



IHO File No S3/6000

CIRCULAR LETTER 38/2022
21 September 2022

ADOPTION OF AMENDMENTS TO:

- IHO RESOLUTION 7/1919 - *Hydrographic Office Arrangements for the Exchange and Reproduction of Nautical Products***
- IHO RESOLUTION 1/1987 - *IHO Transfer Standard for Digital Hydrographic Data***
- IHO RESOLUTION 1/2007 - *IHO Data Protection Scheme S-63***
- IHO RESOLUTION 2/2012 - *Reaffirmation of the IHO's Commitment to Full ENC Coverage (PRO WENDWG-1)***

Reference:

- A. IHO CL 20/2022 dated 15 June – *Call for approval of amendments to IHO Resolutions 7/1919, 1/1987, 1/2007, and 2/2012.*

Dear Hydrographer,

1. Reference A proposed the adoption of amendments to IHO Resolutions 7/1919, 1/1987, 1/2007, and 2/2012, as endorsed by the IHO Hydrographic Services and Standards Committee (HSSC) in May 2022.
2. The Secretariat of the IHO thanks the 38 Member States that replied to Reference A: Algeria, Australia, Bangladesh, Belgium, Brazil, Canada, Chile, Colombia, Croatia, Cuba, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Indonesia, Iran (Islamic Republic of), Ireland, Italy, Latvia, Lebanon, Malaysia, Netherlands, New Zealand, Norway, Peru, Poland, Portugal, Republic of Korea, Romania, Singapore, South Africa, Sweden, Tunisia, United Kingdom of Great Britain and Northern Ireland, and the United States of America.
3. Thirty-eight Member States supported the adoption of the proposed amendments to the IHO Resolutions 7/1919, 1/1987, 1/2007; thirty-seven Member States supported the adoption of the proposed amendments to the IHO Resolution 2/2012; five Member States offered comments in addition to their vote. These comments and the outcome of their review by the Chair of the HSSC and the IHO Secretariat are provided in Annex A to this Circular Letter.

4. When Reference A was issued, there were 98 Member States of the IHO with three States suspended. In accordance with the provisions of the Convention on the IHO as amended, the minimum number of affirmative votes required was 31. As a result, and taking into account the editorial corrections reported in Annex A, all the amendments to the IHO Resolutions 7/1919, 1/1987, 1/2007, and 2/2012 have been adopted.

5. *Following up* on this adoption,

Noting the way forward agreed by HSSC on the other IHO Resolutions 4/2002, 3/2007, 1/2012, 2/2002, 3/2002, 1/1997, and 1/2018 (Reference A, paragraph 3)¹, and

Considering the additional proposal for a generic IHO Resolution on S-100 Implementation² submitted by the HSSC for the endorsement of the Council before submission for Member States' approval at the 3rd Session of the Assembly (Reference A, paragraph 5),

it is considered that Decision A2/32 and associated actions related to the S-100 concept have now been fully implemented and completed.

IHO Resolution	Title	Way forward / Recommendations
4/2002 as amended	ENC/SENC Distribution Option	Keep the current version as applicable to S-57 ENC and datasets only. Noting the new concepts and definitions ³ introduced in the amendments proposed to MSC.232 (82) ECDIS Performance Standards, suggest to put on hold amendments to this Resolution and consider a new one for S-101 when appropriate.
3/2007	ENC Distribution and Use of the Term ENC	Revision to be considered for S-57 ENCs if appropriate (ENCWG) and supplementary IHO Resolution covering S-101 to be considered when appropriate.
1/2012 as amended	The Importance of Resolving Issues related to the Functioning of the "ECDIS-ENC System"	Revision to be considered in the light of the development of the Dual Fuel Concept on S-100 ECDIS when appropriate.
2/2002 as amended	Printed and Digital Nautical Publications	No amendment required.

¹ Recapped in the following table for ease of convenience.

² Also included in the last row of the table for ease of convenience.

³ Such as Electronic Navigational Data Service (ENDS), System Database.

