



Canadian Hydrographic Service National Report to USCHC42

Dr. Geneviève Béchard

Director General, Canadian Hydrographic Service and
Hydrographer General of Canada





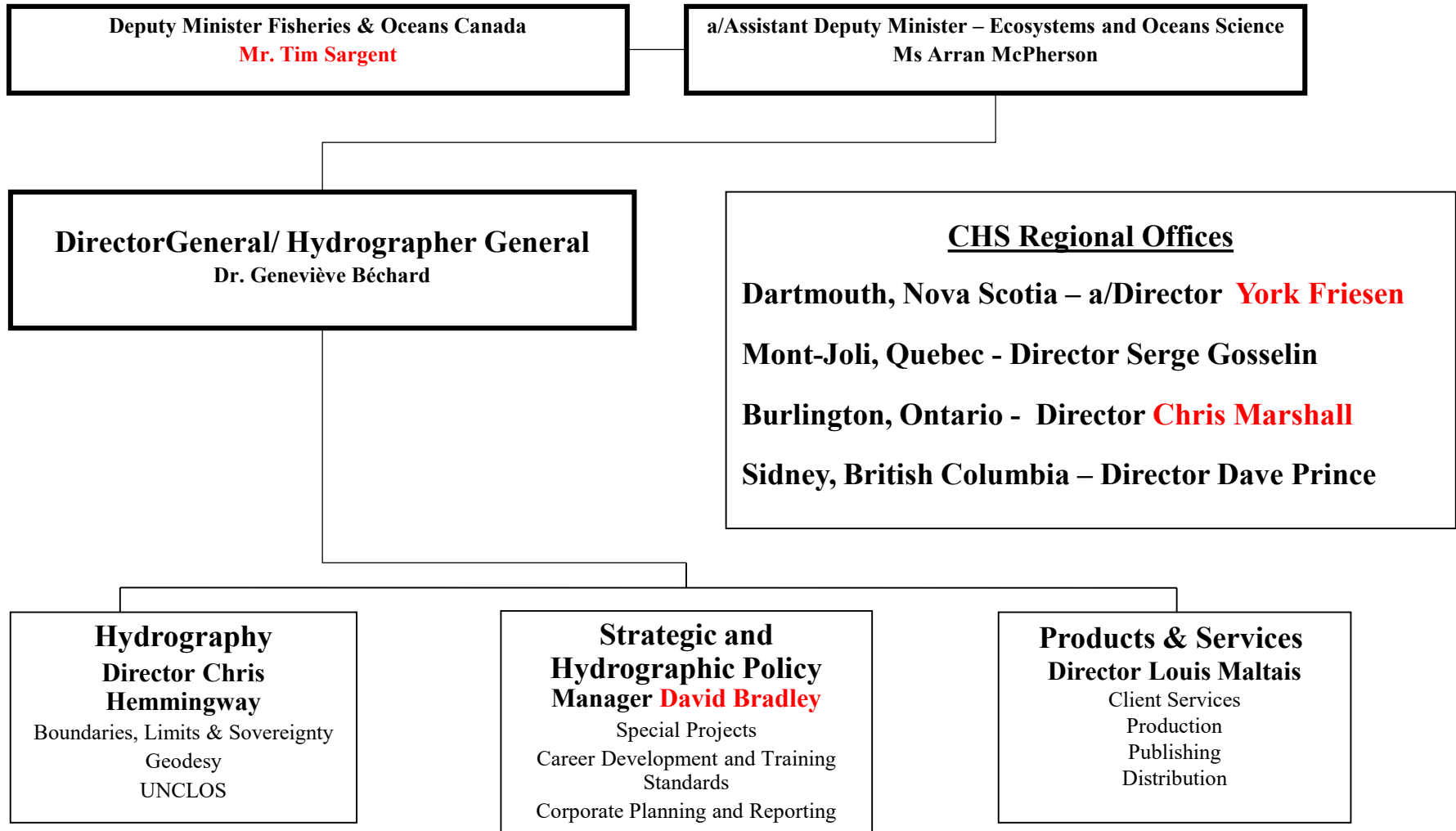
Overview

- Organizational changes.
- Survey activities 2018-19.
- Production 2018-19.
- DND activities and plans.
- Future plans and activities





