

# CFTC



## 2014-2018 Information Technology Strategic Plan (ITSP)

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Office of Data and Technology (ODT)

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**Document History**

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1.1	December 22, 2014	Added External Factors, revised table identifying alignment between IT strategic initiatives and CFTC goals and objectives

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## Executive Summary

The 2014-2018 Information Technology Strategic Plan (ITSP) provides strategic direction for how ODT will support the expanded CFTC mission, improve efficiency and effectiveness, and provide reliable and secure IT services.

This IT Strategic Plan was developed in partnership with CFTC stakeholders from all divisions and offices to ensure alignment with the CFTC Mission and the CFTC Strategic Plan. ODT and the CFTC stakeholders developed the plan using the following principles, priorities, and factors.

### Principles

IT strategic principles identify how IT activities will be managed:

- Alignment with the CFTC Mission and Strategic Plan
- Leadership and communication at all levels
- Timely direction and priorities from IT leaders.

### Priorities

IT strategic priorities establish preferences for selecting IT investments, in descending order of priority:

- **Availability of infrastructure and services**  
CFTC must have reliable and high-performance IT services, including the infrastructure and analysis and communication tools. Without this, other IT priorities would be difficult to achieve.
- **Access to data and information**  
Because the CFTC must ingest, understand, and analyze data from multiple industry sources, ODT provides data transfer, ingest, warehousing, standards, and quality activities.
- **Availability of platforms for data analysis**  
The expert market, financial, legal, and economic analysts in CFTC must have platforms and tools with which to analyze data while minimizing time, process, and resource constraints.
- **Mission- and enterprise-focused automation services**  
All implemented solutions, whether built or purchased (with a bias towards buying), are integrated with enterprise data and enterprise services.

### Factors (Technical Approaches to IT Activities)

Factors are technical approaches that direct the design, implementation, and sustainment of IT services:

- Use legal entity identifiers, provide accurate, centralized source and reference data
- Exploit publicly available, government and industry information, facilities, and data services
- Provide an enterprise-wide information and services architecture
- Promote and adopt industry standards
- Connect industry straight-thru processing to automated and transformed internal processes
- Use buy-or-build and total cost of ownership assessments for the best value with acceptable risk
- Manage, protect, and leverage information using automated security controls and continuous diagnostics to reduce risk
- Deliver solutions in short, iterative phases, using components that can be assembled with agility
- Establish and refine precise data and data quality requirements collaboratively and iteratively
- Maintain a cadre of FTEs with industry, technical, and contract-oversight expertise to manage IT investments, ultimately lowering costs, reducing risks, and increasing operational flexibility

## IT Strategic Goals, Objectives, and Initiatives

The IT Strategic Plan is organized into four goals that provide focus and define achievable outcomes. The twelve objectives identify general directions that lead to the outcomes identified by IT strategic goals, while the strategic initiatives are specific programs, projects, services, and sets of activities.

### Goal 1 - Deliver IT systems and services aligned with regulatory mission activities of the CFTC

A key driver of the information technology program is the delivery of technology platforms, systems, and services to support CFTC mission and support functions. It is a priority to meet business needs first by empowering users with self-service technology platforms for data analysis, then by enterprise-focused automation services. Accordingly, the self-service technology platforms, including business intelligence software and collaboration software, empower CFTC staff to quickly and iteratively develop analytical work products (e.g., surveillance reports) and share information without being hampered by a dependence on technologists to build solutions. If requirements are such that self-service is not practical and packaged solutions are available in the market, then CFTC will buy, configure, and integrate the appropriate solutions to meet the business need. Given the unique nature of CFTC requirements, if a solution is not available in the marketplace then many of the same technology platforms mentioned previously are leveraged to build custom mission systems.

The underlying technology services component facilitates the:

- Delivery of services to implement technology platforms and custom solutions
- Building of analytical models, reports, and systems to support specific mission requirements
- Integration of solutions to facilitate use within and across CFTC business units.

While it is ideal to acquire ready-made solutions to meet business objectives, services are still needed to implement, integrate, and manage solutions. Where solutions are customized, resources are also required to design and develop these customizations.

#### Objective 1.1: Develop mission systems that contribute to the effectiveness of CFTC regulatory mission activities

##### Strategic Initiatives

- 1.1.1: Continuously enhance market surveillance monitoring and case management systems
- 1.1.2: Continuously identify and develop enhanced financial analytical tools
- 1.1.3: Continuously enhance data analytics platforms, data discovery and visualization platforms and high-performance data environment
- 1.1.4: Increase litigation support services
- 1.1.5: Continuously enhance eLaw program technology

#### Objective 1.2: Collaborate with the industry and divisions to automate business processes and data flows

##### Strategic Initiatives

- 1.2.1: Actively engage derivatives clearing organizations (DCOs) to identify and potentially re-use or extend margining and other software algorithms to meet unique Commission requirements
- 1.2.2: Increase integration between the National Futures Association (NFA) and CFTC systems
- 1.2.3: Further integrate eLaw with other CFTC systems and processes
- 1.2.4: Provide technical support for regulatory reporting compliance
- 1.2.5: Build out of proof-of-concept programs formulated by mission program staff

### **Objective 1.3: Provide enterprise solutions aligned with industry best practices**

#### **Strategic Initiatives**

- 1.3.1: Increase use of Application Programming Interfaces (APIs) and web services for regulatory data reporting
- 1.3.2: Use industry-standard tools to evaluate futures commission merchant (FCM), commodity pool operator (CPO), and other participant financial risk

## **Goal 2 - Facilitate availability and enhance understanding of data to improve regulatory effectiveness**

The CFTC increasingly and unavoidably relies on its understanding of data to ensure that it can perform its regulatory and public policy functions effectively. As the markets and participants it oversees overwhelmingly turn electronic, engage in faster and more automated trading, and transact in products that are more and more complex, the CFTC increasingly needs to be a regulator that understands, aggregates, processes, summarizes, and acts on data in a timely manner for surveillance, enforcement and transparency reporting. The markets and participants that CFTC regulates generate and report to the CFTC a large quantity of information from multiple industry sources across multiple markets. Increasing speed, volume, and complexity in these products and markets require the CFTC to develop an increasingly sophisticated ability to validate and pre-digest the reported data so that front-line regulatory functions such as surveillance and enforcement can more effectively use that data. In addition, even as the CFTC's regulatory regime has expanded to include swaps, it needs to ensure that not only is the swaps oversight integrated into the existing program initiatives, but also that the existing program and processes are upgraded to keep up with new techniques and technologies. Thus, data management is an essential to all of CFTC's regulatory initiatives and, in particular, to integrating swaps oversight into existing program initiatives.

Timely and effective surveillance analysis, aggregation, and risk analysis are critical to the CFTC's ability to oversee the markets effectively. CFTC's data management program has to ensure that it responds both broadly and specifically to address the critical regulatory needs of the Commission:

- A standards-based, robust and flexible data architecture is an essential pre-requisite and ensures that confidentiality, availability and integrity of the data are maintained in line with the Commission's mission and federal government requirements
- A capable data standards program that provides guidance to the industry on the data reporting and recordkeeping aspects of CFTC's rules and guidance that the CFTC staff can rely on for understanding the data reported

- A robust reference data management program that ensures that key identifier and product data used by the CFTC staff for data reporting, analysis, aggregating and surveillance is valid, correct and current
- Data analysis that reviews incoming data to ensure that upfront analyses, extracts, reports, and alerts are effective and that data quality can be measured and addressed as needed
- A data harmonization program that includes oversight of data custodial programs operated by the industry, such as Swap Data Repositories (SDRs), Exchanges, Swap Execution Facilities (SEFs), Designated Clearing Organizations (DCOs) and Designated Clearing Members (DCMs). Industry programs must contribute to effectively supporting the Commission's mission, result in acceptable data quality, and ensure that data is well-protected in terms of data integrity, confidentiality and security and is available on a timely basis
- An automated, responsive, robust and high-quality data ingest program that ensures that there is sufficient capacity to take in, validate, rectify and make available to CFTC staff the data that is reported and funneled to the Commission by the participants the Commission regulates
- A front-end data operations program that reviews the data that is ingested, ensures compliance with reporting and recordkeeping requirements, and conducts effective data audits of regulated entities to ensure that their policies and processes are supportive of consistent, timely and high-quality reporting and recordkeeping.

### **Objective 2.1: Architect data to enable automated ingestion, integration, access, sharing, reporting and transparency**

#### **Strategic Initiatives**

- 2.1.1: Receive all data electronically and automate its distribution throughout the Commission using business process automation software (BPMS)
- 2.1.2: Improve data quality

### **Objective 2.2: Aggregate data across markets and participants to empower the CFTC staff to perform complex data analyses**

#### **Strategic Initiatives**

- 2.2.1: Increase application of data standards, including Legal Entity Identifiers (LEIs) and unique product identifiers (UPIs)
- 2.2.2: Harmonize swap data repository (SDR) data

### **Objective 2.3: Manage information to ensure its availability to the regulatory mission activities and the public**

#### **Strategic Initiatives**

- 2.3.1: Ingest order book data from market exchanges and platforms
- 2.3.2: Implement a research-focused data environment
- 2.3.3: Implement the President's Digital Government Strategy

- 2.3.4: Expand the use of interagency collaboration platforms
- 2.3.5: Continue centralized management and administrative data and systems services and support automation of the CFTC administrative and management processes
- 2.3.6: Implement an electronic records and document management system (ERDM)
- 2.3.7: Support publishing of aggregated swaps and futures data

### **Goal 3 - Provide a stable, scalable and secure IT environment and ensure continuous operations**

The Commission must continue to provide a stable, scalable and secure IT infrastructure to meet demand. CFTC's IT infrastructure is the combination of hardware, software, network resources, facilities, and services that are common across CFTC regardless of mission, program, or project and are the foundation of CFTC's IT environment. This infrastructure supports the development, testing, delivery, monitoring, control, and support of IT resources.

The IT infrastructure is the foundation upon which CFTC mission specific systems are built and is the key enabler for delivery of systems and services. CFTC recognizes the interdependency between infrastructure components as well as the systems that depend upon the infrastructure. Therefore, CFTC carefully prioritizes, plans, and coordinates changes to the IT Infrastructure. CFTC will continue to enhance computing infrastructure and related resources to facilitate CFTC regulatory mission activities and mission support activities. Increased network, storage, and processing capacity will permit analyzing larger and more complex data sets and enable enhanced collaboration. A private cloud computing environment will enable CFTC to consolidate processing and networking services in a highly virtualized environment. This environment will deliver high levels of availability, redundancy, and business continuity, while also allowing all information to be managed and made available centrally. IT services that benefit all Commission staff will be sustained and enhanced to support improved effectiveness and productivity.

#### **Objective 3.1: Provide stable and scalable communication, processing, and storage infrastructure capabilities**

Strategic Initiative 3.1.1: Maintain highly available and scalable data infrastructure

#### **Objective 3.2: Provide trusted access to systems and data**

##### **Strategic Initiatives**

- 3.2.1: Enhance data management tools
- 3.2.2: Automate security controls and implement continuous monitoring
- 3.2.3: Provide systems platform support to empower end users

#### **Objective 3.3: Ensure technology and data availability**

##### **Strategic Initiatives**

- 3.3.1: Improve business continuity support
- 3.3.2: Improve mobile computing and mobile communication services

3.3.3: Improve video teleconferencing

3.3.4: Expand after-hours technical support for staff and external participants

### **Objective 3.4: Optimize infrastructure for management of high-volume information sources**

#### **Strategic Initiatives**

3.4.1: Provide access to an increasing number of data sources and increasing sample sizes of market data (including non-futures market data)

3.4.2: Enable infrastructure support for high performance computing

## **Goal 4 - Manage resources to achieve CFTC priorities**

To continue supporting improved business outcomes IT management processes will continue to be integrated into CFTC planning and governance processes. The degree to which IT management leverages best practices, CFTC processes, and proven tools to achieve efficiency of operations will help define its success in fully supporting CFTC regulatory mission and mission support activities.

The CFTC will expand its strategic and operational planning process to better unite the various functional plans including, but not limited to, financial, human capital, and information technology plans. A unified planning process will lead to better use of resources and facilitate effective resource governance. Most importantly, it will increase the Commission's agility in responding to and adapting to external changes and derivatives market evolution. The Commission will supplement current planning activities and deliverables (strategic planning, budget formulation, budget execution, performance, human capital strategic, IT strategic, and IT operating) with mission division and mission support office strategic, operating, and performance plans. The additional level of detailed planning at the division and office level will increase the granularity and focus of HR and IT strategic and operating plans. More detailed and better focused HR and IT plans will also increase the effectiveness of division and office level planning.

Collaboration and partnering will continue to ensure the alignment of business needs and IT services. However, IT management processes for capital planning and investment control (CPIC), strategic and operational planning, and IT program and project management will be adjusted to facilitate expanding CFTC processes. IT operating plans will continue to identify incremental, iterative projects in order to reduce project risk and increase flexible alignment with CFTC appropriations and budget execution. Transparency will be increased to support the enterprise focus of CFTC resource planning and governance.

### **Objective 4.1: Deliver expected outcomes on IT Investments**

#### **Strategic Initiatives**

4.1.1: Extensively use learning management, electronic learning, and video production

4.1.2: Achieve transparency through ODT communications and processes

**Objective 4.2: Develop the ODT organization in alignment with the demands of CFTC’s regulatory mission activities**

Strategic Initiative 4.2.1: Support the implementation of CFTC Governance

# 1. Introduction

The 2008 financial crisis and the subsequent enactment of the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) brought about historic change to the mission of the CFTC. The mission has grown from ensuring the fair, open, and efficient functioning of the futures marketplace to ensuring that the Commission provides that same level of oversight to the complex swaps marketplace.

This more complex environment at the agency has made it imperative that the information technology program rapidly adjusts to meet the new demands in a fiscally prudent environment. The Commodity Futures Trading Commission (CFTC) 2014-2018 Information Technology Strategic Plan (ITSP) provides strategic direction for how IT will support the expanded CFTC mission, improve efficiency and effectiveness, and provide reliable and secure IT services. The CFTC ITSP five-year plan was developed in partnership with its business stakeholders to ensure we are in alignment with the mission priorities of the CFTC's Strategic Plan.

The ITSP supports the Commodity Futures Trading Commission Strategic Plan FY 2014–2018 and was developed in partnership with business stakeholders. The ITSP defines the IT strategic principles, priorities, and factors that form the basis for the IT strategic goals, objectives, and initiatives outlined in this document. These goals, objectives, and initiatives will drive IT planning, development, and operational activities.

The ITSP is built based on a framework that consists for four key components:

1. CFTC Strategic Planning Goals
2. IT Strategic Principles
3. IT Strategic Priorities
4. IT Strategic Factors.

CFTC Strategic Planning Goals come directly from the CFTC Strategic Plan and set the priorities for all Commission work, including but not limited to IT priorities.

IT Strategic Principles identify the management approach to delivering and sustaining IT services:

- Mission partnership, alignment, and outcomes
- Leadership and communication at all levels
- Timely direction and priority setting.

IT Strategic Principles identify how IT services will be managed and are further described in Section 2 of the ITSP.

IT Strategic Priorities establish the order of importance for selecting and sustaining IT investments:

1. Availability of infrastructure and services

## **IT Strategic Goals:**

*IT strategic goals articulate clear outcomes for information technology to deliver effective CFTC mission support.*

## **IT Strategic Principles:**

*IT strategic principles identify how IT services will be managed.*

## **IT Strategic Priorities:**

*IT strategic priorities establish high-level preferences for selecting IT investments.*

## **IT Strategic Factors:**

*IT strategic factors are technical approaches that help direct the planning, design, implementation, and sustainment of IT services.*

2. Access to data and information
3. Availability of platforms for data analysis
4. Mission and enterprise-focused automation services.

**IT Strategic Priorities** are further described in Section 3 of the ITSP.

**IT Strategic Factors** provide technical direction that lead to greater return on IT investments by maximizing value and minimizing risk. They are further described in Section 4 of the ITSP.

**IT Strategic goals and objectives** correlate IT strategy with CFTC strategy, identifying IT Strategic Initiatives that will be used to identify, select, and run IT projects each year. Each of the IT Strategic Initiatives is defined, its purpose and support of the CFTC Strategic Plan is explained, and planned focus areas for specific projects are identified.

To provide the most benefit, the ITSP is integrated with the CFTC Planning Process and is reviewed periodically and adjusted as needed.

**IT Strategic Objectives:**

*IT strategic objectives identify general directions that lead to the outcomes identified by IT strategic goals.*

**IT Strategic Initiatives:**

*IT strategic initiatives establish sets of activities that provide scope to IT operating plans and specific programs, projects, and services.*

## 2. IT Strategic Principles

- Mission partnership, alignment, and outcomes
- Leadership and communication at all levels
- Timely direction and priorities

### Mission Partnership, Alignment and Outcomes

The CFTC mission is the focal point of the ITSP. The ITSP is an overarching mechanism that aligns IT operational activities with CFTC strategic priorities. Each service delivered will be designed, implemented, and deployed with direct insight into why it is needed, how it adds value, and how it will be adopted and used by the CFTC. ODT and CFTC stakeholders will work collaboratively in the planning, implementation, and sustainment of IT services. During FY 2014 thru FY 2018, this collaboration will be especially important in refining data and data quality requirements in the post Dodd-Frank regulatory environment.

#### The CFTC Mission:

To foster open, transparent, competitive, and financially sound markets; to avoid systemic risk; and to protect market users and their funds, consumers, and the public from fraud, manipulation, and abusive practices related to derivatives and other products that are subject to the Commodity Exchange Act.

Alignment of the IT Strategic Goals and IT Strategic Initiatives to CFTC Goals is summarized in Section 9.

### Leadership and Communication at All Levels

Every CFTC stakeholder uses IT services to accomplish the CFTC mission and must have the opportunity to help define how those services are provided. Each Office of Data and Technology (ODT) staff member's role offers a unique organizational perspective. Effective strategy execution can be achieved only if each contributor in ODT understands and takes ownership of their responsibility for contribution to the CFTC mission. The ITSP provides a common vision that facilitates engagement by CFTC staff in the delivery of IT services and enables every contributor in ODT to lead the CFTC towards its mission.

### Timely Direction and Priorities

IT leaders must provide timely decision making and communicate with the Commission and ODT staff to ensure that IT strategy is implemented successfully. This process begins with communication of the ITSP to validate its rationale and encourage engagement and is followed by constant communication throughout the lifecycle of each IT service.

### 3. IT Strategic Priorities

- Availability of infrastructure and services
- Access to data and information
- Availability of platforms for data analysis
- Mission- and enterprise-focused automation services

Given the pace of technology and structural change in the futures and swaps markets and continuing resource constraints, four IT Strategic Priorities are applied to IT strategic and operational planning to ensure the best return on the overall portfolio of CFTC IT investments. These IT Strategic Priorities are listed in descending order of priority: Availability of Infrastructure and Services; Access to Data and Information; Availability of Platforms for Data Analysis; and Mission and Enterprise-focused Automation Services.

#### Availability of Infrastructure and Services

The most fundamental priority is available, flexible, reliable, scalable, and high performance infrastructure and base services. The CFTC IT infrastructure includes hardware, software and telecommunication equipment as well as base services (e.g., data base management systems, email). This infrastructure supports systems (e.g., trade surveillance, position monitoring, or large trader reporting), as well as platforms (e.g., data analytics or collaboration), that empower staff to fulfill the CFTC mission. The Commission will scale and enhance communication, processing, storage, and platform infrastructure to meet mission requirements.

Without a stable, available, and well-functioning IT Infrastructure, other IT priorities would be difficult to achieve. Therefore this is the most fundamental IT priority.

#### Access to Data and Information

In order to fulfill its mission, the CFTC depends heavily on its ability to quickly access and analyze large volumes of complex market data. A primary area of focus must be on data understanding and ingestion—particularly because CFTC has a unique imperative to aggregate various types of data from multiple industry sources across multiple market segments both domestic and international. Providing this access requires data transfer, data ingest, data warehousing, data standards, and data quality activities.

