site.



**Project Name:** Network Administration/Operations

**Purpose:** The Commission's use of computers is dependent on network facilities and services. Those network facilities and services are many in number and require a significant amount of skilled attention. The purpose of this project is to refine and conduct a well-structured program to effectively administer and operate the Commission's network.

**Users:** Commissioners and all Commission staff

**Requirements:** This project will emphasize:

- Maximum availability;
- Sound security;
- Prompt provision of services for new or relocated employees;
- Balanced utilization of network facilities, to provide relatively uniform levels of performance to all Commission staff;
- Regularly scheduled and securely stored backups of all network services;
- Coordination with other OIRM staff as it plans and implements new services and systems which require network facilities; and
- Proactive monitoring and analysis of network operations.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 14.7 staff years during the life of the plan.

**Status:** Ongoing

**Project Name:** Network Maintenance and Enhancements

**Purpose:** The Commission's use of computers is fundamentally dependent on network facilities and services. Those facilities and services must be properly maintained to operate in a reliable fashion. The purpose of this project is to refine and conduct a program of network hardware and software maintenance that will maximize the availability of network facilities and services to Commission staff and maintain the currency of the Commission's network.

**Users:** Commissioners and all Commission staff

**Requirements:** The Commission's network facilities and services are comprised of local and wide area network communications hardware and network servers (specialized computers) configured with software products that provide a variety of network services. Some communications hardware components and most server software components require upgrades periodically. Those upgrades enable the Commission to take advantage of new features and are required by the vendor to maintain eligibility for technical support. Due to the large number of network devices and software products in use, these maintenance procedures consume a significant amount of network staff time. Additionally, all equipment must be replaced periodically or enhanced to utilize new features to maintain currency with technological advancements, and to provide an infrastructure that adequately supports the computing requirements of the Commission.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 10.3 staff years during the life of the plan.

**Status:** Ongoing

**Project Name:** Records Management

**Purpose:** The purpose of developing and overseeing a comprehensive Commission-wide records management program is to assure that records received or generated by staff during the conduct of business are well managed and readily available when needed, and that they are preserved as historical records, when appropriate, to document the organization, policies, decisions, and other actions of the Commission. In addition, the implementation and active management of the program assures that the Commission's records are efficiently and economically managed. Furthermore, Federal law requires each Federal agency to "make and preserve records containing adequate and proper documentation of (its) organization, functions, policies, decisions" (44 U.S.C. 3101), and that it "establish and maintain an active, continuing program for the economical and efficient management of the records of the agency" (44 U.S.C. 3102). This program supports CFTC compliance with these statutes.

**Users:** Commissioners and all Commission staff

**Requirements:** As the first step in the process of revitalizing the Commission's records management program, new records management instructions were written and a revised records disposition schedule prepared. The disposition schedule will soon be submitted to the National Archives and Records Administration (NARA) for review and approval. When approved, it will be incorporated into a new CFTC records management handbook. After the records disposition schedule is submitted to NARA, and the agency migrates to an Internet-based records management system provided by the agency's contract storage facility, CFTC staff members responsible for records management will be trained. This training is anticipated to include CFTC-wide as well as division-specific instruction on records management. After training is completed in the spring of 2000, all Commission offices will be requested to conduct a records clean-up campaign. The purpose of that campaign will be to review record holdings, transfer eligible records to off-site storage, and, if applicable, destroy unneeded records. Thereafter, an ongoing effort will be made to help all CFTC offices periodically and systematically review Commission records holdings to ensure they are being managed effectively and efficiently.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require five staff years during the life of the plan.

**Status:** Ongoing

**Project Name:** Staff Training

**Purpose:** OIRM professional staff has overall responsibility for selecting, implementing, configuring, maintaining, and supporting the computing and communications hardware and software (“computing infrastructure”) for the Commission. Due to the rapid evolution and nature of technological change (i.e., new software with improved features that requires new hardware to provide acceptable performance), the computing infrastructure changes frequently. To maintain the skills to effectively utilize and support the components of the computing infrastructure, OIRM professional staff must attend training classes on a regular basis. Additionally, administrative and management staff must occasionally attend training classes to maintain currency with federal laws and practices that govern its actions.

**Users:** OIRM

**Requirements:** On average, it is necessary for each professional staff member to attend two weeks of training per year.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 6.8 staff years and \$310,000 in other costs during the life of the plan.

**Status:** Ongoing

**Project Name:** Systems Coordination

**Purpose:** Due to the Commission's migration from a mainframe to a client/server environment, and the increased productivity made possible by the software tools employed in that environment, there has been a significant increase in the number of systems developed for which ongoing support must be provided. At current staffing levels, provision of that support can only be accomplished with the aid of comprehensive system and user documentation. This project supports the efforts of a staff member to coordinate and assist with development of that documentation.

**Users:** Commissioners and all Commission staff

**Requirements:** Accomplishment of this project requires the staff person to:

- Maintain an awareness of all system development plans and schedules;
- Ensure that developers have and are familiar with OIRM's standards for documentation;
- Assist developers in preparation of that documentation;
- Ensure that documentation is distributed to the appropriate developers and end-users; and
- Maintain a central library of all documentation.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 4.3 staff years during the life of the plan.

**Status:** Ongoing

**Project Name:** Systems Maintenance

**Purpose:** Due to the Commission's migration from a mainframe to a client/server environment, and the increased productivity made possible by the software tools employed in that environment, there has been a significant increase in the number of systems developed. As changes occur to the processes for which systems provide support, and as experience is gained with the use of those systems, new requirements are defined. Those systems must be modified to accommodate those new requirements. Also, operating environment changes that occur sometimes require changes to systems. This project supports the efforts of development staff to perform these maintenance activities.

**Users:** Commissioners and all Commission staff

**Requirements:** Accomplishment of this project requires system development staff to:

- Document new requirements identified by end-users;
- Document maintenance work required due to changes in the operating environment;
- Provide resource estimates to management for modifications to accommodate new requirements and changes in the operating environment;
- Develop, test, and implement approved modifications to the system; and
- Modify system and end-user documentation to reflect changes.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 11.1 staff years during the life of the plan.

**Status:** Ongoing

**Project Name:** Systems Management Server (SMS) Deployment and Management

**Purpose:** OIRM currently relies upon manual procedures for collecting computer inventory information and for many desktop software upgrades. Microsoft's SMS is a server-based software tool that will enable OIRM to automate most of those procedures. Implementation of this facility was accomplished during the 4<sup>th</sup> quarter of FY 1999. Now that it is available, it will enable OIRM staff to vastly improve its ability to accomplish software upgrades and to accurately maintain an inventory of computer configuration information that will facilitate planning and budgeting for future hardware and software upgrades.

**Users:** Commissioners and all Commission staff

**Requirements:** There are more than 800 computers in use at the Commission. Maintaining an accurate inventory of those computers and their configurations, with regard to both hardware and software, and performing software upgrades is very time-consuming when performed manually. SMS, the software tool recently implemented by OIRM, will automate the following functions:

- Hardware and software inventory information collection;
- Software metering;
- Software distribution and installation; and
- Remote troubleshooting.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require one staff year during the life of the plan.

**Status:** Ongoing

**Project Name:** Training Programs for Desktop Software

**Purpose:** Commission staff requires training in the use of desktop software products. This project will ensure that appropriate training materials are acquired or developed and offered to Commission staff at locations and times that are responsive to the training needs and work schedules of Commission staff.

