

CMTS

U.S. Committee on the Marine Transportation System

ANNUAL REPORT 2010



EXECUTIVE SUMMARY

The Committee on the Marine Transportation System has made many great strides towards addressing some of the pressing needs of the Nations' marine transportation system (MTS). As Chair of the CMTS Coordinating Board in calendar year 2010, the U.S. Army Corps of Engineers has summarized in this Report the high points and accomplishments achieved by the CMTS during their tenure.

In 2010 the CMTS accomplished many things including, but not limited to the following:

- USACE, NOAA, and USGS have developed a common water datum – the first time in over 200 years!
- Wave data is now available on PORTS(Physical, Oceanographic Real Time System)
- Hosted the first MTS-related Research and Development Conference
- Coordinating Board approved the *Strategic Action Plan for Research and Development in the Marine Transportation System*.
- The Arctic IAT completed an inventory of Federal activities related to marine transportation in the U.S. Arctic Region. From this inventory, a framework for a U.S. Arctic marine transportation system was developed.
- The Arctic IAT is also engaged in development of a Strategic Action Plan for the National Ocean Policy priority objective number eight, “Changing Conditions in the Arctic.”
- Is helping to coordinate the permit application process for the Union Pacific railroad to replace the Dennis J. Duffy Mississippi River Bridge, Clinton, Iowa.



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ACCOMPLISHMENT

NAVIGATION TECHNOLOGY INTEGRATION AND COORDINATION INTEGRATED ACTION TEAM

SUMMARY:

The Navigation Technology Integration and Coordination IAT has coordinated multi-agency efforts on 10 projects focused on improving navigational safety and efficiency in three ways:

- Improving delivery of navigational information,
- Improving accuracy of navigational products, and
- Improving efficiency by enabling agencies to better share information of navigational value.

Outcome(s): As these projects are completed Mariners can expect significant improvements to navigational safety especially in and around ports.

Team Lead: National Oceanic and Atmospheric Administration (NOAA)

BACKGROUND:

The Navigation Technology IAT was established October 2006 by the CMTS Coordinating Board to assist CMTS member agencies with coordination and integration of their technologies, data, and services to enhance navigational safety and efficiency.

A. Improved Delivery of Information

1. Distribution of NOAA Physical Oceanographic Real Time Systems (PORTS) data through US Coast Guard (USCG) Automatic Identification System (AIS):

STATUS: On Schedule

The initial tests in Tampa Bay, at the Soo Locks in Michigan, and on the Columbia River have been successful. USCG is now moving forward with plans to make this service operational in areas with Vessel Tracking Systems

2. Development of US Army Corp of Engineers (USACE) Operator Management Applications (LOMA):

STATUS: On Schedule

Work has begun on the installation of current meters at locks in the inland rivers with the data to be transmitted to users as the AIS sites are established.

B. Improved Accuracy of Navigational Products

1. USCG and NOAA are to collaborate on measuring precise positions for aids to navigation and the development of database of precise positions:

STATUS: On Schedule

- Progress has been made in utilizing NOAA field units to measure precise positions for USCG aids-to-navigation and updating the associated databases. Accurate positions are required for an additional 1,387 fixed aids.
- Progress has also been made in NOAA providing quality control information to the USCG Districts for aids-to-navigation in the Local Notice to Mariners, thereby reducing the number of certain types of errors, principally the identification of the charts to be corrected. Nearly all USCG Districts are participating in this effort.

2. USACE and NOAA are to collaborate on the development and charting of precise channel limits and controlling depths:



STATUS: On Schedule

USACE is building a digital framework of channels collecting the precise positions of their maintained channels and controlling depths in the channel quarters. NOAA is developing a process for rapid update of nautical charts with this new and more accurate channel information.

C. Improved Efficiency – Data Sharing

1. USACE to provide NOAA digital depth survey data in standard data exchange format. –

STATUS: On Schedule

NOAA and USACE have defined the process and data requirements and the USACE is beginning the implementation of this data exchange. This project is on track for completion in 2011 with all Districts providing NOAA with digital hydrographic data.

2. USACE to adopt a common standard for water level datum. –

STATUS: COMPLETE*

The USACE has adopted the standard water level datum and is making the conversions as resources enable. This is a very large project with large benefits to the mariner in improved accuracy of information in channels.

3. USACE and NOAA to collaborate on making wave data available to mariners via PORTS displays.

STATUS: COMPLETE*

This project has been completed. Wave data is being displayed on all PORTS sites where USACE is collecting this information.

4. NOAA/USACE/ and US Geological Service to set standards for the measurement of tides and currents.

STATUS: COMPLETE*

The three agencies have agreed on common standards. The USACE has created a web based map interface of the three agencies' water level stations, geodetic control points, and USACE projects to enable the agencies to better control their activities for converting to the common standards. The agencies have agreed to test the conversion processes utilizing their state, local, private industry, and academic partners. Texas was used as the test area.

5. NOAA and USACE are to collaborate on the development of VDatum.

STATUS: COMPLETE*

USACE and NOAA have collaborated on the development of this important data transformational tool.