IT initiatives that provide staff with access to data are given priority over all other investments, with the exception of maintaining current infrastructure and services. Precise data and data quality requirements developed collaboratively with staff also provide a foundation for effectively establishing platform and automation service requirements.

**The U.S. futures and swaps markets are estimated at \$30 trillion and \$400 trillion, respectively. By any measure, the markets under CFTC's regulatory purview are large and economically significant. Given the enormity of these markets and the critical role they play in facilitating price discovery and hedging of risk, ensuring that these markets are transparent, open, and competitive is essential to their proper functioning and to help safeguard the financial stability of the Nation.**

### **Availability of Platforms for Data Analysis**

CFTC staff are expert market, financial, legal, and economic analysts that must have the ability to rapidly adjust their analytic activities and approaches to address changing market characteristics and economic conditions. Staff must be provided with platforms and tools that enable them to innovatively analyze data while minimizing time, process, and resource constraints. Most mission-focused work is highly analytical and is unique to specific market conditions, timing, and other variables.

IT initiatives that provide staff with flexible self-service analytics tools for their direct use are given priority over initiatives that take longer to implement and need greater investment in staff time as a prerequisite to successful development and implementation.

### **Mission and Enterprise-focused Automation Services**

Automation services and solutions that support a diversity of roles and activities and increase data re-use across the Commission and allow CFTC to leverage limited resources. Examples include Business Process Management Tools, Enterprise Search Capabilities, Collaboration Tools (e.g., Microsoft SharePoint), and Portal Technology. When considering Enterprise-Focused tools, build/buy decisions will need to be made with a bias to buying. All implemented solutions, whether built or purchased, are integrated with enterprise data and enterprise services.

## 4. IT Strategic Factors

Several factors are considered in the planning, design, implementation, and sustainment of IT services, including the identification of goals, objectives and strategic initiatives, in order to maximize the value of and manage the risk of IT investments.

### Maximizing Value

- Provide accurate, centralized source and reference data to ensure data quality, using legal entity identifiers as a linchpin
- Exploit publicly available, government and industry-provided information, facilities and data services
- Provide an enterprise-wide information and services architecture
- Promote and adopt industry standards
- Connect industry straight-thru processing to automated and transformed internal processes
- Consider total cost of ownership and use buy or build assessments to achieve best value with acceptable risk.

Changes in the marketplace are requiring additional investments in technology and data infrastructures as well as business processes. The complexities of adapting to these changes present technical, operational, and business process challenges and opportunities to the industry. In response to the influx of new types of data from new and existing registrants, the CFTC must build its own information infrastructure and analytical capabilities to support its responsibilities as a first line regulator.

### Minimizing Risk

- Manage information as a CFTC asset that needs to be managed, protected, and leveraged.
- Protect proprietary industry, individual and sensitive government information, using automated security controls and continuous diagnostics to reduce risk.
- Balance business value with risk when implementing new technology and accept risk only when the benefit to achieving the CFTC mission outweighs evaluated risks.
- Deliver solutions collaboratively with staff in short, iterative phases using small components that can be assembled and reassembled with agility.
- Establish and refine precise data and data quality requirements collaboratively and iteratively with staff.
- Maintain a cadre of FTE with industry, technical, and contract oversight expertise who ensure that IT investments are managed effectively ultimately lowering IT ownership costs, reducing the risk inherent in complex IT projects, and providing a pool of expertise that increases operational flexibility.

## 5. IT Strategic Goals, Strategic Objectives, and Strategic Initiatives

The IT Strategic Plan takes a view of the CFTC Strategic Plan and CFTC mission and mission support priorities from a technology perspective. With that view in mind, the goals, objectives and initiative described in Section 5 center around how technology initiatives are organized and executed. Connections to the CFTC Strategic Plan, CFTC Divisions/Offices, and specific Commission program areas are provided throughout this Section to provide a business-oriented context to a particular IT goal, objective, or initiative. These connections are not intended to be comprehensive in nature, but are examples of how the ITSP integrates with other Commission priorities.

Wherever practical, a single IT goal, objective, or initiative will support multiple Commission priorities. Many, in fact, will support all Commission goals, objectives and strategies. ODT attempts to apply an enterprise focus to all IT initiatives, maximizing the leverage of technology investments to support the entire Commission.

Each IT strategic goal and strategic objective reflects the Commission's strategic priorities. In order to bring the greatest benefit to the mission, Commission stakeholders and ODT staff must collaborate and partner to anticipate and understand business needs and align resources to the delivery of IT services. The ITSP is organized into four IT strategic goals that provide focus and define achievable outcomes. Twelve IT strategic objectives (SO) identify general directions that lead to the outcomes identified by IT strategic goals.

### IT Strategic Goals

- Goal 1. Deliver IT systems and services aligned with regulatory mission activities of the CFTC
- Goal 2. Facilitate availability and enhance understanding of data to improve regulatory effectiveness
- Goal 3. Provide a stable, scalable and secure IT environment and ensure continuous operations
- Goal 4. Manage IT resources to achieve CFTC priorities.

More entities, more markets and more products (including more complex products) are subject to CFTC regulation than ever before. The industry is responding quickly to the competitive opportunities engendered by the shifting regulatory landscape. Innovation in the industry will continue to add complexity in ways currently unanticipated.

### IT Strategic Objectives

- 1.1 Develop mission systems that contribute to the effectiveness of CFTC regulatory mission activities
- 1.2 Collaborate with the industry and divisions to automate business processes and data flows
- 1.3 Provide enterprise solutions aligned with industry best practices
- 2.1 Architect data to enable automated ingestion, integration, access, sharing, reporting and transparency
- 2.2 Aggregate data across markets and participants to empower the CFTC staff to perform complex data analyses
- 2.3 Manage information to ensure its availability to the core mission functions and the public

- 3.1 Provide stable and scalable communication, processing, and storage infrastructure capabilities
  - 3.2 Provide trusted access to systems and data
  - 3.3 Ensure technology and data availability
  - 3.4 Optimize infrastructure for management of high-volume information sources
- 
- 4.1 Deliver expected outcomes on IT Investments
  - 4.2 Develop the ODT organization in alignment with the demands of CFTC's core mission functions

## **IT Strategic Initiatives**

IT strategic initiatives decompose the IT strategic objectives and establish sets of activities that provide scope to IT operating plans and specific programs, projects, and services. Each IT strategic goal, objective, and initiative is described below. Focus Areas for Projects listed for each IT strategic initiative are examples of major projects that will be executed during the timeframe of the ITSP. Projects are sometimes repeated across multiple initiatives because they advance multiple CFTC and IT strategic objectives. The CFTC Strategic Plan performance goals that the IT strategic initiative contributes to are listed along with a general description of the contribution. Finally, the CFTC Strategic Plan goals and objectives as well as the CFTC divisions or offices that will benefit from the IT strategic initiative are listed. This cross reference shows the line of sight from IT initiatives and their projects through the IT Strategic Plan to the CFTC Strategic Plan. While the complete set of IT projects and activities performed during the course of any year are beyond the scope of the IT Strategic Plan, there is a linkage from the IT Operating Plan for each year to the IT Strategic Plan and the CFTC Strategic Plan. It is through this line of sight that Commission staff and IT staff can see how their collaborative efforts lead to meeting the strategic objectives and goals of the Commission.

## **Goal 1 – Deliver IT systems and services aligned with regulatory mission activities of the CFTC**

A key driver of the information technology program is the delivery of technology platforms, systems, and services to support CFTC mission and support functions. It is a priority to meet business needs first by empowering users with self-service technology platforms for data analysis, then by enterprise-focused automation services. Accordingly, the self-service technology platforms, including business intelligence software and collaboration software, empower CFTC staff to quickly and iteratively develop analytical work products (e.g., surveillance reports) and share information without being hampered by a dependence on technologists to build solutions. If requirements are such that self-service is not practical and packaged solutions are available in the market, then CFTC will buy, configure, and integrate the appropriate solutions to meet the business need. Given the unique nature of CFTC requirements, if a solution is not available in the marketplace then many of the same technology platforms mentioned previously are leveraged to build custom mission systems.

The underlying technology services component facilitates the:

1. Delivery of services to implement technology platforms and custom solutions
2. Building of analytical models, reports, and systems to support specific mission requirements
3. Integration of solutions to facilitate use within and across CFTC business units.

While it is ideal to acquire ready-made solutions to meet business objectives, services are still needed to implement, integrate, and manage solutions. Where solutions are customized, resources are also required to design and develop these customizations.

The Commission's regulatory mission activities – registration; product review and assessment; examination, surveillance, and enforcement – are supported by economic analysis, legal analysis, data infrastructure and technology, international policy coordination, and management and administration functions. New IT services and enhancements to existing services are evaluated and planned in terms of their impact on the CFTC mission, either directly to regulatory mission activities or indirectly through supporting activities.

The following IT strategic objectives are described under Goal 1:

- 1.1: Develop mission systems that contribute to the effectiveness of CFTC regulatory mission activities
- 1.2: Collaborate with the industry and divisions to automate business processes and data flows
- 1.3: Provide enterprise solutions aligned with industry best practices.

### **Objective 1.1: Develop mission systems that contribute to the effectiveness of CFTC regulatory mission activities**

Development of services or implementations of commercially-available off-the-shelf solutions are focused on the CFTC mission, either directly to regulatory mission activities or indirectly through mission supporting activities. IT delivery of systems takes a buy first approach to delivering solutions, focusing custom software development services on requirements unique to the CFTC and relying on commercial off-the-shelf (COTS) acquisitions to meet non-unique requirements.

The following IT Strategic Initiatives are described below:

- 1.1.1: Continuously enhance market surveillance monitoring and case management systems
- 1.1.2: Continuously identify and develop enhanced financial analytical tools
- 1.1.3: Continuously enhance data analytics platforms, data discovery and visualization platforms and high-performance data environment
- 1.1.4: Increase litigation support services
- 1.1.5: Continuously enhance eLaw program technology.

### **Strategic Initiative 1.1.1: Continuously enhance market surveillance monitoring and case management systems**

**Definition:** In order for CFTC to provide effective market and trade practice surveillance, CFTC must monitor a wide range of aspects of the futures and swaps markets (e.g., price movements, individual positions, positions relative to limits, trading patterns and anomalies). CFTC has developed a set of specialized monitoring systems. These monitoring systems range from analyst driven data discovery query tools, report tools, scheduled monitoring tools, to alert-based tools. Wherever possible, these monitoring systems leverage off-the-shelf technology platforms for analytics and collaboration. For example, an analytics platform may be made up of data discovery tools which are self-service analytical software which enables a business user to analyze massive amounts of data and query this data in an ad-hoc fashion. These monitoring tools and platforms will require enhancements to keep pace with the industry and respond to changes in regulatory mandates.

Case management systems (also known as collaboration platforms or work flow systems) allow CFTC to effectively manage processes, organize work products and related information, track progress, and provide managerial reports. These case management systems generally include document management and workflow management components. The case management systems support the processes throughout the Commission though currently case management is most mature in the Division of Enforcement for tracking legal matters.

**Purpose:** Strategic Initiative 1.1.1 is necessary to continuously enhance market and trade practice surveillance monitoring in order to address structural market changes and support new regulatory requirements (e.g., swaps) by facilitating awareness of markets through monitoring. These systems will also incorporate innovative surveillance approaches formulated by staff into scheduled, routinely run processes to free up staff to innovate and focus on unique and emerging issues.

Integrated swaps and futures positions along with integrating position ownership information with position control information will be a major focus area for market surveillance monitoring. Significant effort will be applied to understanding overall positions across instruments. Staff will integrate the information in the swaps database with that currently held in the Commission's futures and options database. In so doing, staff will be better able to track the positions of traders for the purpose of enhancing market surveillance of large traders as well as enforcing position limits.

Case management technology will be enhanced continually and applied in most mission areas, including market surveillance and financial risk surveillance. The case management capabilities of the eLaw program will be expanded to an enterprise-wide capability. Automating integration between registration and review, market and trade practice surveillance, financial and risk surveillance, examination, and enforcement activities will improve workflow, increase re-use of information, improve awareness of key market information as well as important regulatory activity and coordination, and increase the ability of staff to correlate data and events.

**Focus Areas for Projects:**

- Futures and Swaps Position Monitoring Development
- Position Limits System Development
- Enterprise-wide Case Management Acquisition and Implementation (distinct from Legal Matter case management)
- Registration System Development
- Ownership Control Reporting (OCR)
- Data Collection, Ingestion, and Analysis
- High-Performance Computing Implementation.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by increasing awareness of key market information as well as important regulatory activity:

- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies
- Percentage of derivatives for which trader data can be matched across CFTC datasets
- Monitor high-risk registrants including SD, MSPs, and FCMs for signs of financial stress.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop and implement technology based surveillance tools to keep pace with market technology
- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1-4	1.1, 1.4, 2.1-2.4, 3.1, 3.2, 4.4	DCR, DMO, DOE, DSIO

**Strategic Initiative 1.1.2: Continuously identify and develop enhanced financial analytical tools**

**Definition:** CFTC has acquired and/or developed a set of financial analysis tools and capabilities to monitor risk at the firm, clearing member, clearing house, and DCM/SEF levels as well as monitor overall systemic risk. Financial records, including margin, collateral, financial health measures, and positions are loaded, tracked, outliers explored, and measured against stress tests to determine risks and financial viability of participants and the markets. CFTC's systems include Stressing Positions at Risk (SPARK), Regulatory Statement Review Express (RSR Express), Trend Analysis, and Vault (collateral valuation). CFTC currently utilizes COTS products including FINCAD and MATLAB, as components on which to build enhanced risk management capabilities. CFTC's financial analytical tools require significant enhancements to evaluate risk not just in the futures markets but must include overall participant portfolio risks when including swaps (e.g., interest rate swaps, credit default swaps, and commodity swaps).

**Purpose:** Strategic Initiative 1.1.2 is necessary to continuously identify and develop enhanced financial

analytical tools to support the analysis and evaluation of financial data received from registrants in order to monitor financial risk. This includes continuing agile development of CFTC-developed custom systems. Furthermore, given the complexity of margin and risk calculations associated with swaps, this initiative includes identifying, implementing, and integrating best-of-breed solutions used by industry participants whenever practical. In addition to initial system implementation, fully operationalizing Dodd-Frank will require residual IT changes for several years to come.

Enhancing CFTC's financial analysis tools is critical as the Commission will be the only financial regulator that will be able to aggregate and evaluate risk across all DCOs. Each DCO's view of risk is limited to market participants clearing at that DCO. Many market participants will have positions at multiple DCOs in more than one asset class. Therefore, the Commission is enhancing its existing futures specific risk surveillance program to include the ability to stress test positions in swaps for market participants and DCOs. These software tools will need to be able to stress test both market participants and DCOs. These financial analysis tools will also be used as part of oversight and reviews of FCMs and swaps dealers risk management controls.

Additionally, the Commission is developing a system that allows for the identification and then aggregating of related market participants across DCOs. Additionally, tools will be enhanced to back test/evaluate sufficiency of all material product and portfolio margin requirements; monitor firm level variation and initial margin requirements across DCOs; evaluate the risk of market participants positions held at multiple FCMs or DCOs; and combine cleared and bilateral positions to obtain a more complete picture of a clearing firm's risk

**Focus Areas for Projects:**

- Analytical Systems and Tools Implementation
- Data Collection, Ingestion, and Analysis.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by providing staff with financial analysis tools:

- CFTC strives to conduct back testing of DCOs' material product and portfolio initial margin requirements to assess their sufficiency
- Clearing members' ability to fund variation and initial margin requirements calculated in hypothetical CFTC-designed market scenarios
- Strive to aggregate cleared swaps, futures, and options positions into a comprehensive risk surveillance process and conduct analysis for each material market participant.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop tools to back test financial resources and evaluate sufficiency of all material product and portfolio margin requirements
- Develop a program to monitor firm-level variation and initial margin requirements across DCOs
- Enhance the risk surveillance program to evaluate the risk of market participants positions held at multiple FCMs or DCOs
- Develop process to combine cleared and uncleared, bilateral positions to obtain a more complete picture of a clearing firm's risk exposure
- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
2-4	2.1, 2.4, 3.1, 3.2, 4.4	DCR, DOE, DSIO

### Strategic Initiative 1.1.3: Continuously enhance data analytics platforms, data discovery and visualization platforms and the high-performance data environment

**Definition:** Data discovery and data visualization are terms to indicate self-service analytical software which enables a business user to analyze massive amounts of data and query this data in an ad-hoc fashion. These tools allow CFTC's economists, analysts, investigators, and attorneys to go beyond the canned reports in custom systems. These data discovery/data visualization tools empower users to use a point-and-click interface to interact with graphics, query and filter data, create interactive animations, and explore data in a highly intuitive fashion. To further enhance the user experience, a high-performance data infrastructure (e.g., CFTC's massively parallel database) allows near real time responses to queries. High-performance computing coupled with data discovery tools allow users to explore data in a highly efficient manner in order to gain insights and see patterns that would not have been previously possible.

**Purpose:** Strategic Initiative 1.1.3 is necessary to enable the Commission to conduct market, risk and economic analysis based on the most current data, using analytical tools that can be built by CFTC data analysts for the particular situation being analyzed. These platforms and tools empower CFTC analysts with futures and swaps expertise to conduct self-discovery of data and build specific work products for unique business situations. These platforms also enable technologists to build solutions for more routinized analyses.

Continuously enhancing systems and platform support technologies is a requirement in this strategic area. Doing so will ensure that staff is able to efficiently conduct analytics and innovate market and financial risk surveillance and investigative techniques that address unique CFTC requirements. The platforms must enable staff to instantly interact with new, large, and varied sets data and quickly assess structure, quality and relevance and also establish patterns, outliers, and connections with other data sets.

**Focus Areas for Projects:**

- High-Performance Computing Implementation
- Data Discovery/Data Visualization Tools Implementation
- Business Intelligence
- Dashboards and Information Summary Reports.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by making it easier for staff to interpret and manipulate data:

- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies
- Percentage of derivatives activity covered by regularly published Commission reports
- Publish economic research reports to inform the public about market structure of the derivatives

markets

- Percentage of derivatives for which trader data can be matched across CFTC datasets
- CFTC strives to conduct back testing of DCOs' material product and portfolio initial margin requirements to assess their sufficiency
- Clearing members' ability to fund variation and initial margin requirements calculated in hypothetical CFTC-designed market scenarios
- Strive to aggregate cleared swaps, futures, and options positions into a comprehensive risk surveillance process and conduct analysis for each material market participant
- Monitor high-risk registrants including SD, MSPs, and FCMs for signs of financial stress
- Strengthen and ensure a coordinated approach to receiving, assessing, and referring tips, complaints and referrals as necessary and appropriate; if resources permit, establish a unit or office dedicated to this function
- Percentage of enforcement investigations completed within 18 months of opening, depending on the nature and scope of investigations.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop and implement technology based surveillance tools to keep pace with market technology
- Publish Interactive Reports on Swap Market Activity
- Conduct economic analysis and research on market structure and transparency for derivatives
- Update eLaw technology to more effectively investigate and litigate cases and increase program efficiency.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1-4	1.1, 1.3, 1.4, 2.1, 2.4, 3.1, 3.2, 4.4	DCR, DMO, DOE, DSIO, OCE

### Strategic Initiative 1.1.4: Increase litigation support services

**Definition:** Litigation Support refers to all activities in supporting investigators and attorneys during the investigation and subsequent litigation of a matter. Support includes preparing and loading documents to an electronic document search and retrieval database system and preparing documents for production to opposing counsel. Litigation support also includes obtaining electronically stored information using proven digital forensics procedures; providing staff experienced in using software specifically designed for the legal environment to assist the investigators and attorneys in the use of the software; and providing technical support at trial with the presentation of animation, diagrams, visuals, or other persuasive graphics used by attorneys to help explain complex technology, issues or situations to jury members during a trial.

**Purpose:** Strategic Initiative 1.1.4 is necessary to technologically support the progress on enforcement and administrative matters. The Commission will continue to face rising case volumes and more complex enforcement actions as Dodd-Frank is operationalized. Providing enforcement staff with sufficient technical support resources increases their opportunity to focus on investigation and litigation strategically and tactically and also ensures that investments in technology provide full, realized benefits. Services will be increased as needed to ensure that technical and logistical support is sufficient to support the number of

enforcement actions.

