



COOPERATION ARRANGEMENT - OPERATING PRINCIPLES AND GOVERNANCE

Version 4.0

Adopted by the ENC Issuing Authorities
that supply their ENC's through IC-ENC

Version	Date	Reason for Change
1.0	December 2003	Original
2.0	November 2012	Amended by IC-ENC Steering Committee 13
3.0	March 2013	Re-written to describe governance and operating principles, following a series of review by Participants at Steering Committee 12 and 13, and via correspondence.
4.0	June 2016	Amended to reflect discussions/decisions at Steering Committee 15 and 16.

CONTENTS

PREAMBLE

COOPERATION ARRANGEMENT - PRINCIPLES OF OPERATION

Section 1	PURPOSE, OBJECTIVES AND SCOPE OF THE PRINCIPLES OF OPERATION
Section 2	TERMS OF REFERENCE FOR THE STEERING COMMITTEE
Section 3	RESPONSIBILITIES OF IC-ENC
Section 4	RESPONSIBILITIES OF PARTICIPANTS
Section 5	RESPONSIBILITIES OF HOST HYDROGRAPHIC OFFICE(S)
Section 6	COSTS OF PARTICIPATION
Section 7	ACCESSION TO THE PRINCIPLES OF OPERATION OF IC-ENC
Section 8	WITHDRAWAL AND TERMINATION

DEFINITIONS

ANNEX A – VALUE ADDED RESELLER ASSESSMENT PANEL TERMS OF REFERENCE

ANNEX B – TECHNICAL WORKING GROUP TERMS OF REFERENCE

ANNEX C – STATEMENT OF INTENT TO JOIN IC-ENC

PREAMBLE

ENC Issuing Authorities that supply their ENC's through IC-ENC agree to follow the terms of this Cooperation Arrangement, hereinafter called the Participants

Noting the obligations placed on Contracting Governments by Chapter V of the SOLAS Convention,

Noting that in order to ensure the greatest level of harmonisation and consistency in the establishment of ENC Services to international shipping, the International Hydrographic Organization (IHO) Member States have agreed the WEND concept and a set of associated WEND Principles;

Having considered that the best way to implement the WEND Principles for their ENC Services is to supply their ENC's officially through a RENC, being IC-ENC,

Noting that IC-ENC Headquarters is hosted by the United Kingdom Hydrographic Office (UKHO), and that IC-ENC Regional Offices are hosted by other National Hydrographic Offices, for and on behalf of the Participants, and is controlled by a Steering Committee;

Have agreed to cooperate as set out in this Cooperation Arrangement - Operating Principles and Governance document.

IC-ENC COOPERATION ARRANGEMENT - OPERATING PRINCIPLES AND GOVERNANCE

Section 1 PURPOSE & OBJECTIVES OF THE COOPERATION ARRANGEMENT

1. The purpose of this document is to continue and strengthen the cooperation of the Participants of the International Centre for Electronic Navigational Charts (IC-ENC).
2. The objective of this document is to describe the principles of operation of IC-ENC (a RENC), which is controlled by a Steering Committee, to:
 - 2.1 Jointly decide methods and policies that enable the Participants to cooperate in coordinating and harmonising the production of their ENC's and ENC updates to ensure the integration, uniformity, timeliness and quality of the data needed to:
 - 2.1.1 Satisfy the requirements of international shipping in the carriage and use of electronic navigational charts that meet the relevant standards of the IMO and the IHO;
 - 2.1.2 Contribute to the safety of navigation, the protection of the environment and the effective operation of maritime activities.
 - 2.2 Oversee and review the operation of IC-ENC.

Section 2 TERMS OF REFERENCE FOR THE STEERING COMMITTEE

Membership

1. The IC-ENC Steering Committee (SC) consists of a representative from each Participant.

Scope

2. The scope of the SC and its Working Groups will include technical and business issues related to the production, validation and distribution of ENC's and ENC updates, and to the operation of IC-ENC.

