Federal Maritime Commission

FMC Information Resources Management

Strategic Plan

Fiscal Years 2014-2018

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Contents

FEDERAL MARITIME COMMISSION
INFORMATION RESOURCES MANAGEMNT
FIVE-YEAR PLAN

I.   BACKGROUND

The Paperwork Reduction Act of 1995 (PRA) and Office of Management and Budget (OMB) Circular A-130, Management of Federal Information Resources, require the Federal Maritime Commission (FMC or Commission) to develop and annually revise a five-year plan (Plan) for meeting information technology (IT) needs. The Clinger-Cohen Act (CCA) requires agencies to acquire IT in the most efficient and cost-effective manner.

Based on these and other requirements, this Information Resources Management (IRM) Plan details the FMC IT vision and initiatives and sets forth a plan to carry out those initiatives. The Plan provides a basis for addressing agency-wide needs, as well as individual bureau and office needs. The Plan is linked to its parent document, the agency's 2014-2018 Strategic Plan, and has been integrated within the agency's policy and decision-making processes to ensure it aligns with the FMC's mission and strategic objectives.

The Plan also has been coordinated in compliance with the Commission's Automated Information Security Program (Commission Order 56). Commission Order 56 directs that access to data resources and services be limited to authorized personnel, and that the value of the agency's data not be diminished due to misuse of agency-owned or -issued technology.

Over the next few years, enterprise content management (ECM) tools, low-cost cloud services (LCS), enterprise social media networking technologies, mobile enterprise applications for smartphones and media tablets, big data analytics, and cyber security standards will become synonymous with rapid change of information technology.   These technologies represent a profoundly different way in which government agencies, at all levels, and their IT departments will relate to the public and to each other. These trends and events are changing the nature of IT services and support, and will challenge government to determine what its role should be and how to further the promise of new technological innovations in service to our citizens.

FMC recognizes the speed at which these technological advancements are occurring and realizes the importance of addressing this challenge. The Commission understands that information technology is critical to reaching its strategic goals. Nearly every activity relies on technology to disseminate information and collect data. To meet this challenge, FMC plans to update its systems and procedures to keep pace with these changes.

II.   FMC MISSION AND STRATEGIES

The FMC is an independent agency responsible for the regulation of oceanborne transportation in the foreign commerce of the United States for the benefit of U.S. exporters, importers, and the U.S. consumer.

The Commission carries out its regulatory responsibilities by conducting informal and formal investigations. It holds hearings, considers evidence, renders decisions, and issues appropriate orders and

regulations. The Commission also adjudicates and mediates disputes involving regulated entities, the shipping public, and other affected individuals or interest groups.

The Commission is composed of five Commissioners appointed by the President with the advice and consent of the Senate. Commissioners serve five-year, staggered terms, and no more than three members of the Commission may belong to the same political party. The President designates one of the Commissioners to serve as Chairman. The Chairman is the chief executive and administrative officer of the agency.

The FMC's mission and strategic goals are defined in the Commission's 2014-2018 Strategic Plan. The Agency's mission is "to foster a fair, efficient and reliable international ocean transportation system and to protect the public from unfair and deceptive practices." The following two strategic goals enable the FMC to accomplish that mission:

- Maintain an efficient and competitive international ocean transportation system.

- Protect the shipping public from unlawful, unfair and deceptive ocean transportation practices and resolve shipping disputes.

III.   MISSION OF OIT

The OIT mission is to provide management, technical, and administrative support to the program operations of the Commission through IRM, IT acquisitions, technologies and applications support, computer network infrastructure support, IT strategic planning and governance, web services support, documents and records management, and cyber security. In this regard, OIT plans to: (1) explore and support current and emerging technologies to take advantage of new and existing capabilities, such as ECM and LCS technology to "innovate with less" while improving the agency's return on its IT investments; (2) leverage IT acquisitions to limit the impact of reduced funding; (3) support the Commission in effecting government initiatives such as the E-Government Act of 2002, the Government Paperwork Elimination Act (GPEA), the Federal Information Security Act of 2002 (FISMA), Section 508 of the Rehabilitation Act Amendments (Section 508); and (4) provide expert technical and administrative advice and support to the Commission on the acquisition and use of information technologies and services.

