



12th Meeting of the Hydrographic Services and Standards Committee

Report of the HSPT

Summary of work and changes made

Agenda Item HSSC12-05.6A & HSSC12-05.6B

HSSC-12, IHO Secretariat, Monaco + VTC, 19 – 22 October 2020





IHO

PRINCIPAL ACTIVITIES AND ACHIEVEMENTS

International
Hydrographic
Organization

→ Publication S-44 6th Edition mid-September 2020

Dossiers de l'OHI n° S3/8151 & S3/7198 & S3/3061

LETTRE CIRCULAIRE N° 33
14 septembre 2020


ADOPTION DE L'ÉDITION 6.0.0 de la S-44 – NORMES DE L'OHI POUR LES LEVÉS HYDROGRAPHIQUES, ÉDITION 1.0.0 de la S-67 - GUIDE DU NAVIGATEUR SUR LA PRÉCISION DES INFORMATIONS DE PROFONDEUR CONTENUES DANS LES CARTES ÉLECTRONIQUES DE NAVIGATION (ENC) ET DE L'ÉDITION 2.1.0 DE LA S-49 – GUIDES D'ORGANISATION DU TRAFIC POUR LES NAVIGATEURS

Références :

- A. LC de l'OHI 27/2020 du 15 juillet 2020 – *Demande d'approbation de l'édition 6.0.0 de la S-44 – Normes de l'OHI pour les levés hydrographiques, de l'édition 1.0.0 de la S-67 – Guide du navigateur sur la précision des informations de profondeur contenues dans les cartes électroniques de navigation (ENC) et de l'édition 2.1.0 of S-49 – Guide d'organisation du trafic pour les navigateurs*
- B. Résolution de l'OHI 2/2007 telle qu'amendée – *Principes et procédures pour la modification des normes et des spécifications techniques de l'OHI.*

Madame la Directrice, Monsieur le Directeur,

- La lettre circulaire de l'OHI citée en référence A demandait aux Etats membres d'approuver l'édition 6.0.0 de la norme S-44 - *Normes de l'OHI pour les levés hydrographiques*, l'édition 1.0.0 de la norme S-67 - *Guide du navigateur sur la précision des informations de profondeur contenues dans les cartes électroniques de navigation (ENC)* et l'édition 2.1.0 de la norme S-49 - *Guides d'organisation du trafic pour les navigateurs*, Conformément à la procédure d'élaboration et de mise à jour des normes techniques (cf. référence B).
- Le Secrétariat tient à remercier les 45 membres suivants qui ont répondu à la référence A : Afrique du Sud, Algérie, Allemagne, Arabie Saoudite, Argentine, Australie, Belgique, Brésil, Canada, Chili, Chypre, Croatie, Danemark, Equateur, Espagne, Estonie, Etats-Unis d'Amérique, Finlande, France, Grèce, Inde, Iran (République islamique d'), Islande, Italie, Japon, République de Corée, Malte, Malaisie, Maroc, Maurice, Norvège, Nouvelle-Zélande, Pays-Bas, Pérou, Philippines, Pologne, Portugal, Royaume-Uni de Grande-Bretagne et d'Irlande du Nord, Singapour, Slovénie, Suède, Thaïlande, Tunisie, Ukraine et Uruguay.
- Cinq Etats membres (France, Iran (République islamique d'), Pérou, Philippines et Uruguay) ont formulé des commentaires en complément de leur approbation. Ces commentaires et le résultat de leur examen par les présidents des groupes de travail et des équipes de projet, par le président du HSSC et par le Secrétariat sont présentés à l'annexe A de la présente lettre circulaire.


 L'hydrographie à l'appui
du développement des
technologies autonomes

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S-44 Edition 6.0.0



International Hydrographic Organization
Standards for Hydrographic Surveys




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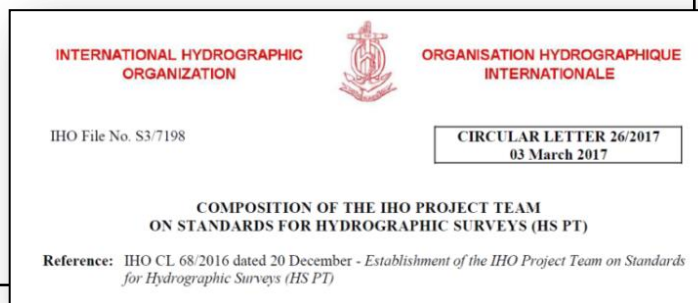
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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS

International Hydrographic Organization

→ 4 structured “pillars” which have supported this editorial work over three years

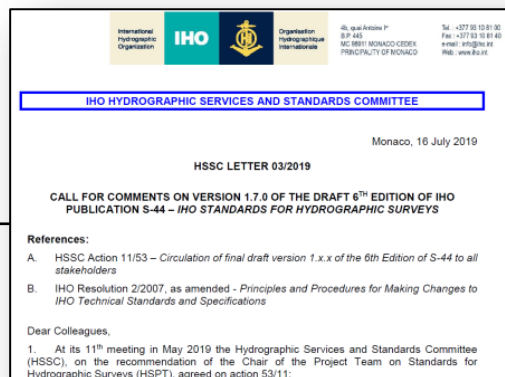
1 – HSPT “terms of reference” and IHO rules



2 – The questionnaire published in 2017, addressed to the hydrographic community



3 – Comments received from IHO stakeholders on the summer 2019 consolidated version



4 – The expertise and work of the HSPT members, especially during the 5 meetings





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→ Pillar 4: The team (Meetings and intersessional works)

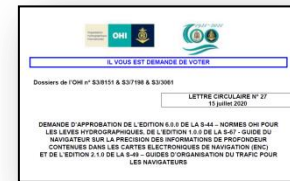


- 20-25 participants at each meeting (≈ the same)
- Mosaic of skills
- Important intersessional work



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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS



→ Timeline

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Sept – Nov 2017
“Questionnaire”



July-Sept. 2019
“call for comments”

May-Jul. 2020
“call for endorsement”

July-Sept. 2020
“Vote”

HSWG ?

March 2017
“Creation”

June 2017
1st Meeting
Paris

July 2018
2^d Meeting
Niteroi

March 2019
3^d Meeting
Woollongon

Dec. 2019
4th Meeting
Monaco

March 2020
5th Meeting
Stockholm

12 Sept. 2020
“Publication”





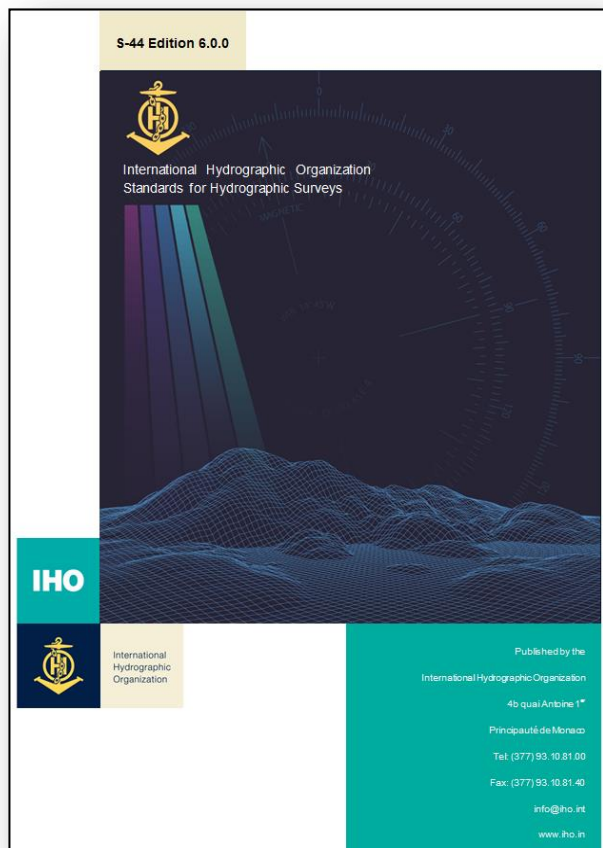
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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS



→ S-44 6th Edition – What's new?

- a new, stricter order has been defined: **the exclusive order**
- the concept of "**bathymetric coverage**" has been introduced
- the **special order** explicitly requires **complete bathymetric coverage**
- the specifications of the orders are divided into two tables: below and above the vertical reference
- Edition 6 wishes to encourage the use of S-44 beyond safety of navigation: the concept of "**matrix of specifications**" has been introduced
- the vocabulary has been revised and aligned with the terms usually used in metrology
- the specifications on positioning of the coastline have been revised and requirements on vertical positioning have been added
- the importance of the epoch of realization of geodetic systems was emphasized
- a chapter dedicated to metadata has been created
- edition 6 is intended to be "technologically and methodologically independent"