3/2002 as amended	Nautical Publications and the SOLAS Convention.	Revision to be considered in the light of the S-1xx Implementation Guidelines, once adopted and when appropriate.
1/1997	Principles of the WEND	No further amendment required due to the adoption of distinct WEND-100 Principles (IHO Resolution 1/2021).
1/2018	Elimination of overlapping ENC data in areas of demonstrable risk to the safety of navigation	No further amendment required due to the adoption of distinct WEND-100 Principles (IHO Resolution 1/2021) and development in progress of S-101/S-1xx Scheming and Implementation Guidelines.
xx/2023	S-100 Implementation	Proposal still to be considered at C-6 (Doc. C6-04.1A, Annex A refers)

6. The IHO Resolutions 7/1919, 1/1987, 1/2007, and 2/2012 as amended (See Annexes B to E), will be published in an updated version of Publication M-3 in due course, prior to A-3.

On behalf of the Secretary-General
Yours sincerely,



Abri KAMPFER
Director

- Annex A: Annex A: Member States' responses to IHO CL 20/2022 and comments from the Chair of the HSSC and IHO Secretariat.
- Annex B: Final Amendments to IHO Resolution 7/1919.
- Annex C: Final Amendments to IHO Resolution 1/1987.
- Annex D: Final Amendments to IHO Resolution 1/2007.
- Annex E: Final Amendments to IHO Resolution 2/2012.

**MEMBER STATES' RESPONSES TO IHO CL 20/2022
AND COMMENTS FROM THE CHAIR OF THE HSSC AND THE IHO SECRETARIAT**

ADOPTION OF AMENDMENTS TO:

- IHO RESOLUTION 7/1919 - *Hydrographic Office Arrangements for the Exchange and Reproduction of Nautical Products***
- IHO RESOLUTION 1/1987 - *IHO Transfer Standard for Digital Hydrographic Data***
- IHO RESOLUTION 1/2007 - *IHO Data Protection Scheme S-63***
- IHO RESOLUTION 2/2012 - *Reaffirmation of the IHO's Commitment to Full ENC Coverage (PRO WENDWG-1)***

BRAZIL (Vote = YES for Questions 1 to 3, = NO for Question 4)

Question 4 – IHO Resolution 2/2012

Brazil understands that the commitment of the Hydrographic Services to provide full coverage of the S-100 based products other than the S-101 needs to be further discussed by the IHO. At this time, the Brazilian Hydrographic Office is evaluating the need to produce some "S-100 based products (S-1xx products) to be used for navigation (route monitoring in priority, and route planning)".

Comments by HSSC Chair/IHO Secretariat:

The HSSC Chair/IHO Secretariat thank Brazil for their comments which are acknowledged and noted. Actions are already planned at regional level and some Regional Hydrographic Commissions have created S-1xx Regional WG, nominated S-1xx Regional Coordinators, starting to coordinate the regional implementation of S-100 based product services in order to ensure in medium term a suitable coverage, depending on regional capacity and identified needs. (See WENDWG Letter 02/2022 for instance).

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CANADA (Vote = YES)

Question 4 – IHO Resolution 2/2012

Would it be useful or appropriate to reference the S-100 Implementation Strategy (Roadmap) in this resolution?

Comments by HSSC Chair/IHO Secretariat:

The HSSC Chair/IHO Secretariat thank Canada for their comments and while agreeing on the valuable intention, suggests to keep the amendment to the Resolution as simple as possible in order to avoid several cross-references to other documents and to the S-100 Roadmap in particular (a live document), as this would certainly complicate their proper and formal maintenance throughout the years.

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FRANCE (Vote = YES, subject to the modifications proposed below)
(Original comments in French, tentative translation provided by IHO Secretariat)

Question 3 – IHO Resolution 1/2007

Considering that Part 15 of the S-100 applies equally to the S-100 Product Specification (PS) datasets, to the feature catalogue and to the portrayal catalogue, the latter two are also defined within the PS, it is proposed to replace the term “S-100 series data” with “S-100 based products”. This amendment would also bring consistency with the other amendments submitted in this CL.