The Commission's priorities include the implementation of upgraded applications and computer systems, and consolidating/eliminating redundant business and workflow applications and systems. The OIT vision is to be a catalyst for change in delivering the most appropriate technology solutions and service to effectuate and enhance agency mission accomplishment.

FMC's key IT program investment and acquisition activities include upgrading and deployment of the Commission's IT infrastructure (datacenter equipment, network, IT security, etc.), commodity IT (email, audio/video, computers, etc.), and the next generation applications and systems including: Internet Service Contract Filing (SERVCON) application, Form FMC-18 (FMC-18) Ocean Transportation Intermediary Application Licensing System, Form FMC-1 (FMC-1), FMC Online Agreements Library, Passenger Vessels Operators Certificates Database (PVO Database), and Case Management System (ECM) platforms. Within each initiative, there are specific deliverables constituting and implementing the Commission's IT strategy.

The following chart sets forth the overall structure of the plan.

IV.   STRUCTURE OF PLAN

FMC's Strategic Plan - Mission
To foster a fair, efficient and reliable international ocean transportation system and to protect the public from unfair and deceptive practices.

FMC's Strategic Plan - Goals	
Goal 1: Maintain an efficient and competitive international ocean transportation system.	Goal 2: Protect the shipping public from unlawful, unfair and deceptive ocean transportation practices and resolve shipping disputes.

Current Environment					
Government-wide Initiatives & OMB Directives	Technology Trends	Fiscal Austerity	Security Threats	Current FMC IT Infrastructure	Other Assumptions & Constraints

FMC IRM Mission
To provide IT leadership and governance that enables FMC to operate efficiently, effectively, and securely through the use of IT solutions and services.

FMC IRM Vision
To be a catalyst for change in delivering the most appropriate technology solutions and service that directly enhances agency mission accomplishment.

FMC IRM Strategies				
EFFICIENT AND RELIABLE BUSINESS SYSTEMS	SAFE AND SECURE IT ENVIRONMENT	PROACTIVE ENTERPRISE PLANNING	ASSURED AGENCY IT BEST PRACTICES	SHARED SERVICES STRATEGY
Service Contracts	Disaster Recovery Plan	IRM Strategic Plan	IT Infrastructure Library	Shared First Culture
Agreements	IT Security Protocols	Enterprise Architecture	Lifecycle Management	Begin with Commodity IT
OTI Licenses	IT Infrastructure	Capital Planning	Change Management	Identify Providers & Delivery Modes
Compliance/Enforcement	Security, privacy and data protection	Process Improvement	Performance Monitoring	Technical Guidance/Data Collection
Dispute/Compliant Resolution	IT Regulatory compliance	Data Interpretation and Analysis	Responsiveness with IT	Efficiency

FMC IRM Goals				
Current & Emerging Technology	Program Area IT Services & Support	IT Security Posture	Federal Government Mandates	Telework Enhancements

FMC IRM Technology Initiatives			
Network Infrastructure and IT Operations Modernization	FMC Enterprise Content Management Platform	IT Disaster Recovery	End User Systems and Support
Service Contracts Filing System (SERVCON)	Consumer Affairs and Dispute Resolution Services Database (CADRS DB)	OTI Licensing and Registration System (FMC-18)	Common Carrier and MTO Registration System (FMC-1)

V.   FACTORS WHICH COULD AFFECT GOAL ACHIEVEMENT

This plan looks at the following six key areas of the environment in which the FMC operates: Government-wide Initiatives and OMB Directives; Technology Trends; Fiscal Austerity; Security Threats; Current FMC Infrastructure; and Key Assumptions and Constraints.

Government-wide Initiatives and OMB Directives

All Federal agencies are required to meet the information technology requirements mandated by Congress. FMC faces the challenge of implementing these regulations, including GPRA, CCA, FISMA, and E-Government. FMC must be able to measure the performance of its IT investments, consistent with the GPRA and CCA. The CCA requires that business processes be streamlined, redesigned, or eliminated prior to investing in information technology to support them. The directive is focused on business process improvement.