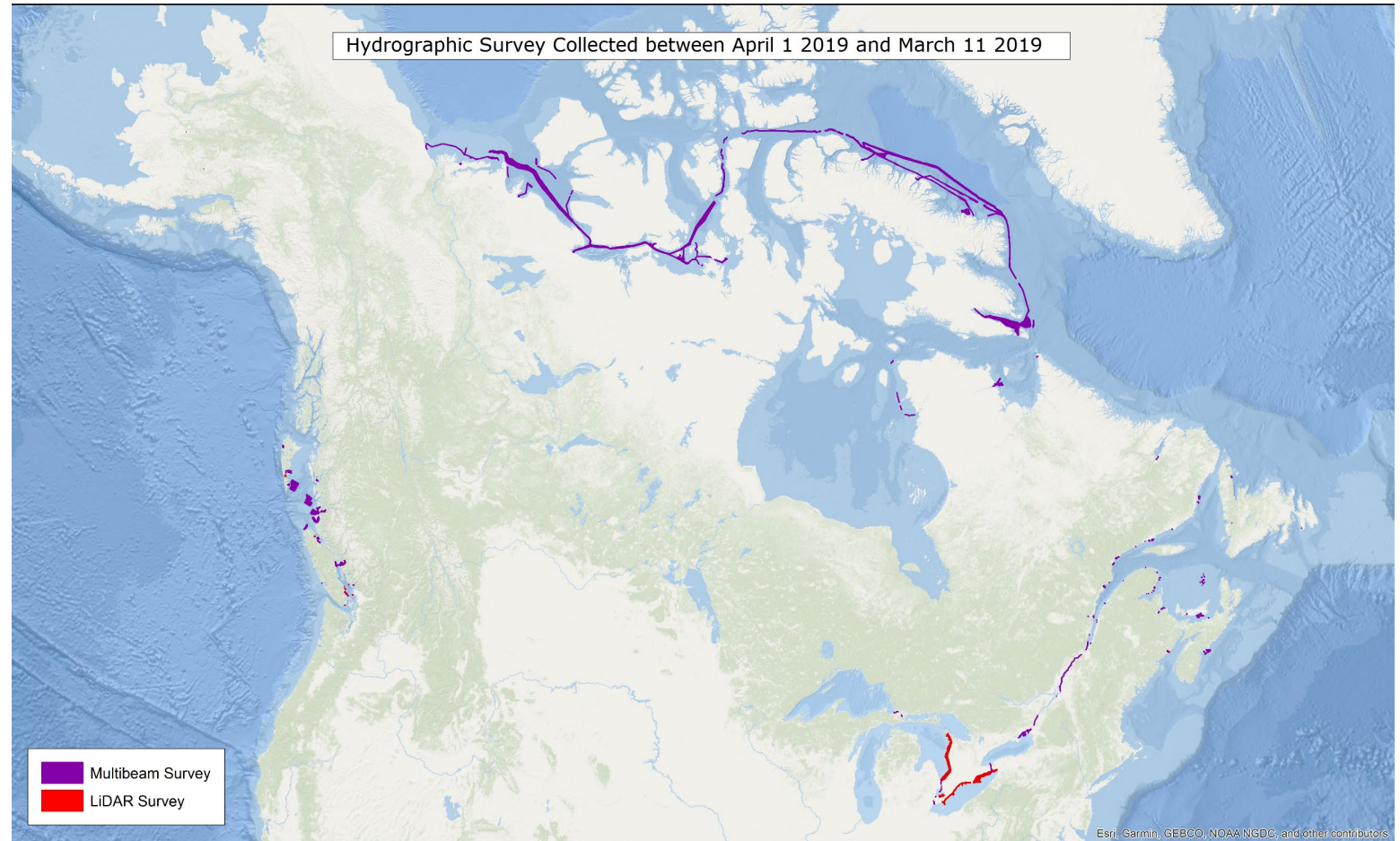
DFO Science - Canadian Hydrographic Service (CHS)





