



# Report to 2017 Mariners' Workshop

Western Region eNavigation Sub-Committee

# Overview

- Membership
- Report from July 7, 2016 meeting
- Update on regional activities
- Report from eNavigation Conference, Seattle
- Future areas of focus

# Western Region eNavigation Sub-Committee Membership

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- BC Coast Pilots
  - BC Ferries
  - Canadian Coast Guard
  - Canadian Hydrographic Services
  - Chamber of Shipping
  - Canadian Marine Pilots
  - Council of Marine Carriers
  - Environment Canada
  - Fraser River Pilots
  - Nanaimo Port Authority
  - Pacific Pilotage Authority
  - Port Vancouver
  - Prince Rupert Port Authority
  - Shipping Federation of Canada
  - Transport Canada

# Report from July 7, 2016 meeting

1. Environment Canada presentation
  - Potential additional buoys on west coast
2. Maritime Domain Awareness
  - TC MDA Coastal Strategy working group
  - Government vs private sector
3. Canadian Coast Guard update
  - AIS message status
  - AIS AtoN Study

# Report from July 7, 2016 meeting (cont.)

## 4. Canadian Hydrographic Services update

- Tides and Currents
- Field survey work
- Berthing scale ENC
- Pacific charts production plan

## 5. Regional Updates

- Vancouver
- Prince Rupert
- BC Ferries

# Regional updates

- Vancouver
  - First Narrows – purchased additional tide equipment, assess installation of a current gauge, pursuing real time bridge height
  - Port Moody – data available through CHS but not yet online
  - Second Narrows - water level and current data over AIS
  - Network of tide gauges installed to create a hydrodynamic model
  - Sand Heads - redundancy
- Nanaimo
  - Continued development of marine domain awareness
- Prince Rupert
  - Radar installation complete
  - Working with CHS to enhance tide and current gauges
- Other
  - Testing transmission of met/hydro data over CG AIS network

# Report from eNav Conference, Seattle

1. Federal eNavigation Policy and Regulations
2. Developing e-Navigation Standards
  - Fishing industry
  - Intertanko
  - Holland America
3. The Operational Environment
  - Holland America Group
  - Mike Sollosi, USCG
4. Technical Developments in Navigation Hardware
  - USCG
  - Team Augmented Reality
  - German Federal Waterways and Shipping Administration

# Report from eNav Conference, Seattle (cont.)

5. Technical Developments in Navigation Hardware
  - USCG
  - Team Augmented Reality
  - German Federal Waterways and Shipping Administration
  
6. Cyber Security and e-Navigation
  - USCG
  - John Hopkins University
  
7. Advances in Data Collection and Dissemination
  - NOAA
  - Gatehouse
  - Viadonau (Austria)



# Report from eNav Conference, Seattle (cont.)

## 8. The Impact of eNavigation on BRM

- Maritime Pilots Institute
- Holland America Group
- Pacific Maritime Institute

## 9. Future challenges and opportunities

# Future focus

- Maritime Domain Awareness (Ocean Protection Plan)
- Continue efforts to broadcast met/hydro data over AIS
- Smart buoys
- Berthing scale ENC's
- Real time bridge height (1<sup>st</sup> Narrows)
- Now casting (near forecasting) – Vancouver, Seymour Narrows
- Storm surge predictions for head of inlets



Thank you

Western Region eNavigation Sub-Committee