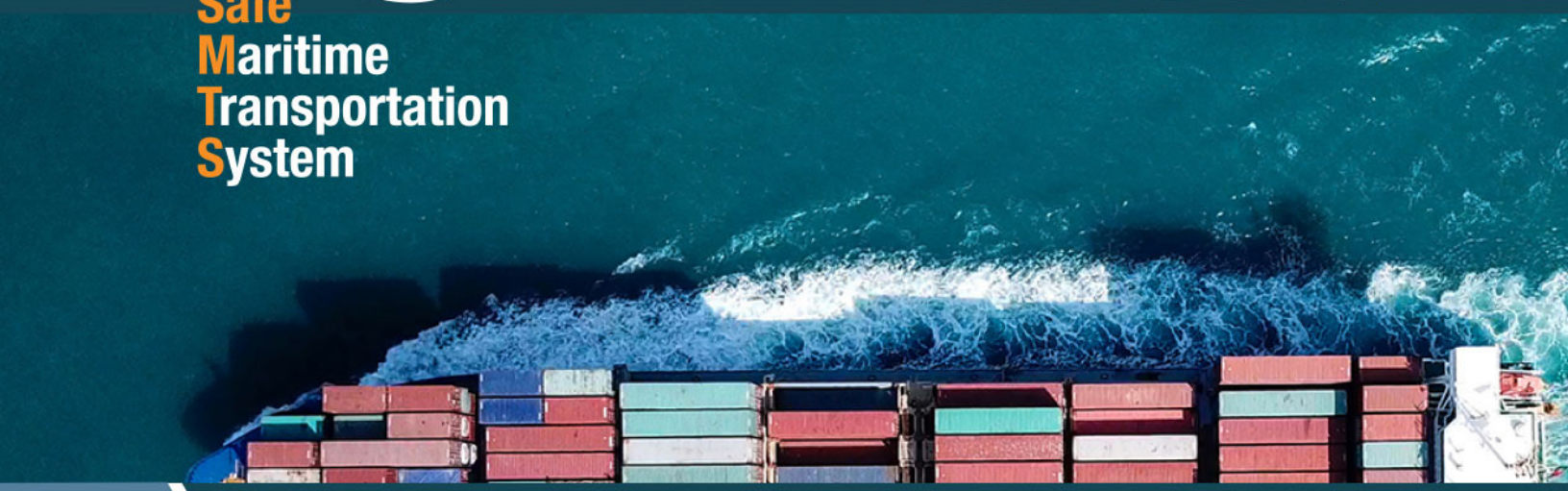
Safe
Maritime
Transportation
System



SafeMTS
New Participant Welcome Kit

October 2024

Contents

1. Welcome

Thank you for joining the SafeMTS (Safe Maritime Transportation System) program, and welcome to this collaborative and innovative community! Your involvement will help increase the collective knowledge on maritime precursor safety events, which can be used to develop preventive safety measures and lower the risk of more serious events.

When you share near-miss event data from your Safety Management System (SMS), or other data repositories, through our straightforward and secure data portal, you can access anonymized, industry-wide near-miss safety data that you can use to develop preventive safety measures and lower the risk of more serious or even catastrophic events.

In short, you are playing a vital role in improving the safety and security of maritime transportation.

1.1. About This Document

This welcome package provides background information about the SafeMTS program as well as information to help you get started with data sharing and accessing SafeMTS resources. Please also review the appendices for informational materials to support your onboarding and communication about the program.

You can contact the SafeMTS team at any time:

- Visit our program website at https://www.c3rs.bts.gov/safemts-home.
- Email our team at SafeMTS@dot.gov.

Again, thank you for joining SafeMTS, and welcome!

2. About SafeMTS

SafeMTS empowers the maritime industry to share information voluntarily and confidentially about near-miss events, which include narrowly avoided collisions or other accidents that could have occurred but did not. The program provides a trusted, proactive means for the maritime industry to confidentially report sensitive and proprietary safety information for the purpose of identifying early warnings of potential safety issues through analysis of collected, aggregated, and anonymized data from all participants. SafeMTS aims to help to uncover hidden, at-risk conditions not previously exposed from analysis of reportable accidents and incidents.

2.1. Progress Through Partnerships

SafeMTS is a collaboration between the U.S. Department of Transportation's (USDOT's) Maritime Administration (MARAD) and the USDOT's Bureau of Transportation Statistics (BTS), in partnership with the maritime industry. MARAD is the sponsoring agency, and BTS collects and protects submitted data under the legal authority of the Confidential Information Protection and Statistical Efficiency Act (CIPSEA, Title III of the Foundations for Evidence-Based Policymaking Act of 2018, Pub. L. 115-435).

Stakeholders of this program include companies within the maritime industry; industry groups like the American Waterways Operators (AWO), Ship Operations Cooperative Program (SOCP), and the Passenger Vessel Association (PVA); the U.S. Coast Guard; and the Bureau of Safety and Environmental Enforcement (BSEE), among others.

2.2. Program Objectives

The following are the purposes of SafeMTS:

- Extracting near-miss data from industry partners' SMSs or other data repositories that can be analyzed to identify safety-related trends to prevent incidents or identify otherwise noncorrelated events.
- Sharing results with industry stakeholders to support continuous safety improvement efforts.
- Informing near-miss reporting standards to improve the reporting of meaningful near-miss information.
- Improving maritime safety through collaboration and collection of data from companies.

2.3. Program Benefits

SafeMTS fills a gap in sharing of information on maritime precursor, near-miss safety events—which can be used to develop preventive safety measures and lower the risk of more serious—or even catastrophic events.

By participating in SafeMTS, your organization is helping to accomplish the following:

- Build the industry's first shared resource for near-miss safety events.
- Develop a program that provides independent and confidential analysis of organizations' near-miss data compared to the broader maritime industry or a specific sector.
- Identify emerging safety hazards and developing targeted prevention measures through analysis of the aggregate data form your organization and other industry participants.
- Improve decision-making by providing data that informs participants' evidence-based policies and regulations.
- Foster collaboration with diverse stakeholders to share knowledge and best practices.

