

## Paper for Consideration by HSSC

### S-100 Cloud Service Distribution

<b>Submitted by:</b>	Canada, Norway, PRIMAR, CARIS/Teledyne, Open Geospatial Consortium
<b>Executive Summary:</b>	Data centric HO's are now exploring cloud based distribution model for S-100, this paper and presentation will share results and demonstrate capacity developed under the pilot project lead by Canada (CHS) in collaboration with Teledyne CARIS and PRIMAR.
<b>Related Documents:</b>	Presentation, videos, demo + <a href="https://www.iho.int/mtg_docs/com_wg/WEND/WENDWG9/PRIMAR%20S-100%20development%201.2.pdf">https://www.iho.int/mtg_docs/com_wg/WEND/WENDWG9/PRIMAR%20S-100%20development%201.2.pdf</a>

#### Introduction / Background

Under Canada Ocean protection plan (1.5 Billion project) CHS has to deliver dynamic products(S-102 Bathymetry, S-111 currents, S-104 water levels) in majors ports and waterways of Canada. Canada has been active on the S-102,S-111,S-104 specification development over the last couple of years. Canada like some other HO's have now S-100 production capacity and has launched a pilot project for S-100 distribution. On the technical side cloud technology is being tested with web service interfaces (including OGC), and a new service based business model is being explored

#### Analysis/Discussion

At HSSC-10 information paper *HSSC10-05.3D Future Provision of products based on S-100 based Product Specification under HSSC responsibility* was presented to expose some of the challenges related to S-100 distribution. Under the pressure to deliver on Canada Ocean Protection Plan CHS initiated a pilot project with PRIMAR and Teledyne CARIS to start answering some of the concerns raised at HSSC-10.

After one year of efforts, the project team can affirm that cloud technology can deliver S-102 bathymetry.

Demonstration of capacity created under the pilot project will be shown at HSSC-11.

#### Conclusions

There are many unknowns that remains to be address moving toward S-100. This pilot project demonstration will address some issues in term of the future of S-100 distribution.

#### Justification and Impacts

This pilot project will impact many IHO Committees and Working Groups. So far the focus of IHO has been on S-100 product specifications with HSSC and S-100WG. When come the question of distribution of S-100 hydrographic data, IRCC and WEND could be impacted if S-100 is added to their terms of reference.

- Canada suggest putting a 2 year objective on S-100 distribution standards
- Proposed priority = high

#### Action Required of HSSC

The HSSC is invited to:

- Discuss S-100 distribution capacity demonstrated in this pilot project
- Select relevant Committee and/or Working Group to manage this aspect of S-100.
- Task selected Committee and/or Working Group
- Advise pilot project partners on future steps from HSSC perspective.