Tasks

3. The SC will oversee the operation of IC-ENC and provide strategic direction to IC-ENC to ensure that it meets its objectives.
4. The SC shall review and approve the IC-ENC Strategic Plan, Work Plan and budget.
5. The SC will determine solutions on issues related to the harmonisation of ENC production and distribution policies between the Participants, tasking a Technical Working Group to discuss and provide recommendations on technical issues surrounding the content and application of ENC's. The SC will approve the Terms of Reference for the Technical Working Group, included at Annex B.
6. The SC will establish, task and disband, any other subordinate bodies as deemed necessary to accomplish specific tasks or to carry out specific functions.

7. The SC will keep the cost base of IC-ENC under review and arrange audits if any explanations for variance against budget are not satisfactory.
8. The SC will monitor and assess the experiences accruing from operating IC-ENC and employing the WEND Principles as well as other IHO Standards and Regulations.
9. The SC will review progress and identify further opportunity for areas of harmonising ENC technical and distribution arrangements between RENCs.

Administration

10. The SC will elect a Chair and Vice-Chair for a period of two years. More than one Vice Chair may be elected by the SC. IC-ENC will provide the Secretariat for the SC.
11. The SC elects individuals to the Chair and Vice Chair positions, not a Participant.

Meetings

12. The SC will hold a meeting at least once a year, normally around September. Other meetings may be held to consider urgent business at the request of the Chair. Notification of the meeting shall be sent to all Participants not later than 3 months before the date fixed for each meeting. An agenda shall be circulated to all Participants not later than 1 month before the date fixed for each meeting. Business not on the agenda shall only be discussed by special permission of the Chair. Between meetings, business may be continued through correspondence.
13. Representatives from IC-ENC office(s) will attend the SC meetings to report on the operation of IC-ENC.
14. In addition to Participants and representatives from IC-ENC, other individuals or organisation may attend SC meetings. These will either be as Steering Committee Guests, Observers or Expert Contributors (see Definitions section).

Voting and decision making

15. The IC-ENC General Manager (GM) has a defined level of authority, set to balance the practicalities of day-to-day operations with the strategic involvement of the SC, defined as:
 - 15.1 The IC-ENC GM is empowered by the SC to take decisions affecting the day-to-day business operations of IC-ENC, provided this is:
 - Within the strategic direction agreed by the SC (i.e. required to achieve one or more objectives of the IC-ENC Strategic Plan).
 - Each instance does not exceed \$25,000
 - The combined financial impact of these decisions over the FY does not exceed \$125,000
 - 15.2 Where a decision is required on an issue beyond the Strategic Plan, the IC-ENC GM will require approval from the Chair. The Chair is empowered by the SC to authorise GM decisions on extraordinary operational issues, without recourse to the SC, provided the financial impact does not exceed either of the thresholds in section 15.1.
 - 15.3 Decisions taken under 15.1 and 15.2 shall be expressly reported to the SC at the next meeting.

- 15.4** All other decisions shall be returned to the SC. The aim shall be for the SC to reach decisions by consensus, or else be decided by voting.
- 16.** In the event of a vote being required, each Participant will have one vote (see Section 7). Voting can be done at SC meetings, or between meetings via the IC-ENC Circular Letter (CL) system.
- 16.1** At SC meetings, a quorum will exist when a total of at least half of all the Participants are present, or have submitted their opinion to the Chair prior to the meeting, who will represent their views during discussions. The subject must have been referenced in the meeting papers. Voting decisions at SC meetings will be made by a simple majority of votes (whereby the highest number of votes for any one option will be recorded as the agreed decision). If a quorum does not exist, the result of the majority vote at the meeting will form the Chair's recommendation under a vote by IC-ENC CL.
- 16.2** Voting by CL can be conducted following a SC meeting (as above), or at any time between meetings. The CL will contain a recommendation by the Chair, and be sent to all Participants via email. Participants will have two weeks to return their vote to IC-ENC. 'Silence procedure' will be used (no response equates to approval of the recommendation). The decision supported by the majority of Participants will be carried.