2.4. Program Beginnings

A pilot phase of SafeMTS concluded in 2023. Seven maritime companies participated in the pilot by sharing sample near-miss records, working with BTS and MARAD to identify the scope of data that should be submitted to ensure data captured have appropriate learning value, and contributing to the development of the pilot "Data Key"—a set of baseline core data fields and values necessary for the collection of meaningful information about a near-miss event.

Outcomes of the pilot program included *SafeMTS Report on the Pilot*, an evaluation and summary of the pilot dataset, comprising 7,222 near-miss and hazard recognition events that occurred between 2020 and 2022, and a key of core data fields. Planned outcomes of future phases are data products like public- and participant-facing dashboards and updates to the ASTM F3256.

SafeMTS Report on the Pilot

3. Data Confidentiality

3.1. The Role of BTS in Protecting Data

To address legal concerns among prospective participating companies about sharing sensitive near-miss data, MARAD approached BTS to serve as the data steward for the SafeMTS program. As the only principal federal statistical agency in USDOT, BTS has the authority to collect data confidentially for statistical purposes. Furthermore, BTS has also developed and operated

confidential near-miss reporting systems for the offshore oil and gas industry, railroad industry, and transit industry, including the SafeOCS program and the Washington Metropolitan Areas Transit Authority Close Call Data Program.

3.2. Confidential Information Protection and Statistical Efficiency Act (CIPSEA)

BTS protects SafeMTS data under CIPSEA, which was first enacted in 2002 and reaffirmed and recodified in the 2018 Foundations for Evidence-Based Policymaking Act (Pub. L. 115-435). Pursuant to CIPSEA, BTS has the authority to collect information under pledge of confidentiality for statistical purposes. CIPSEA protections include the following assurances:

- No government agency may require, for any reason, a copy of a respondent's report.
- Court cannot require a copy of any respondent's report.
- Reports are immune from the legal process and cannot be admitted as evidence.
- Reports are exempt from Freedom of Information Act (FOIA, 5 U.S.C. § 522) requests.
- Information may not be disclosed in identifiable form for any nonstatistical purpose without the informed consent of a respondent.
- Willful disclosure of confidential information by BTS employees, agents, and contractors may incur sanctions and penalties, including felony imprisonment of up to 5 years and a fine of up to $250,000.

Data requiring confidentiality protection include sensitivity, proprietary, or private data; examples include, whether paper or electronic, original SafeMTS reports provided directly to BTS and BTS working documents.

You can review BTS' Confidentiality Policy at https://www.bts.gov/confidentiality.

4. How SafeMTS Works

4.1. Reporting Precursor Details

As a SafeMTS participant, your organization is part of a collaborative maritime industry community that is working to address common safety challenges. The core aspect of the program is the voluntary reporting of near-miss events that could have led to an accident but were avoided. These incidents can range from close calls to equipment failures, and collected data provides a solid foundation for informed decision-making regarding maritime safety.

Participants are encouraged to provide files from their SMSs or other data repositories about near-miss event information, follow-up actions that occurred, and outcomes and causes of the

near miss. All reported information is kept confidential. This confidential approach encourages participants to report incidents without fear of repercussions or legal consequences.

The following graphic summarizes the core data fields that participants can report to SafeMTS to contribute to the industry database from which preventative measures can be derived.