**Users:** Commissioners and all Commission staff

**Requirements:** In 1996, the Commission adopted Windows and Microsoft Office to provide support for end-users' word-processing, spreadsheet, and database management needs. In 1998, the Commission upgraded to Windows 95 and Office 97, and adopted the use of Microsoft Outlook for e-mail and calendar functions. In both 1996 and 1998, training in the use of these software products was provided to all staff. As staff mastered the basics of these products and attempted to utilize more sophisticated features, and as new staff inexperienced in the use of these products began work at the Commission, additional training was required. In response to those needs, OIRM introduced a training program based upon workshops. Called Focus Workshops, some of these training sessions provide basic training in a product, while others provide specialized training in particular areas. Examples of specialized training classes include:

- Tables of authority in Word;
- Document collaboration techniques in Word;
- Time and e-mail management in Outlook; and
- Pivot tables in Excel.

The topics of Focus Workshops will change over time as new needs are identified and as products mature. The instructors who lead these workshops include OIRM staff, other Commission staff, and contractors.

To provide a more flexible training vehicle for Commission staff, HelpDesk staff has recently begun the development of a web-based training program. It has designed a training web page for the Commission's Intranet and is currently evaluating training modules for purchase and distribution through this medium.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 2.5 staff years during the life of the plan.

**Status:** Ongoing



**Project Name:** TV System Management

**Purpose:** The Commission must have access to current information about events that have the potential to impact the stability of the markets or the operation of the Commission. Events in the futures and option markets, other national and international markets, and the areas of finance and business are of primary concern and politics, natural disasters, weather, and other major events all provide opportunities for increased market volatility. The Commission must also have access to current information about congressional activities that may impact the Commission or impose operational requirements or restrictions on the Commission. Television broadcasts are capable of providing an information-rich view of such events. This project will support the management of the Commission's TV systems.

**Users:** Commissioners, senior staff, and research staff

**Requirements:** The Commission currently relies upon a cable-based TV system to provide this information to approximately 30 users. That system has proven to be unreliable. To ensure continuous access to broadcasts, the Commission is in the process of implementing a satellite-based TV system as the primary system. Despite pre-purchase acceptance testing that confirmed the quality and reliability of the satellite-based system, there have been recent indications that the system may be more sensitive to certain weather conditions than is acceptable. Therefore, further testing and analysis will be performed before proceeding with full implementation. In the event that this specific satellite-based system proves unacceptable, other alternatives will be explored. In any case, in combination with whatever primary system is adopted, as a precaution, the cable-based system will be retained as a backup system for approximately 25 percent of the users.

Distribution of these broadcasts involves both televisions and computers equipped with TV-adapters. Technical issues associated with the TV-adapters and their integration with other PC components must be resolved. In general, accomplishment of this project requires management of the vendor support contracts for the primary and backup services, trouble-shooting activities in coordination with the vendors, and management of changes to the configuration of the systems.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require five-tenths of a staff year during the life of the plan.

**Status:** Ongoing

**Project Name:** Voice Communications Support

**Purpose:** The Commission relies upon a voice communications infrastructure that consists of multiple voice communications systems, internal wiring, and external phone service connections. The purpose of this project is to provide the strategic direction for the agency's selection and acquisition of these systems and services.

**Users:** Commissioners and all Commission staff

**Requirements:** To make recommendations for selection and acquisition of voice systems, it is necessary to understand the Commission's voice requirements and to analyze and evaluate the strengths and weaknesses of alternative systems. Recommendations for selection of service providers are developed by analyzing service features and performing complex cost comparisons. The FTS 2001 contract will provide a greater range of choices from which the Commission can select required services. This will increase the complexity of the analyses, but will offer more opportunities for reducing the costs of providing these services.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require 3.1 staff years during the life of the plan.

**Status:** Ongoing

**Project Name:** Review of OIRM

**Purpose:** A consultant will be hired to conduct a study and perform an analysis to evaluate the CFTC's existing automation systems and operations. The purpose of this study is to recommend changes needed to improve service delivery, functionality and performance; the Commission's overall automation systems and capabilities; its information security program; use of resources; and planning for future technological developments. The purpose of this project is to provide the support to the consultant necessary for its accomplishment of the study.

**Users:** Director of OIRM, Director of OED, the Chairman, and Division Directors

**Requirements:** The consultant will require access to a variety of written documentation and opportunities to interview OIRM staff. The documentation required includes:

- Descriptions and diagrams of current systems architecture;
- Descriptions of and documentation for ongoing projects and applications, including systems documentation;
- All planning documents for the last five years, including long-range planning documents;
- Copies of contracts for consultant services;
- Documentation on staff and staff organization, assignment and functions, including position descriptions;
- Documentation of OIRM expenditures including contractor, hardware, and software costs;
- Past, present, and future training plans; and
- Automation procedures and user guidance provided over the past five years.

Interviews with OIRM managers and staff will solicit information about:

- Existing systems and projects;
- OIRM management, staffing, and day-to-day operations;
- Problem areas; and
- Development plans and other pertinent information that impact information systems development and planning efforts.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require five-tenths of a staff year.

**Status:** This project will begin in the 2<sup>nd</sup> quarter of FY 2000 and will be completed by the end of FY 2000.

**Project Name:** Financial Surveillance Information System Port

**Purpose:** The Financial Surveillance Information System (FSIS) is the system that combines the value of various futures and option positions held by market participants and is used to identify those market participants most likely to be affected by sudden market moves. The system had operated on the Commission's mainframe computer until that computer was shut down at the end of 1999. It is necessary to relocate this application to the Commission's client-server environment.

**Users:** Commissioners and all Commission staff

**Requirements:** The sole requirement of this project is to duplicate the functionality of the current FSIS in a client-server environment.

**Development Priority:** One

**Estimated Resources Requirements:** This project will require five-tenths of a staff year.

**Status:** This project is scheduled to begin during the 3<sup>rd</sup> quarter of FY 2000 and will be completed during the 4<sup>th</sup> quarter of FY 2000.

## Priority 2 Essential But Can Be Delayed Projects and Activities

**Project Name:** Company Financial Reporting

**Purpose:** FCMs and IBs must provide certain company financial information to CFTC. They submit that information to the CFTC using its 1-FR or Securities and Exchange Commission (SEC) FOCUS reports. Those reports have historically been provided to the Commission in hardcopy. This project will automate the submission and use of this information and will produce four major benefits. It will improve the effectiveness and efficiency of financial analysis of company reports; enhance the tracking of file statements; streamline cumbersome procedures for responses to Freedom of Information Act (FOIA) requests; and improve the quality and timeliness of data analysis for National Futures Association filing firms. This system will also reduce the reporting burden on firms because they will be able to use a single process to provide this information to both the exchange and to the Commission.

**Users:** Division of Trading and Markets

**Requirements:** T&M requires the ability to receive data electronically transmitted by the current version of Winjammer, a communications facility developed by the Chicago Mercantile Exchange. This facility currently provides FCMs the ability to electronically transmit financial reports to the exchange. Authorized users in each regional office and at headquarters need to conduct analyses using a customized version of RSR Express. RSR Express is a financial analysis program also obtained from the CME.

The capabilities of this system will be expanded by focusing on the following tasks:

- Development of new analysis reports, including debt/equity calculations and changes in excess net capital computation;
- Development of trend reports to compare the current statement to the previous statement, and to year-end audit reports;
- Development of new statement tracking capabilities that will enable the user to select and sort the data by various criteria, including reviewer, audit branch, designated self-regulatory organization (DSRO), and date range;
- Creation of automated procedures to print only the public portion of a submission in response to a FOIA request; and
- Specification and implementation of system interface requirements to the RSR Express for those FCMs whose DSRO is NFA.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require five-tenths of a staff year.