Section 3 RESPONSIBILITIES OF IC-ENC

- 1.** IC-ENC is responsible for achieving the Strategic Plan and Work Plan approved by the SC.
- 2.** IC-ENC shall not alter ENC files in any way, and full product responsibility and liability remains with the producing Participant.
- 3.** IC-ENC shall independently validate all ENC base cells and updates using off the shelf and proprietary software, ECDIS systems and manual assessment. Feedback reports will be provided to the producing Participant, focussed on improving the ENC product for the user and using categories previously agreed with the Participant under the IC-ENC Partnership Approach to validation service
- 4.** IC-ENC shall aim to meet the following performance targets between receipt of ENC data and returning of the validation report to the Participant:
 - a. ENC Update files 3 working days
 - b. ENC New Editions 5 working days
 - c. ENC New Cells 10 working days
- 5.** IC-ENC shall supply the ENC files that are ready for release to the network of Value Added Resellers (VARs) on a weekly cycle, who then have 7 days within which to make the new data available to the end users. VARs are significant maritime industry companies, and the VAR appointment process is carried out independently by the IC-ENC VAR Assessment Panel (see Annex A). Once appointed, all VARs are subject to the same contractual terms.

6. ENC files will be available for sale under a consistent set of licensing terms, as agreed by the SC, but with the wholesale price set independently by each Participant (which is valid for one calendar year).
7. IC-ENC will manage the business relationship with the VARs, reporting to the Participants on a quarterly basis the sales volumes, and managing the settlement of royalty payments to the Participants.
8. Transfer of ENC files (unencrypted) between Participant, IC-ENC offices and VARs will be done securely. Only encrypted ENC files will be transferred out from VARs to end-users, using an approved data protection standard (default is IHO S-63).
9. IC-ENC shall work with other RENC organisations with a view to harmonising RENC technical, licensing and distribution arrangements, enhancing the status of ENCs and RENCs within the international Hydrographic community and improving the ENC data quality and services available to the mariner.
10. IC-ENC shall work with IHB, recognised IHO Committees and Working Groups, and Regional Hydrographic Commissions, on technical and strategic issues with a view to enhancing the status of ENCs and RENCs within the international hydrographic community. If expressly authorised to do so by each Participant, IC-ENC will submit those ENCs and/or ENC metadata files (as expressly defined by the Participant) to IHB to populate IHB databases.
11. IC-ENC shall prepare the Strategic Plan, annual Work Plan and annual budget, for approval by the SC.
12. IC-ENC's working language is English, both for written documents and meetings. An IC-ENC Regional Office may use another language for internal/regional co-ordination as required.

Section 4 RESPONSIBILITIES OF PARTICIPANTS

1. Each Participant will supply its official ENCs to IC-ENC, on a non-exclusive basis.
2. Each Participant will maintain its ENC database for navigationally significant changes and supply ENC New Editions (EN) and Update files (ER) to IC-ENC in a timely manner.
3. Each Participant will support the principle of continuous improvement of the ENC database, and;
 - a. Make available appropriate resources to act on the improvement recommendations made in the validation feedback reports
 - b. Actively participate in IC-ENC Quality Improvement initiatives, through meetings, correspondence, data exchange and knowledge sharing with IC-ENC offices and other Participants.
4. The Participant will support in full IC-ENC's mandatory commercial policies as agreed by the SC (e.g. keeping the wholesale price stable for each calendar year), and respond as required with respect to variable policies (e.g. SENC distribution). This does not prevent the Participant providing local ENC services.
5. The Participants will promptly inform IC-ENC Chair and GM of any developments, claims or other important issues concerning their ENCs or IC-ENC.

6. Any disputes regarding the interpretation and implementation of this Cooperation Arrangement will be resolved only by consultation among the Participants.

Section 5 RESPONSIBILITIES OF HOST HYDROGRAPHIC OFFICE(S)

1. The host HO(s) of IC-ENC shall supply the staff required (number and skills) to carry out the activities of IC-ENC as set by the SC, or permit site access and associated related permissions to staff placed on site by IC-ENC.
2. The host HO(s) shall supply suitable office accommodation and IT infrastructure as required for the IC-ENC activities, or permit IC-ENC to operate independent infrastructure on site.
3. The host HO(s) shall maintain clear and separate financial accounting for IC-ENC activities, to allow transparent and auditable IC-ENC budget reporting
4. General support functions shall also be provided to IC-ENC by the host, e.g. Human Resources support, Health and Safety.