Near-miss event reporting process

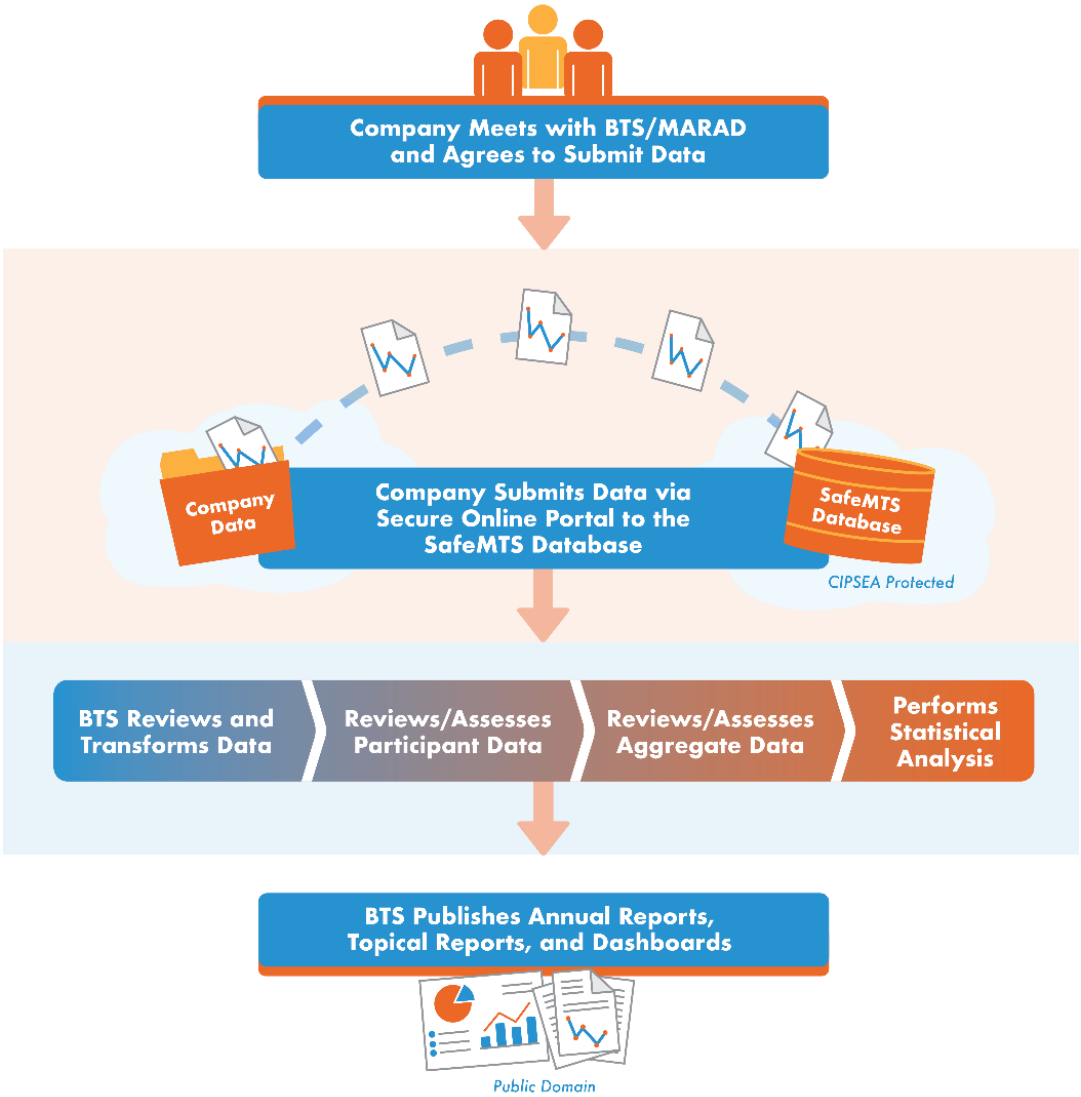
4.2. Data Collection and Analysis

The data collection and analysis process includes the following steps:

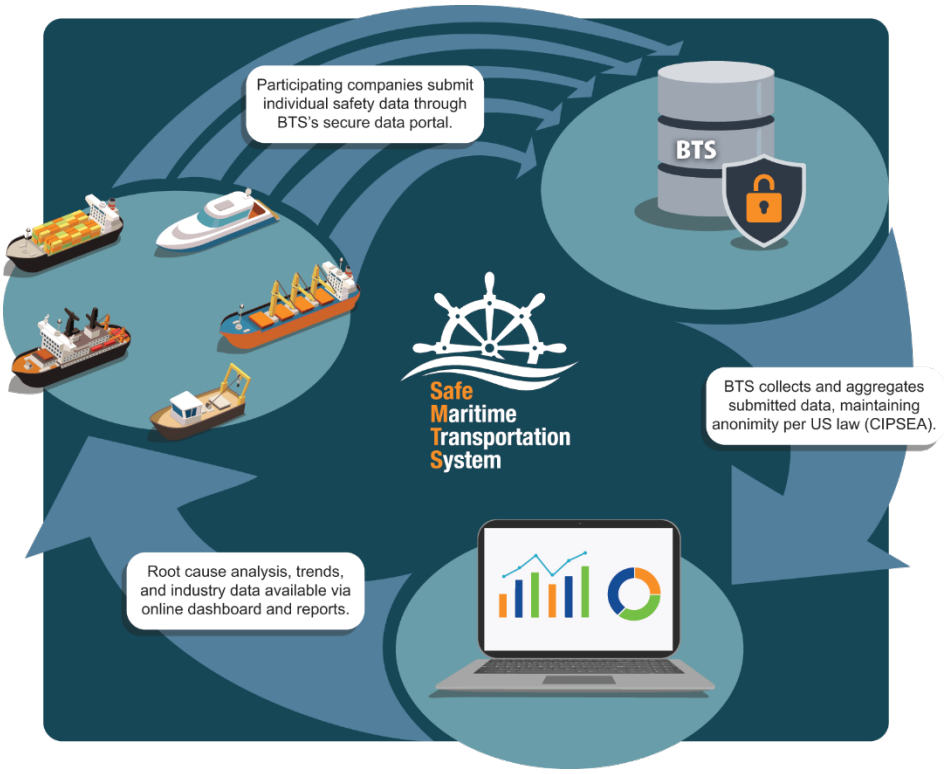
1. Participants submit extract files of near-miss safety data from their SMS or other data repositories through BTS' secure data portal.
2. BTS accepts data in company's native format and maps information to core data fields.
3. BTS extracts discrete data elements from narrative information through text mining and subject matter expert review.
4. The team performs quality checks to eliminate duplicate entries and confirms that data are processed in a standardized manner.
5. As part of this process, BTS aggregates and anonymizes submitted data, maintaining confidentiality per CIPSEA.
6. BTS analyzes the collected data to identify patterns, trends, and common causes of near misses.
7. BTS provides overall industry near-miss safety data via an online dashboard.
8. BTS also provides trends analysis through the publication of reports and stakeholder meetings.
9. The insights gained from the data are used to develop safety recommendations and improvements for the maritime industry. These recommendations can include changes to

regulations, training programs, or equipment. Participants can use the resulting information to benchmark their own safety management activities and adjust risk mitigation practices.

The following graphics summarize the data process.



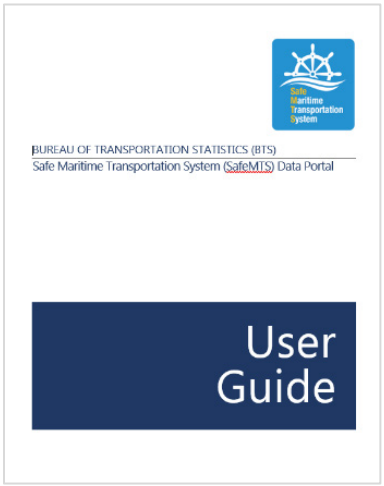
SafeMTS data process



SafeMTS program process overview

5. Getting Started

If you are reviewing this welcome package, you or someone from your organization has likely already begun the process of sharing data and accessing the online dashboard. Instructions for getting started, including accessing the SafeMTS data portal, uploading safety data, and accessing the online dashboard, are available in the *SafeMTS Data Portal User Guide*.