6. USACE/NOAA/and Navy to develop and implement standards for bathymetric and topographic data.

STATUS: COMPLETE*

Standards have been developed, published, and adopted by the agencies.

BENEFITS TO THE MTS:

The Navigation Technology IAT has coordinated multi-agency efforts on ten projects focused on improving navigational safety and efficiency:

- Improved delivery of navigational information,
- Improved accuracy of navigational products, and
- Improved efficiency by enabling agencies to better share information of navigational value.

As these projects are completed Mariners can expect significant improvements to navigational safety information especially in and around ports.



ACCOMPLISHMENT

RESEARCH AND DEVELOPMENT INTEGRATED ACTION TEAM

SUMMARY

The Research and Development IAT, comprised of CMTS member agencies, drafted the MTS Research and Development Strategic Plan. The Strategy, “*Strategic Action Plan for Research and Development in the Marine Transportation System*,” was an interagency collaboration. The Coordinating Board approved the final Strategy at the December meeting. The IAT also successfully planned and hosted the first bi-annual MTS R&D Conference at the National Academies of Science facilities in California in June of 2010. The team is now developing implementation plans for achieving the priorities established in the Strategy and planning the next bi-annual MTS R&D Conference for summer 2012.

Team Lead: IIS Army Corps of Engineers (USACE)

BACKGROUND:

The Committee on the Marine Transportation Coordinating Board established a Research and Development IAT (R&D IAT) in March 2009 to provide a strategic capability to identify, develop, and implement innovative research and technology to address the pressing challenges identified in the CMTS *National Strategy for the Marine Transportation System: A Framework for Action* (July 2008). The R&D IAT also serves to re-establish previous collaborative interagency activities from the early efforts under the Interagency Committee on the Marine Transportation System and develop a robust research agenda to improve the Marine Transportation System (MTS).

- The Transportation Research Board and the Committee on the Marine Transportation System’s R&D IAT co-sponsored a national conference titled, “Transforming the Marine Transportation System: A Vision for Research and Development.” The conference was held June 29-July 1, 2010 at the Beckman Center of the National Academies in Irvine, CA, and drew more than 100 attendees from across the Federal Government, marine transportation industry, and academia
Work Plan Task: Develop and hold a stakeholder forum to receive comments toward the development of a MTS-related R&D strategy: **STATUS: COMPLETED**
- On December 15, 2010, the CMTS Coordinating Board approved the “*Strategic Action Plan for Research and Development in the Marine Transportation System*.” The strategic action plan calls for a coordinated research framework aimed at leveraging and linking existing Federal R&D programs to address MTS R&D as a whole.
Work Plan Task: Develop a Federal strategy for research and development in support of the MTS: **STATUS: COMPLETED**

BENEFITS TO THE MTS:

Leveraging resources and ideas among agencies, academics and industry will advance MTS R&D much faster. Complex, multi-disciplinary issues will be addressed through collaborative efforts.



ACCOMPLISHMENT

ARCTIC MARINE TRANSPORTATION INTEGRATED ACTION TEAM

SUMMARY

The CMTS Arctic Marine Transportation Integrated Action Team was established by the Coordinating Board in January of 2010. Participation includes eight member agencies. The intent of the IAT is to identify opportunities for member agencies to work together to address the needs, both current and future, for providing for safe, and environmentally sound navigation in the Arctic as the waterways become more accessible to use for navigation and other activities.

Team Leads: US Coast Guard (USCG), Maritime Administration (MARAD), National Oceanic and Atmospheric Administration

BACKGRROUND:

The U.S. Arctic Marine Transportation Integrated Action Team (Arctic IAT) identifies opportunities for interagency collaboration to improve the marine transportation system in U.S. Arctic waters; and develop transportation policies concerning maritime shipping safety, environmental protection and security, and associated impacts concerning existing and likely increases in Arctic marine traffic in the U.S. Arctic Region. The CMTS was directed to coordinate domestic transportation policy for the Arctic in the US Coast Guard Authorization Act of 2010.

STATUS:

- The Arctic IAT completed an inventory of Federal activities related to marine transportation in the U.S. Arctic Region. From this inventory, a framework for a U.S. Arctic marine transportation system was developed.
- A gap analysis is being completed by comparing a U.S. Arctic MTS framework and its elements against current and likely Arctic marine transportation activities.
- The Arctic IAT is also engaged in development of a Strategic Action Plan for the National Ocean Policy priority objective number eight, “Changing Conditions in the Arctic.”

BENEFITS TO THE MTS:

Coordinated interagency response and planning for use of the Arctic for transportation will enhance safety and ensure environmental viability.



ACCOMPLISHMENT

PREPAREDNESS TASK TEAM

SUMMARY

The Preparedness Task Team was initiated to determine what steps could be taken to limit or prevent the damage caused by breakaway vessels from facilities, anchorages, or other moorings during severe weather or other storm-related events. The team's original intention was to provide a template that could be used for developing local memoranda or planning documents to address prevention of breakaway vessels. After consultation with Coast Guard and industry representatives, the team determined that a "Best Practices" document would better serve the intent of the Task Team's effort and allow for local planning, implementation and coordination for the prevention of break-away vessels.