**Focus Areas for Projects:**

- eLaw Litigation Support

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by increasing resources available to DOE:

- Percent of enforcement investigations completed within 18 months of opening, depending on the nature and scope of investigations.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Solicit high quality tips, complaints and referrals from CFTC divisions and offices, and self-regulatory organizations
- Update eLaw technology to more effectively investigate and litigate cases and increase program efficiency
- Obtain and provide enforcement investigative assistance to and from international authorities.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
3, 4	3.1-3.3, 4.4	DOE

### Strategic Initiative 1.1.5: Continuously enhance eLaw program technology

**Definition:** The eLaw Program provides the attorneys and investigators with law office software tools to assist in the review and management of the large volumes of data received during the course of an investigation and/or litigation. eLaw supports the Division of Enforcement from the preliminary investigation process through to the courtroom presentation, and in all phases in between. The eLaw capabilities also support the Commission's Reparations, FOIA, and Whistleblower programs. The tools in the eLaw suite include document, transcript and audio search and retrieval tools. As technology advances and provides increased functionality, software needs to be evaluated for implementation within the suite of software applications eLaw provides to the attorneys and investigators.

**Purpose:** Strategic Initiative 1.1.5 is necessary to continuously enhancing eLaw program technology (e.g. case assessment and management, document review, eDiscovery, forensics, searching, audio analytics, data analytics) will address rising case volumes, complex enforcement actions, and extensive use of technology by opposing counsel. Since litigation support requirements are not unique to the Commission, using Commercial Off-the-Shelf (COTS) products is ideal and the sustained investment is comparable, in relative terms, to that of large industry participants.

COTS products will be continually upgraded and enhanced. Data storage capacity will be increased to support ever increasing volumes of digital evidence and analytic support databases. Computer forensics will continue to be enhanced to examine new types of digital evidence in a sound manner with the aim of identifying, preserving, recovering, analyzing and presenting facts and opinions about the information.

**Focus Areas for Projects:**

- Case Management Implementation
- eDiscovery Solution Implementation
- Document Review Solution Implementation
- Audio Analytics Implementation
- Forensics Data Collections and Analysis
- FOIA Solution Implementation
- Courtroom Solution Implementation

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by leveling the IT-playing field between staff and those it investigates and opposing counsel and ensuring that staff has the tools needed to work effectively with other regulators:

- Strengthen and ensure a coordinated approach to receiving, assessing, and referring tips, complaints and referrals as necessary and appropriate; if resources permit, establish a unit or office dedicated to this function
- Percentage of enforcement investigations completed within 18 months of opening, depending on the nature and scope of investigations.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Solicit high quality tips, complaints and referrals from CFTC divisions and offices, and self-regulatory organizations
- Update eLaw technology to more effectively investigate and litigate cases and increase program efficiency
- Obtain and provide enforcement investigative assistance to and from international authorities.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
3, 4	3.1-3.3, 4.4	DOE, OGC, OED

## **Objective 1.2: Collaborate with the industry and divisions to automate business processes and data flows**

Collaboration with the divisions and the industry to automate business processes and data flows will result in benefits to both the CFTC and the industry. The regulated community will be able to send data to the CFTC using industry-wide data standards. These data standards reduce misunderstandings. CFTC benefits through improved data quality and reduced manual intervention. For example, the CFTC will no longer need to interpret hand-written responses on forms faxed to CFTC. CFTC will also have audit trails of data from initial receipt. CFTC will also be able to leverage business processes and algorithms that have been adopted by the industry and therefore spend less time developing algorithms from scratch.

The following IT Strategic Initiatives are described below:

- 1.2.1: Actively engage DCOs to identify and potentially re-use or extend margining and other software algorithms to meet unique Commission requirements
- 1.2.2: Increase integration between NFA and CFTC systems
- 1.2.3: Further integrate eLaw with other CFTC systems and processes
- 1.2.4: Provide technical support for regulatory reporting compliance
- 1.2.5: Building out of proof-of-concept programs by mission program staff.

### **Strategic Initiative 1.2.1: Actively engage DCOs to identify and potentially re-use or extend margining and other software algorithms to meet unique Commission requirements**

**Definition:** Margin levels are set by the industry to cover potential losses during a one to five day period for Futures and Swaps. Properly set margin levels ensure the integrity of the derivatives marketplace by ensuring that counterparties can meet their obligations. What-if analysis or stress testing can be applied to derivative prices to see the impact on available margin at the firm, clearing member, clearing house, and DCM/SEF levels as well as to monitor overall systemic risk. Margin calculations on futures have been handled by CME's SPAN Risk Manager. With the inclusion of swaps (e.g., interest rate swaps, credit default swaps, and commodity swaps) into CFTC regulatory purview, margin and risk analysis has become significantly more complicated as each swap asset class requires its own risk analysis methodology. Futures contracts have few configurable contract terms (i.e., quantity, price, and expiration month) whereas swaps can have hundreds of contract terms making risk management and margining much more difficult.

**Purpose:** Strategic Initiative 1.2.1 is necessary to evaluate and apply multiple margining models to conduct oversight of financial risk. There are no COTS products or best-of-breed solutions available that fulfill all of CFTC's needs and DCO models are unique and proprietary. However, collaboration with DCOs and sharing of information about key algorithms will result in reduced CFTC systems development efforts.

#### **Focus Areas for Projects:**

- IRS Risk Analysis Implementation
- CDS Risk Analysis Implementation
- Position Risk Analysis Implementation

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by allowing staff to apply multiple margining methodologies:

- CFTC strives to conduct back testing of DCOs' material product and portfolio initial margin requirements to assess their sufficiency
- Clearing members' ability to fund variation and initial margin requirements calculated in hypothetical CFTC-designed market scenarios
- Strive to aggregate cleared swaps, futures, and options positions into a comprehensive risk surveillance process and conduct analysis for each material market participant.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop tools to back test financial resources and evaluate sufficiency of all material product and portfolio margin requirements
- Develop a program to monitor firm-level variation and initial margin requirements across DCOs
- Enhance the risk surveillance program to evaluate the risk of market participants positions held at multiple FCMs or DCOs
- Develop process to combine cleared and uncleared, bilateral positions to obtain a more complete picture of a clearing firm's risk exposure.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
2, 4	2.1, 4.3	DCR

## Strategic Initiative 1.2.2: Increase integration between NFA and CFTC systems

### Definition:

NFA has been delegated the responsibility for registration for a variety of organization types including FCMs, IBs, CPOs, CTAs, SDs, and MSPs. The Commission works with the NFA to ensure that those seeking registration as intermediaries meet high qualification and fitness standards through the registration process. CFTC staff has access to NFA's Online Registration System (ORS), FACTS 2000 and Query System database. Staff runs individual queries to extract information related to specific registration-related events, enforcement actions, and financial requirements about the intermediaries. DSIO Inspections access NFA systems on a daily to weekly basis to perform investigations on financial and demographic information of firms. DSIO Registration Compliance performs investigations within NFA's audit recordkeeping logs, matter lists, and external tracking metrics on a weekly basis. DSIO Office of Counsel use NFA systems on a weekly to monthly basis to research firm demographics as enrichment to the swap registration forms. The Office of the Chief Economist (OCE) reference NFA firm fund identifiers on a monthly basis. Increasing the integration of NFA data into CFTC systems will improve CFTC's ability to oversee the Futures and Swaps markets and reduce the manual effort necessary in accessing NFA systems.

**Purpose:** Strategic Initiative 1.2.2 is necessary to increase integration between NFA and CFTC systems (e.g., NFA FACTS 2000 and registration systems and the CFTC RSR system) through secure data transfers and use of portal services will increase staff efficiency by providing faster access to comprehensive participant data.

Processes supporting oversight of registered participants will be automated through business process management software (BPMS) and integration of CFTC and NFA systems through secure services and automated data transfers in collaboration with NFA.

**Focus Areas for Projects:**

- Financial Statement Review Implementation
- Position Risk Analysis Implementation
- Data Collection Business Process Automation
- Data Engineering and Processing

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators reducing the amount of time needed by staff to correlate data:

- Conduct governance and risk management oversight reviews for SDs and FCMs
- Review CCO annual reports for SDs, MSPs, and FCMs, and provide feedback to the registrants on governance and compliance oversight
- Conduct limited scope reviews of SD, MSP, and FCM risk management and internal control systems and procedures, including controls, processes and procedures over technology risks
- Monitor high-risk registrants including SD, MSPs, and FCMs for signs of financial stress.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Through close coordination with NFA, the Commission will review registration documentation and the policies and procedures being employed by SDs and MSPs to achieve compliance with the CEA and the Commission’s regulations and that registrants operate with an effective governance and risk management structure
- Conduct oversight reviews of SD and MSP risk governance and risk management framework
- Together with the DSROs, monitor the CCO annual filings of SDs, MSPs, and FCMs and, in coordination with the DSROs, evaluate best practices, effectiveness of the evaluations, and areas for follow up with specific firms where the report does not meet expectations
- Conduct limited scope reviews of the risk management and internal control systems and procedures of SDs and FCMs
- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
2, 4	2.2 – 2.4, 4.4	DOE, DSIO

### Strategic Initiative 1.2.3: Further integrate eLaw with other CFTC systems and processes

**Definition:** The eLaw Program provides the attorneys and investigators with litigation software tools to assist in the review and management of the large volumes of data received during the course of an investigation and/or litigation. These tools include document, transcript and audio search and retrieval tools. The eLaw systems have limited integration with the Commission's surveillance and compliance tools and the registration data set and further integration will improve efficiency as well as provide opportunities for CFTC to perform unique analysis across data sets.

**Purpose:** Strategic Initiative 1.2.3 is necessary to enhance integration of enforcement tools and processes with other the work of other divisions that lead to referrals. Further integration of eLaw tools throughout the Commission will enable more proactive identification of high-impact enforcement leads and will support faster and more comprehensive exchange of information between registration, compliance, and surveillance activities, thereby prioritizing oversight based on risk and patterns of non-compliance. The process of managing referrals to the enforcement staff from other divisions will be automated and integrated.

#### Focus Areas for Projects:

- Case Management Implementation
- Business Process Management Solution Implementation
- Data Engineering and Processing.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by increasing appropriate collaboration within the Commission:

- Strengthen and ensure a coordinated approach to receiving, assessing, and referring tips, complaints and referrals as necessary and appropriate; if resources permit, establish a unit or office dedicated to this function.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Solicit high quality tips, complaints and referrals from CFTC divisions and offices, and self-regulatory organizations.

#### Strategic Plan Goal and Objective Support:

CFTC Goal	CFTC Objective	Division/Office
1-4	1.1, 2.3, 2.4, 3.1, 3.2, 4.4	DCR, DMO, DOE, DSIO

### Strategic Initiative 1.2.4: Provide technical support for regulatory reporting compliance

**Definition:** CFTC currently receives a wide range of submissions as part of firms' regulatory reporting compliance programs. These submissions are sent to CFTC through a variety of methods including paper, fax, e-mail, CFTC portal, and FTP (i.e., batch data transfer). CFTC is moving forward with a regulatory portal

for infrequent submissions and FTP for daily large submissions. This will reduce errors caused by interpreting and re-keying data at CFTC and will reduce the amount of manual tasks freeing staff to perform higher-level tasks. This approach will also require firms to correct their data before they submit it to the CFTC which will improve data quality while decreasing the effort to manage this data.

**Purpose:** Strategic Initiative 1.2.4 is necessary to improve data reporting compliance mechanisms. It will allow staff to conduct registrations and reviews more efficiently. Increasing integration between reporting compliance and surveillance activities will benefit ongoing surveillance activities. Data collections that are form based will appear on the CFTC regulatory portal, with edits to ensure data quality prior to submission. These forms will replace the forms previously received via fax or email, and be auto-populated wherever possible to save time for submitters in data entry. For large volume data reporting, CFTC is improving automation of feedback mechanisms to data submitters in order to improve data quality at the source, thereby reducing the amount of data quality challenges and follow up activities required by Commission staff. This initiative requires continual collaboration with reporting entities.

Staff will be provided with a single data management console to review and correct swaps, futures and options data received by the Commission; the console will automate compliance and completeness reports, non-compliance and data error alerts, and data change audits. Furthermore, to improve data quality and standardization, guidebooks for all registered entity data will be developed and data submitters will receive automated notifications when errors are detected or expected data is missing.

**Focus Areas for Projects:**

- Data Engineering and Processing
- Data Operations and Collections.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by making it easier for industry participants to comply with regulations and for staff to have a comprehensive view of each participant:

- Strive for percentage of high impact contract and rule submissions received by the Commission through the OPERA portal
- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies
- Strive to examine compliance by exchanges with the CEA Core Principles and Commission regulations, prioritizing systemically important entities
- Strive to review exchange and SDR notifications and periodic status updates regarding significant systems disruptions and material planned changes to mission-critical systems or programs of risk analysis and oversight
- Percentage of derivatives for which trader data can be matched across CFTC datasets
- Strive to review DCO notifications regarding systems disruptions, material planned changes to mission-critical systems or programs of risk analysis and any other notifications that potentially impact the DCOs ability to process, clear and risk manage its business activities
- Number of SD, MSP, and FCM annual and quarterly reports reviewed and feedback provided; percent of swap dealer and major swap participant's registration documentation completed
- Review CCO annual reports for SDs, MSPs, and FCMs, and provide feedback to the registrants on governance and compliance oversight
- Monitor high-risk registrants including SD, MSPs, and FCMs for signs of financial stress.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Review derivatives contract terms and conditions more efficiently and effectively
- Analysis of DCM, SEF, and Foreign Boards of Trade (FBOT) registration applications and the ongoing oversight of DCMs, SEFs, and FBOTs.
- Review of SDR applications and the ongoing supervision of SDRs
- Through close coordination with NFA, the Commission will review registration documentation and the policies and procedures being employed by SDs and MSPs to achieve compliance with the CEA and the Commission’s regulations and that registrants operate with an effective governance and risk management structure
- Together with the DSROs, monitor the CCO annual filings of SDs, MSPs, and FCMs and, in coordination with the DSROs, evaluate best practices, effectiveness of the evaluations, and areas for follow up with specific firms where the report does not meet expectations
- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1, 2	1.1, 1.2, 2.1 – 2.4	DCR, DMO, DSIO

### Strategic Initiative 1.2.5: Building out of proof-of-concept programs by mission program staff

**Definition:** The process of having surveillance staff establish requirements for the development of systems and then have ODT develop those requirements in a waterfall approach is not rapid or agile enough for surveillance staff to iteratively test and apply innovative surveillance approaches. Instead, models and prototypes developed directly by surveillance staff that are determined to be worth executing daily or on some other recurring basis will be operationalized by technology staff. This approach allows surveillance staff to define their business requirements as they iterate through their proof of concept, and determining how technologists can add additional technological capabilities for solutions that have persistent value.

**Purpose:** Strategic Initiative 1.2.5 is necessary to enable Commission staff to have the means of working through the process of analyzing voluminous transaction and position data to conduct surveillance activities. With access to the data received by the Commission daily and the tools to create surveillance models, staff can innovate on new surveillance techniques that address CFTC-specific requirements. With the assistance of computer aided tools such as graphics and visualization software or automated anomaly detection models, staff will identify patterns of activity that may indicate possible violations of the CEA by one or more individuals. Staff will make use of newly available technologies to blend data from different data sources, such as futures and swaps position data, trade execution data and order data, and develop new methods to analyze trading within and across products and markets. Proof of concepts innovated by staff will be operationalized, enhanced, and adapted over time to address evolving market conditions. The results of these analyses will be shared across CFTC market, financial risk, and participant surveillance programs.

**Focus Areas for Projects:**

- Staff Proof-of-concept Development
- Data Discovery/Data Visualization Tools Implementation
- Financial Statement Review Implementation
- Position Risk Analysis Implementation
- Business Process Management Software (BPMS).

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by having staff rapidly develop and apply new market and financial surveillance techniques:

- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies
- CFTC strives to conduct back testing of DCOs' material product and portfolio initial margin requirements to assess their sufficiency
- Clearing members' ability to fund variation and initial margin requirements calculated in hypothetical CFTC-designed market scenarios
- Strive to aggregate cleared swaps, futures, and options positions into a comprehensive risk surveillance process and conduct analysis for each material market participant
- Monitor high-risk registrants including SD, MSPs, and FCMs for signs of financial stress
- Strengthen and ensure a coordinated approach to receiving, assessing, and referring tips, complaints and referrals as necessary and appropriate; if resources permit, establish a unit or office dedicated to this function.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop and implement technology based surveillance tools to keep pace with market technology
- Develop tools to back test financial resources and evaluate sufficiency of all material product and portfolio margin requirements
- Develop a program to monitor firm-level variation and initial margin requirements across DCOs
- Enhance the risk surveillance program to evaluate the risk of market participants positions held at multiple FCMs or DCOs
- Develop process to combine cleared and uncleared, bilateral positions to obtain a more complete picture of a clearing firm's risk exposure
- Solicit high quality tips, complaints and referrals from CFTC divisions and offices, and self-regulatory organizations.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1-4	1.1, 2.1-2.3, 3.1, 3.2, 4.4	DCR, DMO, DOE, DSIO

### Objective 1.3: Provide enterprise solutions aligned with industry best practices

In order to cost-efficiently meet the business / regulatory needs at CFTC, enterprise-wide solutions are used whenever possible. This is in line with ODT's IT Strategic Priority for enterprise-focused automation services. Enterprise-wide solutions promote re-use, information sharing, standardization of common practices, and collaboration. Many requirements are common across mission areas and across the industry as a whole. Additionally, industry best practices (e.g., data standards, portfolio margining models, web services for data reporting) should be utilized to reduce implementation time and implementation cost.

The following IT Strategic Initiatives are described below:

1.3.1: Increase use of Application Programming Interfaces (APIs) and web services for regulatory data reporting

1.3.2: Use industry-standard tools (e.g., to evaluate FCM, CPO, and other participant financial risk).

#### Strategic Initiative 1.3.1: Increase use of Application Programming Interfaces (APIs) and web services for regulatory data reporting

**Definition:** Common development best practices will be used to enable straight-thru processing (data passing directly from industry applications to the Commission without human intervention) between industry participants and CFTC systems wherever practical. APIs and web services provide mechanisms for systems at CFTC to interact with external systems (e.g., Bloomberg data services, ICE margining systems) minimizing the development efforts at CFTC. Additionally CFTC will use APIs and web services as a methodology to loosely couple systems internally (e.g., BPMS, portal). By using standardized external APIs and web services, ODT minimizes the effort of developing, testing and maintaining of software. By exposing APIs and web services to industry participants, CFTC ensures data received at the commission has already passed rigorous data quality checks.

**Purpose:** Strategic Initiative 1.3.1 is necessary to facilitate rapid development of systems and will lead to a reduced reporting burden for industry participants. Increasing use of publicly available and industry provided APIs and data services will also support more timely collection of correlated data for staff.

