



1. The purpose of WEND is to ensure a world-wide consistent level of high-quality, updated official ENC's through integrated services that support chart carriage requirements of SOLAS Chapter V, and the requirements of the IMO Performance Standards for ECDIS.
2. **Service Provision**
 - a) Member States will strive to ensure that mariners, anywhere in the world, can obtain fully updated ENC's for all shipping routes and ports across the world.
 - b) Member States will strive to ensure that their ENC data are available to users through integrated service³, each accessible to any ECDIS user (i.e., providing data in S-57 form), in addition to any national distribution or system-specific SENC delivery.
 - c) Member States are encouraged to distribute their ENC's through a RENC⁴ in order to share in common experience and reduce expenditure, and to ensure the greatest possible standardization, consistency, reliability and availability of ENC's.
 - d) Member States should strive for harmonization between RENC's in respect of data standards and service practices in order to ensure the provision of integrated ENC services to users.
 - e) Methods to be adopted should ensure that data bear a stamp or seal of approval of the issuing HO.
 - f) When an encryption mechanism is employed to protect data, a failure of contractual obligations by the user should not result in a complete termination of the service. This is to assure that the safety of the vessel is not compromised.
 - g) Member States are to strive for the greatest possible user –friendliness of their ENC services and to facilitate integrated services to the mariner in order to maximise the use of ENC's.

3. Rights and Responsibilities

- a) SOLAS Chapter V, Regulation 9, requires Contracting Governments to ensure that hydrographic data are available in a suitable manner in order to satisfy the needs of safe navigation. The introduction from 2012 of an IMO mandatory carriage requirement for ECDIS imposes a requirement on Contracting Governments to ensure that such data are available in a form suitable for use in ECDIS.
- b) It is expected that Member States will have mature arrangements in place for the issue of ENC's and their subsequent updating for waters of national jurisdiction in order to support the IMO requirement for the mandatory carriage of ECDIS.

³ Integrated services are a variety of end-user services where each service is selling all its ENC data, regardless of source, to the end user within a single service proposition embracing format, data protection scheme and updating mechanism, packaged in a single exchange set.

⁴ RENC's are organisational entities where IHO members have established co-operation amongst each other to guarantee a world-wide consistent level of high quality data, and for bringing about coordinated services with official ENC's and updates to them.

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- c) By the dates established by IMO⁷, Member States will strive to either:
- a. Provide the necessary ENC coverage, or
 - b. Agree with other States to produce the necessary ENC coverage on their behalf.

IHO will address overall coverage on a regional basis through Regional Hydrographic Commissions. Guidelines on the implementation of the WEND Principles are published separately. These should be employed to facilitate the provision of appropriate ENC coverage within a suitable timeframe.

- d) The INT chart system is a useful basis for initial area selection for producing ENCs.
- e) Member States are encouraged to work together on data capture and data management.
- f) Responsibilities for providing digital data outside areas of national jurisdictions must be established (see guidance in Annex).
- g) Technically and economically effective solutions for updating are to be established conforming to the relevant IHO standards. The updating of ENCs should be at least as frequent as that provided by the nation for correction of paper charting.
- h) The Member State responsible for originating the data is also responsible for its validation in terms of content, conformance to standards and consistency across cell boundaries.
- i) A Member State responsible for any subsequent integration of a country’s data into a wider service is responsible for validating the results of that integration.
- j) National HOs providing source data are responsible for advising the issuing HO of update information in a timely manner.
- k) Member States should work together so that the IHO Data Protection Scheme (S-63) is used for ENC distribution to end users, to ensure data integrity, to safeguard national copyright in ENC data, to protect the mariner from falsified products, and to ensure traceability.
- l) In producing ENCs, Member States are to take due account of the rights of the owners of source data and if paper chart coverage has been published by another Member State, the rights of that State.
- m) Member States should recognize their potential exposure to legal liability for ENCs.

⁷ The IMO Sub-Committee on Safety of Navigation, at its 51st Session (NAV 51):

- Agreed to recommend to the IMO Maritime Safety Committee the mandatory carriage requirement of ECDIS for High Speed Craft (HSC) by 1 July 2008.
- Did not decide on a mandatory carriage requirement for other types of ship; this will be considered in conjunction with a Formal Safety Assessment (FSA) to be conducted into the use of ECDIS in ships other than HSC and large passenger ships

Maritime Safety Committee, at its 82nd Session (MSC 82), adopted revisions to the High Speed Craft Codes, making the carriage of ECDIS compulsory for new build craft from 1 July 2008 and for existing craft from 1 July 2010. At the 86th Session (MSC 86 in June 2009), this was extended to a wide range of vessels (including all vessels over 10,000GT) in a rolling programme commencing from July 2012 and running until July 2018.

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4. Standards and Quality Management

- a) A Quality Management System should be considered to assure high quality of ENC services. When implemented, this should be certified by a relevant body as conforming to a suitable recognised standard; typically this will be ISO 9001:2008 (as amended).
- b) There must be conformance with all relevant IHO and IMO standards.

5. Assistance and Training

- a) Member States’ HOs are strongly recommended to provide, upon request, training and advice to HOs that require it to develop their own national ENC provision.

Annex to 1/1997 as amended (K2.19)

Guidance for the Establishment of ENC Production Boundaries

- 1 ENC duplication should be avoided. A single ENC producing country should exist in any given area.
- 2 A country is normally the ENC producing country for waters within its national jurisdiction.
- 3 Responsibility for the production of ENC can be delegated in whole or in part by a country to another country, which then becomes the producing country in the considered area.
- 4 When the limits of waters of national jurisdiction between two neighbouring countries are not established, or it is more convenient to establish boundaries other than established national boundaries, producing countries are to define the boundaries for ENC production within a technical arrangement. These limits would be for cartographic convenience only and shall not be construed as having any significance or status regarding political or other jurisdictional boundaries.
- 5 In international waters, the INT chart producer nation shall be assumed to be the producer of the corresponding ENC. Where the offshore limits of waters under national jurisdiction have not yet been established, clause ‘4’ should apply.
- 6 In areas where the paper INT charts overlap, neighbouring producer nations should agree a common limit of ENC production in the overlapping areas. Cartographic boundaries should be as simple as possible; for example: a succession of straight segments and turning points corresponding to such things as meridians, parallels, or chart limits. Where different producer nations are responsible for INT coverage of the same area at different scales, those nations should agree on a suitable set of boundaries so as to provide the user with the most coherent service possible.
- 7 In areas of national jurisdiction for which there is no recognized ENC producer nation, the Regional Hydrographic Commission (or similar body) should determine the ENC producer nation. ENCs produced under such arrangements should be offered for transfer to the Coastal State in the event that the Coastal State subsequently develops the capacity to maintain the ENCs. Such transfer should respect the moral rights of the Coastal State and the commercial rights of the producer nation.
- 8 When the production limits are the official limits for national jurisdiction waters, commercial rights shall belong to the ENC producing country.
- 9 When the production limits are cartographic boundaries as opposed to national boundaries, the commercial rights shall normally belong to the ENC producing country but may possibly be encumbered by the payment of royalties to the relevant country through a technical arrangement (see clause 4).