Paper for Consideration by TSMAD29

[S-102 Specification Update Impact Study]

Submitted by:	US Naval Oceanographic Office
Executive Summary:	S-102 Update and Sub-Working Group.
Related Documents:	S-102 Product Specification; IHO CL 10/2012, TSMAD27 6.1
Related Projects:	N/A

Introduction / Background

In 2012 the IHO member states approved S-102 as the first S-100 based product specification. This specification is based on the Open Navigation Standards Working Group (ONSWG) work on the Bathymetric Attributed Grid (BAG). OEMs are requesting test data sets and beginning to work with S-102 samples. In doing so deficiencies or beneficial enhancements have been identified that need to be incorporated into the product specification.

TSMAD27 6.1 proposed S-102 is updated to cover deficiencies and incorporate beneficial enhancements. HSSC6 requested that TSMAD conduct an impact assessment prior to going forward with an update.

Analysis/Discussion

The original S-102 sub-working group chair compiled a short questionnaire that was published as an internet survey. Member states and TSMAD participants were asked to respond. The survey questions and a summary of the results are presented in Annex A. The response deadline was set at 15 January 2015 so the results could be presented to TSMAD29.

Conclusions

While responses were not overwhelmingly abundant, there was no resistance to an update for S-102. IN fact, the majority of the respondents want an update to address issues.

Recommendations

US recommend that TSMAD endorse this proposal and allow a sub-working group develop an update to S-102.

Justification and Impacts

As stated, this proposal will help ensure successful implementation of S-102 within the next generation of ECDIS. This would include performance with S-100 and other overlays. This action should be considered high priority. It should be completed and prosed for TSMAD 30 or S-100 1.

Action Required of TSMAD and DIPWG

The TSMAD and DIPWG are invited to:

     a.   endorse

     b.   participate

Annex A

1. What is the name and address of your organization?

2. Is there a technical POC that could answer follow-up questions if necessary?

3. What is the type of your organization? (i.e. Hydrographic Office, ECDIS Manufacturer, Data Provider, etc.)

Response	Quantity
Hydrographic Office	7
Navigation System Manufacturer (ECDIS, ECS, PPU)	3
Product Tool Developer	5
Data Provider	5
Other (Service Provider, Development SDK for Kernel)	2

4. Have you implemented S-102?

Response	Quantity
Yes	5
No	11

5. If the answer to question 4 is 'yes', would you implement an upgrade to S-102?

Response	Quantity
Yes	5
No[1]	1

---

[1] Respondent stated the S-102 was so close to ONSWG BAG that they would not implement an S-102 update.

6. If the answer to question 5 is 'no', Please explain your concerns.

Response
Immature standard, lack of tools support.
S102 is missing a portrayal section. In addition, our experience with S102 implementation was a constant reference to OpenNav's BAG documentation, there is little value that S102 added to the BAG/HDF5 format.
there's no real end-users and no identified needs right now
S-102 is in implementation plans, not yet started because of various reasons.[2]

7. If the answer to question 4 is 'no', would you approve of an upgrade to S-102?

Response	Quantity
Yes	10
No	0

---

[2] Numerous respondents have plans to implement S-102 but have not yet started projects to do so.