2018-19 National Surveys

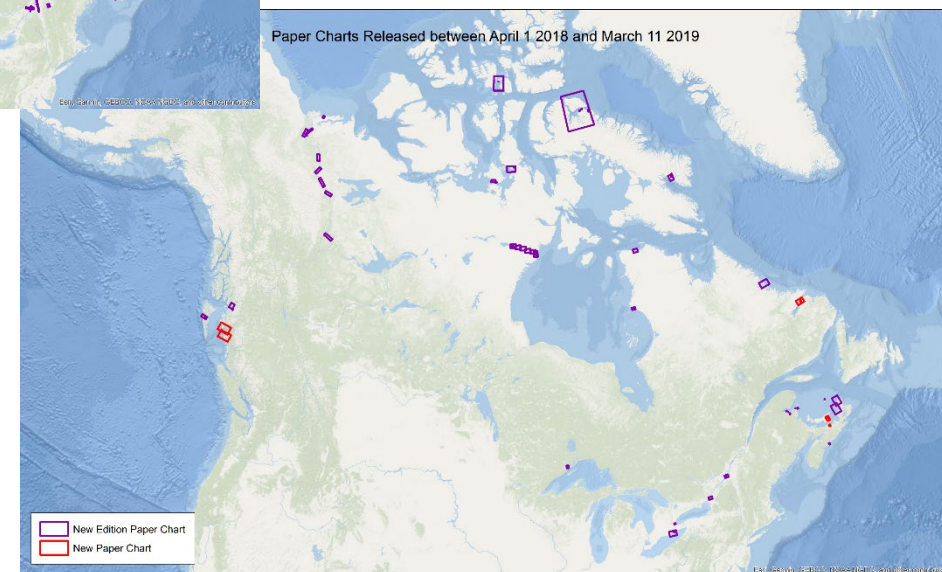
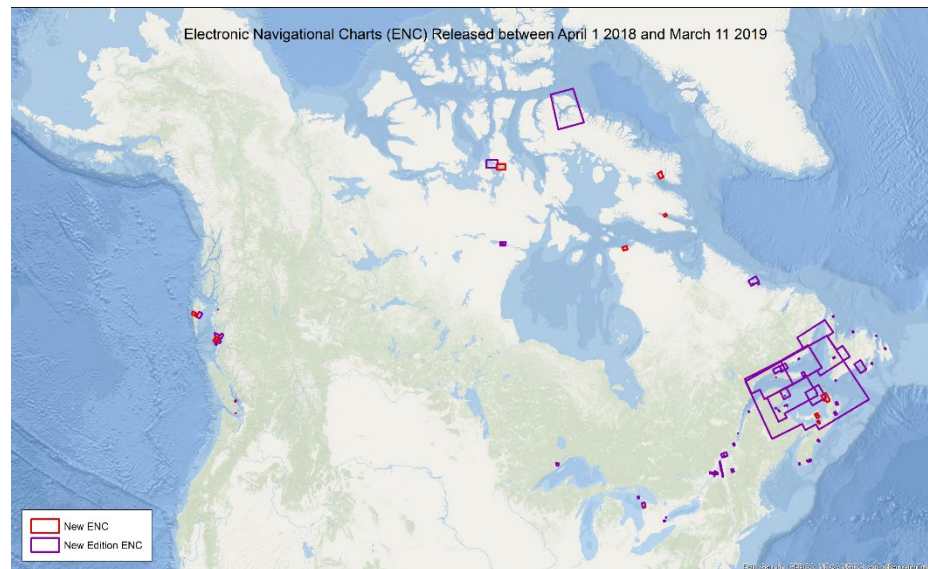
- Multibeam and LiDAR surveys in all regions
- Much of the work funded under the Oceans Protection Plan (OPP) initiative.
- Major data collection focus during Year 2 (2018-19) and Y3.
- Since 2016 over 30,000 km² of LiDAR have been flown.