**Status:** This project began in FY 1999 and will be completed in FY 2000.

**Project Name:** Exchange Database System (EDS) Reengineering

**Purpose:** An important component of the CFTC's mission is to ensure market integrity and protect market participants against manipulation, abusive trade practices, and fraud. The Commission pursues this mission through detecting illegal trading activities to ensure compliance with the CEA and Commission trade practice regulations. The Commission's contract markets section collects information from the exchanges and clearinghouses to operate a monitoring system to carry out this mission. This project will provide the Commission with a full-featured replacement for this system that will enable staff to more precisely focus its attention on probable trading violations and conduct a larger number of "successful" investigations. This system will enable Commission staff to quickly and comprehensively access all data relevant to an investigation. Its "expert system" features will enable less experienced staff to conduct improved analyses, thereby increasing the Commission's overall productivity. This system will enable the Commission to take receipt of data in a more timely fashion, thereby improving its ability to analyze current events. Also, it will be capable of accepting a significant volume of data from electronic trading systems, and eventually from internet-based trading systems. The standardized data collection instrument will significantly reduce system maintenance costs. In addition, collected data will be expanded to include such useful information as related accounts information (*i.e.*, which accounts belong to which customer) and trader identification information. Overall, this new system will greatly improve the Commission's ability to identify potential trade practice violations.

**Users:** Divisions of Trading and Markets and Enforcement

**Requirements:** The reengineering of this mission-critical system is intended to provide four major improvements over the current EDS. The first improvement is related to the manner in which staff can access the information. Trade practice investigators must be able to obtain all of the data related to trading activities on the exchanges. The data includes details about the traders involved, the commodity, the price and quantity, and the time of each trade and is compared against price-change data collected independently by the exchanges. The volume of this data creates significant storage requirements. The current system is limited to off-line (tape) storage and batch reporting for most of the data. Those limitations have increasingly become an impediment to T&M's ability to conduct timely trade practice investigations. T&M requires the provision of on-line access, for all divisions, to information necessary for reviews, investigations, and research. It is OIRM's intention to employ Redundant Array of Inexpensive Disk (RAID) technology in a client/server environment to provide online access to more data.

The second improvement is related to the software tools provided for analysis of the data. The increasing volume of data through which staff needs to sift has made it essential that it be provided with more sophisticated software tools. Those tools are to be based on algorithms with built-in "expert rules" that will enable the computer to detect certain patterns associated with trading practice violations. T&M requires such

tools so that staff can focus resources on analyzing those unusual patterns of behavior detected by the computer.

The third improvement is related to the manner in which data is provided to the Commission. Data is currently provided by most exchanges using magnetic tapes, a medium whose slow speed and requirement for physical transport prevents the timely analysis of this data by Commission staff. Due to dramatic reductions in telecommunication costs since the current EDS was designed, it is now possible to cost-effectively transfer clearinghouse data directly to CFTC systems, thereby providing Commission staff with timely access to data that is critical to the conduct of investigations.

The fourth improvement is related to the form in which data is received. The information currently arrives in a variety of formats, sometimes several per exchange. This situation makes system maintenance tasks difficult and time-consuming. It is the intention of T&M to require all trade register submissions to adhere to a standard format specification.

As modules are completed and put into production, staff in the Divisions of Trading and Markets and Enforcement will begin to gain experience in the use of those portions of the new system. As that staff gains experience, it is likely to identify additional features and capabilities that would improve its ability to conduct oversight of the futures and option markets. That feedback will enable OIRM to better focus its development efforts.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require 13.5 staff years.

**Status:** This project was started in the 1<sup>st</sup> quarter of FY 1999 and will continue through FY 2003.



**Project Name:** Migration to Office 2000

**Purpose:** The Commission relies upon Microsoft's Office Suite for provision of word-processing, spreadsheet, database, and presentation graphics capabilities. The Commission's current version of that product is Office 97. Microsoft has recently released a new version of that product, Office 2000, designed to be tightly integrated with Internet/Intranet functions. Given that a significant component of the Commission's strategy for delivering information to staff is based on an Intranet, it is particularly important that the Commission adopt Office 2000 as its software tool for preparing that information. Additionally, a major system development project underway, the Exchange Database Reengineering project, is reliant on the availability of Office 2000 on the user's desktops for provision of some of its functionality.

**Users:** Commissioners and all Commission staff

**Requirements:** The following actions must be taken to accomplish this project:

- Train support staff in the use of Office 2000;
- Acquire or develop training materials suitable for transitioning staff from Office 97 to Office 2000;
- Schedule and conduct training classes for Commission staff;
- Install Office 2000 software on Commission desktops; and
- Assist with migration of old files to the new software environment.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require five-tenths of a staff year and \$118,000 in other costs (\$108,000 for software and \$10,000 for Microsoft Certification training of OIRM support staff).

**Status:** This project began in the 4<sup>th</sup> quarter of FY 1999 and will be completed in the 3<sup>rd</sup> quarter of FY 2000.

**Project Name:** Migration to Windows NT

**Purpose:** Commission staff relies upon a variety of desktop computer applications to accomplish its work. Effective use of those applications is dependent, in part, on a desktop operating system that is reliable and easily maintained. The Commission currently uses Windows 95 as its desktop operating system on most of its desktop PCs. Windows 95 has significant reliability problems that result in frequent “lockups,” associated downtime for the end-user, and loss of work. Windows NT provides a more robust operating environment and is only slightly different in appearance and use than Windows 95. Windows NT is also the recommended path for migration to Windows 2000, the Commission’s intended next-generation desktop operating system. This project will provide Commission staff with a cost-effective, short-term solution to the need for a more reliable desktop operating system. This project is being conducted in tandem with the replacement of desktop computers.

**Users:** Commissioners and all Commission staff

**Requirements:** All new PCs are being ordered with the Windows NT operating system. Existing PCs will be upgraded to Windows NT. OIRM Help Desk staff will be trained and certified, if possible, on Windows NT software.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require seven-tenths of a staff year and \$105,000 in other costs (\$85,000 for software and \$20,000 for Microsoft Certification training of OIRM support staff).

**Status:** This project was started in the 3<sup>rd</sup> quarter of FY 1999 and will be completed in the 3<sup>rd</sup> quarter of FY 2001.

**Project Name:** Help Desk Information Analysis

**Purpose:** Commission staff relies upon the availability and proper operation of its personal computers, the network to which they are connected, and the applications and information systems that are provided by these facilities. The OIRM Help Desk is the first point of contact for staff who experience any problem in the use of these facilities. The purpose of this project is to analyze the information collected during the Help Desk assistance process to improve OIRM's ability to support the Commission's computing requirements.

**Users:** Commissioners and all Commission staff

**Requirements:** All Help Desk requests are recorded, and progress in responding to and resolving the problem is tracked. The analysis of this information can be used to:

- Identify trouble call trends, so that proactive strategies can be developed and implemented;
- Identify effective techniques or strategies for resolving problems, so that they can be employed by all Help Desk staff;
- Identify weaknesses in Help Desk capabilities, so that appropriate training can be provided; and
- Develop resource utilization reports for management.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require five-tenths of a staff year during the life of the plan.

**Status:** Ongoing

**Project Name:** Wide Area Network Bandwidth Improvement

**Purpose:** The Commission has adopted the use of client/server architecture to support its next generation of systems, including mission-critical systems. The Commission's increasing use of those evolving systems will place additional loads on the communications infrastructure that links staff client PCs in remote offices with databases on centralized servers. This project will provide the increased bandwidth for inter-city data communications necessary to support the Commission's use of these new client/server applications.

**Users:** Commissioners and all Commission staff

**Requirements:** Bandwidth requirements for inter-city data communications are expected to increase by as much as a factor of three during this five-year period. Those increases will be in response to a number of initiatives, including the use of the new client/server applications, the introduction of the Intranet, and the increased performance of newer computers. The ability to increase bandwidth is dependent on two factors: the existing centralized communications hardware and the available remaining bandwidth of the long-distance service being used. The Commission currently has the capacity to increase the bandwidth by at least a factor of three in all cities.