The FMC will address this challenge through its strategic IT governance processes. The agency will evaluate proposed project business cases and use a performance-based portfolio management system to evaluate investment alternatives, determine feasibility, and track performance metrics of individual IT projects.

When appropriate, Program/Project Working Groups will be initiated in order to promote collaboration, create standards, resolve possible issues, and provide continuous improvement. Enterprise Architecture will be used as the roadmap to realign and re-engineer technology and processes to best meet the needs of citizens, other agencies, businesses, and Federal employees.

Fiscal Austerity

The imposition of sequestration on the agency during the latter half of FY 2013 curtailed the IT investment portfolio. There were understandable efforts to save money in holding agency furlough days to a minimum. It is anticipated that a reduced budget appropriation will continue into FY 2014 and ensuing years.

It is clear that all branches of government are focused on deficit reduction. Yet key funding challenges for the FMC include OMB-mandated initiatives to transition to the Internet Protocol Version 6 (IPv6), FISMA compliance, and annual Life Cycle Management of IT components.

The agency also faces funding challenges in modernizing the FMC's IT architecture by implementing an Enterprise Platform solution, LCS, electronic payment systems and upgrades to the Service Contracts application.

Current FMC IT Infrastructure

Agency-wide: FMC headquarters and regional offices have desktop and laptop computers linked to the Commission's Local Area Network (LAN), which interconnects computers for the agency. The FMC uses Microsoft Active Directory for directory and domain services utilizing Microsoft Server 2003/2008; the operating systems used on the personal computers are Windows XP/Windows 7.

Local Area Network: Software applications on the network include Microsoft Office 2007, Adobe Acrobat 9/10, WordPerfect Office X5, Google Chrome, Safari Firefox, Symantec Endpoint Protection,

Microsoft Project Professional 2007, Microsoft Visio 2003, Numara Track-it, Microsoft Internet Explorer, and Dell Desktop Authority Management Suite.

Specialized programs and systems: Specialized programs and systems which support bureau and office operations include: Google Email and Apps for Government, Pay.gov, Laserfiche, Westlaw LexisNexis, BPD Bureau of the Fiscal Service ARC PRISM platform, and SERVCON.

Network and Infrastructure: The FMC's network runs on a 1 GB/s backbone with 1 GB/s connectivity to the desktop computers. Internet access is provided via a dedicated high-speed (DS3) connection at the headquarters. Internet access for the six Area Representative Office locations is provided through dedicated high-speed (T1) lines at each office.

Federal Shared Services: The agency uses interagency shared services of Bureau of Public Debt, U.S. Customs Service, and the Department of the Treasury Federal Financial Management System.

It is important to look at the current IT infrastructure in evaluating IT solutions for the agency at the present time and in the future. While some migration to the cloud has already taken place (e.g., email, National Finance Center for human resources), the agency is mainly in an on-premise environment with servers and storage residing at headquarters. Due to budget constraints over the past several years, the FMC IT infrastructure has taken deep cuts. The FMC is developing an Information Technology Roadmap along with a cost-benefit analysis between on-premise and cloud hosting for certain commodity and agency-unique IT resources.

Key Assumptions and Constraints

A variety of organizational, economic, and technical assumptions and constraints have been considered in formulating this Plan.

Organizational

Updating the business applications and infrastructure to more cost-effectively support the business function is the objective of every FMC IT initiative. Alignment of information technology initiatives and agency strategy will involve the participation of key agency decision-makers. Improved understanding of information technology will help FMC decision-makers identify and prioritize the service improvement initiatives.

The IT management provides background information, alternatives, and recommendations to educate the business customers on the impacts of their initiatives and their associated risks. A partnership between the business units and the IT management will help two-way communications. Business units must not only understand that IT expenditures benefit them, but that they are also responsible for prioritization of initiatives across the agency. The needs of the entire organization must be considered and solutions developed that reflect a corporate/unified approach and execution of the agency's mission.

Economic

Adequate budget resources are required to maintain current service levels, while meeting the additional challenges involved in improving planning processes, creating E-Government pilot projects, and meeting new and expanded Federal mandates. The FMC must have enough flexibility in its IT budget to comply with new requirements, to cover unforeseen costs, and to plan budgets which reflect future needs.