Team Leads: US Coast Guard and US Army Corps of Engineers

BACKGROUND:

- The creation of the Task Team was approved by the Coordinating Board in September 2009 to address the planning and coordination among government agencies and industry partners relating to prevention of breakaway vessels.
- The Task Team developed an initial set of deliverables that was presented to the Coordinating Board for their concurrence. The deliverables included defining critical infrastructure, identifying key stakeholders, documenting breakaway events, creating an outreach plan, and developing a planning template to address breakaway vessels.
- Because of the events surrounding Deepwater Horizon, and feedback provided by Coast Guard and industry representatives, the focus of the Task Team changed from the original deliverables to creating a "Best Practices" document that could be shared and implemented by local agencies and coordinating bodies.

STATUS:

- Task Team direction and deliverables were approved at the December 2009 Coordinating Board Meeting.
- Some of the initial deliverables were developed during 2010 prior to Deepwater Horizon. A draft template could not be completed prior to the 2010 hurricane season.
- Draft planning template and Memorandum of Understanding were presented to Coast Guard Sector New Orleans and maritime industry representatives.
- Input received recommends moving away from just a planning template to a "Best Practices" document.
- Data is being collected for incorporation into a "Breakaway Vessel Best Practices" document.

BENEFITS TO THE MTS:

- The "Best Practices" document will facilitate better planning and coordination among MTS stakeholders to address prevention of breakaway vessels.
- Maritime critical infrastructure will be better protected from potential impacts of breakaway vessels during severe weather and storm related events, allowing for rapid resumption of the MTS and minimizing damage to the infrastructure.



ACCOMPLISHMENT

ENVIRONMENTAL STEWARDSHIP DISCUSSION GROUP

SUMMARY

The purpose of the Environmental Stewardship Discussion Group (ESDG) is to facilitate networking and information sharing for the advancement of knowledge regarding environmental issues, rules and practices relevant to the marine transportation system. The ESDG has participation from ten member agencies.

Team Lead: Executive Secretariat

BACKGROUND:

- The creation of the ESDG was approved by Coordinating Board in April of 2010 to address the need for a forum to discuss the myriad of environmental topics that impact the MTS.
- The ESDG serves as a sounding board and networking opportunity for member agencies to stay abreast of environmental issues relevant to the MTS.

STATUS:

The ESDG meets quarterly according to an informal ‘brown bag’ format, which allows for the free exchange of ideas and viewpoints among participants. Since being approved the discussion group has met four times and discussed the following topics:

May 20, 2010 – Round table discussion on environmental stewardship issues in the MTS.

July 14, 2010 – Vessel Emissions, EPA’s National Clean Diesel Campaign (NCDC) and the Clean Ports Program, newly anointed North American Emission Control Area and implications for regulators and operators, fuel availability, and the evolution of emission reduction technologies, as well as heretofore un-regulated vessel emissions (i.e. greenhouse gasses).

September 28, 2010 – Executive Order 13514, “Federal Leadership in Environmental, Energy, and Economic Performance,” and efforts underway to improve the environmental performance of federally operated vessels, and alternative fuel applications in the MTS.

BENEFITS TO THE MTS:

The ESDG will benefit the Nation by reducing the harmful side effects of MTS related operations. Working in concert with the R&D IAT, Navigation Technology IAT, and others, the ESDG will help to inform policies that effectively address the MTS’s most pressing environmental concerns.



ACCOMPLISHMENT OTHER SIGNIFICANT ACTIONS

SUMMARY

In addition to the Integrated Action Teams and Task Teams identified in this report, the CMTS engages in many other activities that provide value to the Marine Transportation System and the Nation.

- Clinton, Iowa – Union Pacific Bridge Permitting Coordination
 - At the request of USDOT Deputy Secretary Porcari, the CMTS is helping to coordinate the permit application process for the Union Pacific railroad as they try to replace the Dennis J. Duffy Mississippi River Bridge, Clinton, Iowa. This is a demonstration project to determine if CMTS communication expertise can be of value to projects of major impact to the Nation’s supply chain. Task Leader: CMTS Executive Secretariat.

- ENavigation Task Team –
 - The E-Navigation Strategic Plan Task Team was created by the Coordinating Board at the 15 April 2010 meeting to develop a National e-navigation strategy. The strategy is intended to prescribe how the U.S. will implement e-navigation concepts and activities in a cross-agency manner, and coordinated with industry and other stakeholders in support of the safer, environmentally sound, and more efficient marine transportation system. The strategy will be consistent with and linked to international (IMO, IHO and IALA) e-navigation strategies and policies. Task Leader: US Coast Guard

- CMTS Response to the National Ocean Policy Task Team –
 - The CMTS Response Task Team was established at the 15 December 2010 Coordinating Board meeting to address the marine transportation system equities in the National Ocean Policy Objectives. The team continues to meet and will complete their work by June 2011. Task Leader: US Army Corps of Engineers