Determination of the amount of bandwidth sufficient to support an organization's needs is an ongoing process. Since the Commission's data communication facilities are shared by multiple users, whose instantaneous bandwidth requirements cannot be anticipated, determining the optimal bandwidth is difficult. OIRM has a variety of monitoring tools that it uses to determine the necessary bandwidth. However, the complexity of the communications infrastructure and the inherent complexity of the tools required to conduct analyses impose significant classroom and on-the-job training requirements for the staff responsible for these activities. Due to the anticipated rapid growth in bandwidth requirements during this time, OIRM plans to place an increased emphasis on these training and monitoring activities.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require four-tenths of a staff year, to be split evenly between FYs 2000 and 2002, and ongoing costs of \$25,000 annually after a major upgrade in the 1<sup>st</sup> quarter of FY 2002.

**Status:** This project is ongoing at a reportable level of activity in FYs 2000 and 2002, and at a low level of activity in FYs 2001, 2003, and 2004.

**Project Name:** Division of Economic Analysis Workflow Modernization

**Purpose:** When the ISS Reengineering project has been completed and put into production, staff in DEA will begin to gain experience in the use of that new system. As that staff gains experience, it may identify ways in which automation can be employed to better incorporate that system within the flow of work performed by DEA. The purpose of this project is to develop systems to improve DEA's workflow.

**Users:** DEA

**Requirements:** The specific requirements for this project will not be known until ISS users have had an opportunity to gain experience with the reengineered ISS.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require seven staff years.

**Status:** This project will begin in the 2<sup>nd</sup> quarter of FY 2000 and will be completed in FY 2003.

**Project Name:** Travel Manager Upgrade

**Purpose:** The Commission uses a software product called Travel Manager to manage the workflow related to authorization of and payment for official travel. The Commission's current version of that software is not Year 2000 compliant in its native form. Due to resource constraints within the Office of Financial Management, the office responsible for administration of this process, there was insufficient time during calendar year 1999 to accomplish an upgrade to the version of Travel Manager that is Year 2000 compliant. The Commission therefore implemented a temporary solution by applying a "patch" to the Commission's current version that made it Year 2000 compliant. However, there is a monthly recurring charge associated with use of this patch whose cost makes this an unacceptable long-term solution. Therefore, the Commission plans to upgrade to the newer version as soon as possible.

**Users:** Commissioners and all Commission staff

**Requirements:** The following actions must be taken to accomplish this project:

- Train support staff in the use of the new version of Travel Manager;
- Acquire and/or develop training materials suitable for transitioning staff from the old to the new version of Travel Manager;
- Schedule and conduct training classes for Commission staff;
- Migrate files from the old to the new version; and
- Install the new version of Travel Manager on Commission desktops.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require one-tenth of a staff year.

**Status:** This project will begin in the 2<sup>nd</sup> quarter of FY 2000 and will be completed in the 3<sup>rd</sup> quarter of FY 2000.

**Project Name:** Video Communications Support

**Purpose:** Headquarters and regional office staff members frequently need to communicate. The purpose of some of those communications can best be accomplished when the parties are face-to-face. For those instances, a significant improvement in the effectiveness of voice communication could be accomplished through the use of video communications. The purpose of this project is to identify, acquire, implement, and manage a video communications system for the Commission.

**Users:** Commissioners and all Commission staff

**Requirements:** The following actions are required:

- Conduct a requirements analysis;
- Evaluate video systems and make a recommendation for selection and acquisition;
- Test and implement the video system; and
- Develop and manage a program for use of the system.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require one staff year during the life of the plan.

**Status:** This project will begin in FY 2000 and will be ongoing for the life of the plan.

**Project Name:** Telephony Integration

**Purpose:** Major telecommunications technology companies have announced products that enable personal computers to supplement normal telephone functions. Currently, staff relies on these two distinct facilities for communicating. These new products enable communications to occur seamlessly between telephones and computers. All messages are placed in a single queue so that retrieval is simplified and time priority sequencing is guaranteed. Such integration improves communications and increases productivity.

**Users:** Commissioners and all Commission staff

**Requirements:** This product should support routing of voice mail to an e-mail inbox and forwarding of voice messages through the e-mail facility. Voice messages routed to an e-mail inbox should be able to be replayed through a PC's speakers. The product should also allow for automatic dialing from entries in an e-mail contact list.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require four-tenths of a staff year.

**Status:** This project will begin in FY 2000 and will be completed in FY 2001.



**Project Name:** Rehabilitation Act Compliance

**Purpose:** The Workforce Investment Act of 1998 contains provisions regarding the accessibility of electronic and information technologies for persons with disabilities. This project supports OIRM's efforts to achieve and maintain compliance with that act.

**Users:** Commission staff and members of the public with disabilities who are seeking access to or use of electronic information maintained by the Commission.

**Requirements:** OIRM will comply with the relevant sections of OMB Circular A-130 by:

- Acquiring information technology in a manner that considers the need for accommodations of accessibility for individuals with disabilities, to the extent that needs for such access exist; and
- Ensuring that members of the public with disabilities have a reasonable ability to access the information they require from the agency.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require four-tenths of a staff year during the last four years of the plan.

**Status:** Due to resource constraints, this project will not begin until the 4<sup>th</sup> quarter of FY 2000.

**Project Name:** Financial Surveillance Information System Replacement

**Purpose:** The existing Financial Surveillance Information System (FSIS) is antiquated and no longer fully meets the needs of the Division of Trading and Markets. Staff in that division has also identified several additional features that would better enable it to perform its oversight role. This project would provide a replacement system that would also support those additional requirements.

**Users:** Division of Trading and Markets

**Requirements:** This project will produce a replacement system for FSIS that will improve upon the functionality and performance of the old system in a number of ways, including the addition of the following components:

**Daily Option Large Trader Data** – This component would provide access to daily option large trader data.

**Consolidated Inter-Market Position** – This component would provide access to information regarding a firm's exposure across several markets, across accounts administered by different FCMs, and among the firm's subsidiaries. This component would also allow T&M to maintain and access records of the subsidiaries that are partially or wholly owned by a parent company, including information regarding the percentage of equity interest.

**Market Move/Financial Position** – This component would provide for maintenance and analysis of information relevant to the financial position of firms under various market move scenarios. Data in this component needs to be integrated with consolidated inter-market position data.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require 11 staff years.

**Status:** This project will begin in FY 2001 and will be completed in FY 2004.

**Project Name:** Integrated Human Resources System

**Purpose:** This system would improve OHR's ability to perform the tasks essential to its mission. Staff would benefit from the increased level of service through those improved OHR programs.

**Users:** Office of Human Resources

**Requirements:** The Commission's OHR has a requirement for a system that would enable them to collect, maintain, and report on information such as:

- Position and personnel actions (SF52 tracking);
- Applicant data;
- Time and attendance;
- Employee demographics such as GS level, job title, and security clearance information;
- Employee relations data;
- Training information; and
- Other related items required for personnel administration.

It is assumed that commercial packages are available to fill this need and that only selection, testing, and implementation are required.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require one staff year.

**Status:** This project will begin in FY 2001 and will be completed that fiscal year.

**Project Name:** Desktop Operating System Upgrade (Windows 2000)

**Purpose:** The Commission has used Windows as its desktop operating system since 1996. As that product has evolved and after resolution of initial software problems, the Commission upgraded to the current version. Microsoft is in the process of finalizing its next version of Windows, Windows 2000, which has been designed to be tightly integrated with Internet/Intranet functions. Given that a significant component of the Commission's strategy for delivering information to staff is based on an Intranet, it is particularly important that the Commission adopt Windows 2000 as the operating environment within which to prepare and access that information. This project supports the effort to accomplish that upgrade.