#### Focus Areas for Projects:

- CFTC Portal Implementation
- Participant Registration Processes and Systems
- Business Process Management Software (BPMS)
- Data Engineering and Processing.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by reducing systems development cost and time for the Commission and industry participants:

- Strive for percentage of high impact contract and rule submissions received by the Commission through the OPERA portal
- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies
- Strive to examine compliance by exchanges with the CEA Core Principles and Commission regulations, prioritizing systemically important entities

- Strive to review exchange and SDR notifications and periodic status updates regarding significant systems disruptions and material planned changes to mission-critical systems or programs of risk analysis and oversight
- Percentage of derivatives for which trader data can be matched across CFTC datasets
- Strive to review DCO notifications regarding systems disruptions, material planned changes to mission-critical systems or programs of risk analysis and any other notifications that potentially impact the DCOs ability to process, clear and risk manage its business activities
- Number of SD, MSP, and FCM annual and quarterly reports reviewed and feedback provided; percent of swap dealer and major swap participant’s registration documentation completed
- Review CCO annual reports for SDs, MSPs, and FCMs, and provide feedback to the registrants on governance and compliance oversight
- Monitor high-risk registrants including SD, MSPs, and FCMs for signs of financial stress.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Review derivatives contract terms and conditions more efficiently and effectively
- Analysis of DCM, SEF, and Foreign Boards of Trade (FBOT) registration applications and the ongoing oversight of DCMs, SEFs, and FBOTs.
- Review of SDR applications and the ongoing supervision of SDRs
- Through close coordination with NFA, the Commission will review registration documentation and the policies and procedures being employed by SDs and MSPs to achieve compliance with the CEA and the Commission’s regulations and that registrants operate with an effective governance and risk management structure
- Together with the DSROs, monitor the CCO annual filings of SDs, MSPs, and FCMs and, in coordination with the DSROs, evaluate best practices, effectiveness of the evaluations, and areas for follow up with specific firms where the report does not meet expectations
- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1, 2	1.1, 1.2, 2.1–2.3	DCR, DMO, DSIO

### **Strategic Initiative 1.3.2: Use industry-standard tools (e.g., to evaluate FCM, CPO, and other participant financial risk)**

**Definition:** Instead of building financial risk assessment tools from scratch, ODT will use industry-standard tools, thereby reducing overall development and maintenance efforts. The CFTC Strategic Plan requires the following strategy for Goal 2: conduct limited scope reviews of FCMs and swap dealers risk management and internal control systems and procedures. This initiative will ensure that Commission staff uses common industry tools to reduce costs.

**Purpose:** Strategic Initiative 1.3.2 is necessary to define and utilize, where practical, an established set of

tools in use by FCMs, CPOs, and swap participants to evaluate their own financial risk. Best-of-breed tools will be identified, acquired, and implemented to enable staff to use familiar and commonly used software. Use of the tools will be integrated with CFTC systems and enterprise data using data services whenever practical to increase overall process automation and data reuse.

**Focus Areas for Projects:**

- DSIO Tool Identification and Implementation
- Data Engineering and Processing.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by encouraging rapid acquisition of tools for DSIO staff:

- Number of SD, MSP, and FCM annual and quarterly reports reviewed and feedback provided; percent of swap dealer and major swap participant’s registration documentation completed
- Conduct governance and risk management oversight reviews for SDs and FCMs
- Review CCO annual reports for SDs, MSPs, and FCMs, and provide feedback to the registrants on governance and compliance oversight
- Conduct limited scope reviews of SD, MSP, and FCM risk management and internal control systems and procedures, including controls, processes and procedures over technology risks
- Monitor high-risk registrants including SD, MSPs, and FCMs for signs of financial stress.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Conduct oversight reviews of SD and MSP risk governance and risk management framework
- Together with the DSROs, monitor the CCO annual filings of SDs, MSPs, and FCMs and, in coordination with the DSROs, evaluate best practices, effectiveness of the evaluations, and areas for follow up with specific firms where the report does not meet expectations
- Conduct limited scope reviews of the risk management and internal control systems and procedures of SDs and FCMs
- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
2, 4	2.4, 4.3	DSIO

## Goal 2 - Facilitate availability and enhance understanding of data to improve regulatory effectiveness

The CFTC increasingly and unavoidably relies on its understanding of data to ensure that it can perform its regulatory and public policy functions effectively. As the markets and participants it oversees overwhelmingly turn electronic, engage in faster and more automated trading, and transact in products that are more and more complex, the CFTC increasingly needs to be a regulator that understands, aggregates, processes, summarizes, and acts on data in a timely manner for surveillance, enforcement and transparency reporting. The markets and participants that CFTC regulates generate and report to the CFTC a large quantity of information from multiple industry sources across multiple markets. Increasing speed, volume, and complexity in these products and markets require the CFTC to develop an increasingly sophisticated ability to validate and pre-digest the reported data so that front-line regulatory functions such as surveillance and enforcement can more effectively use that data. In addition, even as the CFTC's regulatory regime has expanded to include swaps, it needs to ensure that not only is the swaps oversight integrated into the existing program initiatives, but also that the existing program and processes are upgraded ability to keep up with new techniques and technologies. Thus, data management is essential to all of CFTC's regulatory initiatives and, in particular, to integrating swaps oversight into existing program initiatives.

Timely and effective surveillance analysis, aggregation, and risk analysis are critical to the CFTC's ability to oversee the markets effectively. CFTC's data management program has to ensure that it responds both broadly and specifically to address the critical regulatory needs of the Commission:

- A standards-based, responsive, robust and flexible data architecture as an essential pre-requisite and ensures that confidentiality, availability and integrity of the data are maintained in line with the Commission's mission and federal government requirements
- A capable data standards program that provides guidance to the industry on the data reporting and recordkeeping aspects of CFTC's rules and guidance that the CFTC staff can rely on for understanding the data reported
- A robust reference data management program that ensures that key identifier and product data used by the CFTC staff for data reporting, analysis, aggregating and surveillance is valid, correct and current
- A data analysis component that reviews incoming data to ensure that upfront analyses, reviews, extracts, reports, and alerts are effective and that data quality can be measured, reported and addressed as needed
- A data harmonization program that includes oversight of data custodial programs operated by the industry, such as Swap Data Repositories (SDRs), Exchanges, Swap Execution Facilities (SEFs), Designated Clearing Organizations (DCOs) and Designated Clearing Members (DCMs). Industry programs must contribute to effectively supporting the Commission's mission, result in acceptable data quality, and ensure that data is well-protected in terms of data integrity, confidentiality and availability
- An automated, responsive, robust and high-quality data ingest program that ensures that there is

sufficient capacity to take in, validate, rectify and make available to CFTC staff the data that is reported and transmitted to the Commission by the participants the Commission regulates

- A front-end data operations program that reviews the data that is ingested, ensures compliance with reporting and recordkeeping requirements, and conducts effective data audits of regulated entities to ensure that their policies and processes are supportive of consistent, timely and high-quality reporting and recordkeeping.

The following IT Strategic Objectives are directly linked to the above components and are described under Goal 2:

2.1: Architect data to enable automated ingestion, integration, access, sharing, reporting and transparency

2.2: Aggregate data across markets and participants to empower the CFTC staff to perform complex data analyses

2.3: Manage information to ensure its availability to the regulatory mission activities and the public.

### **Objective 2.1: Architect data to enable automated ingestion, integration, access, sharing, reporting and transparency**

One of the pre-requisites to enabling market transparency and regulatory effectiveness through reporting is architecting data, that is, defining what data types are being collected, their relationships, and relevant data standards and logically organizing data. Integration of swaps oversight into existing CFTC mission functions will require ODT to create an integrated enterprise data environment that supports both swaps and futures oversight and to define new data standards and submission requirements. Architecting data at the enterprise level and using a standards-based approach for data interchanges and submissions, particularly for information needed by regulators, will promote information integration, sharing, and re-use.

The following IT Strategic Initiatives are described below:

2.1.1: Receive all data electronically and automate its distribution throughout the Commission using business process automation software (BPMS)

2.1.2: Improve data quality.

#### **Strategic Initiative 2.1.1: Receive all data electronically and automate its distribution throughout the Commission using business process automation software (BPMS)**

**Definition:** Receiving all data electronically and automating the data flow within the Commission will improve productivity through streamlined data ingest, registrations, reviews, and reporting. It will include automatic updating of CFTC systems and eliminating latency between industry submission of data and staff ability to use the data. It will provide industry participants with up-to-date information about submission status and lead to a reduced reporting burden.

**Purpose:** Strategic Initiative 2.1.1 is necessary to ensure that all data will be submitted and processed electronically, including Ownership Control Reporting (OCR), all registrations, Large Trader Reporting (Parts 16 and 17), aggregated SDR reporting, and Order Data submissions. Use of the CFTC Portal and Organizations, Product, Events, Rules and Actions (OPERA which allows organizations to make submissions

to the Commission through the CFTC Portal) will reduce staff burdens and increase the efficiency with which staff conducts reviews of new or amended contracts and rule filings. Exchanges will be able to electronically file submissions directly with the Commission. All key mission processes will be fully automated and integrated with Electronic Records and Document Management (ERDM). Dashboards will provide transparency and management visibility into process status.

**Focus Areas for Projects:**

- CFTC Regulatory Portal
- OPERA
- ERDM
- Business Process Management Software (BPMS).

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by streamlining registration and review processes:

- Strive for percentage of high impact contract and rule submissions received by the Commission through the OPERA portal
- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies
- Strive to examine compliance by exchanges with the CEA Core Principles and Commission regulations, prioritizing systemically important entities
- Strive to review exchange and SDR notifications and periodic status updates regarding significant systems disruptions and material planned changes to mission-critical systems or programs of risk analysis and oversight
- Percentage of derivatives for which trader data can be matched across CFTC datasets
- Strive to review DCO notifications regarding systems disruptions, material planned changes to mission-critical systems or programs of risk analysis and any other notifications that potentially impact the DCOs ability to process, clear and risk manage its business activities
- Number of SD, MSP, and FCM annual and quarterly reports reviewed and feedback provided; percent of swap dealer and major swap participant's registration documentation completed
- Review CCO annual reports for SDs, MSPs, and FCMs, and provide feedback to the registrants on governance and compliance oversight
- Monitor high-risk registrants including SD, MSPs, and FCMs for signs of financial stress.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Review derivatives contract terms and conditions more efficiently and effectively
- Analysis of DCM, SEF, and Foreign Boards of Trade (FBOT) registration applications and the ongoing oversight of DCMs, SEFs, and FBOTs.
- Review of SDR applications and the ongoing supervision of SDRs
- Through close coordination with NFA, the Commission will review registration documentation and the policies and procedures being employed by SDs and MSPs to achieve compliance with the CEA and the Commission's regulations and that registrants operate with an effective governance and risk management structure
- Together with the DSROs, monitor the CCO annual filings of SDs, MSPs, and FCMs and, in

coordination with the DSROs, evaluate best practices, effectiveness of the evaluations, and areas for follow up with specific firms where the report does not meet expectations

- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1-3	1.1-1.4, 2.1-2.4, 3.1	DCR, DMO, DOE, DSIO

### Strategic Initiative 2.1.2: Improve data quality

**Definition:** It is essential that the Commission proactively manage the quality of the data used to conduct oversight and is able to certify the accuracy and completeness of data. Data quality will be improved by both standards and processes. Data standards such as FIXml and FpML, which are industry standards, will be adopted and enhanced to ensure that reporting firms and the CFTC have a shared understanding of field definitions, types and values. Since most firms have already adopted these standards, this will reduce the effort required to move to this more flexible standard. The data loading process will be improved and fully implement the CFTC Regulatory Portal to eliminate manually keying and correcting forms and submissions. Data quality will be further improved by enhancing error detection when loading large data file submissions. Firms submitting data will send their data to automated data ingest systems at the CFTC that will check the data for errors, report error conditions, and reject records or the entire file as appropriate. This will incentivize firms to resolve consistent errors as they will be forced to resolve the same types of errors day after day. This will also reduce staff burdens by eliminating time required to key in data, review errors, contact firms to request corrections, and reprocess files. The Commission will also improve quality of data through better implementation of reporting rules, data audits, data management practices, and technology. The Commission will focus on enterprise reference data and will streamline processes for and increasing controls around ad-hoc and recurring data requests from market participants. The CFTC will implement a controlled unclassified information (CUI) program, additional controls for high-risk personally identifiable information (PII) and research data, and information security continuous monitoring. Collectively these activities will improve the effectiveness of both mission area and mission support analysis and decision-making.

Leveraging data management activities related to standards and improving quality, this initiative will establish ownership of and accountability for authoritative source data and implement policy and procedures necessary to provide transparency of management and system controls over sensitive CFTC information.

**Purpose:** Strategic Initiative 2.1.2 is necessary to ensure that data will be appropriately standardized, described, tagged, and harmonized to improve data quality. Improving data quality reduces rework, reduces the time it takes to conduct complex data analyses, and reduces systems development and maintenance costs. Data standards will be harmonized for all SDR data. Guidebooks and standards will be published for all CFR parts with data reporting requirements. Data quality standards, metrics and measures will be established and be reported on daily, weekly, and monthly. Data edit checks will be enhanced to reduce the level of incomplete data.

**Focus Areas for Projects:**

- Data Standards Implementation
- Data Operations and Collection Automation
- Data request process
- Information Governance (Controlled Unclassified Information - CUI).

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by reducing redundancy and rework:

- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies
- Percentage of derivatives activity covered by regularly published Commission reports
- Publish economic research reports to inform the public about market structure of the derivatives markets
- Percentage of derivatives for which trader data can be matched across CFTC datasets
- CFTC strives to conduct back testing of DCOs' material product and portfolio initial margin requirements to assess their sufficiency
- Clearing members' ability to fund variation and initial margin requirements calculated in hypothetical CFTC-designed market scenarios
- Strive to aggregate cleared swaps, futures, and options positions into a comprehensive risk surveillance process and conduct analysis for each material market participant
- Strengthen and ensure a coordinated approach to receiving, assessing, and referring tips, complaints and referrals as necessary and appropriate; if resources permit, establish a unit or office dedicated to this function.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop and implement technology based surveillance tools to keep pace with market technology
- Develop consistent reporting of relevant swaps data
- Publish Interactive Reports on Swap Market Activity
- Conduct economic analysis and research on market structure and transparency for derivatives
- Develop tools to back test financial resources and evaluate sufficiency of all material product and portfolio margin requirements
- Develop a program to monitor firm-level variation and initial margin requirements across DCOs
- Enhance the risk surveillance program to evaluate the risk of market participants positions held at multiple FCMs or DCOs
- Develop process to combine cleared and uncleared, bilateral positions to obtain a more complete picture of a clearing firm's risk exposure
- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events
- Solicit high quality tips, complaints and referrals from CFTC divisions and offices, and self-regulatory organizations.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1-4	1.1-1.4, 2.1, 2.4, 3.1, 3.2, 4.2, 4.4	DCR, DMO, DOE, DSIO, OCE, OIA

**Objective 2.2: Aggregate data across markets and participants to empower the CFTC staff to perform complex data analyses**

The CFTC surveillance mission function is highly dependent on the ability to understand large volumes of data and develop sophisticated analytics to identify trends and/or outlying events that warrant further investigation. The first step to effective management of this information is its understanding and aggregation, including definition, cataloguing, correlating with other data types and evaluation at multiple levels. The futures and swaps markets are complex and understanding who owns or controls positions across the wide spectrum of markets that CFTC regulates is critical to economic analysis and investigations. Aggregating data across markets and participants will make this possible.

The following IT Strategic Initiatives are described below:

2.2.1: Increase application of data standards, including Legal Entity Identifiers (LEIs) and product identifiers (UPIs)

2.2.2: Harmonize SDR data.

**Strategic Initiative 2.2.1: Increase application of data standards, including Legal Entity Identifiers (LEIs) and product identifiers (UPIs)**

**Definition:** Data standards provide easier, less expensive data sharing and transfer by providing regulators and diverse industry participants with common terms, format, and quality standards. Consistently used identifiers are key part of applying data standards for the purpose of data aggregation, whether it is aggregation at the counterparty level, product level, or some other level. LEIs are part of a unique identification system for parties to financial transactions being adopted by financial markets globally. They are important for the CFTC to be able to cost-effectively determine the controlling and benefitting party to every derivatives transaction. UPIs are unique product identifiers for standardized derivatives. UPIs will allow the Commission to cost-effectively determine the characteristics of most derivatives transactions.

**Purpose:** Strategic Initiative 2.2.1 is necessary to apply standards in support of more efficient data aggregation. Customer and account level aggregation across related markets is necessary to more comprehensively assess risk. Product, customer, and account aggregation is necessary to monitor market power and position limits. Comprehensive use of data standards will support more efficient aggregation at various levels and dimensions and will enable staff to more easily discover new approaches to correlating data for surveillance and economic analysis. The Commission will lead global establishment of entity, product and transaction data standards. A standardized guidebook and handbook for substituted compliance for all relevant jurisdictions will be developed. LEIs and UPIs will be extended to include futures as well as swaps.

**Focus Areas for Projects:**

- LEI

- UPI
- Reference data catalog
- Integration of LEI and UPI with all data services and systems.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by reducing the cost and time to aggregate data and increase the accuracy of aggregated data:

- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies
- Percentage of derivatives activity covered by regularly published Commission reports
- Publish economic research reports to inform the public about market structure of the derivatives markets
- Percentage of derivatives for which trader data can be matched across CFTC datasets
- CFTC strives to conduct back testing of DCOs' material product and portfolio initial margin requirements to assess their sufficiency
- Clearing members' ability to fund variation and initial margin requirements calculated in hypothetical CFTC-designed market scenarios
- Strive to aggregate cleared swaps, futures, and options positions into a comprehensive risk surveillance process and conduct analysis for each material market participant
- Strengthen and ensure a coordinated approach to receiving, assessing, and referring tips, complaints and referrals as necessary and appropriate; if resources permit, establish a unit or office dedicated to this function.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop and implement technology based surveillance tools to keep pace with market technology
- Develop consistent reporting of relevant swaps data
- Publish Interactive Reports on Swap Market Activity
- Conduct economic analysis and research on market structure and transparency for derivatives
- Develop tools to back test financial resources and evaluate sufficiency of all material product and portfolio margin requirements
- Develop a program to monitor firm-level variation and initial margin requirements across DCOs
- Enhance the risk surveillance program to evaluate the risk of market participants positions held at multiple FCMs or DCOs
- Develop process to combine cleared and uncleared, bilateral positions to obtain a more complete picture of a clearing firm's risk exposure
- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events
- Solicit high quality tips, complaints and referrals from CFTC divisions and offices, and self-regulatory organizations.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1-4	1.1, 1.3, 1.4, 2.1, 2.4, 3.1, 3.2, 4.2, 4.4	DCR, DMO, DOE, DSIO, OCE, OIA

**Strategic Initiative 2.2.2: Harmonize SDR data**

**Definition:** Swaps Data Repositories collect and maintain over-the-counter (OTC) derivative trade records. Though SDRs make these records available to CFTC, the data elements or even specific fields are not defined or reported in a similar manner. Even within an SDR, different trading firms may report data inconsistently (e.g., using different codes to represent trades in crude oil). Therefore it can be difficult to analyze SDR data. SDRs must standardize the data elements and content for the CFTC to aggregate data across SDRs.

**Purpose:** Strategic Initiative 2.2.2 is necessary to SDR data harmonization. Harmonized SDR data will support more efficient data aggregation. Though industry must have the latitude to make cost-effective design and implementation decisions in operationalizing SDRs, the collective set of information across SDRs must be consistent, transparent and usable by regulators and will require a concerted effort by all participants initially (as SDRs begin operating) and a sustained level of effort to integrate new products and accommodate market evolution.

The Commission will continue close collaboration with SDRs to identify and resolve data consistency and access issues, establishing best practices and common approaches whenever practical. Subsets of SDR data required for integration with CFTC systems will be received daily. Currently, SDRs have different validation models, making rules for acceptance and rejection of the submitter's records inconsistent; receive different content for certain data fields; and provide different functionality within their regulatory portals. CFTC will identify the best capabilities of each SDR and make them requirements for others to achieve the highest common denominator of standardization and capability. Foreign SDRs must also have harmonized data to enable efficient cross-border regulation.

**Focus Areas for Projects:**

- SDR compliance
- Reporting completeness and compliance
- Data Services.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by ensuring SDRs operate as intended by financial reform legislation and regulation:

- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies
- Percentage of derivatives activity covered by regularly published Commission reports
- Publish economic research reports to inform the public about market structure of the derivatives markets
- Percentage of derivatives for which trader data can be matched across CFTC datasets
- Strive to aggregate cleared swaps, futures, and options positions into a comprehensive risk surveillance process and conduct analysis for each material market participant
- Strengthen and ensure a coordinated approach to receiving, assessing, and referring tips, complaints and referrals as necessary and appropriate; if resources permit, establish a unit or office dedicated to this function.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop and implement technology based surveillance tools to keep pace with market technology
- Develop consistent reporting of relevant swaps data
- Publish Interactive Reports on Swap Market Activity
- Conduct economic analysis and research on market structure and transparency for derivatives
- Develop process to combine cleared and uncleared, bilateral positions to obtain a more complete picture of a clearing firm's risk exposure
- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events
- Solicit high quality tips, complaints and referrals from CFTC divisions and offices, and self-regulatory organizations.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1-4	1.1, 1.3, 1.4, 2.1, 2.4, 3.1, 3.2, 4.2, 4.4	DCR, DMO, DOE, DSIO, OCE, OIA

### **Objective 2.3: Manage information to ensure its availability to the regulatory mission activities and the public**

Data needs to be managed as an enterprise asset to ensure integration across multiple systems, high quality, identification of authoritative data sources, and availability of a consolidated data set that is the single source of reference for the CFTC's operational production systems.