IHO DATA PROTECTION SCHEME S-63	1/2007 as amended	IHO CL 38/2022	A3.12
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Proposed version in IHO CL 20/2022

1 It is resolved that the IHO Data Protection Scheme, as described in Publication S-63, is the IHO recommended security scheme for S-57 ENC*s* and the Encryption and Data Protection, as described in Publication S-100, is the IHO recommended security scheme for S-101 ENC*s* including S-100 series data.

2 It is further resolved that the IHO Secretariat will act as Scheme Administrator for S-63 and S-100 series hydrographic data.

Proposed version by France (blue):

1. It is resolved that the IHO Data Protection Scheme, as described in Publication S-63, is the IHO recommended security scheme for S-57 ENC*s* and the Encryption and Data Protection, as described in Publication S-100, is the IHO recommended security scheme for S-101 ENC*s* as well as for other S-100 based products.

2. It is further resolved that the IHO Secretariat will act as Scheme Administrator for S-63 and S-100 based products.

Comments by HSSC Chair/IHO Secretariat:

The HSSC Chair/IHO Secretariat thank France for their comments and agree on these editorial suggestions since this proposed wording is more appropriate and consistent.

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GERMANY (Vote = YES)

Question 2 – IHO Resolution 1/1987

Editorial suggestions.

Proposed version by Germany (blue):

1 It is resolved that the S-57 IHO Transfer Standard for Digital Hydrographic Data including the S-57 based Product Specifications described in S-57 and the S-100 IHO Universal Hydrographic Data Model including the S-100 based Product Specifications shall be adopted by the IHO for the exchange of digital hydrographic and cartographic data.

2 It is further resolved that the IHO Secretariat, through the HSSC (Hydrographic Services and Standards Committee) and the IRCC (Inter-Regional Coordination Committee), keep the contents of the Standards under review in response to changing requirements and practical experience. Changes to the Standards ~~the S-57 Standard are coordinated on behalf of the HSSC by an the ENC Standards Maintenance Working Group (ENCWG), changes to S-100 are coordinated on behalf of the HSSC by the S-100 Working Group (S-100WG), and changes to S-100 series are coordinated on behalf of the HSSC/IRCC by their subordinate Sub-Committees/Working Groups.~~ National Hydrographic Offices which wish to propose changes to the Standards should address their comments to the IHO Secretariat. Other users of the Standards, for example equipment manufacturers, should be advised to address their comments to their national Hydrographic Office.

Comments by HSSC Chair/IHO Secretariat:

The HSSC Chair/IHO Secretariat thank Germany for their valuable comments and agree on these editorial suggestions.

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INDONESIA (Vote = YES)

Question 1 – IHO Resolution 7/1919 -

Approve because in the future the S101 product and the WEND-100 principle must be applied by hydrographic offices.

Question 2 – IHO Resolution 1/1987

Approve because now and in the future apart from S-57, S-100 will be adopted by IHO for the exchange of digital hydrographic and cartographic data. For working groups apart from ENCWG, there is also S-100WG.

Question 3 – IHO Resolution 1/2007

Approve, because in the future the encryption and data protection version of the S-100 is an IHO recommendation for the S-101 security scheme included in the S-101 series.

Question 4 – IHO Resolution 2/2012

Approve, because this resolution applies to ENC (S-57, S-101) and all S-100 based products (S-1xx products) to be used for navigation.

Comments by HSSC Chair/IHO Secretariat:

The HSSC Chair/IHO Secretariat thank Indonesia for their wise and committed comments.

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NETHERLANDS (Vote = YES)

Question 2 – IHO Resolution 1/1987

One editorial comment to first sentence: change "Standard under review" (singular) to "Standards under review" (plural).

Comments by HSSC Chair/IHO Secretariat:

The HSSC Chair/IHO Secretariat thank the Netherlands for their suggestion which is agreed, in addition to amending the further two instances of “Standard” in this paragraph to the plural for consistency, as suggested also by Germany.