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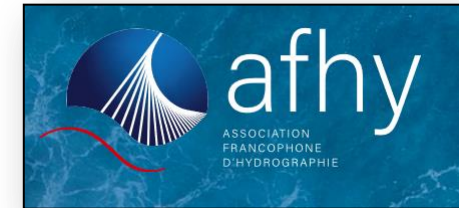
FUTURE WORK PROGRAMME

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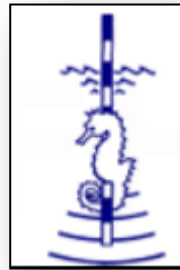
→ Communication/promotion

Ask for all HSPT participants to communicate (or promote) about S-44 Edition6

French Hydrographic Society (AFHY) webinar (mid-November)



IFHS webinar coming soon



Paper for Hydro International on the way





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ACTIONS REQUESTED FROM HSSC

→ Hydrographic Surveys Working Group (HSWG)

The case for the establishment of the Hydrographic Surveys Working Group (HSWG) has been considered by the HSPT and work items have been identified

Considering the IHO Strategic Plan
(see draft 20 July 2019 - *ex: SPI 2.2.2*)

International Hydrographic Organization (IHO) Strategic Plan

for 2021-2026

Draft – 20 July 2019

- Maintain IHO publication S-44
- Update IHO publication C-13 – *IHO Manual on Hydrography*
- Lead the education on the use of S-44
- Lead the translation task for S-44 and C-13
- Maintain close liaison with other HSSC working groups, in particular the work of the Data Quality Working Group (DQWG) and the presentation/visualization of nautical data to the maritime customer
- Identify new systems, technologies and methodologies and exchange experiences, best practice
- Act as a focal point for industry engagement with the IHO.



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ACTIONS REQUESTED FROM HSSC

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→ “Collaborative discussion space” (HSSC12-05.6B)

Promote technical exchange between member states by providing collaborative discussion space

Submitted by:	France (Shom), US (NOAA), UK (UKHO)
Executive Summary:	Build a space for exchange around data processing.
Related Documents:	Circular letter 26/2017 (IHO File No. S3/7198)
Related Projects:	HSCC; capacity building; HSPT.

Extract from (HSSC12-05.6B)

3. This exchange space could be the place where the following topics could be examined (non-exhaustive list identified to date by the SHC, NOAA, UKHO and Shom):

- ❖ Processing (detect and flag systematics errors / detect and flag outliers)
- ❖ Quality control methodologies and tools adapted to bathymetric data (a priori and a posteriori uncertainty)
- ❖ Collection / bathymetric data standards (data archiving standards, common attribution, data sharing/formats)
- ❖ QA, verification, trusted data sources.
- ❖ Processing applications/limitations
- ❖ Common practices that we could adopt
- ❖ Automation (data processing with IA and workflow)
- ❖ VR Surfaces



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ACTIONS REQUESTED FROM HSSC

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International Hydrographic Organization (IHO) Strategic Plan

for 2021-2026

Draft – 20 July 2019

Extract from IHO Strategic Plan

Progress in technology

The pace of technological changes, from sensors to digital services, is increasing, bolstering the need for continuous adaptation of training and standards, thus requiring strong effort from HO in investment and training. This is particularly significant for the automation of sensors carrying devices, and for new processing techniques from the field of artificial intelligence, which make it possible to handle ‘big data’ and augment the capacity of human teams.

→ Future HSWG could be a right place to host this “collaborative discussion space” (supported by HSPT)



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1st meeting of HSSC Project Team on Standards for Hydrographic Surveys (HSPT1) at Palais de la Porte Dorée, Paris, France, 20th to 22nd June 2017



2nd meeting of HSSC Project Team on Standards for Hydrographic Surveys (HSPT2) in Niterói, Brazil, 3rd to 6th July 2018



3rd meeting of HSSC Project Team on Standards for Hydrographic Surveys (HSPT3) in Wollongong, Australia, 12th to 15th March 2019



4th meeting of HSSC Project Team on Standards for Hydrographic Surveys (HSPT4) in Monaco, 3rd to 6th December 2019



5th meeting of HSSC Project Team on Standards for Hydrographic Surveys (HSPT5) in Stockholm, Sweden, 2nd to 6th March 2020

Many thanks to HSPT participants, to their State or Organisation
Thanks to Hydrographic Offices and IHO for hosting meetings
Thanks to IHO and HSSC team for their support and availability