Section 6 IC-ENC FINANCIAL ARRANGEMENTS AND COSTS OF PARTICIPATION

1. IC-ENC is a not-for-profit organisation. There are no joining fees or annual standing charges for the Participants. IC-ENC's day to day running costs (including staff, accommodation, Information Technology, training and travel costs as presented in the annual budget to the SC) are initially covered by the host Hydrographic Office and are reimbursed by IC-ENC. Other costs will be considered by the Chair / SC as required.
2. IC-ENC retains a fixed fee for each ENC sold, using this revenue to refund the host's expenditure. The amount of the fixed fee is determined annually by the SC, taking account of the financial position (deficit or surplus), and future forecasted operating costs and revenue.
3. Each Participant will cover its own costs arising from being an IC-ENC Participant, unless otherwise agreed by the SC.
4. Costs incurred by the Chair and Vice-Chair(s) directly under IC-ENC Chair activities will be refunded by IC-ENC.

Section 7 ACCESSION TO THE PRINCIPLES OF OPERATION OF IC-ENC

1. The IC-ENC GM will inform the SC Chair on the signing of a new Statement of Intent to Join (at Annex C) with an ENC Issuing Authority related to the provision of ENCs to IC-ENC. On completion of this signing, the ENC Issuing Authority is deemed to be a Participant of IC-ENC (benefits and restrictions as described in the Statement of Intent), with the expectation of the signing of a Bilateral Arrangement (see Section 7, paragraph 2) in due course.
2. The IC-ENC GM will inform the SC Chair on the signing of a new Bilateral Arrangement with an ENC Issuing Authority related to the provision of ENCs to IC-ENC. On completion of this signing, the ENC Issuing Authority is deemed to be a Participant as described in this document.

Section 8 WITHDRAWAL AND TERMINATION

1. If a Participant becomes unable to fulfil the provisions of the Statement of Intent or Bilateral Arrangement, it will promptly notify the Chair and IC-ENC GM.
2. In the event that a Participant finds it necessary to withdraw from the Bilateral Arrangement, the following procedure will apply:
 - The withdrawing Participant must consult with the Chair and IC-ENC GM about the reasons for and consequences of the withdrawal and the possibility of preventing it, before it presents a formal notice of withdrawal.
 - The formal notice of withdrawal must be given in writing to Chair, and must give a period of notice as defined in the Bilateral Arrangement.
 - The withdrawing Participant will meet in full its commitments up to the effective date of withdrawal.
3. The withdrawing Participant, Chair and IC-ENC GM will jointly decide on the arrangements necessary to effect the dissolution of the activities covered by the Bilateral Arrangement.

DEFINITIONS

Definition of terms used in this Arrangement to ensure a common understanding:

Electronic Chart Display and Information System (ECDIS)

A navigation information system which with adequate back-up arrangements can be accepted as complying with the up-to-date chart required by regulations V/19 and V/27 of the 1974 SOLAS Convention, as amended, by displaying selected information from a System Electronic Navigational Chart (SENC) with positional information from navigation sensors to assist the mariner in route planning and route monitoring, and if required display additional navigation-related information

Electronic Navigational Chart (ENC)

A database, standardised as to content, structure and format, issued for use with ECDIS on the authority of government authorised Hydrographic Offices (HOs). It contains all chart information necessary for safe navigation and may contain supplementary information in addition to that contained in the paper chart (e.g. sailing directions), which may be considered necessary for safe navigation.

ENC Services

The supply of ENCs and ENC updates, issued officially on the authority of the government-authorised Hydrographic Offices (HOs), designed to satisfy the requirements of international shipping in compliance with the relevant IMO resolutions and IHO standards. Such services are made available by Value Added Resellers.

IC-ENC Headquarters

IC-ENC Headquarters provides all four of the core IC-ENC services (ENC Production Support, ENC Validation, ENC Distribution, ENC Revenue Management). In addition, all other IC-ENC business related activities, corporate governance and organisational management are conducted at IC-ENC Headquarters.

IC-ENC Regional Office

IC-ENC aims to provide a worldwide validation service, supported by effective technology, giving a rapid response and maximum availability. This is achieved via a limited number of IC-ENC Regional Offices making use of time-zone differences to give a long international working day/week, supplemented by automated and responsive technology. IC-ENC Regional Offices deliver two of the four core IC-ENC services (ENC Production Support, ENC Validation).