Technical

The Commission is currently breaking down its technology stovepipes. All new applications will use current proven technology to maximize user functionality and minimize operation maintenance costs.

VI.   IRM GOALS

Goal 1: Current and Emerging Technology   Support the Commission's efforts to ensure all major systems and applications will benefit from new and emerging technologies that can be used to better support business and workflow processes.

OIT initiatives supporting Goal 1:

- IT infrastructure modernization; servers, storage, and network.
- Backup and Recovery infrastructure modernization with a disk-based architecture.
- Complete agency's initiative to implement ECM technology.
- Complete agency's initiative to integrate databases.
- Assess enterprise or volume software license agreements for operating systems and office automation applications.
- Implementation of Federal Shared Services Strategy as key part of the Commission's Plan.
- Provide training for IRM staff to enhance development of IT programs for agency requirements.

Goal 2: Program Area IT Services & Support   Support program and administrative bureaus and offices in the fulfillment of their responsibilities by providing high-quality IT services and support. This includes the integration and coordination of information technology across functional and program lines.

OIT initiatives supporting Goal 2:

- Provide and support end-user applications and equipment.
- Provide expert technical and administrative support.
- Introduce Business Intelligence (BI) through data analysis and reporting tools for the bureaus and offices.
- Provide end user training in coordination with FMC Training Officer.
- Coordinate with bureaus and offices, contractors, and the industry.
- Schedule all systems of records, as appropriate.
- Obtain OMB clearances, as needed.

Goal 3: IT Security Posture   Implement enhanced security policies and
                                                       procedures to fully implement FISMA
                                                       requirements.

The law requires each Federal agency to develop, document, and implement an agency-wide program to provide information security for the information and information systems that support the operations and assets of the agency, including those provided or managed by another agency, contractor, or other source.

Under FISMA, agencies must ensure the integrity, confidentiality, authenticity, availability, and non-repudiation of information and information systems. FISMA further requires: (1) annual program reviews; (2) annual Inspector General (IG) evaluations; (3) agency reporting to OMB of the results of IG evaluations for unclassified systems and audits of IG evaluation for national security programs; (4) security Certification and Accreditation of Federal Information Systems; and (5) an annual OMB report to Congress summarizing the material received from agencies.

OIT initiatives supporting Goal 3:

- Implement security controls in Commission information systems.
- Transition from the traditional Certification and Accreditation (C&A) into the Risk Management Framework (RMF)
- Compile/update current inventory of information systems.
- Implement security controls in agency information systems.
- Assess the effectiveness of baseline security controls.
- Construct Plan of Action to remediate all security issues for management/OMB.
- Assess agency systems security status and compile reports to management/OMB.
- Continue Commission-wide survey and security assessments of information systems.
- Monitor the security controls on a continuous basis.

Goal 4: Federal Government Mandates   To further position the Commission to be able to
                                                       engage in E-Government and E-Commerce.

OIT initiatives supporting Goal 4:

- Improve Commission policy, procedures and specifications for managing documents and records to meet with National Archives and Records Administration (NARA) requirements.
- Migrate all documents and record collection deemed suitable for conversion to NARA-compliant electronic storage.
- Provide employees with training to operate in an electronic content management environment.
- Continue to enhance Commission policy and procedures for compliance with Section 508 to include IT systems development, procurement, maintenance, and use of technology that meets the standards published by the 508 Standards Access Board.

Goal 5: Telework Enhancements   To ensure that the needs of the Commission to
                                                       meet the objectives of the Telework Act of 2000
                                                       (the Act 2000) and the Telework enhancement
                                                       Act of 2010 (the Act 2010) are in place.

Implement the requirements of Section 359 of Public Law No. 106-346, which requires agencies to establish a policy by which eligible employees may participate in teleworking so long as their

performance is not diminished. The Public Law's primary aim is to reduce traffic congestion and improve the environment; improve employee morale and commitment; improve productivity and quality of work; help hire and retain employees; and enable employees to better arrange their use of leave. The Act 2010 expands upon and strengthens the Federal government's commitment to the telework program.