2018-19 New Charts and Updates

- 84 New Edition ENC
- 27 New ENC
- 34 New Edition Paper Charts
- 5 New Paper Charts
- 613 NtMs
- 89 NOTSHIPs (NAVWARNs)
- 768 Sailing Directions (Pilots) updates





IHO related

- CA participated in:
 - IHO Council
 - HSSC and working groups
 - IRCC, working groups and RHCs
 - Strategic Plan Review Working Group
- Release of NONNA-100 to IHO DCDB
 - Data can be mined by GEBCO and Seabed 2030
- C-55
 - CA updated C-55
 - Used CATZOC as a basis of the analysis; a variation of UK and FR proposal
- INT (International) Charts
 - CHS does not produce INT charts any longer





DND Production (HSO) UNCLASSIFIED

LCdr James Zuliani

Domestic Additional Military Layers (Primarily TTW, Operating Areas, CLB, SBO)

NATO AML Co-production

MFF – Maritime Foundation Features

LBO – Large Bottom Objects

ESB – Environment, Seabed, Beach

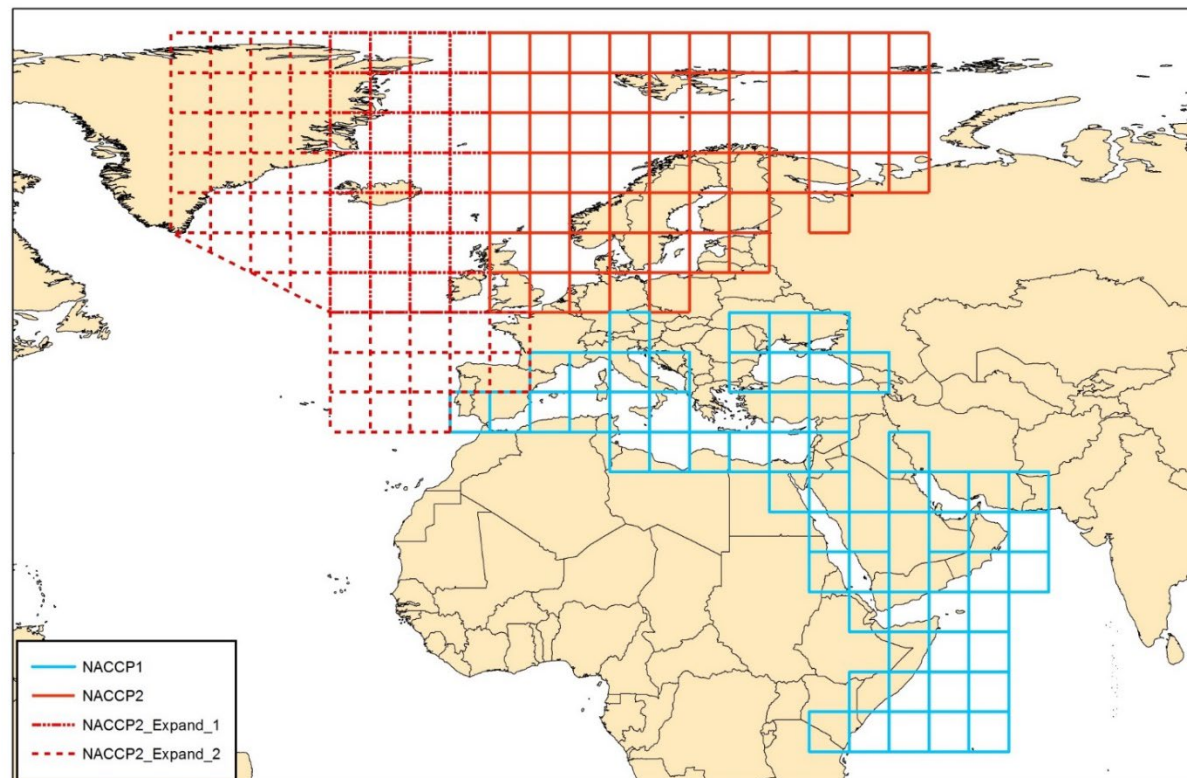
RAL – Routes, Areas, Limits

CLB – Contour Line Bathymetry

IWC – Integrated Water Column

AWC – Atmospheric & Met Climatology

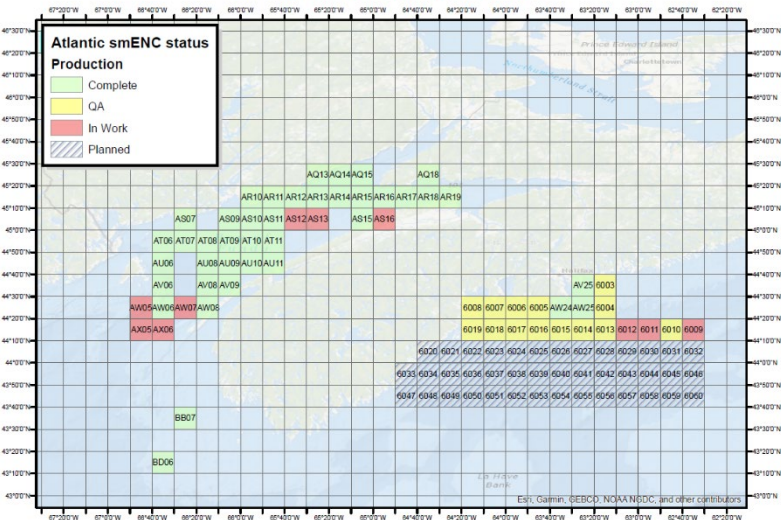
SBO – Small Bottom Objects



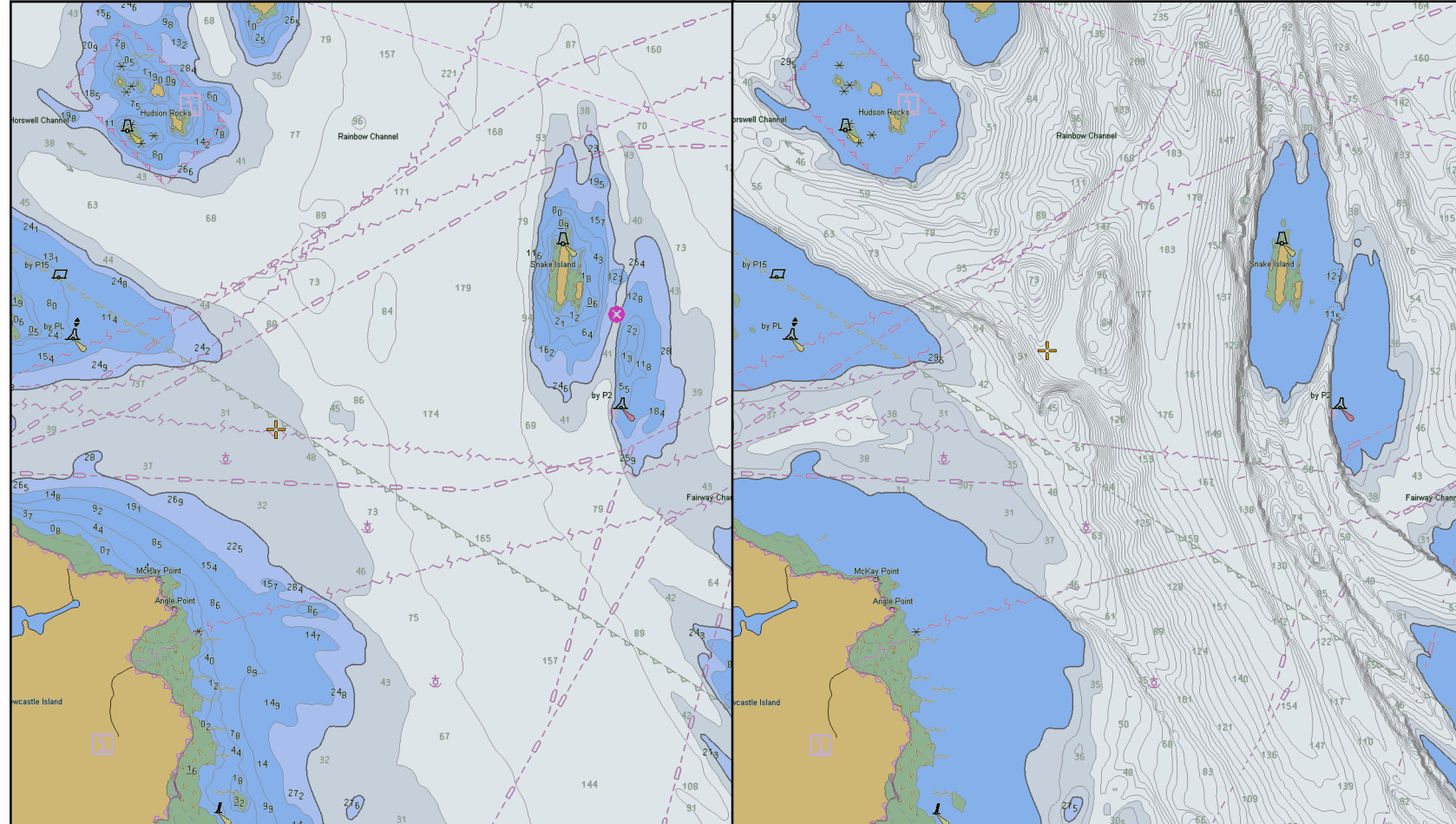
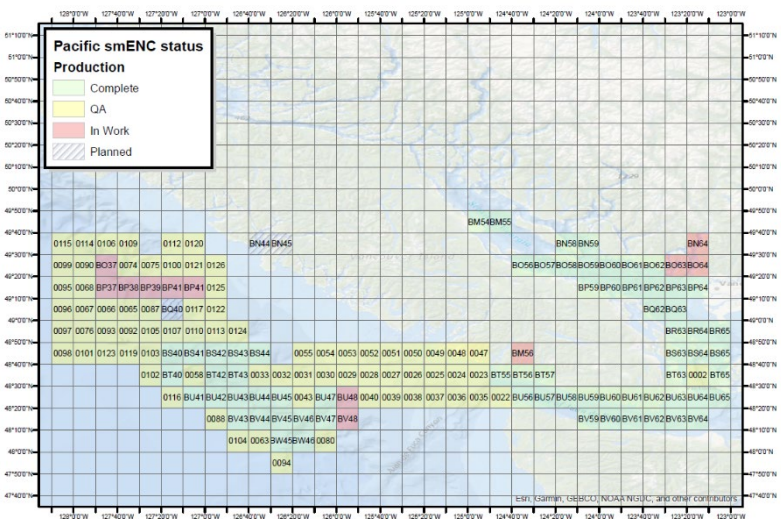