**Users:** Commissioners and all Commission staff

**Requirements:** The following actions will be required:

- Train OIRM Help Desk staff in the configuration and use of Windows 2000;
- Develop or acquire training materials focused on the differences between Windows 2000 and Windows NT;
- Provide training to Commission staff; and
- Upgrade desktop operating system software.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require 1.2 staff years and \$105,000 in other costs (\$85,000 for software and \$20,000 for Microsoft Certification training of support staff).

**Status:** This project will be started in the 3<sup>rd</sup> quarter of FY 2001 and will be completed in the 1<sup>st</sup> quarter of FY 2002.

**Project Name:** Document Tracking Systems (DTS)

**Purpose:** Various offices within the Commission require the functionality of a DTS for CFTC documents other than controlled correspondence documents. Some of these offices have been using older correspondence tracking systems based upon obsolete software and require a replacement system. Other offices have been relying on manual processes and require development of an automated system. These systems will improve the accessibility of Commission documents to all staff. Automating the task of identifying relevant documents will improve workflow and increase staff productivity and accuracy.

**Users:** Commissioners and all Commission staff

**Requirements:** The new Document Management System, CFTC-Docs, will meet many of the Commission's requirements for electronically storing and retrieving documents. However, there are additional document management requirements related to tracking the movement of documents that cannot be satisfied by CFTC-Docs. OIRM intends to develop one or more systems that are responsive to the Commission's document tracking needs. An existing model is currently used by several offices for tracking controlled correspondence. The new tracking systems will need to provide the ability for organizations to track the progress of document review and/or development and to associate with each step in the process target and actual completion dates, identification of responsible staff, and comments.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require six staff years.

**Status:** This project will begin in FY 2002 and will continue through FY 2004.

**Project Name:** Financial Management System (FMS) Replacement

**Purpose:** This project will increase the Commission's control of this mission-supporting application. Elimination of the Commission's dependence on time-sharing arrangements with the DOI will also reduce the costs associated with supporting these functions.

**Users:** Office of Financial Management

**Requirements:** The short-term solution for migration of the Commission's FMS from the CFTC mainframe was a time-sharing arrangement for use of DOI's mainframe. However, that arrangement imposes a significant cost increase and results in some loss of operational control. OIRM will therefore seek a suitable client/server-based FMS to which this function can be migrated. Once identified, OIRM will work with OFM and DOI to schedule that migration.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require four staff years.

**Status:** This project will begin in FY 2002 and will be completed in FY 2004.

**Project Name:** Independent Brokers

**Purpose:** The Commission's ability to monitor trading practices at the exchanges is currently limited to individual brokers. It would be useful to be able to monitor trading practices among groups of cooperative individuals. This project will support the development of such a capability.

**Users:** Division of Trading and Markets

**Requirements:** This system will extend the Commission's trade practice analysis capabilities to include monitoring the activity of groups of cooperating traders. Currently this capability only exists for broker groups operating at the CME. As arrangements are made with other exchanges for the submission of similar information, that data should also be included. Since this information is currently provided in hard-copy lists, T&M desires to scan images of these lists and to provide access to this information by all divisions.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require two staff years.

**Status:** This project will begin in FY 2002 and will be completed in FY 2003.

**Project Name:** Civil Monetary Penalties

**Purpose:** The Commission operates a program for the purpose of collecting and accounting for monies received in accordance with civil monetary penalties that have been levied against registered commodity professionals. This program reinforces Commission sanctions by assuring vigorous pursuit of penalties assessed. The purpose of this project is to develop a system that would facilitate timely and effective collection and recording of these penalties.

**Users:** Division of Trading and Markets

**Requirements:** This system would provide for maintenance of and reporting from a central repository of information. This system should track penalties, generate payment demand letters, calculate dates for referral of delinquent debts to the Justice and Treasury Departments, and retire debts that meet retention limits. It should also pass information to and from the FMS and calculate periodic and year-end accruals of interest and other charges owed, as required for assessing those charges and for quarterly reporting to the U.S. Treasury. The scope of this program, which includes aging of accounts receivable, recording the volume and source of collections, and updating the status of amounts owed, has recently been expanded to include the collection and accounting of monies for cases involving restitution and disgorgement. This change will result in a tripling of the number and amount of delinquent debt to be collected. Due to this increase, reporting requirements will increase fourfold. These factors will result in increased pressure to accelerate the development of an integrated system that will meet all of the needs of this program.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require five-tenths of a staff year.

**Status:** This project will begin in FY 2003 and will be completed that fiscal year.



**Project Name:** Remote Computing

**Purpose:** The remote access project, described earlier, will provide staff with the ability to connect to the Commission's internal network and all of its information resources while away from the office. This project will provide staff with the ability to perform computing tasks while away from the office without being connected to the Commission's network. For example, the information used in developing an enforcement case comes from many sources, most of which are accessed through the Commission's network. In a courtroom, it would be useful to have immediate access from a laptop computer to that information without needing to be connected to the Commission's network. The ability to spontaneously access and produce relevant documentation while away from the office would improve staff's effectiveness in such situations.

**Users:** Commissioners and all Commission staff

**Requirements:** Commission staff currently has the capability to perform some remote computing tasks. However, the type and amount of information available on laptop computers that are not connected to the Commission's network is limited. Additional software tools will be required in order to develop a facility that will enable staff to selectively download onto a laptop computer the specific subsets of information that were used in accomplishing a task. OIRM will evaluate and select appropriate software tools as they become available and utilize them in development of such a facility.

**Development Priority:** Two

**Estimated Resources Requirements:** This project will require eight-tenths of a staff year.

**Status:** This project is scheduled to begin in FY 2004 and will be completed that fiscal year.



## CHAPTER IV - STAFFING, FUNDING, IMPLEMENTATION SCHEDULE, AND CROSS-REFERENCE TO ANNUAL PERFORMANCE PLAN

### Introduction

This chapter provides details of the staffing and funding requirements necessary to accomplish the projects and activities described in Chapter III. An implementation schedule allocates resources between projects and activities and across years as illustrated in Table IV-3 at the end of this chapter. The resource allocation strategy is based on an imperative to complete the greatest number of projects and activities in the shortest time possible, within the existing staffing and funding constraints.

### Staffing

The estimated staff years required over the next five years for ongoing development and support of the projects and activities listed in Chapter III is shown in Table IV-1. The required level of contractor support will be reevaluated on an annual basis. Staff positions made available in FY 2000 due to the closure of the Chicago Data Center are being reallocated across other categories.

**Table IV-1 Staffing Requirements (In Staff Years)**

STAFF TYPE	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<b>Government</b>					
Administration	4	4	4	4	4
Application Services	6.8	7	7	7	7
Data Center	1.5	0	0	0	0
Director's Staff	4.3	4	4	4	4
Management	4.5	5.8	5.8	5.8	5.8
Network Services	6.8	7	7	7	7
Systems Development	7.7	9.2	9.2	9.2	9.2
<b>Government Development and Support Staff</b>	<b>25.6</b>	<b>27.2</b>	<b>27.2</b>	<b>27.2</b>	<b>27.2</b>
<b>Total Government</b>	<b>35.6</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>
<b>Applications Contractors</b>	<b>.5</b>	<b>.5</b>	<b>.5</b>	<b>.5</b>	<b>.5</b>
<b>Network Contractors</b>					
<b>Systems Contractors</b>	<b>6</b>	<b>8</b>	<b>11</b>	<b>9.5</b>	<b>6</b>
<b>Total Development and Support Staff</b>	<b>32.1</b>	<b>35.7</b>	<b>38.7</b>	<b>37.2</b>	<b>33.7</b>
<b>Grand Total</b>	<b>42.1</b>	<b>45.5</b>	<b>48.5</b>	<b>47</b>	<b>43.5</b>

## Funding - Cost Estimates

The costs associated with supporting the systems and services required by the Commission, as described in Chapter III, are presented in this section. Table IV-2 details the cost items, extended over a five-year period, based on the implementation schedule found in Table IV-3. A description of the cost elements is provided immediately following Table IV-2. The figures in this table form the basis for the agency's IRM budget requests during this time period. The migration of mainframe applications to the client/server environment and the associated closure of the mainframe data center will result in the transfer of those costs to the client/server environment.