The following IT Strategic Initiatives are described below:

- 2.3.1: Ingest order book data from market exchanges and platforms
- 2.3.2: Implement a research-focused data environment
- 2.3.3: Implement the President's Digital Government Strategy
- 2.3.4: Expand the use of interagency collaboration platforms
- 2.3.5: Continue centralized management and administrative data and systems services and support automation of the CFTC administrative and management processes
- 2.3.6: Implement an electronic records and document management system (ERDM)
- 2.3.7: Support publishing of aggregated swaps and futures data.

#### **Strategic Initiative 2.3.1: Ingest order book data from market exchanges and platforms**

**Definition:** Futures market order message data, which allows surveillance staff to understand market behavior as it was unfolding, is not currently obtained on a regular basis. The process for requesting and obtaining order message data for specific timeframes or situations under surveillance is too cumbersome and lengthy. Furthermore, order book data can be two hundred times larger than a comparable slice of trade register data. Advanced tools, techniques, and storage devices are needed to process this information.

**Purpose:** Strategic Initiative 2.3.1 is necessary to perform analysis of pre-trade activity for surveillance, economic analysis and enforcement purposes. Ingesting of order book data from market exchanges and platforms will allow surveillance staff to increase the depth of surveillance. Because of the massively large volume of order book data it is likely that not all order data will be ingested from all regulated exchanges, platforms and facilities; however the capability to ingest targeted sets of data on a recurring basis or to quickly ingest sets of data based on specific surveillance or other initiatives is required, especially for oversight of automated trading activity. Dodd-Frank mandates pre-trade transparency for the swaps traded on SEFs. Commission rules require that DCMs and SEFs offer open and competitive centralized market trading for futures and swaps. To ensure compliance with these regulations, staff will gather and analyze trade and order book data from SEFs and DCMs. While trade data from DCMs is being reported to the Commission, staff will work with DCMs to collate order book data, develop a database to store this data or alternatively, access data from DCMs on an as-needed basis, and develop tools to analyze this data and integrate it with trade data. Similarly, staff will work with SEFs to develop data standards and protocols to collate both trade and order book data, and develop tools to analyze this data.

Order book data will be available to staff for on-demand for targeted or recurring analysis.

**Focus Areas for Projects:**

- Order Book
- Data standards
- High-Frequency trading.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by ensuring key market data is available to staff:

- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies
- Percentage of derivatives activity covered by regularly published Commission reports
- Publish economic research reports to inform the public about market structure of the derivatives markets
- Strengthen and ensure a coordinated approach to receiving, assessing, and referring tips, complaints and referrals as necessary and appropriate; if resources permit, establish a unit or office dedicated to this function.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop and implement technology based surveillance tools to keep pace with market technology
- Conduct economic analysis and research on market structure and transparency for derivatives  
Develop
- Solicit high quality tips, complaints and referrals from CFTC divisions and offices, and self-regulatory organizations.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1, 3, 4	1.1, 3.1, 3.2, 4.4	DMO, DOE, OCE

**Strategic Initiative 2.3.2: Implement a research-focused data environment**

**Definition:** Effective research requires a data environment that is supported by transparent policies and procedures; allows data to be used and shared with external parties without compromising privacy, confidential, or sensitive information; and provides researchers with flexibility in using tools and approaches without risk to CFTC data and IT infrastructure.

**Purpose:** Strategic Initiative 2.3.2 is necessary to support a research environment that allows for inter-agency research within a controlled environment. Implementing a research-focused data environment will support CFTC and inter-agency research into understanding evolving market conditions as well as continuing to provide appropriate market information to the public to increase market transparency. Staff will collaborate with market structure experts from academia to strengthen its analytical capabilities and ensure that the state of art in terms of models and econometric techniques is being deployed. The efforts of such rigorous economic analysis will generate internal staff reports to inform the Commission, cost and benefit considerations to support Commission rulemaking, and research papers targeting publication in academic

and practitioner journals.

The environment will include transparent management and systems controls. Hadoop and other open source analytic processing tools will be used in the environment.

**Focus Areas for Projects:**

- Information Governance.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicator by ensuring that market information published by the CFTC is relevant, accurate and can only be provided by the Commission:

- Publish economic research reports to inform the public about market structure of the derivatives markets.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Conduct economic analysis and research on market structure and transparency for derivatives.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1, 3, 4	1.1, 1.3, 3.1, 4.3, 4.4	DMO, DOE, OCE

### Strategic Initiative 2.3.3: Implement the President's Digital Government Strategy

**Definition:** The President's Digital Government Strategy aims to deliver better digital services to the American people. The strategy has main objectives: enable the American people and an increasingly mobile workforce to access high-quality digital government information and services anywhere, anytime, on any device; ensure that as the government adjusts to this new digital world, we seize the opportunity to procure and manage devices, applications, and data in smart, secure and affordable ways; unlock the power of government data to spur innovation across our Nation and improve the quality of services for the American people.

**Purpose:** Strategic Initiative 2.3.3 is necessary to implement the President's digital government strategy. This will be achieved by enhancing the usability and mobility of reports published on CFTC.gov and will support increased transparency of the futures and swaps markets. The Commission continues to incorporate many of the elements of the President's Digital Government Strategy in the CFTC.gov public website. In addition to the elements already incorporated, architecting certain CFTC.gov services specifically for users of mobile devices and developing open APIs for datasets published on CFTC.gov would provide industry participants and the public with greater flexibility in accessing and using the information and would support efforts to boost public awareness across different audiences

Together with re-architecting services for mobile users and to include APIs, CFTC.gov will be reorganized to improve ease of use and to better support implementing new technology.

**Focus Areas for Projects:**

- CFTC.gov.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by increasing the ability of the public and industry participants to access and use information published by the Commission:

- Percentage of derivatives activity covered by regularly published Commission reports
- Develop a comprehensive communication strategy, geared for internal and external stakeholders, relating to the role of whistleblowers and the function of the Whistleblower Office.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Publish Interactive Reports on Swap Market Activity
- Boost public awareness of the Commission and its role in regulating financial markets
- Promote public information campaigns to enhance consumer ability to detect and avoid fraudulent and other abusive business practices.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1, 3	1.3, 3.4	DMO, DOE, OCE

### Strategic Initiative 2.3.4: Expand the use of interagency collaboration platforms

**Definition:** CFTC Strategic Plan Goal 2 will benefit from secure, mobile-accessible platforms that support arrangements for regulatory and enforcement cooperation and coordination; partnering with law enforcement agencies at the national, regional, and state levels; and obtaining and providing enforcement investigative assistance.

**Purpose:** Strategic Initiative 2.3.4 is necessary to expand the use of interagency collaboration platforms to support enforcement and cooperative domestic and international enforcement. The Commission will ensure that staff has required digital credentials and supporting policy and processes to participate on platforms provided by other agencies. In cases where the purpose of the platform is specific to the CFTC mission, the Commission will establish platforms that are secure and supported by transparent management and system controls.

**Focus Areas for Projects:**

- Secure private cloud
- Collaboration sites.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by ensuring staff ability to work effectively with other regulators:

- Strengthen and ensure a coordinated approach to receiving, assessing, and referring tips, complaints and referrals as necessary and appropriate; if resources permit, establish a unit or office dedicated to this function
- Percentage of enforcement investigations completed within 18 months of opening, depending on the nature and scope of investigations.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Solicit high quality tips, complaints and referrals from CFTC divisions and offices, and self-regulatory organizations.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
3, 4	3.1, 3.2, 4.4	DOE

### Strategic Initiative 2.3.5: Continue centralized management and administrative data and systems services and support automation of the CFTC administrative and management processes

**Definition:** The Commission uses services provided by other agencies for its financial management and human resources systems, as well as services provided by commercial providers to many federal agencies (e.g., travel and hiring systems). The Commission must also develop some administrative services that are unique to the Commission (e.g., performance management, pay adjustment, and ethics compliance). To reduce data redundancy, rework, and support cost-effective automation, administrative data and systems must continue to be centralized, replacing point solutions and isolated data stores.

**Purpose:** Strategic Initiative 2.3.5 is necessary to ensure that the Commission has a single authoritative source for administrative information about staff and mission support functions such as budget execution, security clearances, training, financial disclosure, workforce planning, and performance management. The Management and Administrative Enterprise Database (MAED), which provides centralization of administrative data and data services, will be sustained and used for ongoing management system maintenance and integration. All administrative support systems will leverage a single data source. As administrative support systems for any purpose (e.g., inventory management, onboarding support, and transit subsidy) are implemented or upgraded they will be integrated with MAED to use core data and services. Flexible dashboards will be developed to increase management visibility into processes. Excel collaboration tools will be used to supplement services provided by other agencies without systems development.

**Focus Areas for Projects:**

- MAED
- OED automation initiatives.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by enabling administrative and management support activities to be conducted more efficiently:

- Implement Operational Planning across the Commission
- Improved satisfaction among CFTC staff with management programs and services
- Decrease in per employee operating costs.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
Management Objectives	5.2	OED

**Strategic Initiative 2.3.6: Implement an electronic records and document management system (ERDM)**

**Definition:** An ERDM will manage documents and records from creation to destruction across connecting business processes. Benefits include: centrally storing documents instead of in uncontrolled shared drive and email folders, managing emails as records, managing lawful destruction of records, integrating case management and business process management systems (BPMS), searching more efficiently for relevant documents, reducing duplicate copies, ensuring information is reliable and secure, and managing FOIA requests more efficiently.

**Purpose:** Strategic Initiative 2.3.6 is necessary to apply technology to automate the process of collecting and managing CFTC documents and records. Fully deploying an electronic records and document management system will improve information management and security, support process automation, improve internal controls, and improve staff productivity. In addition to automating, all key mission processes via BPMS, an integrated, secure enterprise search capability that will allow simultaneous searching of key Commission information sources and databases will be implemented. A National Archives and Records Administration (NARA) compliant electronic records management will be fully deployed to ensure the effective and appropriate capture, retention, archival, and destruction of Commission records.

**Focus Areas for Projects:**

- ERDM
- Capstone
- OPERA
- BPMS
- Information Governance including Controlled Unclassified Information (CUI).

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators enabling staff to collaborate more effectively and contribute to Commission-wide work processes more efficiently:

- Improved CFTC customer satisfaction with management programs and services
- Decrease in per employee operating costs.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Expand Management Support and Data and Information Technology Internal Controls, Governance, and Planning.
- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish

the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
ALL	5.2	ALL

**Strategic Initiative 2.3.7: Support publishing of aggregated swaps and futures data**

**Definition:** This initiative supports continuing improvements in currently-published aggregated data and publishing of aggregated datasets to be defined in the future.

**Purpose:** Strategic Initiative 2.3.7 is necessary to support the publication of internal and external (i.e., public) reports in the interest of transparency. Publishing aggregated swaps and futures data supports increased transparency of the futures and swaps markets. ODT will continue to provide and enhance data extraction, loading and maintenance processes; compose reports using automated analytics tools; and publish the reports with automated processes. The CFTC will use data collected directly from the SDRs under Part 45 for the swaps report. Initially such reports will cover the major swap categories and then be expanded to include other categories as they meet minimum activity thresholds. The Commission will continue to identify new sets of aggregated information that will promote transparency.

**Focus Areas for Projects:**

- CFTC.gov
- Data Analysis and Reporting
- SAS.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by ensuring that market information published by the CFTC is generated efficiently:

- Percentage of derivatives activity covered by regularly published Commission reports.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop consistent reporting of relevant swaps data
- Publish Interactive Reports on Swap Market Activity.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1	1.3	DMO, OCE

### **Goal 3 - Provide a stable, scalable and secure IT environment and ensure continuous operations**

As the scope of CFTC oversight increases and expands and as the markets and related data grow increasingly complex, the Commission must continue to provide a stable, scalable and secure IT infrastructure to meet demand. CFTC's IT infrastructure is the combination of hardware, software, network resources, facilities, and services that are common across CFTC regardless of mission, program, or project and are the foundation of CFTC's IT environment. This infrastructure supports the development, testing, delivery, monitoring, control, and support of IT resources.

The IT infrastructure is the foundation upon which CFTC mission specific systems are built and is the key enabler for delivery of systems and services. CFTC recognizes the interdependency between infrastructure components as well as the systems that depend upon the infrastructure. Therefore, CFTC carefully prioritizes, plans, and coordinates changes to the IT Infrastructure. CFTC will continue to enhance computing infrastructure and related resources to facilitate CFTC regulatory mission activities and mission support activities. Increased network, storage, and processing capacity will permit analyzing larger and more complex data sets and enable enhanced collaboration. A private cloud computing environment will enable CFTC to consolidate processing and networking services in a highly virtualized environment. This environment will deliver high levels of availability, redundancy, and business continuity, while also allowing all information to be managed and made available centrally. IT services that benefit all Commission staff will be sustained and enhanced to support improved effectiveness and productivity.

The following IT Strategic Objectives are described under Goal 3:

- 3.1: Provide stable and scalable communication, processing, and storage infrastructure capabilities
- 3.2: Provide trusted access to systems and data
- 3.3: Ensure technology and data availability
- 3.4: Optimize infrastructure for management of high-volume information sources.

### Objective 3.1: Provide stable and scalable communication, processing, and storage infrastructure capabilities

Communication, processing, and storage infrastructure capabilities are fundamental to the operation of the Commission. The communication infrastructure consists of all the networks, routers, switches, and monitoring software. Providing a high-bandwidth, low-latency environment is critical to supporting CFTC regulatory mission activities and mission support activities. Processing infrastructure consists of all of the desktop and server hardware and software. The storage infrastructure includes everything from the desktop hard drives to the Storage Area Networks (SANs).

CFTC is experiencing significant growth in demands on the IT infrastructure. Data volumes are increasing significantly as CFTC incorporates swaps data and order message data. To optimize processing efficiency, specialized analytic tools may require storing additional versions of data sets (e.g., data marts, data warehouses, and massively parallel data systems). To provide for disaster recovery, data must be transferred across networks to backup facilities. Processing this data requires significant server resources. Additionally, significant network bandwidth is required to transfer this data between regions and to backup sites.

The Commission must sustain existing program initiatives, providing mission operations and maintenance, as well as providing CFTC staff with up-to-date desktop computing tools (e.g., software) necessary to be effective in their daily jobs. ODT needs to be able to quickly and efficiently allocate resources to meet business requirements. The IT infrastructure will allow dynamic provisioning of resources, providing resources quickly as needs arise (e.g., providing a virtual server for processing data associated with a special call). This scalable environment will provide the flexibility to add to resources into existing pools to scale storage and processing power as our needs grow.

The following IT Strategic Initiative is described below:

3.1.1: Maintain highly available and scalable data infrastructure.

#### Strategic Initiative 3.1.1: Maintain highly available and scalable data infrastructure

**Definition:** High availability infrastructure refers to a well-designed and thoroughly tested system of networks, servers, storage systems and other hardware that are available for access with very little downtime. High-availability is engineered into the infrastructure through redundant devices such as redundant array of independent disks (RAID), storage area networks (SANs), virtualized servers, and alternative computing facilities (ACFs). A scalable architecture is a set of networks, servers and storage that can be enlarged or configured to accommodate growth. The Commission's IT services should leverage technology that makes systems highly available and ready for use at all times. The systems should be flexible enough to be incrementally upgraded to adapt to increased demands.

**Purpose:** Strategic Initiative 3.1.1 is necessary to ensure that the CFTC IT infrastructure is designed to be able to change to meet the needs of the business, where CFTC can flexibly add resources within fiscal constraints. It is modularly expandable and designed to allow flexibility in capital expenditures in a given year. It allows CFTC to commoditize computing and storage resources (i.e., use standardized commodity hardware) that can be scaled up when necessary. Communications, processing and storage usage is monitored constantly and capacity planning is incorporated into IT strategic and annual operational planning. The hardware, software, and other components that provide communications, processing, and

storage are continuously updated to remediate security vulnerabilities and maintain acceptable performance and are regularly upgraded or replaced to ensure they are cost-effective, provide acceptable levels of service, and can be scaled to meet CFTC demand. Computing tools used by all staff are similarly maintained for secure operation and up-to-date functionality.

In addition to increasing current capacities to meet demand, increasing the redundancy of communications infrastructure will be an area of focus. The storage environment will be expanded and enhanced as appropriate with technological advances. The database management system (DBMS) used for all CFTC systems will be upgraded. The desktop computing environment used by all staff will be transitioned to a virtual desktop environment that will provide better mobile access and telework functionality, reduce ongoing operational support costs, and provide more flexibility in meeting fluctuating staffing levels. Desktop computing tools will be upgraded to support increased mobile computing and secure collaboration.

**Focus Areas for Projects:**

- Internet redundancy
- SQL 2014 DBMS
- Virtual desktop initiative (VDI)
- Office 2013/365.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by ensuring that tools and services used by staff are available as workload increases and technology changes:

- Improved CFTC customer satisfaction with management programs and services
- Decrease in per employee operating costs.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
ALL	ALL	ALL

## Objective 3.2: Provide trusted access to systems and data

In addition to scaling up technology capacity, the Commission must also continue to increase, automate, and scale information security controls in the face of evolving security threats. The Commission is charged with protecting sensitive information assets that are critical to overseeing the markets. Continuous monitoring is required to assess and mitigate risk more effectively. Also, security controls that are solely dependent on policy and staff compliance must be supplemented with system controls to reduce the risks to the Commission. CFTC will deliver a consistent approach to data security that will adequately protect information resources and minimize loss of productivity.

The following IT Strategic Initiatives are described below:

- 3.2.1: Enhance data management tools and procedures
- 3.2.2: Automate security controls and implement continuous monitoring
- 3.2.3: Provide systems platform support to empower end users.

### Strategic Initiative 3.2.1: Enhance data management tools

**Definition:** Data needs to be treated as a strategic asset that can be used as a trusted source of information throughout the Commission. Data needs to be managed throughout its entire lifecycle. Data management requires tools that facilitate defining and enforcing quality and integrity; ensuring that all IT services integrate with the Commission's data architecture; defining how data is collected, labeled and stored through-out CFTC; and establishing, in cooperation with the divisions and offices, definition and direction on the use, access to and security of Commission data.

**Purpose:** Strategic Initiative 3.2.1 is necessary to ensure that Commission staff access to data is managed efficiently. Enhancing data management tools will support Commission-wide data repositories and increase efficiency and appropriate Commission-wide reuse of data. This initiative will improve management of complex market data. It will also facilitate the sharing of data between enforcement and surveillance activities, as appropriate. The initiative will support secure collaborative research (both internal and external) and will support the effort to streamline reporting to the Commission. The Commission will expand access to and controls over regulatory and internal management data and records through the creation of maintainable data catalogs, standards and guide books, and implementing cross-divisional approval of access to enterprise data. One area of focus will be full implementation of the Forefront Identify Management (FIM) platform to automate the provisioning, certification and auditing, and de-provisioning of access to systems and data for CFTC staff.