SafeMTS Data Portal User Guide

What follows are the basic steps for getting started with SafeMTS:

1. Request access to the SafeMTS Data Portal, which as a representative of a participating company of the SafeMTS program, you can access at https://www.c3rs.bts.gov/safemts.
2. Configure access to SafeMTS' multifactor authentication provider, Login.gov, at https://login.gov/create-an-account.
3. Submit a test data file via the SafeMTS secure data portal.

4. Sign and return the SafeMTS Memorandum of Agreement (MOA) describing data protections and expectations for data sharing. A sample MOA is available online and included in Appendix A of this document.

6. Communicating About SafeMTS

In the interest of supporting productive participation in the program and transparency, SafeMTS is committed to maintaining proactive communications and providing resources to help you share the value and details of participation with your organization.

6.1. Share SafeMTS Information With Your Colleagues

As a participant representative of SafeMTS, you can play an important role in helping your organization and members of your professional network understand the benefits of participating as well as providing feedback to improve the program.

You are encouraged to familiarize yourself with the key messages, website, and shareable communications materials (referenced in this document) that help explain the value of SafeMTS. We also encourage you to attend participant meetings and contact the team with questions and feedback that can help improve both the technical workings of SafeMTS and outreach.

6.2. External Communications Resources

Communicating about the program to external stakeholders, such as other operating companies, industry associations, industry safety organizations, and the public, can help raise awareness and build support. The SafeMTS communications strategy includes the following:

- A program website the serves as an information clearinghouse for stakeholders and the public.
- Informational collateral and presentations
- Collaboration with USDOT, MARAD, and BTS public affairs teams.
- Appearances at industry conferences and stakeholder meetings.
- Empowering participants (like you!) to advocate for the benefits of SafeMTS to your colleagues and professional networks.

6.3. Key Messages

When communicating about the SafeMTS program, it is important to use clear and consistent messaging. The following are our key messages:

- SafeMTS promotes confidential reporting and analysis of near-miss events for a safer maritime transportation system.
- SafeMTS empowers industry to share information voluntarily and confidentially about near-miss events, which include narrowly avoided collisions or other accidents that could have occurred but did not.
- SafeMTS fills a gap in sharing of information on maritime precursor, near-miss safety events, which can be used to develop preventive safety measures and lower the risk of more serious or even catastrophic events.
- BTS shares results with industry to support continuous safety improvement.
- The program also informs near-miss standards to improve the reporting of meaningful near-miss information.
- SafeMTS is a partnership among USDOT's MARAD and BTS and industry.
- Participant data are protected by BTS under CIPSEA, which prohibits BTS from disclosing information in identifiable form for any nonstatistical purpose without the informed consent of the data provider.
- Data collected under CIPSEA are immune from legal discovery and subpoena and cannot be released under FOIA.

7. Resources and Support

7.1. Contact Information

Members of the SafeMTS team from BTS and MARAD are available to answer your questions about the program and welcome your feedback about the program and its resources

BTS Office of Safety Data and Analysis

Allison Fischman	allison.fischman@dot.gov
Amanda Lemons	amanda.lemons@dot.gov

MARAD – Office of Safety

Kevin Kohlmann	kevin.kohlmann@dot.gov
Todd Ripley	todd.ripley@dot.gov
Will Nabach	william.nabach@dot.gov

You can also contact the SafeMTS team at any time:

- Visit our program website at https://www.c3rs.bts.gov/safemts-home.
- Email our team at SafeMTS@dot.gov.

7.2. Resources

Data Key

The Data Key is a living guide to the SafeMTS Pilot data fields and values. Use the key as the master file containing the latest agreed upon information.

To access the Data Key, visit**:** https://www.c3rs.bts.gov/safemts-home/file/SafeMTS_Data_Key.xlsx.

Please note that the Data Key is an evolving document that we expect to revise periodically as the program matures.

Data Portal User Guide

The *SafeMTS Data Portal User Guide* provides instructions for creating a user account and the steps for uploading data.

Once you have reviewed the user guide, access the SafeMTS Data Portal.

Appendix A. Memorandum of Agreement

The Memorandum of Agreement (MOA) serves as a formal agreement between BTS and the participating organization, outlining the terms and conditions of data sharing. This sample MOA is also available on the SafeMTS website.

Memorandum of Agreement

For

Safe Maritime Transportation System (SafeMTS)

Between the Bureau of Transportation Statistics and Participant

Effective Date: [TBD]

1.0 Parties

This legally binding Memorandum of Agreement (the "MOA" or "Agreement") is entered into by the Bureau of Transportation Statistics ("BTS"), an office within the U.S. Department of Transportation and [Participant's Legal Name], with their primary offices at [Participant's address] ("Participant"). These two entities are collectively defined as the "Parties" within this MOA.

This MOA is based on a voluntary and mutual interest to collect and analyze precursor information to determine statistically significant indicators of potential problems suited to risk reduction measures within the Maritime Transportation System. The Parties will work together in the spirit of cooperation and open communications, consistent with current law.

The U.S. Department of Transportation's mission is to serve the United States by ensuring a fast, safe, efficient, accessible, and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future. BTS' mission is to serve as the leading source of timely, accurate, and reliable information on the U.S. transportation systems used for moving people and goods, and on their impacts on the economy, society, and the environment.

[Short name for Participant] is [description of type of Participant].

2.0 Legal Authorities

49 USC Section 6302 authorizes the BTS Director to enter into agreements with Federal, State, local, or private agencies or businesses for the purposes of data collection and analysis.

The Confidential Information Protection and Statistical Efficiency Act, ("CIPSEA"), is a United States federal law enacted as Title III of the Foundations for Evidence-Based Policymaking Act of 2018 (Public Law 115-435, 132 Stat. 5529, 44 U.S.C. Chapter 35), reauthorizing the 2002 law of

the same name. CIPSEA establishes uniform confidentiality protections for information collected for statistical purposes[1] by U.S. statistical agencies.

