

**Paper for Consideration by HSSC16****SENC distribution in an S-100 World**

<b>Submitted by:</b>	UK , Navtor, 7Cs, Wartsila, OneOcean
<b>Executive Summary:</b>	PRIMAR Advisory Committee have stated they will not support SENC delivery for S-100 data
<b>Related Documents:</b>	WENDWG14/23 IHO Resolution 2/2007
<b>Related Projects:</b>	S-100 testbed activities

**Introduction / Background**

At the recent WENDWG PRIMAR made the team aware its Advisory Committee have approved a decision to not support SENC/System Database distribution of S-100/S-101 data due to risk of loss of the signature file which is regarded as critical.

**Analysis/Discussion**

The HSSC action, HSSC15/20 (former HSSC14/25, HSSC13/27) was for the S-100WG to consider SENC delivery issues raised by France, add this work item in its work plan (as part of testing activities and the development of S-164) to address and demonstrate, through a security risk analysis on the application of S-100 Part 15, whether the need for SENC distribution is still justified in the S-100 world.

UK and expert contributors (SENC distributors/OEMs) are concerned this decision by Primar is extremely premature given there has been no testing to determine if SENC is still required in a S-100 world.

There are many benefits to SENC delivery, data loading speeds for users are dramatically reduced, QA control of converted ENC data before release and the whole service has been type approved for operation. This has ensured that for the whole time SENC services have been provided to end users there have been no instances of security breaches.

**Recommendations**

It is recommended that Primar countries opposed to SENC engage with the S-100WG to raise their concerns around the delivery mechanism and engage in meaningful SENC testing processes with OEMs.

To support testing RENCs and HOs are encouraged to supply their S-100 data to the S-100WG so a large collection of hydrographic information can be gathered for the testing. This will help to establish system performance when dealing with high resolution bathymetry and other large S-100 datasets.

Through testing it should also be possible to determine if there is a technical way for the IHO members security concerns to be addressed and to understand if there is still a need for SENC in a S-100 future.

**Justification and Impacts**

If through OEM system testing it can be demonstrated there still exists a compelling need and use case for SENC data delivery in S-100 it should be facilitated by and through IHO standards and resolutions.

IHO Resolution 2/2007 sets out a structure for an impact assessment to be carried out, and we feel this should be conducted alongside testing to determine if changes to data delivery may incur higher costs, system impacts and undesirable customer effects.

**Action Required of HSSC 16**

The HSSC 16 is invited to:

- a. Note the contents of the paper.
- b. Encourage IHO member states to engage in the SENC testing process.
- c. Only take actions based on evidence from S-100 SENC testbeds.
- d. Conduct impact assessment with stakeholders