#### Focus Areas for Projects:

- Data Management Tools
- Identity Management.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by ensuring that data used by staff is available and protected from unauthorized disclosure:

- Improved CFTC customer satisfaction with management programs and services
- Decrease in per employee operating costs.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Expand Management Support and Data and Information Technology Internal Controls, Governance, and Planning
- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
ALL	5.2	ALL

### Strategic Initiative 3.2.2: Automate security controls and implement continuous monitoring

**Definition:** Cyber warfare and electronic espionage are at an all-time high. Financial systems and repositories of market data could be viewed as high value targets. Securing our nation against cyber-attacks has become one of the nation's highest priorities. To achieve this objective, networks, systems, and the operations teams that support them must vigorously defend against a variety of threats, both internal and external. Furthermore, for those attacks that are successful, defenses must be capable of detecting, thwarting, and responding to follow-on attacks on internal enterprise networks as attackers spread inside a compromised network. Federal agencies must monitor, detect, analyze, protect, report, and respond against known vulnerabilities, attacks, and exploitations and continuously test and evaluate information security controls and techniques to ensure that they are effectively implemented. By improving efficiency and reducing the likelihood of human error, greater automation of security mechanisms reduces the number and magnitude of potential security vulnerabilities and reduces the Commission's risk of exposure to vulnerability.

**Purpose:** Strategic Initiative 3.2.2 is necessary to ensure proper security mechanisms are in place to protect the Commission's information and technology assets. CFTC is a custodian of confidential industry data and must make efforts to protect that data and prevent unauthorized disclosures. The data must be protected without reducing productivity and availability. This initiative will improve internal controls and reduce information security risk. The initiative includes enhancing security on all access points to CFTC systems (mobile device, BYOD, telework, desktop, external participant) to reduce the risk of compromise of CFTC information by outsiders. A Mobile Device Management (MDM) System will be implemented to ensure all data is securely controlled and all mobile devices can be managed to protect the CFTC from unauthorized access. A Data Loss Prevention (DLP) program will be implemented to reduce the risk of staff inadvertently disclosing sensitive information. A security operations center (SOC) will be fully implemented to use automated security controls to increase situational awareness and prevent and react rapidly to information security incidents. Critical controls will be automated to support continuous monitoring of information security risk. Legacy controls like anti-virus protection and staff internet use filtering and blocking will be evaluated based on emerging technology and upgraded or replaced. The capability for staff to digitally sign documents with authority that is valid externally will be implemented.

**Focus Areas for Projects:**

- SOC

- Enhanced authentication controls
- DLP
- Mobile Device Management
- Advanced malware defense
- Automated web application security testing
- Red teaming/penetration testing
- Configuration baseline hardening and management
- Continuous diagnostics and mitigation
- External digital signature.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by ensuring staff can work effectively in an environment that minimizes risk to the Commission:

- Decrease in per employee operating costs.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Expand Management Support and Data and Information Technology Internal Controls, Governance, and Planning
- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
ALL	ALL	ALL

**Strategic Initiative 3.2.3: Provide systems platform support to empower end users**

**Definition:** In addition to continually enhancing data analytics, data discovery and visualization, collaboration, and other platforms through IT strategic Initiative 1.1.3, CFTC must manage, sustain, and support the platforms that are the infrastructure supporting these capabilities. Additionally, ODT must provide technical, governance, and user support services when needed to troubleshoot and calibrate the technology environment.

**Purpose:** Strategic Initiative 3.2.3 is necessary to ensure that the Commission has a robust technology infrastructure and support mechanism to enable efficient, effective, and continuously available operations. In addition to providing platforms to empower staff to apply information technology to more effectively carry out CFTC regulatory mission and mission support activities, the Commission must manage those platforms so they are highly available, used efficiently and effectively, and used extensively. CFTC will apply best practices to managing platforms. The CFTC will promote a knowledge-sharing culture by promoting platform services and the exchange of knowledge about the effective use of platforms. Platforms will be managed with a strong focus on information governance to ensure compliance with the Privacy Act, Records Management Act, Freedom of Information Act (FOIA), and the controlled unclassified information (CUI)

initiative.

**Focus Areas for Projects:**

- Data Analytics
- Data Discovery/Data Visualization Tools
- SAS Enterprise Business Intelligence
- High Performance Computing
- SharePoint collaboration sites.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by making it easier for staff to interpret, manipulate, and securely share data:

- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies
- Percentage of derivatives activity covered by regularly published Commission reports
- Publish economic research reports to inform the public about market structure of the derivatives markets
- Percentage of derivatives for which trader data can be matched across CFTC datasets
- CFTC strives to conduct back testing of DCOs' material product and portfolio initial margin requirements to assess their sufficiency
- Clearing members' ability to fund variation and initial margin requirements calculated in hypothetical CFTC-designed market scenarios
- Strive to aggregate cleared swaps, futures, and options positions into a comprehensive risk surveillance process and conduct analysis for each material market participant
- Strengthen and ensure a coordinated approach to receiving, assessing, and referring tips, complaints and referrals as necessary and appropriate; if resources permit, establish a unit or office dedicated to this function.
- Improved CFTC customer satisfaction with management programs and services
- Decrease in per employee operating costs.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop and implement technology based surveillance tools to keep pace with market technology
- Develop consistent reporting of relevant swaps data
- Publish Interactive Reports on Swap Market Activity
- Conduct economic analysis and research on market structure and transparency for derivatives
- Develop tools to back test financial resources and evaluate sufficiency of all material product and portfolio margin requirements
- Develop a program to monitor firm-level variation and initial margin requirements across DCOs
- Enhance the risk surveillance program to evaluate the risk of market participants positions held at multiple FCMs or DCOs
- Develop process to combine cleared and uncleared, bilateral positions to obtain a more complete picture of a clearing firm's risk exposure
- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events
- Solicit high quality tips, complaints and referrals from CFTC divisions and offices, and self-regulatory organizations.
- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1-4	1.1-1.4, 2.1-2-4, 3.1, 3.2, 4.4	ALL

### Objective 3.3: Ensure technology and data availability

CFTC staff are more dependent than ever on IT. Technology will be more readily available through improved mobile computing and expanded after hours support. CFTC will also move toward a zero downtime architecture to perform maintenance updates without having to take systems offline and will employ geographically co-located infrastructure (i.e., replicated in an alternative off-site facility for disaster recovery) to support business continuity. Additionally, availability of teleconferencing technology will be expanded since CFTC staff collaborate regularly with other federal, state, and international regulators, Self-Regulatory Organizations (SROs), and industry participants.

The following IT Strategic Initiatives are described below:

- 3.3.1: Improve business continuity support
- 3.3.2: Improve mobile computing and mobile communication services
- 3.3.3: Improve video teleconferencing
- 3.3.4: Expand after-hours technical support for staff and external participants.

#### Strategic Initiative 3.3.1: Improve business continuity support

**Definition:** Protection and service availability of production data and infrastructure is a key component of the Commission business continuity program. Data loss or unplanned service interruption would directly impact the Commission's ability to perform CFTC regulatory mission activities.

**Purpose:** Strategic Initiative 3.3.1 is necessary to ensure business continuity in the event of loss of regular production operations. Given the importance of continuing oversight of derivatives markets to the health of the U.S. and global financial systems, the Commission must be fully prepared for continuity of operations under a broad range of circumstances. This initiative builds on the recent implementation of a co-located alternate computing facility (ACF). To ensure consistency of day to day operations CFTC needs to have a safe and reliable environment for its production systems. The criticality of the information the Commission deals with dictates the need for scalable data facilities. The server room at the DC Headquarters location will be de-commissioned and the ACF will be supplemented with a second, geographically co-located ACF. In addition to current capability to recover operations within recovery time objectives, application system architectures will be adjusted to further automate recovery and reconstitution processes and reduce the need for outages for planned maintenance. A zero downtime engineering methodology will be implemented for all future infrastructure enhancements.

#### Focus Areas for Projects:

- Secondary ACF
- DC Server Room Decommissioning.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by ensuring that tools and services used by staff are available under all operating conditions:

- Improved CFTC customer satisfaction with management programs and services.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
ALL	ALL	ALL

### Strategic Initiative 3.3.2: Improve mobile computing and mobile communication services

**Definition:** There is a growing need for people to communicate with each other and have timely access to information regardless of the location of the individuals or the information. The demand for wireless communication systems of increased sophistication and the increased use of mobile devices require flexible and scalable wireless services. Flexibility must include the ability to securely use a mix of CFTC-provided and staff personal devices. Scalability must enable the Commission to adapt quickly to wireless service and mobile device technology changes.

**Purpose:** Strategic Initiative 3.3.2 is necessary to support work outside the office. Improving mobile computing and mobile communication services will support increased productivity for investigators, auditors, and international affairs staff by ensuring availability of information and services, anytime and anywhere. Increased capability and advanced devices will require additional protections of the CFTC infrastructure and information. Mobile device management (MDM) will be implemented to enforce security controls and a secure, partitioned area for CFTC information, for both CFTC-provided and staff personal devices. Mobile wireless services will be provided by a diversified set of carriers to ensure coverage for staff in all geographic locations. Wireless connectivity within CFTC headquarters and regions will be provided to staff to increase productivity in meetings and when collaborating.

**Focus Areas for Projects:**

- MDM
- Multi-carrier wireless
- HQ and regional WI-FI.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by ensuring that tools and services used by staff are available regardless of their geographic location:

- Strive to examine compliance by exchanges with the CEA Core Principles and Commission regulations, prioritizing systemically important entities
- Strive to examine compliance by exchanges and SDRs with the system safeguards and cyber security requirements of the CEA Core Principles and Commission regulations, prioritizing systemically important entities
- Strive to examine compliance by DCOs with the Core Principles, including system safeguards and cyber security requirements, of the CEA and Commission regulations, prioritizing systemically important entities
- Conduct governance and risk management oversight reviews for SDs and FCMs
- Conduct limited scope reviews of SD, MSP, and FCM risk management and internal control systems and procedures, including controls, processes and procedures over technology risks.
- Percentage of enforcement investigations completed within 18 months of opening, depending on the nature and scope of investigations
- Improved satisfaction among CFTC staff with management programs and services.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Conduct oversight reviews of SD and MSP risk governance and risk management framework
- Conduct limited scope reviews of the risk management and internal control systems and procedures of SDs and FCMs
- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
ALL	ALL	ALL

### Strategic Initiative 3.3.3: Improve video teleconferencing

**Definition:** Video conferencing services are increasingly integral to conducting CFTC regulatory mission activities and mission support activities. Room-based, desktop, and mobile video conferencing and collaboration services will be seamlessly integrated.

**Purpose:** Strategic Initiative 3.3.3 is necessary to visual communication to support meetings where an in-person is not possible and to support video communication with large audiences (i.e., the public via webcasting). Improving video teleconferencing services will increase staff productivity by adopting technology that is increasing video quality at reduced cost and introducing new collaboration tools and services. Well-managed, high quality, secure, and available-on-demand teleconferencing services will support increased collaboration with external parties, including other federal, state, and international regulators, Self-Regulatory Organizations (SROs), and industry participants. Implementing internal conference bridging will facilitate secure video collaboration with broad support for existing and emerging standards, protocols, applications, devices and interoperability between unified communications (UC)

environments at a predictable cost.

**Focus Areas for Projects:**

- Mobile Video Conferencing
- Online Meeting, Desktop Sharing, and Video Teleconferencing with External Parties
- Media Streaming to Support Training Initiatives
- In-house Bridging of Video Teleconferencing

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by ensuring that staff can collaborate effectively with remote staff and external parties:

- Strive to examine compliance by exchanges with the CEA Core Principles and Commission regulations, prioritizing systemically important entities
- Strive to examine compliance by exchanges and SDRs with the system safeguards and cyber security requirements of the CEA Core Principles and Commission regulations, prioritizing systemically important entities
- Strive to examine compliance by DCOs with the Core Principles, including system safeguards and cyber security requirements, of the CEA and Commission regulations, prioritizing systemically important entities
- Conduct governance and risk management oversight reviews for SDs and FCMs
- Conduct limited scope reviews of SD, MSP, and FCM risk management and internal control systems and procedures, including controls, processes and procedures over technology risks.
- Percentage of enforcement investigations completed within 18 months of opening, depending on the nature and scope of investigations
- Improved satisfaction among CFTC staff with management programs and services.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Conduct oversight reviews of SD and MSP risk governance and risk management framework
- Conduct limited scope reviews of the risk management and internal control systems and procedures of SDs and FCMs
- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
ALL	ALL	ALL

### Strategic Initiative 3.3.4: Expand after-hours technical support for staff and external participants

**Definition:** The DC ODT Customer Support Center currently provides support from 7:30am to 5:30pm Eastern Time. Local support for each of the regional offices is comparable, varying slightly region to region. A best-effort is made to support senior staff and staff working on critical projects after those hours and on weekends. After hours support is not generally and readily available to all staff, requires unpredictable compensatory time to be incurred by Commission support staff, and is not supported by current CFTC IT service support contracts.

**Purpose:** Strategic Initiative 3.3.4 is necessary to provide continued support to staff working outside of normal business hours. Expanding after-hours technical support will increase the productivity of economists, attorneys, investigators, auditors, and international affairs staff by ensuring availability of information and services, anytime and anywhere. It will also improve the productivity of staff working extended hours on high-priority projects under tight deadlines. CFTC will structure future IT service support contracts to include the option for customer support after-hours and on weekends to support CFTC regulatory mission and mission support activities. This will be accomplished with a pool of technical resources staffing an after-hours call center to handle high priority work. In addition, the online customer self-service portal will be enhanced and the IT Training Program will be expanded to provide CFTC staff to allow staff to be more empowered after hours. Providing automated self-service capabilities to staff (e.g., password reset capability) will be of the highest priority for this Strategic Initiative as it will likely be the most cost effective. Additional non-automated after-hours technical support will be evaluated based on specific business value assessments.

#### Focus Areas for Projects:

- After Hours Customer Support
- Online Self-Service
- IT Training.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by ensuring that tools and services used by staff are available outside of HQ operating hours:

- Strive to examine compliance by exchanges with the CEA Core Principles and Commission regulations, prioritizing systemically important entities
- Strive to examine compliance by exchanges and SDRs with the system safeguards and cyber security requirements of the CEA Core Principles and Commission regulations, prioritizing systemically important entities
- Strive to examine compliance by DCOs with the Core Principles, including system safeguards and cyber security requirements, of the CEA and Commission regulations, prioritizing systemically important entities
- Conduct governance and risk management oversight reviews for SDs and FCMs
- Conduct limited scope reviews of SD, MSP, and FCM risk management and internal control systems and procedures, including controls, processes and procedures over technology risks.
- Percentage of enforcement investigations completed within 18 months of opening, depending on the nature and scope of investigations
- Improved satisfaction among CFTC staff with management programs and services.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Conduct oversight reviews of SD and MSP risk governance and risk management framework
- Conduct limited scope reviews of the risk management and internal control systems and procedures of SDs and FCMs
- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
ALL	ALL	ALL

### Objective 3.4: Optimize infrastructure for management of high-volume information sources

Increasingly complex automated surveillance strategies and analysis of very large datasets, as well as market reconstruction and simulation; margining, valuation, and stress testing of complex swaps; and analysis of high speed and algorithmic trading require high speed computing capabilities for rapid analysis of datasets. Data communication capacity must also be increased to support connectivity to swap data repositories, high-volume DCMs, and increased communication with newly-regulated industry participants as well as other regulators. High performance disk input/output (I/O) systems, database management systems, and parallel processing will ensure acceptable, reliable and scalable performance for activities that require manipulation of very large data sets.

The following IT Strategic Initiatives are described below:

- 3.4.1: Provide access to an increasing number of data sources and increasing sample sizes of market data (including non-futures market data)
- 3.4.2: Enable infrastructure support for high performance computing.

#### Strategic Initiative 3.4.1: Provide access to an increasing number of data sources and increasing sample sizes of market data (including non-futures market data)

**Definition:** Global markets are automated, intensively data-driven, and connected. Market regulators cannot operate in a vacuum. CFTC staff are increasingly requesting access to external data sources and services. Some of the data sources have mandated access (e.g., SDRs), some data sources are requested on an ad-hoc basis (e.g., special calls), and some data sources CFTC will need to be procured through contracts (e.g., Bloomberg, Reuters or other market data). In some cases the data source is retrieved via calling an interactive service (e.g., sending a complex portfolio to be margined by a web service hosted by a DCM). Additionally, given the growth of messaging in the markets and the growing complexities of the market, sample sizes of data ingested or processed at CFTC will continue to grow. Even a few seconds of futures data can run into hundreds of thousands of rows during a major market event.

**Purpose:** Strategic Initiative 3.4.1 is necessary to ensure staff have access to market data sources as needed to support regulatory mission activities. Providing access to an increasing number of data sources and increasing sample sizes of market data (including non-futures market data) will allow surveillance staff to broaden the scope of surveillance. Activities in markets not regulated by the Commission can be related to regulated trading activity and impact the risk profile of regulated participants. Additional data from external sources and services (e.g., margin data, delta ladders, and cash price data) are necessary for risk analysis, financial surveillance, risk surveillance, and enforcement matters. Dedicated high speed links to data repositories will be leveraged to facilitate secure data collection.

Services that consume data without requiring that it be ingested by the Commission will be favored because they will be quicker to implement and more cost effective. On-demand ingest by staff will be implemented to allow staff to quickly use new sources. Communications, storage, analytical processing applications, and high-performance computing will be scaled to meet demand. Secure, private cloud services will be implemented to ensure future scalability and to cost-effectively support largely-fluctuating ingest volumes.

#### Focus Areas for Projects:

- Data Services
- Information Governance

- High-performance Computing
- Cloud Services.

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by providing staff with access to relevant external data:

- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies
- Percentage of derivatives activity covered by regularly published Commission reports
- Publish economic research reports to inform the public about market structure of the derivatives markets
- Percentage of derivatives for which trader data can be matched across CFTC datasets
- CFTC strives to conduct back testing of DCOs' material product and portfolio initial margin requirements to assess their sufficiency
- Clearing members' ability to fund variation and initial margin requirements calculated in hypothetical CFTC-designed market scenarios
- Strive to aggregate cleared swaps, futures, and options positions into a comprehensive risk surveillance process and conduct analysis for each material market participant
- Strengthen and ensure a coordinated approach to receiving, assessing, and referring tips, complaints and referrals as necessary and appropriate; if resources permit, establish a unit or office dedicated to this function.
- Improved CFTC customer satisfaction with management programs and services
- Decrease in per employee operating costs.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop and implement technology based surveillance tools to keep pace with market technology
- Develop consistent reporting of relevant swaps data
- Publish Interactive Reports on Swap Market Activity
- Conduct economic analysis and research on market structure and transparency for derivatives
- Develop tools to back test financial resources and evaluate sufficiency of all material product and portfolio margin requirements
- Develop a program to monitor firm-level variation and initial margin requirements across DCOs
- Enhance the risk surveillance program to evaluate the risk of market participants positions held at multiple FCMs or DCOs
- Develop process to combine cleared and uncleared, bilateral positions to obtain a more complete picture of a clearing firm's risk exposure
- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events
- Solicit high quality tips, complaints and referrals from CFTC divisions and offices, and self-regulatory organizations.
- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1-4	1.1, 2.1, 2.4, 3.1, 3.2, 4.4	DMO, DCR, DOE, DSIO, OCE

### Strategic Initiative 3.4.2: Enable infrastructure support for high performance computing

**Definition:** High performance computing utilizing a massively parallel processing and storage platform will help process and analyze the ever growing size of market transaction data (TCR data, Order Book, Time and Sales). This data storage and retrieval facility must accommodate the increasing needs of the analysts who are using analytical tools to gain immediate access to data. Traditional relational database management (RDBMS) platforms are not able to sustain the ever-growing demands of the analysts and economists at the Commission. The high performance computing platform implemented at the Commission is required to conduct CFTC regulatory mission activities when analyzing massive amounts of data and has proven to reduce data ingest and data analytics processing times dramatically.

**Purpose:** Strategic Initiative 3.4.2 is necessary to timely analysis of high volume data sets and high complexity data analyses. Use of high-performance computing will be extended from supporting ad-hoc, issue-specific analytics to being fully operationalized, supporting all Commission data ingest and analytics processing. This will reduce latency in data availability and allow staff to conduct analytics more quickly and with greater opportunity to refine and innovate analytic approaches. It will also enable the Commission to scale capabilities to meet the increasing size of very large datasets. High-performance computing technology will be used for daily and other regular analytics. The RDBMS used by the Commission will also be upgraded to take advantage of performance and scalability improvements. The High-availability distributed object-oriented platform (Hadoop) open-source software framework for data-intensive distributed applications will also be evaluated and potentially used.