Many factors influence cost and may result in changes to these estimates. For example, the Commission's decisions relative to the actual services and hardware and software products to be procured and delays in acquiring appropriate support contractors may cause cost variations and changes to the implementation schedule.

**Table IV-2 Cost Estimates**

CATEGORY	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	TOTAL
<b>HARDWARE PURCHASES</b>						
Communications Equipment/Wiring	\$40,000	\$111,000	\$116,550	\$122,378	\$128,496	\$518,424
Network Servers	\$165,000	\$150,000	\$157,500	\$165,375	\$173,644	\$811,519
PCs and Peripherals	\$299,000	\$330,000	\$346,500	\$363,825	\$382,016	\$1,721,341
Spare Parts	\$29,000	\$30,000	\$31,500	\$33,075	\$34,729	\$158,304
Telephone Systems/Equipment	\$60,000	\$60,000	\$63,000	\$66,150	\$69,458	\$318,608
Specialized ADP/Network Furniture	\$10,000	\$5,000	\$5,250	\$5,513	\$5,788	\$31,551
<b>SOFTWARE PURCHASES/LEASES</b>						
Mainframe	\$201,000	\$0	\$0	\$0	\$0	\$201,000
Network Servers	\$303,000	\$366,000	\$384,300	\$403,515	\$423,691	\$1,880,506
PCs	\$57,000	\$112,000	\$117,600	\$123,480	\$129,654	\$539,734
<b>TELECOMMUNICATIONS</b>						
Data	\$235,000	\$240,000	\$252,000	\$264,600	\$277,830	\$1,269,430
Voice	\$709,000	\$710,000	\$745,500	\$782,775	\$821,914	\$3,769,189
<b>ONLINE INFORMATION SERVICES</b>						
Financial	\$287,000	\$277,000	\$290,850	\$305,393	\$320,662	\$1,480,905
Legal	\$334,000	\$357,000	\$374,850	\$393,593	\$413,272	\$1,872,715
<b>HARDWARE MAINTENANCE</b>						
Communications Equipment/Wiring	\$66,000	\$86,000	\$90,300	\$94,815	\$99,556	\$436,671
Mainframe	\$82,000	\$0	\$0	\$0	\$0	\$82,000
Network Servers	\$61,000	\$82,000	\$86,100	\$90,405	\$94,925	\$414,430
PCs and Peripherals	\$48,000	\$53,000	\$55,650	\$58,433	\$61,354	\$276,437
Records Management Storage	\$23,000	\$27,000	\$28,350	\$29,768	\$31,256	\$139,373
<b>TRAINING</b>	\$55,000	\$55,000	\$57,750	\$60,638	\$63,669	\$292,057
<b>CONTRACTOR SUPPORT</b>	\$660,000	\$960,000	\$1,366,200	\$1,221,197	\$798,277	\$5,005,673
<b>SUPPLIES</b>	\$124,000	\$125,000	\$131,250	\$137,813	\$144,703	\$662,766
<b>PERSONNEL COMPENSATION AND BENEFITS</b>	\$2,994,000	\$3,090,000	\$3,198,000	\$3,310,000	\$3,426,000	\$16,018,000
<b>INTRA-GOVERNMENTAL PAYMENTS</b>	\$337,000	\$311,000	\$326,550	\$342,878	\$360,021	\$1,677,449
<b>TOTAL</b>	<b>\$7,179,000</b>	<b>\$7,537,000</b>	<b>\$8,225,550</b>	<b>\$8,375,614</b>	<b>\$8,260,915</b>	<b>\$39,578,079</b>

## Elements of Cost

The following paragraphs describe the cost elements depicted in Table IV-2.

**Hardware Purchases** – It is necessary to routinely upgrade the Commission’s hardware base in all areas. On average, those upgrades are necessary every three to five years. OIRM plans purchases across several categories (servers, PCs, communications equipment) in a phased manner to distribute those costs across multiple years.

**Software Purchases/Leases** – The Commission’s software policy is to maintain currency with vendors’ latest versions, which is accomplished by purchasing software maintenance contracts. Purchase of technical support contracts is also necessary for some software products.

**Telecommunications** – The Commission incurs costs for data communications among the headquarters and regional offices as well as for local and long-distance telephone service. These costs are separately itemized for data and voice communications.

**Online Information Services** – The Commission has requirements for timely and accurate information provided by a variety of online vendors. The Divisions of Economic Analysis and Trading and Markets, and the offices of the Commissioners, require current economic data to monitor the activities and condition of the markets. Legal staff in several offices requires comprehensive legal reference information. Costs for these services are separately itemized for financial and legal information.

**Hardware Maintenance** – Due to the critical functions provided by most of the Commission’s centralized equipment, it is necessary to purchase maintenance contracts. These contracts provide for prompt repair or replacement of defective equipment as well as periodic software upgrades.

The Commission has a different strategy for personal computers, printers, and other easily replaced items. OIRM’s experience is that, by maintaining an inventory of components, it can more cost-effectively and promptly respond to hardware failures than by relying on maintenance contracts. The maintenance costs for PCs and printers therefore reflect the purchase price of a sufficient quantity of components spread out over the five-year period.

**Training** – Rapid changes in technology make it essential that OIRM staff be provided ongoing training. Such training enables staff to develop and maintain skills necessary for successful accomplishment of its responsibilities. For example, in preparation for transition to the next version of the Commission’s desktop operating system software, Windows NT, it is essential that OIRM staff be thoroughly trained so it can provide

support to the rest of the Commission.

**Application Programming Support** – These costs relate to the use of contractor personnel. Development projects planned during the next five years will satisfy most of the identified information requirements. The level of effort required to develop these systems far exceeds the level of effort that will be required to support these same systems. OIRM's use of contractors during this time will enable it to scale back its staff at the appropriate time.

**Supplies** – This category includes expendable items such as paper, laser printer toner cartridges, diskettes, tapes for nightly backups, and similar items.

**Personnel Compensation and Benefits** – This category reflects the cost of salary and benefits of OIRM staff.

**Intra-Governmental Payments** – This category reflects the cost of services the Commission receives from other government agencies. The largest items in this category are the payroll/personnel services provided by the National Finance Center and the time-sharing costs associated with the Commission's use of the Department of Interior for operation of its Financial Management System.

## Implementation Schedule

Table IV-3 illustrates the implementation schedule for the projects and activities described in Chapter III. Projects and activities are grouped by priority. Table IV-3 identifies the group of staff members who are responsible for accomplishing the project, the planned start date, the total number of staff years required, and the distribution of staff years across fiscal years. Totals in this table approximate the sum of staff-years in Table IV-1 (government and contractors) for the following groups of staff: application services (A); director's staff (D); network services (N); and systems development (S). Administrative, data center, and management staff years from Table IV-1 are not accounted for in this table. Projects and activities are listed in one of two priority groups (priority 1 or 2). Within each of those priority groups, projects and activities are listed chronologically by start date and alphabetically.

