**Paper for Consideration by NIPWG**

**Update on the Canadian Coast Guard Navigational Warning System**

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| *Submitted by:* | Canadian Coast Guard |
| *Executive Summary:* | This paper provides a short update of development that the Canadian Coast Guard (CCG) is doing on a new Navigational Warning System. |
| *Related Documents:* | NIPWG4-WP2-5, S-100, S-124 |
| *Related Projects:* | ACCSEAS, S-100WG, S-124CG |

**Introduction / Background**

Canadian Coast Guard (CCG) continues the development of its new Navigational Warning System. This system is a specialization of the Navigational Warning system developed by the Danish Maritime Authority (DMA) under the ACCSEAS project, called Niord. CCG has adapted Niord to fit the Canadian needs, and this new NAVWARN Issuing System (NIS) will become the only NW system in use at CCG.

**Analysis/Discussion**

The Canadian system has been customised for Canadian requirements, including alignment with the organizational structure of the CCG, implementation of maritime geographic areas, charts, aids to navigation and CCG assets, as well as language requirements and bilingual templates, French and English being the two official languages of Canada.  In the last year, the system has been improved through updates to the GUI reflecting extensive tests with the Marine Communications and Traffic Services (MCTS) officers, with several templates having been created to simplify and speed up the NW process. The main focus is currently on user training materials and implementation plans for when the system becomes operational. Live trials are expected to start later this year, with a goal of going operational in 2019.
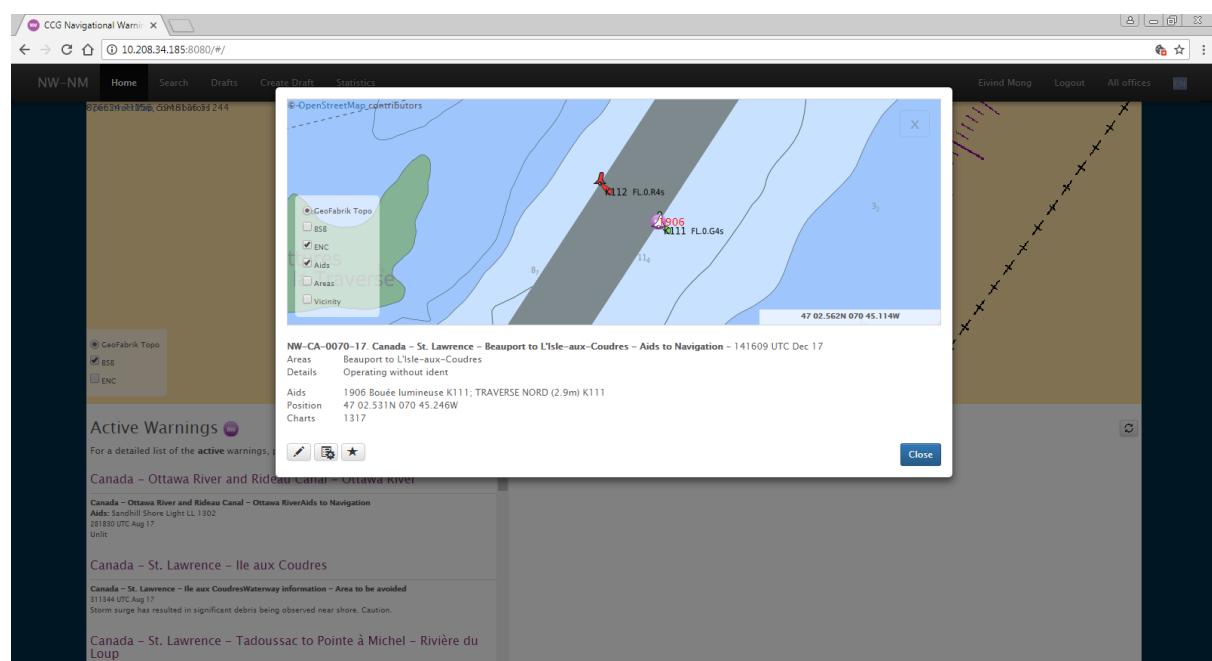


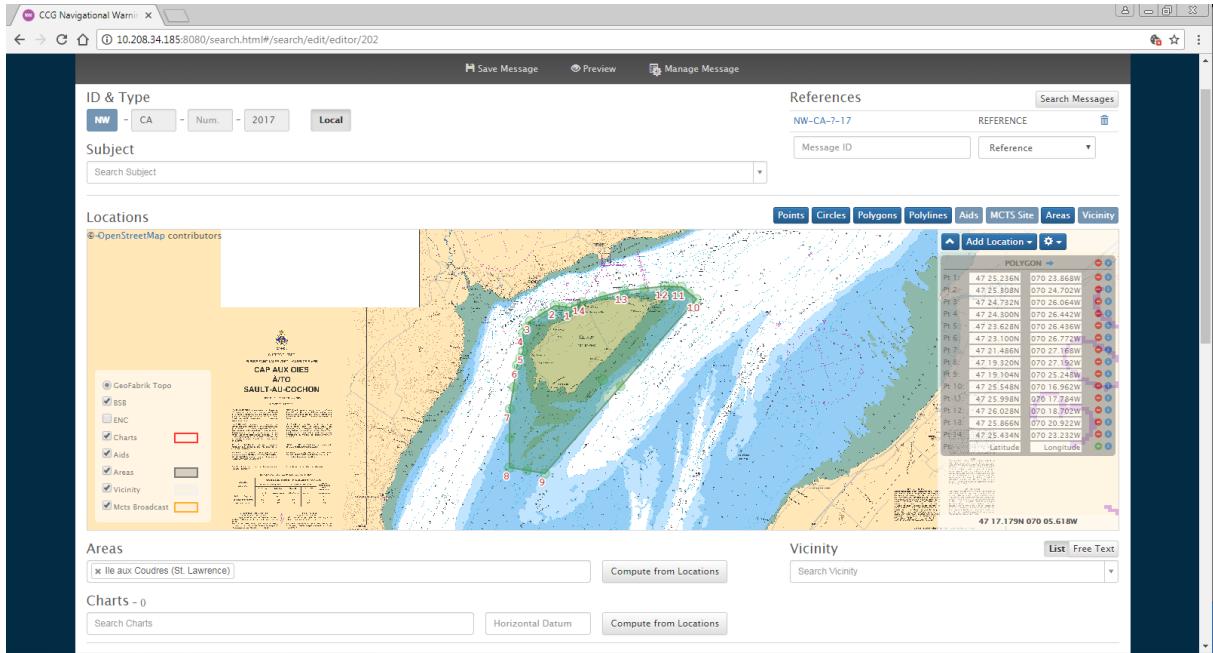Figure 1 – Details on a navigational warning, over ENC data.

Figure 2 – User interface for creating NW, here an area NW.

## Conclusions
Collaboration with DMA and the use of their open source code from the Accseas project has helped speed up and simplify the development process tremendously. CCG was able to re-use and modify as needed all the available open source components to create a system that made most sense for the Canadian perspective. The Canadian NW system is approaching a level of maturity that will allow it to be tested for fitness for operational use very soon.

## Recommendations
CCG encourages other NW authorities to also explore the Danish-created system and source code.

## Action Required of NIPWG
The NIPWG is invited to:

      a.      note the paper