Proposed Amendments to IHO Resolution 7/1919

<p>HYDROGRAPHIC OFFICE ARRANGEMENTS FOR THE EXCHANGE AND REPRODUCTION OF NAUTICAL PRODUCTS</p>	<p>7/1919 as amended</p>	<p>IHO CL 38/2022</p>	<p>A3.4</p>
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2 Hydrographic Offices should make use of internationally standardized products such as International (INT) Charts and Electronic Navigational Charts (ENC) of other Hydrographic Offices where these products meet their customers' needs and are kept up-to-date. INT charts should be adopted in accordance with the 'Regulations of the IHO International (INT) Charts'. The use of ENCs (S-57 or S-101) should be governed by the principles of the Worldwide Electronic Navigational Chart Data Base (WEND or WEND-100).

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Proposed Amendments to IHO Resolution 1/1987

IHO TRANSFER STANDARD FOR DIGITAL HYDROGRAPHIC DATA	1/1987 as amended	IHO CL 38/2022	A3.7
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Current version

1 It is resolved that the IHO Transfer Standard described in S-57 shall be adopted by the IHO for the exchange of digital hydrographic and cartographic data.

2 It is further resolved that the IHO Secretariat, through the HSSC (Hydrographic Services and Standards Committee), keep the contents of the Standard under review in response to changing requirements and practical experience. Changes to the Standard are coordinated on behalf of the HSSC by an ENC Standards Maintenance Working Group (ENCWG). National Hydrographic Offices which wish to propose changes to the Standard should address their comments to the IHO Secretariat. Other users of the Standard, for example equipment manufacturers, should be advised to address their comments to their national Hydrographic Office.

Final version

1 It is resolved that the **S-57 IHO Transfer Standard for Digital Hydrographic Data including the S-57 based Product Specifications** described in ~~S-57~~ and the **S-100 IHO Universal Hydrographic Data Model including the S-100 based Product Specifications** shall be adopted by the IHO for the exchange of digital hydrographic and cartographic data.

2 It is further resolved that the IHO Secretariat, through the HSSC (Hydrographic Services and Standards Committee) **and the IRCC (Inter-Regional Coordination Committee)**, keep the contents of the Standards under review in response to changing requirements and practical experience. ~~Changes to the Standards the S-57 Standard are coordinated on behalf of the HSSC by an the ENC Standards Maintenance Working Group (ENCWG), changes to S-100 are coordinated on behalf of the HSSC by the S-100 Working Group (S-100WG), and changes to S-100 series~~ **are coordinated on behalf of the HSSC/IRCC by their subordinate Sub-Committees/Working Groups**. National Hydrographic Offices which wish to propose changes to the Standards should address their comments to the IHO Secretariat. Other users of the Standards, for example equipment manufacturers, should be advised to address their comments to their national Hydrographic Office.

Proposed Amendments to IHO Resolution 1/2007

IHO DATA PROTECTION SCHEME S-63	1/2007 as amended	IHO CL 38/2022	A3.12
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Current version

- 1 It is resolved that the IHO Data Protection Scheme, as described in Publication S-63, is the IHO recommended security scheme for ENC's.
- 2 It is further resolved that the IHO Secretariat will act as Scheme Administrator for S-63.

Final version

1. It is resolved that the IHO Data Protection Scheme, as described in Publication S-63, is the IHO recommended security scheme for S-57 ENC's and the Encryption and Data Protection, as described in Publication S-100, is the IHO recommended security scheme for S-101 ENC's as well as for other S-100 based products.
2. It is further resolved that the IHO Secretariat will act as Scheme Administrator for S-63 and S-100 based products.

REAFFIRMATION OF THE IHO'S COMMITMENT TO FULL ENC AND S-1xx NAVIGATION PRODUCTS COVERAGE (PRO-WENDWG-1)	2/2012 as amended	IHO CL 38/2022	-
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Add an amendment at the end of the current IHO Resolution:

This Resolution applies to ENC's (S-57, S-101) and all S-100 based products (S-1xx products) to be used for navigation (route monitoring in priority, and route planning).