**Table IV- 3 Implementation Schedule**

Project	Staff Group	Start Date	Total Staff Years	FY00	FY01	FY02	FY03	FY04
<b>Priority 1 Projects and activities</b>								
Financial Information System Replacement	N	Completed	0.1	0.1				
Financial Management System (FMS) Migration	S	Completed	0.3	0.3				
Remote Access	N	Completed	0.1	0.1				
Year 2000 Program Management	D	Completed	0.2	0.2				
Year 2000 Program Support	SAND	Completed	0.6	0.6				
Data Center Closure	D	Started	0.3	0.3				
Document Management System	D	Started	2.3	0.5	0.7	0.5	0.3	0.3
Enforcement System Modernization	S	Started	4.2	1	3.2			
Exchange Database System (EDS) Port	S	Started	1.5	1.5				
Imaging Data Conversion	S	Started	0.5	0.1	0.4			
Imaging System Implementation	D	Started	0.4	0.4				
Integrated Surveillance System (ISS) Reengineering	S	Started	3	3				
Library System Replacement	S	Started	0.2	0.2				
Local Area Network (LAN) Bandwidth Improvement	N	Started	0.5	0.5				
Proceedings Automation	S	Started	1.2	0.6	0.6			
VINES to Windows NT Migration	N	Started	0.2	0.1	0.1			
Contracting Officer Technical Representative (COTR) Administrative Tasks	S	Ongoing	1.6	0.4	0.3	0.3	0.3	0.3
Critical Infrastructure Protection	D	Ongoing	1.8	0.3	0.4	0.4	0.4	0.3
Database Administration	S	Ongoing	7.8	0.6	1.8	1.8	1.8	1.8
Desktop Computer Hardware Upgrade	A	Ongoing	3	0.6	0.6	0.6	0.6	0.6
Development of ADP Plan	D	Ongoing	1.3	0.3	0.2	0.2	0.2	0.4
Focus Workshops Support	A	Ongoing	2.5	0.1	0.5	0.7	0.7	0.5
Help Desk End-User Support	A	Ongoing	24.1	4.3	4.2	5	5.2	5.4
Industry Systems Review	D	Ongoing	1	0.2	0.2	0.2	0.2	0.2
Internet Maintenance and Enhancements	D	Ongoing	2.2	0.4	0.4	0.5	0.5	0.4

Project	Staff Group	Start Date	Total Staff Years	FY00	FY01	FY02	FY03	FY04
Intranet Maintenance and Enhancements	D	Ongoing	4.7	0.4	0.9	1	1.2	1.2
Network Administration/Operations	N	Ongoing	14.7	2	3.1	3.2	3.2	3.2
Network Maintenance and Enhancements	N	Ongoing	10.3	1.5	2	2.2	2.3	2.3
Records Management	D	Ongoing	5	1	1	1	1	1
Staff Training	SAND	Ongoing	6.8	1.8	1.3	1.1	1.3	1.3
Systems Coordination	S	Ongoing	4.3	0.7	0.9	0.9	0.9	0.9
Systems Maintenance	S	Ongoing	11.1	2.2	2.2	2.4	2.3	2
Systems Management Server (SMS) Deployment and Management	N	Ongoing	1	0.2	0.2	0.2	0.2	0.2
Training Programs for Desktop Software	A	Ongoing	2.5	0.5	0.5	0.5	0.5	0.5
TV System Management	N	Ongoing	0.5	0.1	0.1	0.1	0.1	0.1
Voice Communications Support	N	Ongoing	3.1	0.7	0.6	0.6	0.6	0.6
Review of OIRM	SAND	Q2 FY 2000	0.5	0.5				
Financial Surveillance Information System Port	S	Q3 FY 2000	0.5	0.5				
<b>Priority 2 Projects and activities</b>								
Company Financial Reporting	S	Started	0.5	0.5				
Exchange Database System (EDS) Reengineering	S	Started	13.5	0.5	3	6	4	
Migration to Office 2000	A	Started	0.5	0.5				
Migration to Windows NT	A	Started	0.7	0.5	0.2			
Help Desk Information Analysis	A	Ongoing	0.5	0.1	0.1	0.1	0.1	0.1
Wide Area Network Bandwidth Improvement	N	Ongoing	0.4	0.2		0.2		
Division of Economic Analysis Workflow Modernization	S	Q2 FY 2000	7	0.6	2.9	2	1.5	
Travel Manager Upgrade	S	Q2 FY 2000	0.1	0.1				
Video Communications Support	N	Q2 FY 2000	1	0.2	0.2	0.2	0.2	0.2
Telephony Integration	N	FY 2000	0.4	0.1	0.3			
Rehabilitation Act Compliance	D	Q4 FY 2000	0.4		0.1	0.1	0.1	0.1
Financial Surveillance Information System Replacement	S	FY 2001	11		0.5	3	3.5	4
Integrated Human Resources System	S	FY 2001	1		1			
Desktop Operating System Upgrade (Windows 2000)	A	Q3 FY 2001	1.2		1	0.2		
Document Tracking Systems	S	FY 2002	6			1	2	3
Financial Management System (FMS) Replacement	S	FY 2002	4			1	1	2
Independent Brokers	S	FY 2002	2			1.5	0.5	
Civil Monetary Penalties	S	FY 2003	0.5				0.5	
Remote Computing	S	FY 2004	0.8					0.8
<b>Totals</b>								
Total Application Services Staff-Years			37.27	7.25	7.49	7.43	7.49	7.49
Total Network Services Staff-Years			34.73	6.79	6.99	7.03	6.99	6.99
Total Director's Office Staff-Years			20.39	4.29	4.03	4.01	4.03	4.03
Total Systems Development Staff-Years			85.01	13.7	17.2	20.2	18.7	15.2
<b>Grand Totals</b>			<b>177.4</b>	<b>32.1</b>	<b>35.7</b>	<b>38.7</b>	<b>37.2</b>	<b>33.7</b>



## Cross-Reference to Annual Performance Plan

The projects defined in this plan support one or more program plans and goals that are contained within the Commission's Annual Performance Plan (APP). Table IV-4 provides the cross-references between this plan's projects and the APP's goals and program plans. This plan's references to the APP goals use the same numbering scheme as is used in the APP. However, the program plans in the APP are not identified by numbers or letters. The APP contains descriptive sections for program plans that support an APP goal. The program plan entries in Table IV-4 can be translated according to the following scheme:

If an entry begins with a number, that number corresponds to the number of the goal in the APP. A single letter and one or more numbers follow such numbered entries. The meaning of the single letter can be determined according to the following translation table:

M = Market Surveillance, Analysis, and Research  
T = Trading and Markets  
E = Enforcement  
P = Office of Proceedings  
G = Office of the General Counsel  
X = Executive Direction and Support

The one or more numbers that may follow a program plan letter correspond to the sub-sections of the FY2000 and FY2001 program plan for that goal. For example, the entry for the first project in the table, Data Center Closure, is 1X2. That entry refers to the second sub-section within the Executive Direction and Support program plan for FY2000 and FY2001 (Administrative Management and Support, page 137) that addresses goal one of the APP.

The APP contains a section that describes support strategies for accomplishment of goals. Projects are also cross-referenced to those support strategies. The support strategy information can be found on pages 226-234 in the APP. If an entry begins with a pair of letters, the meaning can be translated according to the following values:

ST = Support Strategy for Training  
SI = Support Strategy for the use of Information Technology

The number(s) that follow such entries in the table correspond to the numbered issues that follow those support strategies in the APP.

The entry "N/A" means that a cross-reference is not applicable. The entry "ALL" means that a project supports most or all of the goals or program plans.