#### Focus Areas for Projects:

- High-Performance Computing
- ACF
- SQL 2014 DBMS
- Hadoop
- Communications Infrastructure Bandwidth

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by making it easier for staff to interpret and manipulate very large data sets:

- Strive to strengthen capacity to receive and expeditiously evaluate all trading data and associated information to identify potential violations of the CEA or Commission regulations and the timely response to market emergencies

- Percentage of derivatives activity covered by regularly published Commission reports
- Publish economic research reports to inform the public about market structure of the derivatives markets
- Percentage of derivatives for which trader data can be matched across CFTC datasets
- CFTC strives to conduct back testing of DCOs' material product and portfolio initial margin requirements to assess their sufficiency
- Clearing members' ability to fund variation and initial margin requirements calculated in hypothetical CFTC-designed market scenarios
- Strive to aggregate cleared swaps, futures, and options positions into a comprehensive risk surveillance process and conduct analysis for each material market participant
- Strengthen and ensure a coordinated approach to receiving, assessing, and referring tips, complaints and referrals as necessary and appropriate; if resources permit, establish a unit or office dedicated to this function.
- Improved CFTC customer satisfaction with management programs and services
- Decrease in per employee operating costs.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Develop and implement technology based surveillance tools to keep pace with market technology
- Develop consistent reporting of relevant swaps data
- Publish Interactive Reports on Swap Market Activity
- Conduct economic analysis and research on market structure and transparency for derivatives
- Develop tools to back test financial resources and evaluate sufficiency of all material product and portfolio margin requirements
- Develop a program to monitor firm-level variation and initial margin requirements across DCOs
- Enhance the risk surveillance program to evaluate the risk of market participants positions held at multiple FCMs or DCOs
- Develop process to combine cleared and uncleared, bilateral positions to obtain a more complete picture of a clearing firm's risk exposure
- Monitor firms for financial stress by, among other things, reviewing monthly and annual financial filings, as well as notice of specific events
- Solicit high quality tips, complaints and referrals from CFTC divisions and offices, and self-regulatory organizations.
- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
1-4	1.1, 1.3, 2.1, 2.4, 3.1, 3.2, 4.4	DMO, DCR, DOE, DSIO, OCE

## Goal 4 - Manage resources to achieve CFTC priorities

To continue supporting improved business outcomes IT management processes will continue to be integrated into CFTC planning and governance processes. The degree to which IT management leverages best practices, CFTC processes, and proven tools to achieve efficiency of operations will help define its success in fully supporting CFTC regulatory mission and mission support activities.

The CFTC will expand its strategic and operational planning process to better unite the various functional plans including, but not limited to, financial, human capital, and information technology plans. A unified planning process will lead to better use of resources and facilitate effective resource governance. Most importantly, it will increase the Commission's agility in responding to and adapting to external changes and derivatives market evolution. The Commission will supplement current planning activities and deliverables (strategic planning, budget formulation, budget execution, performance, human capital strategic, IT strategic, and IT operating) with mission division and mission support office strategic, operating, and performance plans. The additional level of detailed planning at the division and office level will increase the granularity and focus of HR and IT strategic and operating plans. More detailed and better focused HR and IT plans will also increase the effectiveness of division and office level planning.

Collaboration and partnering will continue to ensure the alignment of business needs and IT services. However, IT management processes for capital planning and investment control (CPIC), strategic and operational planning, and IT program and project management will be adjusted to facilitate expanding CFTC processes. IT operating plans will continue to identify incremental, iterative projects in order to reduce project risk and increase flexible alignment with CFTC appropriations and budget execution. Transparency will be increased to support the enterprise focus of CFTC resource planning and governance.

The following IT Strategic Objectives are described under Goal 4:

4.1: Deliver expected outcomes on IT Investments

4.2: Develop the ODT organization in alignment with the demands of CFTC's regulatory mission activities.

## Objective 4.1: Deliver expected outcomes on IT Investments

ODT will increase transparency and communication in order to ensure that the right set of IT investments is being made to meet mission requirements, the implementation and sustainment of those investments is efficient, and the investments provide all intended benefits.

The following IT Strategic Initiatives are described below:

- 4.1.1: Extensively use learning management, electronic learning, and video production
- 4.1.2: Achieve transparency through ODT communications and processes:

### Strategic Initiative 4.1.1: Extensively use learning management, electronic learning, and video production

**Definition:** ODT provides IT infrastructure needed by Human Resources, DOE, and other organizations to manage and deliver training. ODT also provides IT training that is focused on CFTC IT services and their application at the Commission. This IT strategic initiative highlights the fact that IT services are more effective when capabilities are fully understood and usage best practices are applied.

**Purpose:** Strategic Initiative 4.1.1 is necessary to support training as an essential Commission function needed to support staff efficiency and effectiveness. IT services often require training to be used to their fullest potential. Training is most effective when it is delivered with mission context. Maintaining the ability to deliver mission-focused training is important not only to deliver IT services effectively, but also to address competency gaps and maintain high performance in all mission functions. Extensively using learning management and electronic learning will improve the overall knowledge and proficiency of all staff and provide organizational flexibility. Video production will support enhanced internal communication as well as increased transparency to the public.

A multimedia production studio capability that supports the development of mission-focused training will be implemented. A multimedia production room will allow the Commission to produce professional grade videos for communications, media distribution and training purposes. The production room will allow for greater scalability and control over video production and post-production activities. The studio will be used to bring a number of benefits to the commission including: a growing need for broadcast quality media services in the form of announcements, presentations, meeting material and HR training, and Public Broadcasts. The CFTC will expand the enforcement learning program to include an on-demand Training Video Library to provide a wide variety of enforcement training topics in a user-friendly, on-demand format. Additionally, an IT training program that is focused on having the greatest impact on mission capabilities will be implemented.

#### Focus Areas for Projects:

- Multimedia Production Studio
- Media Streaming Server
- IT Training Program
- Onboarding Training
- Policy Training
- CFTCNet

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by enabling knowledge unique to the CFTC mission to be provided to new staff and shared with collaborating staff:

- Establish and implement an Individual Development Plan (IDP) strategy
- Establish certification programs in executive, supervisory, and one core subject matter function
- Improved satisfaction among CFTC staff with management programs and services
- Launch long-term anti-fraud campaign.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Further develop, strengthen, and maintain areas of expertise relevant to the CEA, as amended by Dodd-Frank Act, Commission regulations, and ever-changing market innovations and technologies
- Advance a training and development program that focuses employee proficiency and career development, and that addresses the dynamic knowledge requirements of Dodd-Frank legislation
- Boost public awareness of the Commission and its role in regulating financial markets
- Promote public information campaigns to enhance consumer ability to detect and avoid fraudulent and other abusive business practices
- Recruit, Develop, and Retain Highly Qualified Staff
- Increase Transparency and Communication of Commission-wide Vision, Mission, and Policies.
- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
3, Management Objectives	3.2, 5.1, 5.2	ALL

### Strategic Initiative 4.1.2: Achieve transparency through ODT communications and processes

**Definition:** Effective communication within and between business units can more fully engage employees in the business of the Commission and can mobilize them to support organizational change and goals. There are three main methods of corporate communication that are appropriate for ODT: in person, electronic push, and electronic pull. In-person communications includes all-hands meetings, group meetings, hallway conversations, and one-on-one interviews. Electronic push includes emails and desktop alerts, while electronic pull means creating an online destination where employees are confident of finding the information they need, either on CFTCNet or on SharePoint sites.

**Purpose:** Strategic Initiative 4.1.2 is necessary to keep CFTC staff abreast of IT initiatives. ODT will provide more communication about planned, upcoming, and existing IT services to increase awareness and reinforce mission alignment. In order to improve internal communication, ODT will inform staff of ODT projects, events, and services; announce major ODT initiatives systematically; and ensure staff understand essential processes. To improve communication about IT services with the rest of the Commission, inform CFTC of ODT news, projects, and services; structure and share ODT information effectively; create technical documentation based on CFTC needs; and package ODT information so it is trusted. The ITSP will be

published on CFTCNet and CFTC.gov. Annual IT operating plans will be posted on CFTCNet. Information about IT services published on CFTCNet will be improved and expanded. Information about IT services on CFTCNet will be linked to the online self-service web page to request services that must be provisioned and directly to services that are provided to all CFTC staff.

**Focus Areas for Projects:**

- Commission-wide Planning
- IT planning
- ODT Communication Strategic Plan Activities

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by making IT services more readily accessible to staff:

- Improved satisfaction among CFTC staff with management programs and services.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Expand Management Support and Data and Information Technology Internal Controls, Governance, and Planning
- All Employees Have the Knowledge, Tools, and Resources to Effectively and Efficiently Accomplish the CFTC Mission.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
Management Objectives	5.1, 5.2	ALL

## Objective 4.2: Develop the ODT organization in alignment with the demands of CFTC's regulatory mission activities

The Office of Data and Technology (ODT) was established within the CFTC as a mission support office reporting directly to the Chairman because IT services and data management are integral to supporting and transforming CFTC regulatory mission and mission support activities. As with other CFTC divisions and offices, achieving expected business outcomes depends on attracting, developing and retaining experienced and engaged employees. Additionally, contracting for IT services and IT support services must be highly competitive and well-managed in order to fully leverage the innovation that industry is ready to provide. ODT will, along with other CFTC divisions and offices, partner with the Office of the Executive Director (OED) to achieve Objective 5.1 of the CFTC Strategic Plan: A High-performing, diverse, and engaged workforce. ODT will also develop its organization to assume a co-leadership responsibility with OED to achieve Objective 5.2 of the CFTC Strategic Plan: Effective stewardship of resources. Co-leadership is required specifically with respect to the CFTC Strategic Plan strategy to “Expand Management Support and Data and Information Technology Internal Controls, Governance, and Planning”. Achieving CFTC Strategic Plan Objective 5.2 will allow CFTC regulatory mission activities to be carried out securely, efficiently, and transparently.

The following IT Strategic Initiative is described below:

4.2.1: Support the implementation of CFTC Governance.

### Strategic Initiative 4.2.1: Support the implementation of CFTC Governance

**Definition:** CFTC must establish a corporate perspective when applying its finite resources or adopting Commission-wide policies or processes. Applying a corporate perspective enhances agency performance and reduces programmatic risks. Given its staffing level, the Commission must right-size IT planning activities and integrate them with Commission-wide planning and governance co-led by the Office of the Executive Director (OED) in order to make the best use of staff time.

**Purpose:** Strategic Initiative 4.2.1 is necessary to ensure appropriate integration of IT planning functions with other Divisions and Office activities. As the CFTC continues to develop and improve its planning and program evaluation functions, IT planning will be tightly integrated into those functions.

The Chief Information Officer (CIO) is, along with the Executive Director (ED), a co-chair of the Resource Governance Board (RGB). The CIO is also, with the ED, Chief Operating Officer (COO), and Chief Counsel, on the steering committee of a cross-organizational program for information governance (InfoGov). The RGB is a critical advisory resource that serves two primary purposes—to improve internal Commission-wide communication and transparency and provide collaborative recommendations to senior leaders. Two-way, non-attributive dialog is vital to creating consistent, high quality, Commission-wide deliverables. InfoGov fosters a coordinated, enterprise-wide approach to the management of information throughout the information lifecycle -- from creation or receipt, use and maintenance to ultimate disposal. InfoGov will facilitate the development of policies and processes to holistically address various information-use issues and create accountability with respect to the handling of information. ODT will continue to develop its organization to improve and integrate capital planning and investment control (CPIC) and project management life-cycle (PMLC) with CFTC planning and governance functions, particularly the RGB and InfoGov. Additionally, a right-sized enterprise architecture (EA) program will be implemented to provide strategic and technical assessments that will inform integrated planning and governance functions.

**Focus Areas for Projects:**

- InfoGov
- RGB
- PMLC
- EA

**Strategic Plan Performance Indicator Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Performance Indicators by focusing IT investments on essential services:

- Decrease in per employee operating costs.

**Strategic Plan Strategy Support:** The initiative will support the accomplishment of the following CFTC Strategic Plan Strategies:

- Increase Transparency and Communication of Commission-wide Vision, Mission, and Policies
- Expand Management Support and Data and Information Technology Internal Controls, Governance, and Planning.

**Strategic Plan Goal and Objective Support:**

CFTC Goal	CFTC Objective	Division/Office
Management Objectives	5.2	ALL

## 1 IT Strategic Plan Performance Measures

ITSP performance will be measured at the ITSP Goal level.

### Goal 1 - Deliver IT systems and services aligned with regulatory mission activities of the CFTC

For Goal 1, ODT will use a CFTC Strategic Plan Objective 5.2 measure.

**Indicator:** Improved CFTC customer satisfaction with management programs and services

**Target:** Survey/baseline in 2015 and annual target thereafter

**Timeframe:** 2018

**Description:** Resource allocation, including financial, human, and information technology resources, is one of the primary services provided by mission support. The Office of the Executive Director (OED) and the Office of Data and Technology (ODT) will design and conduct a survey in FY 2015 that addresses key services provided by each office to establish a baseline. At least two of the services on which staff will be surveyed will be services that are integral to CFTC resource allocation processes. The survey will be conducted semi-annually FY 2015 – FY 2018. The staff survey will include questions about mission alignment of IT services.

The U.S. futures and swaps markets are estimated at \$30 trillion and \$250 trillion, respectively. By any measure, the markets under CFTC's regulatory purview are large and economically significant. Given the enormity of these markets and the critical role they play in empowering legitimate, prudential, and non-speculative hedging strategies ensuring that these markets are transparent, open, and competitive is essential to help safeguard the financial stability of the Nation.

### Goal 2 - Facilitate availability and enhance understanding of data to improve regulatory effectiveness

**Indicator:** SDR Data Quality

**Target:** Baseline in 2015 and annual target thereafter

**Timeframe:** 2018

**Description:** In FY 2015 an objective, qualitative measure of SDR data quality will be developed. Also in FY 2015, the measure will be applied to establish a baseline and improvement targets will be established. FY 2015 through FY 2018 measurement will be conducted quarterly. Staff will continually, with the SDRs, identify root causes of insufficient quality as well as corrective actions. Staff will correlate corrective actions and measurement results.

### Goal 3 - Provide a stable, scalable and secure IT environment to ensure continuous operations

**Indicator:** DHS FISMA Scorecard (Small Agencies)

**Target:** Baseline in 2015 and annual target thereafter

**Timeframe:** 2018

**Description:** Given increasing external cyber security risks, the Commission will use the DHS FISMA Scorecard for small agencies, which is compiled annually, as an indicator for providing a secure IT environment. The FY 2014 annual scorecard results will be a baseline. In FY 2014 performance targets for improvement relative to other small agencies will be set and measured FY 2014 through FY 2018.

#### **Goal 4 - Manage resources to achieve CFTC priorities**

**Indicator:** Major IT Project Budget and Schedule Performance

**Target:** Baseline in 2015 and annual target thereafter

**Timeframe:** 2018

**Description:** Estimated cost and schedule variance will be base lined for each major IT project. In FY 2015 an average budget and schedule variance will be calculated. Also in FY 2015, target performance improvements will be set for FY 2016 through FY 2018. Results will be measured quarterly FY 2015 through FY 2018 for in-flight projects.

## 2 IT Strategic Planning Process

Information Technology (IT) plays a critical role in CFTC mission attainment. IT enables the Commission's regulatory mission activities by delivering quick and secure information aggregation and access, analytical capabilities, and successful business process automation. The IT Strategic Planning is an integral part of the CFTC Strategic Planning Process, which establishes the long-term goals for the Commission's core mission and supporting functions, including IT. The CFTC IT Strategic Plan (ITSP) ensures that IT investments are in direct alignment with business needs and contribute to the CFTC strategic priorities.

The ITSP high level processes provide the Office of Data and Technology (ODT) with a framework by which to execute the following activities:

- Develop (Update) and Socialize IT Strategic Plan
- Implement IT Strategic Plan
- Evaluate IT Strategic Plan Implementation Progress

The objective of the 'Develop (Update) and Socialize IT Strategic Plan' process is to define what ODT seeks to accomplish in support of the CFTC Strategic Plan goals for current and future years and to identify the strategies ODT will use to achieve desired results.

The objective of the 'Implement IT Strategic Plan' process is to ensure that the planned strategies are executed and that, on a day-to-day basis, the IT Strategic Plan guides IT programs, projects and operational activities.

Finally, the objective of the 'Evaluate IT Strategic Plan Implementation Progress' process is to determine - through measurement - how well ODT is succeeding in achieving IT strategic objectives.

Each of the ITSP High Level Processes is a part of the Commission-level Planning Process, managed by the Office of the Executive Director. As such, each of the ITSP High Level Processes identifies touch points with the Commission's Integrated Strategic, Budget, and Operating Planning Process.

### Develop (Update) and Socialize IT Strategic Plan

The 'Develop (Update) and Socialize IT Strategic Plan' is the process by which ODT defines the long-term IT goals and objectives needed to reach the CFTC's strategic goals. In alignment with the CFTC Planning Process, ODT develops IT Strategic Plan once in 4 years (major revisions). Major ITSP revisions take place concurrently with the development of the CFTC Strategic Plan, which is triggered by the presidential election cycle and begins shortly after the presidential inauguration for publication generally one year following the inauguration with scope spanning the four years of the administration. During the major revisions, the IT Strategic Plan is socialized and published leveraging the CFTC Strategic and Operating Plan socialization process and activities. Since there are ODT-generated IT requirements and technical office requirements, development of the ITSP both informs and is guided by the CFTC Strategic Plan.

ODT continuously reviews its progress (see 'Evaluate IT Strategic Plan Implementation Progress') and conducts annual validations of the ITSP to evaluate if it needs to be modified so that it can remain a valid driver for the IT Operating Plan activities, annual CFTC and ODT operational planning, CFTC strategic plan adjustments, and the next major CFTC strategic planning cycle.

The development of the ITSP is based on collaboration with the other CFTC Divisions and Offices as part of the concurrent CFTC Strategic Planning and IT Strategic Planning processes. The ITSP is also based on divisional strategic and operational plans as articulated through the planning process.

The depth of detail in the ITSP aligns with the detail specified in the CFTC Strategic Plan and other divisional plans. Operational details, project timelines, and budgets are beyond the scope of the ITSP.

### **Implement IT Strategic Plan**

The objective of the 'Implement IT Strategic Plan' process is to ensure that the defined IT Strategic Goals and Objectives direct ODT operations and are implemented via ODT programs and projects. ODT executes the IT Strategic Plan by aligning projects and individual performance of ODT staff to the IT Strategic Objectives, which is in turn aligned with the CFTC Strategic Plan. Detailed action plans and performance measures are developed and tracked at the level of IT projects found in ODT's Annual Operating Plan.

### **Evaluate IT Strategic Plan Implementation Progress**

The objective of this process is to track and evaluate ODT's progress in implementing the strategies expressed in the CFTC and IT Strategic Plans, and ultimately, in meeting business needs and supporting the CFTC mission. ODT continuously tracks and evaluates performance at the level of tasks, projects and strategic initiatives. Formal report and communication of the progress of IT strategic initiatives towards defined performance metrics takes place quarterly and coincides with the quarterly CPIC IT Portfolio evaluation meetings.

### 3 External Factors

The CFTC must be prepared to modify or change its planned direction or level of effort if factors not within its control change in unanticipated ways. Some of the factors that could materially affect CFTC's long term IT strategy are:

- Legislation could be enacted that adds to or reduces CFTC's scope of regulation or ability to access critical information.
- Appropriations may be above or below the level requested.
- World and U.S. economies could grow or contract dramatically.
- Demand for or supply of commodities and other goods and services that affect commodity markets and derivatives trading could change significantly.
- Court decisions may alter prior understandings on which the Commission based workload projections, business processes or resource requirements.
- Information Technology capabilities could materially change, improving or hindering the Commission's ability to monitor market or participant behavior or analyze transactions.
- New derivative products, processes or market participants may develop, having a positive or negative effect in the Commission's ability to oversee the market.
- War or terrorist activity could disrupt the Commission's ability to fulfill its responsibilities.
- Critical staff with hard to replace competencies could leave or be unable to work for some period of time.

