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HSWG 3
HYDROGRAPHIC SURVEYS WORKING GROUP

S-100

INTERNATIONAL HYDROGRAPHIC ORGANIZATION

MEASURING THE PHYSICS & FEATURES OF THE OCEAN

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12.1.4.1 CURRENT SITUATION

- The work whith the S-102 (Bathymetric surface) seems to go forward in a good way.
  - One thing worth to mention is that they are looking in to how to certify that interpolated values are not displayed as a selected sounding.
- S-102 seem to have made a full adoption of the same uncertainty definition as we have in the S44.
- S-102 meeting PT10 via VTC, 24-25 October 2022
  - As I understand it they are trying to get an Ed.3.0.0 ready for the next HSSC meeting in June 2023, that after approval can go out for MS acceptance by voting.

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12.1.4.1 CURRENT SITUATION

- S-101 PT9 meeting in Wellington, New Zealand 21-25 November 2022
  - From Sweden there will be one change request to use the term Mechanical sweep (as in S-44) in all places in the document. Today it is a mix of “Wire-Sweep”, “Wire-drag” and “Mechanical sweep”.
- Most activities within the S-101 PT seems to be around “Portrayal”, and to create a valid test dataset.
- Latest S-101 is now Ed.1.0.2

- S-104 (Water level) seems to be a bit behind and, as I understand, there is more they need to sort out.
  - How to limit the information to be valid for only the respective areas of responsibility.
  - How to handle much larger S-104 cells compared to S-102 (*partly also the area limitation problem*).
  - How the depth uncertainty is influenced by the uncertainty of the water level information (theorethical model) when they are combined in an ECDIS.

- Upcoming S-100 WG7meeting in Monaco, 5-13 December 2022

12.1.4.1 FURTHER OPPORTUNITIES

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- Spoken to the Chair of HSSC, and it is important that the time schedule for the S-101, 102 and 104 is kept, so not to many changes that inflicts the structure of the formats, especially S-101 can be made at this point.

- Spoken to the Vice Chair of S-100 and she believes it is possible to squeeze in smaller changes into the S-101, but we have to select the ones most important to us, or has low impact (*editorial*) and is fairly easy to fix. The sooner the better to deliver such proposals to the Chair of S-101PT, Thomas Richardson (UK)

12.1.4.1 FURTHER OPPORTUNITIES

- Main issues in S-101 regarding Bathymetry:
  - The mixup of language and parameter names, where errors are describes as accuracy and uncertainties and vice versa (SOUACC) (POSACC)
  - To describe uncertainty for a depth or position, is it relevant to have both a fixed and optional depth dependent parameter? Could TVU and THU be used instead (maybe not)?
  - least depth of detected features measured : **(A "Feature" is according to S-44 not detected if the minimum depth hasn't been detected.)**
  - size of features detected : ***(Not a value given from the S-44 as we only stat what should be possible to detect using the survey system.)***
  - significant features detected : ***(S-44 classification do not give any guarantee that all features has been found, not even significant.)***
  - ***(TECSOU) : Is it relevant to register the type of system used as detailed?***
  - Vertical datum handling : ***States negative drying soundings, but positive depths and heights??? That makes violence to all datum specifications. The specification of chart datum must be must be deciding the directions. (Example: the Great Lakes Datum uses negative down)***

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features detected		C	1,1
least depth of detected features measured		(S) BO	1,1
significant features detected		(S) BO	1,1
size of features detected		(S) RE	0,1
full seafloor coverage achieved		BO	1,1
horizontal position uncertainty		C	1,1
uncertainty fixed	(POSACC)	(S) RE	1,1
uncertainty variable factor		(S) RE	0,1
vertical uncertainty		C	1,1
uncertainty fixed	(SOUACC)	(S) RE	1,1
uncertainty variable factor		(S) RE	0,1

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Thank you

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