3.0 Confidential Information Protection & Statistical Efficiency Act

The Confidential Information Protection and Statistical Efficiency Act ("CIPSEA") establishes uniform confidentiality provisions for information collected for statistical purposes by U.S. statistical agencies. The purposes of CIPSEA are:

i. to ensure that information supplied by individuals or organizations to an agency for statistical purposes under a pledge of confidentiality is used exclusively for statistical purposes;
ii. to ensure that individuals or organizations who supply information under a pledge of confidentiality to an agency for a statistical purpose will neither have that information disclosed in identifiable form to anyone not authorized to see it nor have that information used for any purpose other than a statistical purpose; and
iii. to safeguard the confidentiality of individually identifiable information acquired under a pledge of confidentiality for statistical purposes by controlling access to, and the uses made of, such information.

In undertaking efforts to obtain information for a statistical purpose under CIPSEA, an agency may designate agents to perform statistical activities on their behalf. Such agents must take and subscribe an oath of office or swear to observe the limitations of section 512 of the CIPSEA provisions. Further, such agents must undertake confidentiality training and sign a binding non-disclosure agreement (Appendix C). Any knowing or willful disclosure of information protected under the provisions of CIPSEA in any manner to a person or organization, including Participant, not entitled to receive such information is considered a class E felony and may result in imprisonment for not more than 5 years, a fine of not more than $250,000, or both for the disclosing party[2].

4.0 Purpose

The purpose of this MOA is to describe cooperative efforts between the parties to support improved maritime safety through the SafeMTS (Maritime Transportation System) program; establish the authority by which BTS and industry will exchange maritime safety data; and identify the rights and responsibilities of the parties.

The SafeMTS program, established by the USDOT Maritime Administration and BTS as a joint program, aims to fill a gap in maritime safety data collection and sharing by establishing a confidential safety data system to collect and analyze voluntarily reported, safety-related data from the maritime industry to advance marine transportation safety. A broad set of existing data

[1] 44 U.S.C. § 3561(12) states: The term "statistical purpose"— (A) means the description, estimation, or analysis of the characteristics of groups, without identifying the individuals or organizations that comprise such groups; and (B) includes the development, implementation, or maintenance of methods, technical or administrative procedures, or information resources that support the purposes described in subparagraph (A).

[2] 44 U.S.C. § 3572(f).

will be captured from industry and government partners and analyzed to identify critical safety-related trends that could prevent incidents or identify otherwise non-correlated events. BTS and MARAD have determined that it is in the public interest to collect near miss and safety event reports supplied by participants in the SafeMTS program under a pledge of confidentiality for statistical purposes only.

5.0 Principles

Participation in the SafeMTS program is predicated on a realized systemic benefit to the maritime transportation system (MTS) resulting from the exchange of safety data between the participants and the United States Department of Transportation. In the SafeMTS Data exchange program, individual industry participants provide specific data elements to the Bureau of Transportation Statistics (BTS). BTS (1) safeguards, aggregates, and processes that data into a form that is appropriate for and (2) distributes that processed data to all participating government and industry participants.

6.0 Roles and Responsibilities

6.1 Bureau of Transportation Statistics (BTS)

BTS, within the U.S. Department of Transportation, is an objective supplier of statistically sound baseline, contextual, and trend information used to shape transportation policy and investment decisions across the United States. BTS is responsible for providing timely, accurate, and reliable information on U.S. passenger and freight transportation systems and the impact on the economy, society, and the environment. Further, BTS has experience developing and administering near-miss safety data collection programs for transportation and offshore energy sectors. As a federal statistical agency, BTS has the authority to collect data confidentially for statistical purposes under the Confidential Information Protection and Statistical Efficiency Act (CIPSEA), which allows BTS programs to overcome legal concerns among potential industry participants about sharing sensitive near-miss and safety data.

BTS shall:

- Develop and implement a system and a secure hosting environment to support and manage a database of information provided by participants and others.
- Collect confidential data submitted by Participant, other companies, and individuals solely for statistical analysis as detailed in this MOA.
- Protect the confidentiality of the data submitted under its own confidentiality statute (49 U.S.C. 6307(b)), and CIPSEA.
- Develop user interface tools to provide each Participant secure access to its own data.
- Develop online analytical tools to allow each Participant to conduct its own analysis of all data residing in the secure database, without disclosing data contributor identifiable information.
- Provide each Participant with specifications, communications protocols, equipment requirements, interface requirements, standards, message formats, and other relevant

technical information and support as necessary to transmit, receive, interpret, and analyze SafeMTS Data.

- Provide a point of contact for technical support.
- Encrypt processed SafeMTS Data in accordance with the current industry standard.
- Provide each Participant with physical access to the encrypted SafeMTS Data.
- In coordination with MARAD, provide support and guidance to participants for the improvement of data quality for the benefit of individual participants, all participants as a group, and the maritime industry in general.
- Provide aggregate SafeMTS Data consistent with the accuracy, reliability, maintainability, and availability of processing and communications capabilities.
- Have the sole right to relocate, upgrade, and/or update SafeMTS Data products in order to take advantage of advances in technology or for other reasons.
- Have the right to identify participants not in compliance with this agreement and may restrict access to SafeMTS Data products until such time that compliance is demonstrated to the satisfaction of BTS.
- Have the right, with timely and appropriate advance notification and coordination, to modify and amend this agreement if it is in the interest of the United States Government, the maritime industry, or the general public.

