

The Maritime Transportation Data Initiative

At the beginning of October 2022, the Federal Maritime Commission (FMC) finished accepting [public comments](#) in response to their Maritime Transportation Data Initiative (MTDI) and the proposal of new data collection. The FMC will review these comments, continually working with stakeholders as it progresses towards rulemaking and further implements the Ocean Shipping Reform Act (OSRA).

The forthcoming rules will require marine terminal operators' to adapt their current data communication and management practices, posing some challenges despite the greater benefits predicted for the industry. Given the significant changes under discussion, we've put together a guide on the MTDI – what it is, its objectives, what stage it's at and its potential impacts for marine terminal operators.

What is the Maritime Transportation Data Initiative?

The Maritime Transportation Data Initiative is the current effort by the FMC to create better data communication and management processes throughout the shipping industry. This initiative and the creation of common data standards are significant to OSRA's broader effort to prevent the recurrence of recent supply chain disruptions.

With more complete and accurate data, marine terminals can better prepare and schedule resources, such as yard space, scheduled workers and available equipment.

While marine terminals and other parties collect the necessary information already, some of the current challenges are [preventing greater efficiency](#):

- There's too much data.
- The data isn't sanitized – meaning it's not consistently categorized or structured.
- The data is often out-of-date.
- Much of the data is siloed rather than shared, only existing in certain systems or possessed by individual parties.

Following conversations with industry stakeholders and a series of meetings earlier this year, the FMC formed recommendations. Many of these meetings were open sessions that are accessible via the FMC's Youtube channel, such as the most recent one held in [late September 2022](#). The most notable recommendations include real-time transportation data synchronized across systems and the involved parties continuing to manage their own data systems, with the FMC specifying what must be reported and how it's to be standardized.

Who is Involved in the Conversation and Rulemaking?

As the agency responsible for overseeing the implementation of OSRA, the Federal Maritime Commission is leading the MTDI discussion – particularly Commissioner Carl W. Bentzel and Chairman Daniel B. Maffei. In addition, however, the FMC has involved numerous industry stakeholders at every stage of the process.

The FMC has held [MTDI meetings](#) since December 2021 with stakeholders involved with:

- Drayage Trucking
- Warehouse/Distribution Centers/3PL Industry
- Beneficial Cargo Owners
- Chassis Industry
- Railroad Industry
- Federal Partners (USDOT/CBP/Commerce/Agriculture)
- Ocean Transportation Intermediaries (Forwarders and NVOCCs)
- UPS/FedEx/Amazon
- Large Aggregators (Flexport/Expeditors/C.H. Robinson)
- Maritime Labor
- Marine Terminal Operators
- International Standards/FMC Agreements
- Ocean Carriers

How MTDI Relates to OSRA

The MTDI is an effort the FMC is pursuing as part of its data reporting obligations under OSRA. Quarterly reports must be made available to the public concerning:

- Total import and export tonnage
- Total loaded and empty 20-foot equivalent units per vessel

This data must be provided monthly by ocean common carriers. To that end, the FMC is collaborating with industry stakeholders to develop the MTDI.

The Current State of Data Sharing

Following its series of meetings with industry stakeholders, the FMC has determined that the data they're requesting is already stored by ocean common carriers and other entities like marine terminals. However, the challenges listed above – too much data, non-standardized data, out-of-date data and silos – currently prevent data sharing from being effective or timely. And the recent supply chain disruptions have shown how problematic this is.

There are four main obstacles to efficient data sharing in the marine and intermodal shipping industry:

- **Accuracy between entities and systems:** Currently, it's not uncommon for the data used by different entities to be inconsistent (e.g., whether or not a container is available for pickup)
- **Timeliness:** Once the inaccurate data is fixed, there are often not enough resources scheduled and available to handle the tasks (e.g., no available truckers to pick up the container)
- **Data remains subject to change:** Entities cannot plan in advance because the status of ships, containers, and other resources may be changed at the last minute, leading to complications and delays (e.g., a ship's earliest return date (ERD) changes.)
- **Siloed systems and non-standardized data:** There is no currently used universal API for entities' systems to communicate through, and no industry data standard or nomenclature that they all follow. This is because the data has primarily been shared exclusively between partnered entities.

For the FMC to successfully implement OSRA, they need to conduct the Marine Transportation Data Initiative to resolve these issues.

The Objectives of MTDI

As the solution to marine transportation data challenges, the [MDTI seeks to](#):

- Evaluate and catalog the industries' current practices – data elements, metrics, data transmission and access
- Determine critical gaps and inconsistencies with marine data definitions, classifications and general nomenclature
- Formalize FMC recommendations for common data standards and access governance

Marine terminals should note that the MDTI is not seeking to develop a universal system to replace current data management. Instead, the initiative is attempting to determine [how to utilize existing data](#) and intends to leave management in the control of individual entities.