DND Production (HSO) UNCLASSIFIED

smENC for East Coast of Canada



smENC for West Coast of Canada





GEOINT Future Plans UNCLASSIFIED

2019 - HMCS *Kingston*

- Limitations: Fuel, ice, STD, bunking

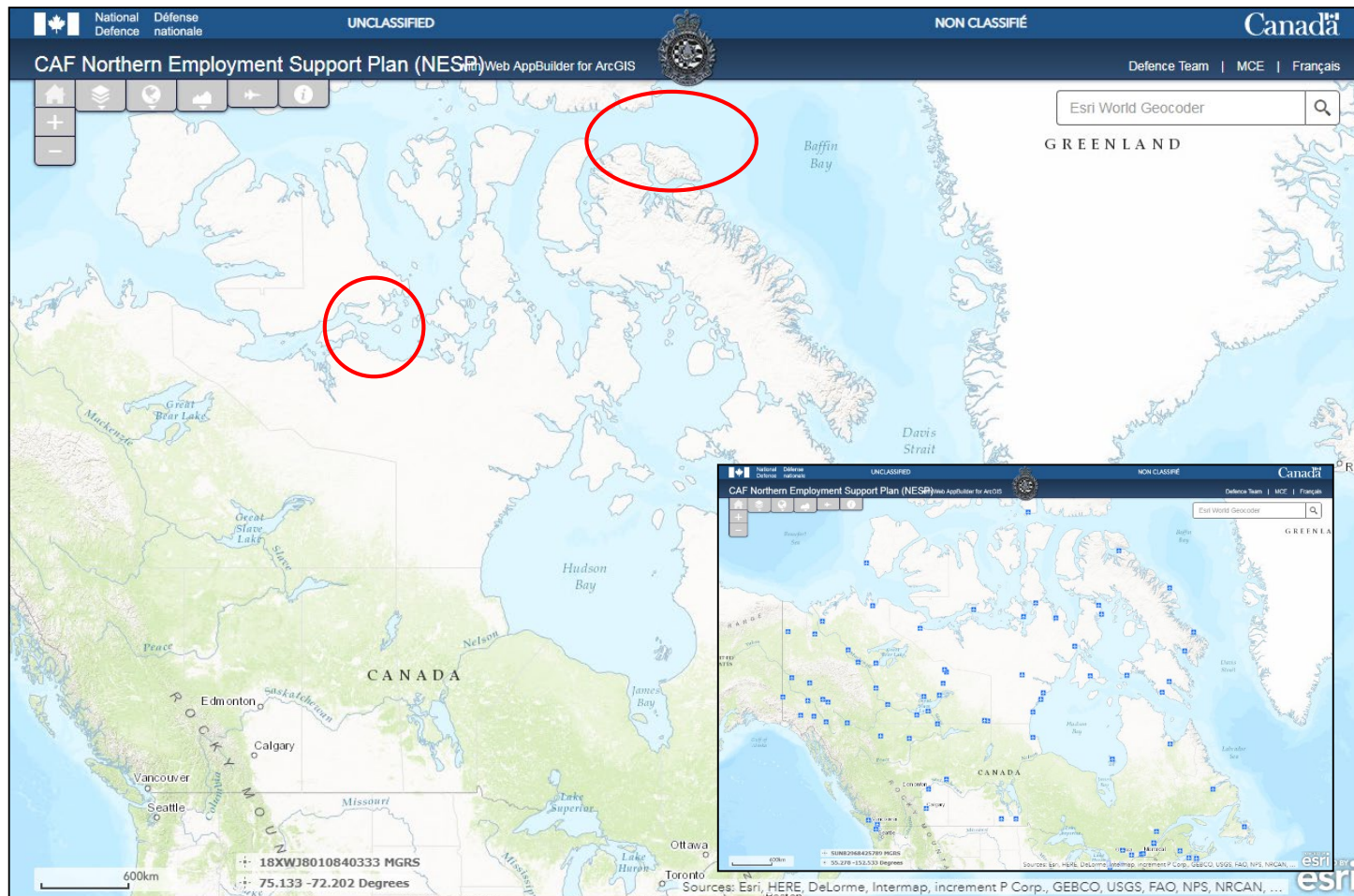


- Data collection with mission-fit MBES and embarked CHS Hydrographer
- Potential for (now or with *Harry DeWolf-class*):
 - CVD work
 - USV support

RCN Arctic Planning Tool /WMS

- Using elements of:
 - CHS Arctic Voyage Planning Guide
 - Arctic-SDI.org
- Including: ice, fuel, facilities

- 2021 planned NWP transit for HDW





Future Plans and Activities

- Entering Y3 of OPP
 - Further data collection (plans presented separately)
 - ENC production for 23 ports and Arctic
 - Further development towards dynamic products and services (separate presentation on Bathymetric Data in the Cloud)
- Suspension of paper chart production
 - Refine a Paper Chart 2.0 solution
- Concentrated effort in digitizing key holdings
 - Ensure database populated with validated data
- Release of more data to the public domain
 - Simplification of access to data for non-navigation uses
- Re-scheming of ENCs to a grid (separate presentation)
- USCHC43 Québec 24 February 2020
- Preparation for IHO C3 and A2





Thank you!

Questions?

Genevieve.Bechard@dfo-mpo.gc.ca