6.2 Participant

Each Participant shall:

- On a voluntary basis, submit near-miss and other safety data to BTS for statistical analysis through a secure hosting environment. The manner and format for such submissions by Participant shall be consistent with the guidance stipulated in the BTS SafeMTS Data Users Guide.
- To the extent practical, the Participant shall attest to the quality and accuracy of the data provided.
- Provide industry-generated safety data to BTS consistent with the data elements and quality standards as specified in Appendix A of this Agreement; and consistent with the accuracy, reliability, maintainability, and availability of the Participant's operational system and/or other processing and communications capabilities.
- In the event that SafeMTS Data Products are relocated, upgraded, updated, and/or modified, the Participant shall be responsible for providing and maintaining the hardware, software, communications, facilities, and any and all other resources needed to continue to transmit, receive, and interpret SafeMTS Data.
- Ensure any third-party accessing SafeMTS Data or Products for research, development, analyses, conclusions, or other capabilities commissioned by the Participant abides by the terms of this Agreement. Third party access must be limited to a specific period of

performance and is not allowed for a long-term pass-through of SafeMTS Data that circumvents this Agreement or BTS data release processes. **BTS MUST APPROVE ALL THIRD-PARTY ACCESS TO SafeMTS DATA PER CIPSEA REQUIREMENTS THROUGH THE STANDARD APPLICATION PROCESS (SAP).** The Participant and/or third party must clearly indicate on all outcomes based on SafeMTS Data that these Products and results are not guaranteed, sponsored, warranted, or endorsed by the USDOT.

7.0 Financial Responsibilities

This Agreement is not a financial or funding obligation document or any commitment of funding by either party. Each party will directly fund its own participation under this Agreement and this effort. Any activity that involves payment for services related to this Agreement will be reflected in an appropriate funding document according to applicable rules and regulations of the party providing the funds. All activities by BTS under or pursuant to this Agreement are subject to the availability of federally appropriated funds, and the parties intend that no provision of this Agreement will be interpreted to require obligation or payment of funds by any party.

8.0 Disputes

In the event of any dispute, question, or disagreement arising out of or relating to this Agreement or the breach thereof, the parties hereto shall first use their best efforts to settle such disputes, claims, questions, or disagreement. To this effect, they shall consult and negotiate with each other, in good faith and, recognizing their mutual interests, attempt to reach a just and equitable solution satisfactory to both parties. The parties agree and stipulate that this binding Memorandum of Agreement shall be governed by and construed under the laws of the United States.

9.0 Terms of Agreement and Right of Termination

This Agreement will take effect at the time of execution and will remain in effect until either party gives written notice to terminate this Agreement or until this Agreement is expressly superseded with another agreement signed by both parties. Both parties to this Agreement shall comply with all applicable laws and regulations in its performance.

10.0 Data Transfer Protocol

Participant will transmit their data file to the Bureau of Transportation Statistics (BTS) via the secure data portal located on the SafeMTS web site (www.bts.gov/SafeMTS). Participant may submit data via other secure means, such as secure file transfer protocol, as mutually agreed by the Parties.

11.0 Communication

USDOT will recognize Participant as a "Stakeholder" for this effort by crediting Participant by name in any press or publicity that is related to the effort, and which mentions all other participants in this effort. The Parties will collectively coordinate all publicity and press during this effort. Both parties to this Agreement will exert their best efforts to obtain prior approval

from the other party for the use of any descriptive language describing the other party in a press release or other written public statement.

All official communications (i.e., notices, communications, and coordination), including inquiries regarding the transfer of SafeMTS Data, technical issues with the transfer of SafeMTS Data, and the analysis of SafeMTS Data shall be directed as follows:

Bureau of Transportation Statistics

United States Department of Transportation

Attn: Director, Office of Safety Data and Analysis

1200 New Jersey Avenue SE, Washington, DC 20590

safemts@dot.gov

All communication to Participant shall be directed as follows:

Participant: [Name of Participant Company]

Attn: [Participant POC Name]

[Participant Address]

[Participant Telephone number]

[Participant email address]

12.0 Signatory Authority, Modification, and Relationship of Parties

The signatories to this Agreement represent that they have the authority to enter into this Agreement on behalf of their respective organization.

Changes and/or modifications to this Agreement shall be in writing and signed by the original signatory or his representative, designee, or successor. The modification shall cite the subject Agreement and shall state the exact nature of the modification. No oral statement by any person shall be interpreted as modifying or otherwise affecting the terms of this Agreement.

This Agreement does not give either party any authority to act on behalf of or to obligate any funds to be expended by the other party. This Agreement may not be assigned by either party. The parties do not intend this Agreement to establish a partnership or other type of legal entity and this Agreement does not create any rights in any third party. Nothing in this Agreement shall be construed as superseding or interfering in any way with other agreements or contracts entered into, either prior to or subsequent to the signing of this Agreement, nor prevent either party from entering into similar agreements or contracts with other companies or organizations.

By entering into this legally binding Memorandum of Agreement, BTS is confirming that Participant's involvement under this Agreement is not a gift from Participant to BTS or the United States Department of Transportation, and BTS' participation in this effort is not an endorsement of Participant by BTS, the United States Department of Transportation or its employees. Participant acknowledges that it has no expectation of favorable treatment in pending or future

matters, or expectation of other improper benefits from either BTS or the United States Department of Transportation because of its participation in this effort.

Executed by:

_____ _____

Patricia Hu
Director, Bureau of Transportation Statistics

Date

_____ _____

[Participant Company Name]
[Participant Signatory Name]
[Participant Signatory Title]

Date

Appendix B. Data Elements and Metadata

Overview

As part of the MOA, participants agree to submit near-miss and safety event data, including the data elements as listed in this appendix. Please heed the following notes:

1. If your company's database does not include all the core data fields noted in the following section, please ensure (to the extent practicable) that this information is addressed in the event description.

2. Relevant data fields not listed in the following section may be submitted if they are already captured in your company's database; there is no need to delete or redact those fields since all data transmitted to BTS is subject to CIPSEA protections.

3. Please note that all specific event identifier data are subject to CIPSEA protection and will *not* be shared with anyone outside of BTS or its agents.

