



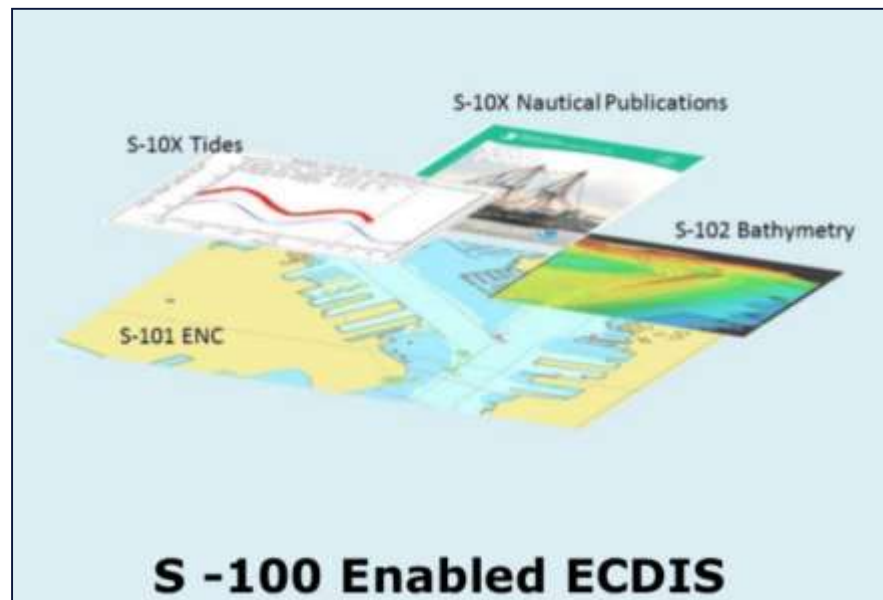
France comments on S-98 draft

S-98 Specification for Data Product Interoperability in S-100
Navigation Systems

S-100WG3 – 10-13 April 2018 - Singapore

S-100 e-Navigation will require a system that allows:

- Identify the most relevant information from various sources and in different contexts of navigation;
- Display the selected information in a harmonized way on screen.



Source: hydrographic-society-benelux

In this perspective, S-98 is a key element.

The impressive work conducted so far must be acknowledged.

Interoperability contains 2 aspects:

- ✓ The users' needs → Interoperability Catalogue (IC) → **conceptual approach**
- ✓ The developers' (typically OEMs) needs → XML files → **technical approach**

Current S-98 V.0.2 seems very "developer oriented".

Tests have already been conducted (Korea/US), but they seem to have concentrated on the technical approach:

- ✓ Creation of an IC;
- ✓ Implementation of the IC on the S-100 navigation system;
- ✓ Visualization.

What will IHO MS need to approve S-98?

✓ "It has been tested and it works!"

Or

✓ "It fulfills the mariners' needs!"

The answer is probably: « Both! », but the latter (the concept) should come before the former (the technical aspect).

It is essential that the concepts under S-98 be clearly explained in an extensive introduction (or a separate part of the document).

Tests will also have to be conducted in various navigation contexts.

Some new aspects introduced by S-98 PS are appreciated:

- ✓ OEMs may add functions for enhanced automatic text placement (improved display);
- ✓ Replacement of the Skin of the Earth (VS bathymetric ENC).

S-98 draft 0.2 raises some questions:

✓ Some fuzzy logic principles need to be explained:

- "are mostly the same but there are minor differences" (§8.1.2);
- "mostly the same" (§8.1.2);

✓ Frequent references to « Superior Data »

- What is a superior data?
- Who decides? The IC (hard coded), the mariner?
- What about meta data of each individual product?

✓ What is the mariner's understanding of what is on his screen?

- ✓ What are the possible consequences for the data producer? Or is there no consequence at all?
- ✓ Are there any consequences on the various S-10x Product Specifications?
- ✓ What about S-57 ENCs (and S-52 portrayal) that will live with S-100 systems?
- ✓ What about the mariner's proper decision (selection of information)? Can we decide for him in advance?

The following recommendations are suggested to improved S-98 PS V0.2 and its understanding.

- ✓ The conceptual principles should be better explained;
- ✓ Principles should be reviewed and discussed;
- ✓ Beyond S-98 PS, draft guidelines for S-100 ECDIS are needed;
- ✓ Take into account the questions raised in this paper;
- ✓ Consider user cases to better define the needs and get the explicit level of choices under the responsibility of mariners;
- ✓ The responsibility of IHO PS developers, data producers and OEMs in the interoperability process should be established;

MERCI !

