Marine Board Focus Session

NAV 2025

"ATON and MSI for the 21st Century"

Captain Scott Smith

Critical Elements:

- Stakeholder Engagement Throughout
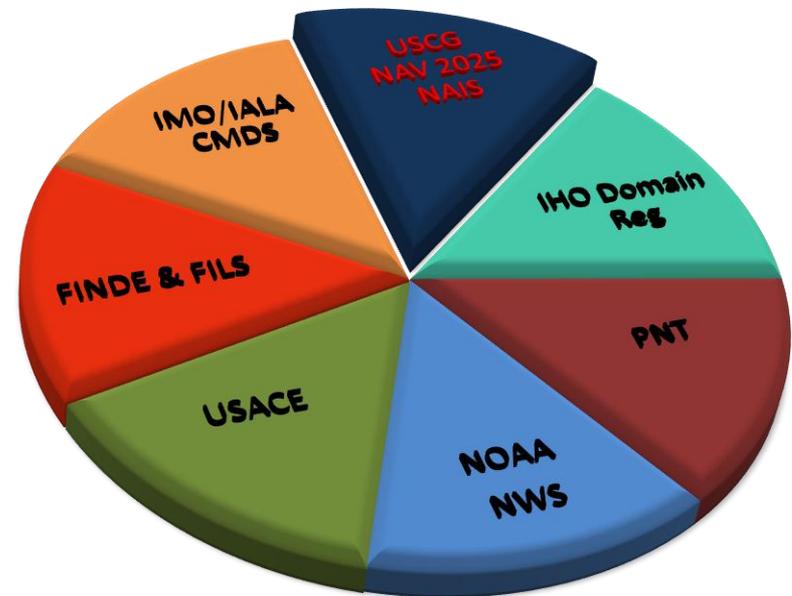
- Balance of Technology and Cost

US eNAV

NAV 2025's eATON and eMSI are components of the US e-NAV Implementation Strategy

An element of the NAV 2025 Initiative is the optimization of the US ATON System.

NAV 2025 seeks to find balance between physical & eATON while maintaining expectable levels of risk and improve overall system resiliency.

- ATON Optimization

- Levels of Service

- Risk Analysis and Management

- Improved Marine Safety Information Delivery

•ATON Optimization

•Maximize current technology: LEDs, etc

•Reduce Seasonal Workload

•Develop Environmental Friendly Mooring Systems

•Reduce Shore side Infrastructure

•Incorporate eATON into system, Safe Water Marks, emergent wrecks, etc

•Determine need for Differential GPS correction

•Level of Service(s)

- •Determine proper federal service/investment in each waterway segment

  ➢Sea Coast System

  ➢Low Use Commercial Waterways

  ➢Recreational Only Waterways within State waters

  ➢Eliminate marking for single user waterways

  ➢Eliminate marking of shallow, unsafe waterways

•Risk Analysis and Management

- •Develop Interactive Visualization and Risk Analysis Tool

  - ➤Data Mining both internal and external

    - ▪USCG – IATONIS, NAIS

    - ▪USACE – Hydro, Vessel Cargo Data

    - ▪NOAA – Environmental info

  - ➤Incorporate optimization of ATON

  - ➤Incorporate IALA's Waterway Risk Assessment Tool (I-WRAP)