IMO SOLAS Convention

International Convention for the Safety of Life at Sea developed by the IMO. The contracting governments undertake to promulgate all laws, decrees, orders and regulations and to take all other steps which may be necessary to give the present Convention full and complete effect, so as to ensure that, from the point of view of safety of life, a ship is fit for the service for which it is intended.

IMO Performance Standards for ECDIS

Minimum performance requirements for ECDIS, adopted by IMO 23 November 1995 as Assembly Resolution and published as Annex to IMO Resolution A817(19) (15 December 1995 and its later amendments).

International Hydrographic Organization (IHO)

Inter-governmental organisation with the object of:

- Coordinating the activities of the national HOs,
- Achieving the greatest possible uniformity in nautical charts and documents,
- Adopting reliable and efficient methods of carrying out and exploiting hydrographic surveys,
- Developing the sciences in the field of hydrography and the techniques employed in descriptive oceanography.

Its International Convention entered into force in 1970. It has a secretariat, the International Hydrographic Bureau (IHB), located in Monaco.

International Maritime Organization (IMO)

The specialised organisation of the United Nations responsible among others to provide machinery for cooperation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade, and to encourage the general adoption of the highest practicable standards in matters concerning maritime safety and efficiency of navigation.

Issuing Authority

The official agency which issues the ENC's and ENC updates validated to comply with the relevant standards and quality requirements. For IC-ENC, this is usually a National Hydrographic Office, but in some cases will be other organisations.

Participants

ENC Issuing Authorities that supply their ENC's through IC-ENC.

Regional Electronic Navigational Chart Coordinating Centre (RENC)

A RENC is an organisation, conceptualised in the Worldwide Electronic Navigational Chart Database (WEND) principles of the IHO, through which IHO members can co-operate to resolve overlaps and gaps in coverage, ensure compliance with S57 and S63 encoding standards, provide a world-wide consistent level of high quality data and support the provision of co-ordinated end-user services for official ENC's.

The IHO WEND principles encourage Member States to distribute their ENC's through a RENC in order to share in common experience and reduce expenditure, and to ensure the greatest possible standardization, consistency, reliability and availability of ENC's

Steering Committee Expert Contributor

An individual or organisation invited to attend part of a single SC meeting to provide expert contribution on a specific agenda item. Invitation issued at discretion of Chair.

Steering Committee Guest

An individual or organisation invited to attend a single SC meeting (all or part), invitation issued at the discretion of Chair. For example, an ENC Issuing Authority considering joining IC-ENC.

Steering Committee Observer

An individual or organisation invited to attend SC meetings. The SC is required to approve the status of Observer, and this status is continuing until revoked. Granting Observer status to an individual or organisation will be for reasons that align with the IC-ENC Strategic Plan.

Value Added Reseller (VAR)

An organisation that markets and distributes services which include the ENC's supplied by IC-ENC, and which are designed in such a way that they add overall value for the user, for example by bundling complementary navigational products together within a single and tailored licensing structure.

WEND (Worldwide Electronic Navigational Chart Data Base)

The concept of a common, worldwide database of ENC's, produced to IHO standards, designed specifically to meet the needs of international maritime traffic using ECDIS which conform to the IMO Performance Standards for ECDIS.

ANNEX A – VALUE ADDED RESELLER ASSESSMENT PANEL TERMS OF REFERENCE

1. Overall Aim

The Value Added Reseller Assessment Panel (VAP) is established by the Steering Committee and managed by IC-ENC to provide an independent assessment function of companies applying to be appointed IC-ENC Value Added Resellers (VARs)

2. Objectives / Tasks

- 1) To contribute to the process of assessing VAR applications, by:
 - i. Having available three independent assessors who have the necessary expertise and knowledge to perform VAR assessments, and who are anonymous to the VAR applicants, known as the VAR Assessment Panel (VAP)
 - ii. Conducting assessments of VAR applications independently from the IC-ENC and any host HO, and in accordance with the standard VAR assessment procedures.

3. Composition / Responsibilities

1. VAP membership shall be open to representatives from all Participants. However, given the specialist commercial skills required to perform a VAR application assessment, IC-ENC will select the three most suitable representatives on a case-by-case basis for each VAR application assessment.
2. The VAP shall meet as necessary, and work via correspondence, to fulfil its objectives and tasks.
3. Travel and subsistence expenses incurred by participants attending VAP meetings (in the unlikely event one is needed) shall be met by the central IC-ENC budget.
4. VAP participants are aware that there is a commitment required for VAP activities. Normally this will be not more than two working days per annum, via correspondence and/or meetings.