OIT initiatives supporting Goal 5:

- Ensure that sufficient inventory of laptops, tablets and mobile equipment exists.
- Provide expertise to solve application/laptop/tablet/equipment problems.
- Provide reliable user-friendly remote access to all FMC systems.
- Implement a defined Bring Your Own Device (BYOD) policy.
- Provide clear, defined IT policy and processes for support of telework.

VII.   FY 2014-2018 IRM TECHNOLOGY INITIATIVES

This section describes major initiatives planned or underway. Also listed are examples of specific activities supporting the FMC's major information system initiatives.

Network Infrastructure and IT Operations Modernization

This investment represents the FMC's system servers, including hardware and software operations, licenses, maintenance, backup, continuity of operations, disaster recovery, virtualization, and data center renewal to support all Commission technology. The project and related ongoing upgrades makes available the IT platform from which mission-critical software applications are supported.

FMC Enterprise Content Management Platform

This project will improve FMC's outdated and disparate database architecture with a central Database Management System (DBMS) to support all agency ECM requirements. The DBMS will serve as a central database and document repository to replace FMC's legacy database system and paper document repositories with a digital repository. The digital repository will be available on-line to FMC staff, and where possible, the public, and will provide enterprise search tools, and document and workflow management tools designed to reduce the need for the agency to produce paper documents.

The system will also make available services and functions to support the FMC's core mission by providing a database to support the new SharePoint 2013 application for records and document management, business workflow, business intelligence, and internal and external web portal needs. This project includes the replacement of existing legacy databases and the integration of new relational database technology for data warehouse and big data analytics. This new DBMS will support Commission business transactions, web portal, records and document management technology and automated workflows implemented for the entirety of agency applications and systems.

IT Disaster Recovery Plan

The information technology disaster recovery plan (DR) will be developed in conjunction with the agency continuity of operations plan (COOP). The DR strategy will cover Commission IT systems, applications and data (network, servers, desktop, laptops, and data and connectivity requirements). Priorities for IT recovery will be consistent with the priorities for recovery outlined in the COOP.

End User Systems and Support

This investment provides the day-to-day end user products, services, and support for FMC employees at Headquarters and Area Representative Offices. This provides the basic automated IT tools and technical support needed by FMC staff to complete agency mission. This investment provides support services for IT assets such as, but not limited to: end-user hardware (desktops, laptops); peripherals (local and shared printers, etc.); software (operating systems, office automation suites, anti-virus software); telecommunications and network services; and OIT Service desk software.

Service Contracts Filing System (SERVCON)

This investment represents the replacement of the FMC's service contracts filling system (SERVCON). This replacement will integrate legacy and external systems with the agency's new DBMS to provide service contracts and NVO service arrangements submission, enterprise data warehouse reporting, and business intelligence analysis processing functions, as well as appropriate public access. The anticipated benefit of the investment includes delivering a new service contracts filing system which will support submissions in a more productive, reliable and secure manner.

Consumer Affairs and Dispute Resolution Services Database (CADRS DB)

This investment represents the replacement of the FMC's consumer affairs and dispute resolution services activities database application. This replacement will provide a case management solution and integrate as appropriate with the agency's new DBMS. This application will provide FMC staff with web portal access to CADRS submissions, reporting and data analysis tools and processing functions and, as appropriate, public access to dispute resolution information.

OTI Licensing and Registration System

This investment represents the completion of the next generation Automated Application for an Ocean Transportation Intermediary License System. This project will develop an OTI certification and licensing case management application that provides a fully integrated online, paperless interface to conduct OTI licensing to facilitate electronic processing and registration activities that are under the Bureau of Certification and Licensing (BCL), and replaces both the Regulated Persons Index (RPI) and the current FMC-18 application process. This will integrate internal and external OTI-related services and business processes, and provides a case management system that supports licensing transactions and fees payment processing in a more productive, reliable manner for current and new licensing applicants. This system will expand the Commission's existing E-government platform to include all internal program offices permitting, licensing, registrations, and docket activities.

Common Carrier and MTO Registration System (FMC-1)

This investment represents the replacement of the Common Carrier and MTO Registration System (FMC-1). This new Form FMC-1 application will permit shippers and other members of the public to obtain reliable and more secure access to tariff information via current web portal technology.