**Table IV- 4 Cross-Reference to Annual Performance Plan**

Project	Start Date	FY00 Program Plans	FY00 Goals	FY01 Program Plans	FY01 Goals
<b>Priority 1 Projects and activities</b>					
Financial Information System Replacement	Completed	1M1; 1M4; 1T1	1.1.2; 1.2.2	N/A	N/A
FMS Migration	Completed	ALL	ALL	N/A	N/A
Remote Access	Completed	ALL	ALL	N/A	N/A
Year 2000 Program Management	Completed	ALL	ALL	N/A	N/A
Year 2000 Program Support	Completed	1T1; 3X2	1.1.2; 1.2.1; 3.1.1,2; 3.3	N/A	N/A
Data Center Closure	Started	1X2	1.1	N/A	N/A
Document Management System	Started	ALL; SI6	ALL	ALL; SI6	ALL
Enforcement System Modernization	Started	1E; 2E; 2X; 3E; SI5	1.1.4-7; 2.1.1-5; 3.1.3-5; 3.4	1E; 2E; 2X; 3E; SI5	1.1.4-7; 2.1.1-5; 3.1.3-5; 3.4
EDS Port	Started	1T1; 1E	1.1.4-6	N/A	N/A
Imaging Data Conversion	Started	1E; 2E; 2P; 3E; 3P	1.1.3; 2.1.3; 2.3.1; 3.1.3	N/A	N/A
Imaging System Implementation	Started	ALL	ALL	N/A	N/A
ISS Reengineering	Started	1M1,2; 1X2; SI1	1.1.1,2,4; 1.2.3	N/A	N/A
Library System Replacement	Started	SI3	N/A	N/A	N/A
LAN Bandwidth Improvement	Started	ALL	ALL	N/A	N/A
Proceedings Automation	Started	2E; 2P	2.1.3-6; 2.3.1	2E; 2P	2.1.3-6; 2.3.1
VINES to Windows NT Migration	Started	ALL	ALL	N/A	N/A
COTR Administrative Tasks	Ongoing	1M1,2; 1T1; 1E; 1X2; 2E; 2P; 2X; 3T1; 3E; 3P; 3X2; SI4,5	1.1; 1.2.3; 2.1.1-5; 2.1.3; 2.3.1; 3.1.2-5; 3.3.5. 3.4	1M1,2; 1T1; 1E; 1X2; 2E; 2X; 3E; 3X2; SI1,5	1.1.1,2,4-7; 2.1.1-5; 3.1.3-5; 3.4
Critical Infrastructure Protection	Ongoing	ALL	ALL	ALL	ALL
Database Administration	Ongoing	ALL	ALL	ALL	ALL
Desktop Computer Hardware Upgrade	Ongoing	ALL	ALL	ALL	ALL
Development of ADP Plan	Ongoing	ALL; SI7,8	ALL	ALL; SI7,8	ALL
Focus Workshops	Ongoing	ALL; ST1,3; SI4	ALL	ALL; ST1,3	ALL
Focus Workshop Support	Ongoing	ALL; ST1,3; SI4	ALL	ALL; ST1,3	ALL
Help Desk End-User Support	Ongoing	ALL	ALL	ALL	ALL
Industry Support	Ongoing	3T3; 3X2; ST2	3.2.1; 3.3.5	3T3; 3X2; ST2	3.2.1; 3.3.5
Internet Maintenance and Enhancements	Ongoing	ALL; ST5; SI3,6	ALL	ALL; ST5; SI3,6	ALL
Intranet Maintenance and Enhancements	Ongoing	ALL; ST5; SI3,6	ALL	ALL; ST5; SI3,6	ALL

Project	Start Date	FY00 Program Plans	FY00 Goals	FY01 Program Plans	FY01 Goals
Network Administration/Operations	Ongoing	ALL	ALL	ALL	ALL
Network Maintenance and Enhancements	Ongoing	ALL; SI1	ALL	ALL; SI1	ALL
Records Management	Ongoing	ALL	ALL	ALL	ALL
Staff Training	Ongoing	ALL; ST1,3	ALL	ALL; ST1,3	ALL
Systems Coordination	Ongoing	ALL	ALL	ALL	ALL
Systems Maintenance	Ongoing	ALL	ALL	ALL	ALL
Systems Management Server (SMS) Deployment and Management	Ongoing	ALL	ALL	ALL	ALL
TV System Management	Ongoing	1M1; 1T1	1.1.2	1M1; 1T1	1.1.2
Voice Communications Support	Ongoing	ALL	ALL	ALL	ALL
Review of OIRM	Q2 FY 2000	ALL	ALL	N/A	N/A
Financial Surveillance System Port	Q3 FY 2000	3T1	3.1.2.3	N/A	N/A

**Priority 2 Projects and activities**

Company Financial Reporting	Started	3T1; SI4	3.3.5	N/A	N/A
EDS Reengineering	Started	1T1; 1E; 1X2; 3X2	1.1.1,4-6; 3.4.1-3	1T1; 1E; 1X2; 3X2	1.1.1,4-6; 3.4.1-3
Migration to Office 2000	Started	ALL	ALL	N/A	N/A
Migration to Windows NT	Started	ALL	ALL	ALL	ALL
Help Desk Information Analysis	Ongoing	ALL	ALL	ALL	ALL
Wide Area Network Bandwidth Improvement	Ongoing	ALL	ALL	N/A	N/A
DEA Workflow Modernization	Q2 FY 2000	1M1,2; 1X2; SI1	1.1.1,2,4	1M1,2; 1X2; SI1	1.1.1,2,4
Travel Manager Upgrade	Q2 FY 2000	ALL	ALL	N/A	N/A
Video Communications Support	Q2 FY 2000	ALL	ALL	ALL	ALL
Telephony Integration	FY 2000	ALL	ALL	ALL	ALL
Rehabilitation Act Compliance	Q4 FY 2000	ALL	ALL	ALL	ALL
Financial Surveillance System Replacement	FY 2001	N/A	N/A	3T1	3.1.2.3
Integrated Human Resources System	FY 2001	N/A	N/A	ALL	ALL
Desktop O/S Upgrade (Windows 2000)	Q3 FY 2001	N/A	N/A	ALL	ALL
Document Tracking Systems	FY 2002	N/A	N/A	N/A	N/A
FMS Replacement	FY 2002	N/A	N/A	N/A	N/A
Independent Brokers	FY 2002	N/A	N/A	N/A	N/A
Civil Monetary Penalties	FY 2003	N/A	N/A	N/A	N/A
Remote Computing	FY 2004	N/A	N/A	N/A	N/A



## **CHAPTER V - CURRENT MONITORING AND PLANNING MECHANISMS**

This chapter discusses two key topics: the mechanism for reporting and evaluating progress toward the objectives set by this plan, and the process for updating the plan. To remain useful, this plan must be modified annually to reflect progress made and changes in the environment.

### **Progress Reporting Mechanism**

The Director of OIRM prepares written progress reports on a semiannual basis, reflecting the status of all projects and activities currently in process or scheduled.

The immediate Office of the Executive Director is responsible for monitoring developments outside the CFTC which affect the long range IRM plan. These developments may include actions of CFTC, Congress, the Office of Management and Budget, the General Services Administration, the General Accounting Office, or participants in the futures industry. Developments beyond staff control may be identified which affect the plan's priorities and/or schedule. In such cases, it is the responsibility of the Executive Director to report these developments to the Commission.

### **Mechanisms for Updating the Plan**

#### **Annual Review**

OIRM initiates an annual review process that includes five activities in support of this planning process. Each year, OIRM:

- Evaluates the progress on implementation of the plan;
- Identifies any new planning requirements, standards, or changes in the planning assumptions;
- Conducts a survey of users of IRM systems and services to identify potential problem areas;
- Proposes modifications to the format of the plan to comply with necessary changes; and
- Disseminates the results of this survey to the Commission.

#### **Special Update**

The Director of the OIRM initiates the special update process when necessitated by unforeseen developments. A list of the projects affected by these developments is prepared to determine how priorities should be shifted.

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