ANNEX B – TECHNICAL WORKING GROUP TERMS OF REFERENCE

1. Overall Aim

The TEWG is established by the Steering Committee of the International Centre for ENC's (IC-ENC) to provide advice and support to the Steering Committee on technical issues regarding the creation, content, quality control and application of the ENC data produced by the IC-ENC Participants, with the ultimate aim of achieving greater consistency in the quality and content of ENC's.

2. Objectives / Tasks

1. To discuss technical topics of mutual interest and to exchange views on any relevant ENC-related issues.
2. To strengthen and enhance the multi-lateral cooperation of the participants to the mutual benefit of all.
3. To enable Participants to advise IC-ENC of any problems and recommendations for improvements in the technical aspects of the running/operation of the RENC.
4. To enable IC-ENC to inform Participants of production and development work being progressed by IC-ENC.
5. To work towards greater consistency in the quality and content of ENC's produced by the Participants.
6. To work towards obtaining improvements in the quality and scope of the ENC validation software.
7. To help to formulate, as required, combined input to relevant IHO Working Groups.
8. To promote and support the development of ENC related standards and publications.
9. To establish and improve technical cooperation among all RENC's.
10. To alert the Steering Committee to any technical topic that needs its attention or approval.
11. To undertake any specific tasks requested by the Steering Committee.

3. Composition / Responsibilities

1. The TEWG shall comprise representatives from each of the Participants.
2. Representatives of other HOs, RENC's or Industry may be invited to attend meetings as observers.
3. The TEWG shall meet at as required (locations and dates to be arranged). Between meetings, business shall be conducted by email exchanges.
4. IC-ENC shall provide a Chairman for the Group.
5. IC-ENC shall provide a Secretary for the Group, whose responsibility will be to produce and distribute all documentation relating to the meetings in a timely manner.

ANNEX C – STATEMENT OF INTENT TO JOIN IC-ENC

STATEMENT OF INTENT CONCERNING COOPERATION BETWEEN

THE ORGANISATION NAME AND THE INTERNATIONAL CENTRE FOR ENCs

The International Centre for ENCs (IC-ENC) is a Regional ENC Coordinating Centre (RENC), an organisation through which national Hydrographic Offices work together to ensure a high quality and consistent international ENC dataset.

The *Organisation Name (Organisation Initials)* has the responsibility and obligation to produce official ENCs.

The (*Organisation Initials*) and the IC-ENC agree to cooperate on the production, validation and distribution of (*Organisation Initials*)'s ENCs.

This Statement of Intent recognizes that (*Organisation Initials*) has begun the process to become a member of IC-ENC, via a Bilateral Arrangement.

Whilst the bilateral arrangement process is in progress, this Statement of Intent means that IC-ENC will provide *Organisation Initials* with:

- Support and advice on the production of ENC's, including full access to the IC-ENC Errors Database
- An independent ENC validation service
- A route to market for its ENCs
- Sales reporting and financial settlements to *Organisation Initials* (where appropriate)

During this period, *Organisation Initials* will:

- Supply its ENCs to IC-ENC; this is on a non-exclusive basis, and so does NOT prevent *Organisation Initials* from supplying its ENCs to other governmental or commercial organizations, to other RENCs, or to ENC users.
- Accept IC-ENC's core commercial and technical policies
- Be invited to participate in the IC-ENC technical working groups
- Be invited to participate in the IC-ENC Steering Committee, via observation and contribution to discussion. The aim of the Steering Committee is to reach a consensus, but in the event of a vote, only those members who are full Participants through a Bilateral Arrangement will cast a vote.

This Statement of Intent does not represent a legally binding commitment under international or national law.

In the event that *Organisation Initials* decides to terminate cooperation with IC-ENC, *Organisation Initials* and IC-ENC will work together to ensure that all existing users of *Organisation Initials* 's ENCs are not disadvantaged.

Signed by:

.....
IC-ENC General Manager

.....
Head of...,
Organisation Name

Date.....

Date.....