Minimum Expected Core Data Elements

While submission of safety data to SafeMTS is voluntary, each participant is expected to provide (as a minimum) the following core data fields to allow more effective data aggregation and analysis. These data are especially important for events where multiple vessels may submit information on the same event (e.g., a tug and barge) as it will allow BTS to identify those incidences and generate a more comprehensive event record. Core data fields are as follows:

- Unique Event Identifier
- Event Date and Time
- Event Description
- Incident Type/Category (e.g., near miss, hazard recognition)
- Near-miss Classification (i.e., describing the most salient potential consequence, such as fire, injury, etc.)
- Geographic Location (e.g., in port, at sea, shipyard)
- Vessel(s) Identification (i.e., vessel name or number)
- Location on Vessel (e.g., engine space, galley, bridge)
- Operations/Activity Ongoing (e.g., deck maintenance, inspection, loading cargo)
- System/Equipment Involved (e.g., anchoring machinery, fuel tank, crane, ROV)
- Corrective Action

- Potential Consequence
- Actual Consequence
- Causal/Contributing Factors

Additional Core Data Elements

- Business Segment (e.g., blue water, brown water)
- Observing Personnel Type (e.g., crew, contractor, passenger)
- Immediate Corrective Action (e.g., operation stopped, equipment shutdown)
- Systemic Corrective Action
- Potential Severity Level
- Factor Preventing Worse Incident
- Root Cause

Appendix C. Draft Narrative Guidance

A basic narrative description of a near-miss event should cover what, when, where, who, and immediate corrective action. A better narrative description would also provide information like causal factors, long-term corrective actions, and what might have occurred had the event not been caught (potential consequence). Acronyms should be spelled out or a complementary key provided. Describe human factors involved if applicable and known.

The following are draft narrative questions/prompts:[3]

1. What is the vessel name and location?
2. What was going on at the time of the event? For instance, what activity or operation was going on or what duty were you performing when the incident occurred?
3. If weather was a factor in the incident, identify the weather conditions.
4. Who identified the incident? Were others involved?
5. What equipment or system(s) were involved in or affected by the event?
6. What was done to immediately remedy the situation?
7. Were there any longer-term changes or plans put in place to prevent the event from occurring again?
8. What would you change? Which new controls, defenses, or capacity should be added to mitigate potential hazards?
9. What were the main causal or contributing factors that led to the event? What was the root cause of the event?
10. What might have occurred had the event not been caught or stopped? What is the worst consequence that could have occurred had one or more of the safety barriers preventing the event failed or not been in place?
11. What happened the way you thought it would happen?
12. What surprised you?
13. Which hazards did you identify and which did you miss?
14. Where did you have to "make do," improvise, or adapt?

[3] Questions 8 and 11–14 are informed by Todd Conklin's Human and Organizational Performance (HOP) approach and Contact Energy, *Guidelines for Successful Learning Teams* (2017), available at https://www.worksafe.govt.nz/the-toolshed/case-studies/wepr-case-studies/involving-everyone-in-learning-reaps-benefits/.

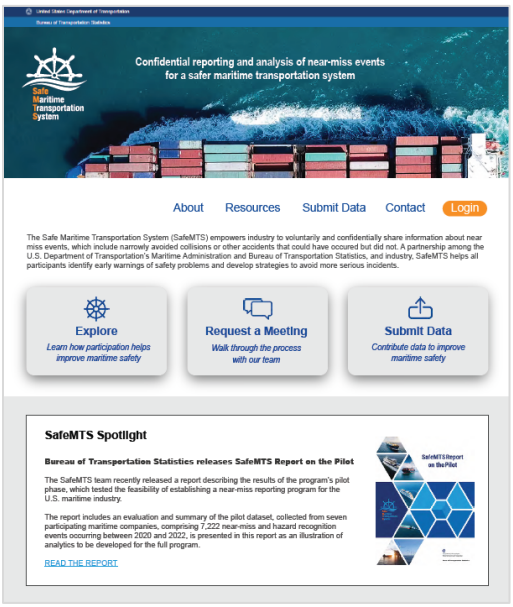
The following are two sample narrative descriptions (**bolded items represent data elements)**:

Aboard the **MV ClearWaters during general vessel operations**, the **auxiliary system** was believed to have a **battery issue** so the **Second Mate** secured the power at the breaker panel to work on the issue. The **First Mate** believed the entire panel was for the forward system and secured the main breaker to the L-1 panel. The mistake was immediately identified, and the breaker was restored to the ON position. The event shut down the forward system and also resulted in the loss of the Stbd. Radar, Gyro#2, and the DP#1 UPS, triggering an alarm. There was no loss of position due to the battery backup and all sensors returned to their normal function. The crew had not been notified of any troubleshooting or need to secure power to the auxiliary system. Immediately following the event the Master **spoke with all involved** to reiterate that they are to **inform the crew before performing any corrective action** that requires power to be secured per the standard operating procedure (SOP). After completion of the mission, **a safety meeting was held** with the crew to review the SOP, the company lock out/tag out (LOTO) procedure and discuss the event.

On **ATB Maritime**, the activation/reset switch for the watertight door system on the bridge was accidentally bumped into the closed position while a chair was being moved, causing the three watertight sliding doors in the engineering spaces to auto close. The local alarm and 20 second delay notified personnel in that space of a closing. Two electrical extension cords being run through two of the watertight doors were severed. Persons on the bridge were unaware until notified by personnel in affected spaces due to there being no alarm on the bridge panel. The only indication was the small light at each door symbol on the panel. Upon realization of the closure, personnel were notified of the unintended closing of the watertight doors. The activation switch was reset on the bridge and the watertight doors were electrically opened at the local operation switch. The previous day welding leads had been run through the doors and **could have caused a worse incident**. A **temporary cover was immediately placed over** the spring-loaded activation switch as an added security measure to prevent accidental operation by being bumped or brushed up against. **A more permanent cover will be fabricated**. **I recommend we add a new procedure** to lock-out the watertight doors from being operated remotely whenever cables are routed temporarily through these doors. All cables should always be removed whenever work is not being carried out.

