



IHO/HSSC

Hydrographic Surveys Project Team

1st Meeting / 20-21-22 June 2017 / PARIS

2^d day outcomes

Debriefing about breakout sessions “limitations of the S-44”

What are they?

Why are they limitations?

10 limitations underlined (at this time of the HSPT)





#1 – S-44 is only focused on nautical charting, with a depth classification

- Why is it a problem?

- S-44 not dedicated for all types of survey (protection of marine environment is a requirement) or for other needs (ex: positioning of fixed aids can be more stringent)
- S-44 not flexible (ex: 40m depth limit may be not relevant)

- Possible solutions:

Should we look at private standards to cover needs not listed in S-44?

Or should we modified the “table 1”

Or should we use a Matrix approach

Or should we use a mixed approach (Table 1 + Matrix)

**Task of the
« step 2 »**



#2 – Difficulty to have an overview of all requirements

- Why is it a problem?

→ S-44 not easily readable

- Possible solution:

Table should be expanded to summarized all requirements, including water current and seafloor classification



#3 – Limited number of definitions

- Why is it a problem?

→ It creates confusion. Ex: “detection capability” vs “feature detection”. “feature” not clearly defined. Uncertainty definition needs to be clarified

- Possible solution:

Check the International Vocabulary of Metrology

Handshake with DQWG



#4 – Misalignment between S-44 and CATZOC

Ex 1: OS not highlighted inside the CATZOC

Ex 2: TVU Coef b for $O1a=0.013$, and, Coef b for $A1=0.01$!!

- Why is it a problem?

→ misunderstanding between cartographers and surveyors and also Order 2 and above all meet CATZOC A1 requirements!

- Possible solution:

Handshake with S-101 and DQWG



#5 – Grid resolution and bathy surfaces not addressed

- Why is it a problem?

→ Possible problem for object detection if cells too wide (depending on the surveyor's honesty)

- Possible solution:

Handshake with S-102



#6 – Confusion between a-priori TPU and a-posteriori Qualification

- Why is it a problem:

→ A priori TPU is just an indicator and not reflects the real data quality and uncertainty after survey

- Possible solution:

In situ qualifications should be requested in order to check the a-posteriori compliancy of the survey (it doesn't has to be expressed only on Annexe A)



#7 – No mention of Water Column, BackScatter or Extra-detection (or Multiple detection)

- Why is it a problem:

→ Not really a problem because very specific on MBES features BUT could be a way for S-44 to stay current or at the opposite make S-44 quickly redondant

- Possible solution:

Add this functionalities in “3.4 Depth measurement”, “3.5 feature detection”, “4.2 Seabed sampling”

Or stay away from specific technologies of fonctionnalités (should be adresssed to C-13)

Focus should be on minimum depth of obstructions, and not on specific techno.



#8 – Confusion of data attribute in metadata

- Why is it a problem:

→ Time variability of the seafloor not expressed in S-44 but in S-101 (attribute “tmp_var”)

- Possible solution:

Handshake with S101



#9 – Outdated chapters

Ex: “5.3 point data attributions”, “Chapter 6 Elimination of doubtful data”, “Annexe B Quality Management”

- Why is it a problem:

→ Not fully relevant today or can be simplified

- Possible solution:

Need to be reviewed



#10 – Annexes A & B originally destined to be placed in C-13

- Why is it a problem:

→ C-13 out of date, and requires comprehensive review and revision

- Possible solution:

Keep these topics, and review annexes A & B to stay current OR revise when reviewing C-13 at later date



Definition of the International Organization for Standardization:

“An International Standard provides rules, guidelines or characteristics for activities or for their results, aimed at achieving the optimum degree of order in a given context.”





2^d Step :

3 Groups (the same as Step1), one topic: HOW

Table / Matrix / Mixed (3 as to be considered)

Advantages + disadvantages

- One pilot for each group
- Debriefing

3^d Step : Questionnaire (three groups)

- Introduction
- Content
- Distribution (IFHS/professional networks)
- Time schedule