Proposed Requirements of MTDI

So far, Commissioner Bentzel and those involved at the FMC have provided the following recommendations:

For Ocean Carriers

Ocean carriers will be responsible for maintaining and making available:

- Real-time in-transit visibility and status with the estimated time of arrival
- Real-time information on ERD
- Subsequent intermodal handling as per service provider

For Marine Terminal Operators

Marine terminal operators will be responsible for open-facing data (available via public internet), including:

- Real-time information on loading and unloading operations
- Real-time ERD data per ocean carrier
- Terminal operations must be posted by 3pm the previous day, and any changes must be synced in real time
- Synchronized appointment policies

They will also be responsible for closed-facing data managed on private, internal systems, including notice of:

- Availability or unavailability
- Government inspections
- Transfers, gate in and gate out
- Changes in D&D responsibilities

For Port Operations

Port operations will be responsible for:

- General data repositories, especially those concerning ocean carriers, marine terminal operators and intermodal cargo carriers
- Logistics for drayage and intermodal equipment providers (IEPs)
- Data on large warehousing and distribution services and their availability

For Drayage and Trucking Services

Drayage and trucking services must manage and make accessible:

- Assessment of drayage and chassis services
- Assessment of adequacy of services to port complex
- Provide advanced notices of special conditions
- Create a forum to harmonize efficiency

For Inland and Warehouses

Inland operations and warehouse must make available:

- Hours-servicing ports
- Special conditions
- Service restrictions or enhancements

For Intermodal Rail

Intermodal rail operators will provide real-time data on:

- Facilities handling substantial volumes of intermodal cargo
- Departure and arrival information (8-12 hours advance notice)
- Facility operations—hours, operation and restrictions on access and for pick up or delivery information

Potential Impacts for the Industry and Terminal Operators

The impacts that the MTDI and OSRA stand to have on the marine transportation industry are significant. Overall, open data sharing and standardization will provide major efficiency improvements for all parties involved – and hopefully prevent another significant supply chain disruption.

Specifically, entities and stakeholders stand to benefit from:

- **Standardized and real-time data:** Access to real-time data will immediately improve planning and flexibility, creating a more fluid and resilient system that enables entities and stakeholders to avoid bottlenecks.
- **Improved communication:** The FMC intends to make all data related to scheduling easily shared between entities involved with ocean and intermodal shipping, with advanced notice on current estimates and real-time changes. This will increase coordination between all parties.
- **More complex data management:** Comments provided by one stakeholder suggested mining manifest data. However, he also acknowledged that more advanced systems and complex data management will be necessary for insights like cargo storage availability and scheduling to prevent unnecessary handling that would increase delays and disruptions.
- **Replacing legacy systems:** Many of the decades-old systems currently in use by marine terminals and other parties may not be able to perform as needed and adapt to the MTDI's recommendations. Operators will benefit from new technology, but two primary challenges remain. The first is the implementation costs, although the more significant issue is replacing legacy systems without that effort disrupting the supply chain. Integration must occur while operations continue.

What's Been Done So Far and What's Coming Next?

Per the [FMC's update](#) provided at the beginning of August 2022, the MTDI has so far accomplished:

- The development of a Notice of Proposed Rulemaking on Unreasonable Refusal to Deal or Negotiate on Vessel Space Accommodations has begun.

- The [Interim process for submitting Charge Complaints](#) has been established.
- The creation of the [Bureau of Enforcement, Investigations, and Compliance](#) will help oversee enforcement.
- Notice has been distributed throughout the industry that all of [OSRA's self-executing provisions](#) take effect immediately.
- Notice has been distributed that common carriers must adhere to the new [detention and demurrage billing practices](#) immediately.
- [Fact Finding 29 Final Report](#) has been published.
- The resources and oversight capabilities of the Office of Consumer Affairs and Dispute Resolution Services have been expanded.
- (Most recently) The 60-day Request for Public Comment period has concluded, with the FMC currently reviewing submissions.

Following the review of public comments on their recommendations, Commissioner Bentzel and those involved with the MTDI will contact participating and affected entities for additional discussions and feedback. The conclusion of this process – expected to last a month or two – will culminate in the presentation of the finalized MTDI recommendations. If approved, the FMC will proceed to the rulemaking stage based on the provided recommendations.

Navigate the MTDI Changes with [REDACTED]

It's an understatement to say global logistics are challenging. And while the MTDI's coming recommendations should benefit those in the industry long-term, adaptation may pose a short-term challenge for many marine terminal operators.

At [REDACTED], we're here to help you manage these new OSRA compliance obligations through cutting-edge systems.

As one of the leading providers of terminal operating systems and similar technology solutions for marine and rail terminals, our team will help you stay a step ahead of the coming changes to data standardization and sharing.