Appendix D. Communications Materials

SafeMTS Website



Overview Flyer

Frequently Asked Questions

What is SafeMTS?

SafeMTS is a voluntary near-miss incident data collection program for the maritime industry aimed at increasing industry safety through trend analysis and benchmarking. Most companies operating U.S.-flagged vessels have some sort of internal safety data reporting program; however, due to legal and commercial concerns, these data are not being shared widely among stakeholders. SafeMTS was established to close this gap in safety data and information sharing across industry by offering operators a confidential method to share important safety data.

Why should I participate?

Participants can securely share incident-related data and, in return, see aggregated industry data for various segments of the maritime industry. This benefit can be useful for identifying potential areas of improvement in your own safety system. Participants' anonymous data will also allow the rest of the industry to get a full picture of the types and frequencies of incidents being seen across fleets.

How do I participate?

Any U.S.-flagged vessel owner/operator who is actively engaged in or is interested in starting the collection of near-miss incident data for the purpose of improving vessel safety can participate. Once a company decides to voluntarily submit its safety data to BTS, the first step is for that company to meet with BTS to discuss the elements of a Memorandum of Agreement (MOA). A sample MOA can be found in Appendix C of *SafeMTS Report on the Pilot*. The MOA is specific to each company and details the scope of the engagement between the company and BTS, including the following:

- Type of data to be submitted (e.g., reportable incidents, near misses)
- Event date ranges of submitted data
- Format of the data to be provided to BTS
- Frequency of data submissions (for example, quarterly)
- Company's expectations regarding data review and analysis

Once your company has entered in the MOA with BTS, you can begin submitting data through BTS' secure data portal, the steps for which can be found in the *SafeMTS Data Portal User Guide*.

How are my data protected?

All participant data are aggregated in such a way that the information is anonymous (devoid of any details that will permit attribution of the data to a particular vessel or company). As an independent federal statistical agency, BTS has the authority and obligation under CIPSEA and the agency's authorizing statute to protect the confidentiality of your data, including but not

limited to company information, personally identifiable information, and sensitive or proprietary information. By submitting to BTS, your data are protected from release to the public and other non-CIPSEA federal agencies. Data are also protected from subpoenas and Freedom of Information Act requests.

In 2002, Congress passed CIPSEA, the Confidential Information Protection and Statistical Efficiency Act, which stipulates that an agency may collect information under pledge of confidentiality for statistical purposes. CIPSEA protections include the following:

- No government agency may require, for any reason, a copy of a respondent's report
- Court cannot require a copy of any respondent's report
- Reports are immune from the legal process and cannot be admitted as evidence
- Reports are exempt from FOIA requests
- Information may not be disclosed in identifiable form for any nonstatistical purpose without the informed consent of a respondent
- Willful disclosure of confidential information by federal employees, agents, and contractors may incur sanctions and penalties.

Data requiring confidentiality protection include sensitivity, proprietary, or private data; the following are some examples:

- Original SafeMTS reports provided directly to BTS
- Any BTS working documents
- Sections of root cause analysis reports by designated subject matter experts
- All the above whether paper or electronic

Nonconfidential information includes preventative safety actions recommended for implementation by subject matter experts or stakeholders and any documents developed for public dissemination using confidential data (e.g., annual reports of aggregated data to stakeholders).

Appendix E. About the Key Federal Partners

About Bureau of Transportation Statistics

The Bureau of Transportation Statistics (BTS) was established in 1992 as an independent federal statistical agency within the U.S. Department of Transportation with the mission to serve the public and other Federal agencies. As a Federal statistical agency, BTS' primary function is the compilation and analysis of relevant and accurate data and the dissemination of information for statistical purposes, thereby allowing the users to make informed decisions.

Principles for all federal statistical agencies include relevance to policy issues, credibility among data users, trust among data providers, and independence from political or other undue external influence, because BTS:

- is policy-neutral (i.e., an objective broker for the facts)
- is not a regulatory agency and has no authority to issue fines or penalties
- has authority and obligation per statute and CIPSEA to protect confidentiality of data

About the Maritime Administration

The U.S. Department of Transportation's Maritime Administration (MARAD) is responsible for America's waterborne transportation system. MARAD promotes the use of waterborne transportation and ensures that its infrastructure integrates seamlessly with other methods of transportation. MARAD also maintains a fleet of cargo ships in reserve to provide surge sea-lift during war and national emergencies and is responsible for disposing of ships in that fleet as well as other noncombatant government ships as they become obsolete.

MARA works to maintain the overall health of the U.S. Merchant Marine. Commercial mariners, vessels, and intermodal facilities are vital for supporting national security, and MARAD provides support and information for current mariners, extensive support for educating future mariners, and programs to educate America's young people about the vital role of maritime operations in the lives of all Americans.

Appendix F. Key Links

The following is a list of the links that appear in this document:

Resource	Link
SafeMTS Website	https://www.c3rs.bts.gov/safemts-home
SafeMTS Report on the Pilot	https://rosap.ntl.bts.gov/view/dot/73113
Confidential Information Protection and Statistical Efficiency Act (CIPSEA)	https://uscode.house.gov/view.xhtml?path=%2Fprelim%40title44%2Fchapter35%2Fsubchapter3&edition=prelim
The 2018 Foundations for Evidence-Based Policymaking Act	https://www.congress.gov/115/bills/hr4174/BILLS-115hr4174enr.xml
BTS Confidentiality Page	https://www.bts.gov/confidentiality
SafeMTS Data Portal	https://www.c3rs.bts.gov/safemts/
Login.gov Account Set-up	https://login.gov/create-an-account