#### 4 Alignment between IT Strategic Initiatives and CFTC Goals and Objectives

<p style="text-align: center;"><b>CFTC Goals and Objectives</b></p> <p style="text-align: center;"><b>IT Strategic Goals, Objectives, Initiatives</b></p>	<p style="text-align: center;"><b>Market Integrity and Transparency</b></p> <p>1.1 Markets not readily susceptible to manipulation and other abusive practices 1.2 Effective self-regulatory framework 1.3 Availability of market information to the public and for use by authorities 1.4 Integrate swaps data with futures and options on futures data</p>	<p style="text-align: center;"><b>Financial Integrity and Avoidance of Systemic Risk</b></p> <p>2.1 Reduce the risk of disruptions to the system for clearing and settlement of contract obligations 2.2 Provide market participants with regulatory guidance 2.3 Strong governance and oversight of Commission registrants 2.4 Assess whether SDs, MSPs and FCMs maintain sufficient financial resources, risk management procedures, internal controls, and customer protection practices</p>	<p style="text-align: center;"><b>Comprehensive Enforcement</b></p> <p>3.1 Strengthen capacity to receive and expeditiously handle high-impact tips, complaints and referrals 3.2 Execute rigorous and thorough investigations 3.3 Effectively prosecute violations 3.4 Remedy past violations, deter future violations and related consumer losses</p>	<p style="text-align: center;"><b>Domestic and international cooperation and coordination</b></p> <p>4.1 Broad outreach on regulatory concerns 4.2 Sound international standards and practices 4.3 Provide global technical assistance 4.4 Robust Domestic and International Enforcement Cooperation and Coordination</p>
<p><b>1. Deliver IT systems and services aligned with regulatory mission activities of the CFTC</b></p>				
<p><b>1.1 Develop mission systems that contribute to the effectiveness of CFTC regulatory mission activities</b></p>				
<p>1.1.1 Continuously enhance market surveillance monitoring and case management systems</p>	<p>✓ (CFTC 1.1, 1.4)</p>	<p>✓ (CFTC 2.1, 2.2, 2.3, 2.4)</p>	<p>✓ (CFTC 3.1, 3.2)</p>	<p>✓ (CFTC 4.4)</p>
<p>1.1.2 Continuously identify and develop enhanced financial analytical tools</p>		<p>✓ (CFTC 2.1, 2.4)</p>	<p>✓ (CFTC 3.1, 3.2)</p>	<p>✓ (CFTC 4.4)</p>
<p>1.1.3 Continuously enhance data analytics platforms, data discovery and visualization platforms and high-performance data environment</p>	<p>✓ (CFTC 1.1, 1.3, 1.4)</p>	<p>✓ (CFTC 2.1, 2.4)</p>	<p>✓ (CFTC 3.1, 3.2)</p>	<p>✓ (CFTC 4.4)</p>
<p>1.1.4 Increase litigation support services</p>			<p>✓ (CFTC 3.1, 3.2, 3.3)</p>	<p>✓ (CFTC 4.4)</p>
<p>1.1.5 Continuously enhance eLaw program technology</p>			<p>✓ (CFTC 3.1, 3.2, 3.3)</p>	<p>✓ (CFTC 4.4)</p>

<p><b>CFTC Goals and Objectives</b></p> <p><b>IT Strategic Goals, Objectives, Initiatives</b></p>	<p><b>Market Integrity and Transparency</b></p> <p>1.1 Markets not readily susceptible to manipulation and other abusive practices                      1.2 Effective self-regulatory framework                      1.3 Availability of market information to the public and for use by authorities                      1.4 Integrate swaps data with futures and options on futures data</p>	<p><b>Financial Integrity and Avoidance of Systemic Risk</b></p> <p>2.1 Reduce the risk of disruptions to the system for clearing and settlement of contract obligations                      2.2 Provide market participants with regulatory guidance                      2.3 Strong governance and oversight of Commission registrants                      2.4 Assess whether SDs, MSPs and FCMs maintain sufficient financial resources, risk management procedures, internal controls, and customer protection practices</p>	<p><b>Comprehensive Enforcement</b></p> <p>3.1 Strengthen capacity to receive and expeditiously handle high-impact tips, complaints and referrals                      3.2 Execute rigorous and thorough investigations                      3.3 Effectively prosecute violations                      3.4 Remedy past violations, deter future violations and related consumer losses</p>	<p><b>Domestic and international cooperation and coordination</b></p> <p>4.1 Broad outreach on regulatory concerns                      4.2 Sound international standards and practices                      4.3 Provide global technical assistance                      4.4 Robust Domestic and International Enforcement Cooperation and Coordination</p>
<p><b>1.2 Collaborate with the industry and divisions to automate business processes and data flows</b></p>				
<p>1.2.1 Actively engage DCOs to identify and potentially re-use or extend margining and other software algorithms to meet unique Commission requirements</p>		<p>✓ (CFTC 2.1)</p>		<p>✓ (CFTC 4.3)</p>
<p>1.2.2 Increase integration between NFA and CFTC systems</p>		<p>✓ (CFTC 2.2, 2.3, 2.4)</p>		<p>✓ (CFTC 4.4)</p>
<p>1.2.3 Further integrate eLaw with other CFTC systems and processes</p>	<p>✓ (CFTC 1.1)</p>	<p>✓ (CFTC 2.3, 2.4)</p>	<p>✓ (CFTC 3.1, 3.2)</p>	<p>✓ (CFTC 4.4)</p>
<p>1.2.4 Provide technical support for regulatory reporting compliance</p>	<p>✓ (CFTC 1.1, 1.2)</p>	<p>✓ (CFTC 2.1, 2.2, 2.3, 2.4)</p>		
<p>1.2.5 Building out of proof-of-concept programs by mission program staff</p>	<p>✓ (CFTC 1.1)</p>	<p>✓ (CFTC 2.1, 2.2, 2.3)</p>	<p>✓ (CFTC 3.1, 3.2)</p>	<p>✓ (CFTC 4.4)</p>
<p><b>1.3 Provide enterprise solutions aligned with industry best practices</b></p>				
<p>1.3.1 Increase use of Application Programming Interfaces (APIs) and web services for regulatory data reporting</p>	<p>✓ (CFTC 1.1, 1.2)</p>	<p>✓ (CFTC 2.1, 2.2, 2.3)</p>		
<p>1.3.2 Use industry-standard tools to evaluate FCM, CPO, and other participant financial risk</p>		<p>✓ (CFTC 2.4)</p>		<p>✓ (CFTC 4.3)</p>

<p><b>CFTC Goals and Objectives</b></p> <p><b>IT Strategic Goals, Objectives, Initiatives</b></p>	<p><b>Market Integrity and Transparency</b></p> <p>1.1 Markets not readily susceptible to manipulation and other abusive practices                      1.2 Effective self-regulatory framework                      1.3 Availability of market information to the public and for use by authorities                      1.4 Integrate swaps data with futures and options on futures data</p>	<p><b>Financial Integrity and Avoidance of Systemic Risk</b></p> <p>2.1 Reduce the risk of disruptions to the system for clearing and settlement of contract obligations                      2.2 Provide market participants with regulatory guidance                      2.3 Strong governance and oversight of Commission registrants                      2.4 Assess whether SDs, MSPs and FCMs maintain sufficient financial resources, risk management procedures, internal controls, and customer protection practices</p>	<p><b>Comprehensive Enforcement</b></p> <p>3.1 Strengthen capacity to receive and expeditiously handle high-impact tips, complaints and referrals                      3.2 Execute rigorous and thorough investigations                      3.3 Effectively prosecute violations                      3.4 Remedy past violations, deter future violations and related consumer losses</p>	<p><b>Domestic and international cooperation and coordination</b></p> <p>4.1 Broad outreach on regulatory concerns                      4.2 Sound international standards and practices                      4.3 Provide global technical assistance                      4.4 Robust Domestic and International Enforcement Cooperation and Coordination</p>
<p><b>2. Facilitate availability and enhance understanding of data to improve regulatory effectiveness</b></p>				
<p><b>2.1 Architect data to enable automated ingestion, integration, access, sharing, reporting and transparency</b></p>				
<p>2.1.1 Receive all data electronically and automate its distribution throughout the Commission using business process automation software</p>	<p>✓ (CFTC 1.1, 1.2, 1.3, 1.4)</p>	<p>✓ (CFTC 2.1, 2.2, 2.3, 2.4)</p>	<p>✓ (CFTC 3.1)</p>	
<p>2.1.2 Improve data quality</p>	<p>✓ (CFTC 1.1, 1.2, 1.3, 1.4)</p>	<p>✓ (CFTC 2.1, 2.4)</p>	<p>✓ (CFTC 3.1, 3.2)</p>	<p>✓ (CFTC 4.2, 4.4)</p>
<p><b>2.2 Aggregate data across markets and participants to empower the CFTC staff to perform complex data analyses</b></p>				
<p>2.2.1 Increase application of data standards, including Legal Entity Identifiers (LEIs) and product identifiers</p>	<p>✓ (CFTC 1.1, 1.3, 1.4)</p>	<p>✓ (CFTC 2.1, 2.4)</p>	<p>✓ (CFTC 3.1, 3.2)</p>	<p>✓ (CFTC 4.2, 4.4)</p>
<p>2.2.2 Harmonize SDR data</p>	<p>✓ (CFTC 1.1, 1.3, 1.4)</p>	<p>✓ (CFTC 2.1, 2.4)</p>	<p>✓ (CFTC 3.1, 3.2)</p>	<p>✓ (CFTC 4.2, 4.4)</p>
<p><b>2.3 Manage information to ensure its availability to the regulatory mission activities and the public</b></p>				
<p>2.3.1 Ingest order book data from market exchanges and platforms</p>	<p>✓ (CFTC 1.1)</p>		<p>✓ (CFTC 3.1, 3.2)</p>	<p>✓ (CFTC 4.4)</p>

<p><b>CFTC Goals and Objectives</b></p> <p><b>IT Strategic Goals, Objectives, Initiatives</b></p>	<p><b>Market Integrity and Transparency</b></p> <p>1.1 Markets not readily susceptible to manipulation and other abusive practices                      1.2 Effective self-regulatory framework                      1.3 Availability of market information to the public and for use by authorities                      1.4 Integrate swaps data with futures and options on futures data</p>	<p><b>Financial Integrity and Avoidance of Systemic Risk</b></p> <p>2.1 Reduce the risk of disruptions to the system for clearing and settlement of contract obligations                      2.2 Provide market participants with regulatory guidance                      2.3 Strong governance and oversight of Commission registrants                      2.4 Assess whether SDs, MSPs and FCMs maintain sufficient financial resources, risk management procedures, internal controls, and customer protection practices</p>	<p><b>Comprehensive Enforcement</b></p> <p>3.1 Strengthen capacity to receive and expeditiously handle high-impact tips, complaints and referrals                      3.2 Execute rigorous and thorough investigations                      3.3 Effectively prosecute violations                      3.4 Remedy past violations, deter future violations and related consumer losses</p>	<p><b>Domestic and international cooperation and coordination</b></p> <p>4.1 Broad outreach on regulatory concerns                      4.2 Sound international standards and practices                      4.3 Provide global technical assistance                      4.4 Robust Domestic and International Enforcement Cooperation and Coordination</p>
2.3.2 Implement a research-focused data environment	<p>✓ (CFTC 1.1, 1.3)</p>		<p>✓ (CFTC 3.1)</p>	<p>✓ (CFTC 4.3, 4.4)</p>
2.3.3 Implement the president’s digital government strategy	<p>✓ (CFTC 1.3)</p>		<p>✓ (CFTC 3.4)</p>	
2.3.4 Expand the use of interagency collaboration platforms			<p>✓ (CFTC 3.1, 3.2)</p>	<p>✓ (CFTC 4.4)</p>
2.3.5 Continue centralized management and administrative data and systems services and support automation of the CFTC administrative and management processes	Supports CFTC Management Objective 5.2 (Effective stewardship of resources)			
2.3.6 Implement an electronic records and document management system	<p>✓ (CFTC 1.2)</p>	<p>✓ (CFTC 2.1, 2.2, 2.3, 2.4)</p>		
2.3.7 Support publishing of aggregated swaps and futures data	<p>✓ (CFTC 1.3)</p>			
<b>3. Provide a stable, scalable and secure IT environment and ensure continuous operations</b>				
<b>3.1 Provide stable and scalable communication, processing, and storage infrastructure capabilities</b>				
3.1.1 Maintain highly available and scalable data infrastructure	<p>✓ (CFTC 1.1, 1.2, 1.3, 1.4)</p>	<p>✓ (CFTC 2.1, 2.2, 2.3, 2.4)</p>	<p>✓ (CFTC 3.1, 3.2, 3.3, 3.4)</p>	<p>✓ (CFTC 4.1, 4.2, 4.3, 4.4)</p>

<p><b>CFTC Goals and Objectives</b></p> <p><b>IT Strategic Goals, Objectives, Initiatives</b></p>	<p><b>Market Integrity and Transparency</b></p> <p>1.1 Markets not readily susceptible to manipulation and other abusive practices                      1.2 Effective self-regulatory framework                      1.3 Availability of market information to the public and for use by authorities                      1.4 Integrate swaps data with futures and options on futures data</p>	<p><b>Financial Integrity and Avoidance of Systemic Risk</b></p> <p>2.1 Reduce the risk of disruptions to the system for clearing and settlement of contract obligations                      2.2 Provide market participants with regulatory guidance                      2.3 Strong governance and oversight of Commission registrants                      2.4 Assess whether SDs, MSPs and FCMs maintain sufficient financial resources, risk management procedures, internal controls, and customer protection practices</p>	<p><b>Comprehensive Enforcement</b></p> <p>3.1 Strengthen capacity to receive and expeditiously handle high-impact tips, complaints and referrals                      3.2 Execute rigorous and thorough investigations                      3.3 Effectively prosecute violations                      3.4 Remedy past violations, deter future violations and related consumer losses</p>	<p><b>Domestic and international cooperation and coordination</b></p> <p>4.1 Broad outreach on regulatory concerns                      4.2 Sound international standards and practices                      4.3 Provide global technical assistance                      4.4 Robust Domestic and International Enforcement Cooperation and Coordination</p>
<b>3.2 Provide trusted access to systems and data</b>				
3.2.1 Enhance data management tools and procedures	<p>✓</p> <p>(CFTC 1.1, 1.2, 1.3, 1.4)</p>	<p>✓</p> <p>(CFTC 2.1, 2.2, 2.3, 2.4)</p>	<p>✓</p> <p>(CFTC 3.1, 3.2, 3.3, 3.4)</p>	<p>✓</p> <p>(CFTC 4.1, 4.2, 4.3, 4.4)</p>
3.2.2 Automate security control, data loss prevention, and identity management tools and implement continuous monitoring	<p>✓</p> <p>(CFTC 1.1, 1.2, 1.3, 1.4)</p>	<p>✓</p> <p>(CFTC 2.1, 2.2, 2.3, 2.4)</p>	<p>✓</p> <p>(CFTC 3.1, 3.2, 3.3, 3.4)</p>	<p>✓</p> <p>(CFTC 4.1, 4.2, 4.3, 4.4)</p>
3.2.3 Provide systems platform support to empower end users	<p>✓</p> <p>(CFTC 1.1, 1.2, 1.3, 1.4)</p>	<p>✓</p> <p>(CFTC 2.1, 2.2, 2.3, 2.4)</p>	<p>✓</p> <p>(CFTC 3.1, 3.2)</p>	<p>✓</p> <p>(CFTC 4.4)</p>
<b>3.3 Ensure technology and data availability</b>				
3.3.1 Improve business continuity support	<p>✓</p> <p>(CFTC 1.1, 1.2, 1.3, 1.4)</p>	<p>✓</p> <p>(CFTC 2.1, 2.2, 2.3, 2.4)</p>	<p>✓</p> <p>(CFTC 3.1, 3.2, 3.3, 3.4)</p>	<p>✓</p> <p>(CFTC 4.1, 4.2, 4.3, 4.4)</p>
3.3.2 Improve mobile computing and mobile communication services	<p>✓</p> <p>(CFTC 1.1, 1.2, 1.3, 1.4)</p>	<p>✓</p> <p>(CFTC 2.1, 2.2, 2.3, 2.4)</p>	<p>✓</p> <p>(CFTC 3.1, 3.2, 3.3, 3.4)</p>	<p>✓</p> <p>(CFTC 4.1, 4.2, 4.3, 4.4)</p>
3.3.3 Improve video teleconferencing	<p>✓</p> <p>(CFTC 1.1, 1.2, 1.3, 1.4)</p>	<p>✓</p> <p>(CFTC 2.1, 2.2, 2.3, 2.4)</p>	<p>✓</p> <p>(CFTC 3.1, 3.2, 3.3, 3.4)</p>	<p>✓</p> <p>(CFTC 4.1, 4.2, 4.3, 4.4)</p>
3.3.4 Expand after-hours technical support for staff and external participants	<p>✓</p> <p>(CFTC 1.1, 1.2, 1.3, 1.4)</p>	<p>✓</p> <p>(CFTC 2.1, 2.2, 2.3, 2.4)</p>	<p>✓</p> <p>(CFTC 3.1, 3.2, 3.3, 3.4)</p>	<p>✓</p> <p>(CFTC 4.1, 4.2, 4.3, 4.4)</p>

<p><b>CFTC Goals and Objectives</b></p> <p><b>IT Strategic Goals, Objectives, Initiatives</b></p>	<p><b>Market Integrity and Transparency</b></p> <p>1.1 Markets not readily susceptible to manipulation and other abusive practices                      1.2 Effective self-regulatory framework                      1.3 Availability of market information to the public and for use by authorities                      1.4 Integrate swaps data with futures and options on futures data</p>	<p><b>Financial Integrity and Avoidance of Systemic Risk</b></p> <p>2.1 Reduce the risk of disruptions to the system for clearing and settlement of contract obligations                      2.2 Provide market participants with regulatory guidance                      2.3 Strong governance and oversight of Commission registrants                      2.4 Assess whether SDs, MSPs and FCMs maintain sufficient financial resources, risk management procedures, internal controls, and customer protection practices</p>	<p><b>Comprehensive Enforcement</b></p> <p>3.1 Strengthen capacity to receive and expeditiously handle high-impact tips, complaints and referrals                      3.2 Execute rigorous and thorough investigations                      3.3 Effectively prosecute violations                      3.4 Remedy past violations, deter future violations and related consumer losses</p>	<p><b>Domestic and international cooperation and coordination</b></p> <p>4.1 Broad outreach on regulatory concerns                      4.2 Sound international standards and practices                      4.3 Provide global technical assistance                      4.4 Robust Domestic and International Enforcement Cooperation and Coordination</p>
<p><b>3.4 Optimize infrastructure for management of high-volume information sources</b></p>				
<p>3.4.1 Provide access to an increasing number of data sources and increasing sample sizes of market data (including non-futures market data)</p>	<p>✓ (CFTC 1.1)</p>	<p>✓ (CFTC 2.1, 2.4)</p>	<p>✓ (CFTC 3.1, 3.2)</p>	<p>✓ (CFTC 4.4)</p>
<p>3.4.2 Enable infrastructure support for high performance computing</p>	<p>✓ (CFTC 1.1, 1.3)</p>	<p>✓ (CFTC 2.1, 2.4)</p>	<p>✓ (CFTC 3.1, 3.2)</p>	<p>✓ (CFTC 4.4)</p>

Management Objectives  IT Strategic Goals, Objectives, Initiatives	5.1 A High-performing, diverse, and engaged workforce	5.2 Effective stewardship of resources	5.3 A Robust and Comprehensive Consumer Outreach Program
<b>4.1 Deliver expected outcomes on IT Investments</b>			
4.1.1 Extensively use learning management, electronic learning, and video production	✓	✓	✓
4.1.2 Achieve transparency through ODT communications and processes	✓	✓	
<b>4.2 Develop the ODT organization in alignment with the demands of CFTC's core mission functions</b>			
4.2.1 Support the implementation of CFTC Governance		✓	