  - ➤Incorporate User Input

  - ➤Provide Waterway Managers with Risk Management Tool

  - ➤Provide Waterways Managers with Operational Assessment Tool

  - ➤Provide Program Managers with Resource Requirements Tool

U.S. Department of Homeland Security
United States Coast Guard

- **Improved Marine Safety Info Delivery**

  - eMSI - Electronic delivery methods

  - Real time notification through AIS

BNM ➤ AIS ➤ USER

Analog **to** **Digital**

LNM ➤ S57/S100 Data Layer ➤ USER
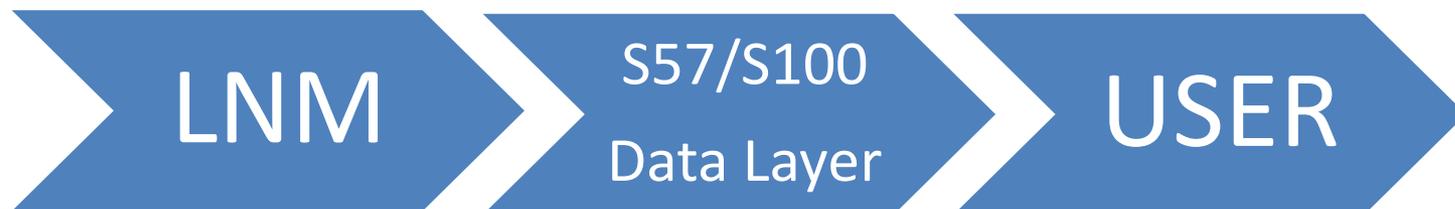
eNAV Projects Coastal – Delaware Bay

U.S. Department of
Homeland Security
**United States
Coast Guard**

ATON
Outage

Temporary
Restricted
Area
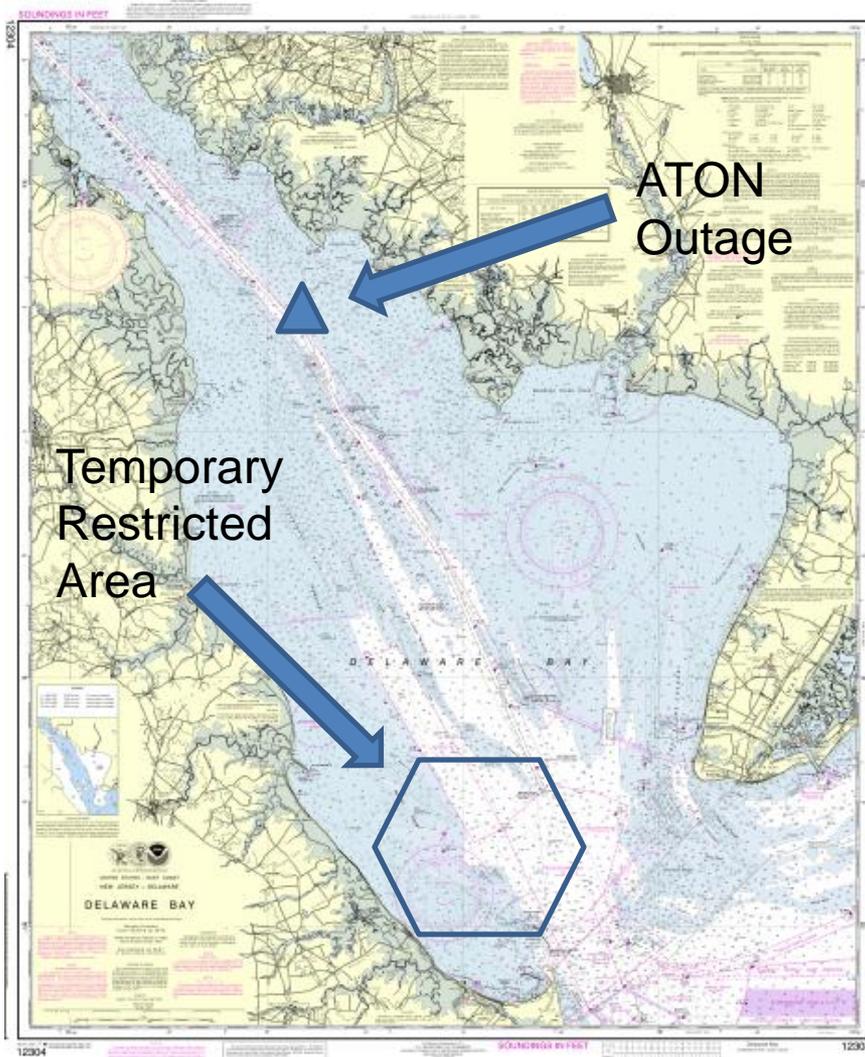
AIS will be used to:

✓Broadcast ATON outage information as a layered object above the charted symbol.

✓Area Notices (i.e. Temporary Restricted Areas.

Takeaways:

- Stakeholder Engagement Throughout

- Balance of Technology and Cost

Questions?