

PART C

GUIDANCE FOR THE PREPARATION AND MAINTENANCE OF ELECTRONIC NAVIGATIONAL DATA SERVICES (other than S-101ENC) Edition 1.0.0 – month 20yy

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PREFACE

1. The International Hydrographic Organization (IHO) was formed in 1921 as the result of a desire for greater standardization of nautical charts and associated publications and consequently for greater safety of mariners. It was felt that this standardization could be achieved in such a way that language and symbol differences would be minimized and that a chart produced by one country would be perfectly comprehensible to a navigator from another country.

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PART C: SECTION 100 GENERAL GUIDANCE FOR ELECTRONIC NAVIGATIONAL DATA SERVICES PROVISION (other than S-101 ENC)

1. INTRODUCTION

- 1.1. Xxxxx
- 1.2. Xxxxx
- 1.3. Xxxxx

2. OBJECTIVE AND CONCEPT

- 2.1. Xxxxx
- 2.2. Xxxxx
- 2.3. Xxxxx

3. PROCEDURE

- 3.1. Port Selection
- 3.2. Shipping Routes
- 3.3. Comparison of Catalogues
- 3.4. Scale
- 3.5. Geodetic Datum and Projections
- 3.6. Dimensions
- 3.7. Limits and Overlaps
- 3.8. Draft Schemes
- 3.9. Consultation
- 3.10. Allocation of Producers
- 3.11. Review
- 3.12. Maintenance
- 3.13. Monitoring

PART C: SECTION 200 GUIDANCE FOR S-102 (BATHYMETRIC SURFACE) DATA PROVISION

1. INTRODUCTION

2. OBJECTIVE AND CONCEPT

3. PROCEDURE

PART C: SECTION 300 GUIDANCE FOR S-104 (Water Level Information for Surface Navigation) DATA PROVISION

- 1. INTRODUCTION**
- 2. OBJECTIVE AND CONCEPT**
- 3. PROCEDURE**

PART C: SECTION 400 GUIDANCE FOR S-111 (Surface Currents) DATA PROVISION

- 1. INTRODUCTION**
- 2. OBJECTIVE AND CONCEPT**
- 3. PROCEDURE**

PART C: SECTION 500 GUIDANCE FOR S-124 (Navigational Warnings) DATA PROVISION

- 1. INTRODUCTION**
- 2. OBJECTIVE AND CONCEPT**
- 3. PROCEDURE**

PART C: SECTION 600 GUIDANCE FOR S-129 (Underkeel Clearance Management) DATA PROVISION

- 1. INTRODUCTION**
- 2. OBJECTIVE AND CONCEPT**
- 3. PROCEDURE**

ANNEX I

TERMS OF REFERENCE FOR INTERNATIONAL CHARTING COORDINATION WORKING GROUPS (ICCWG) (formerly known as Regional Charting Groups)

Introduction

The activity of coordinating International nautical chart production is long-established in certain regions.

Where established, these coordinating bodies operate under the direction of the relevant Regional Hydrographic Commission (RHC).

In September 2008 the 11th meeting of the IHO WEND Committee agreed '*RHCs and INT Chart coordinators to coordinate the development of small/medium scale ENC schemes*'. In October 2009 the first meeting of the IHO Hydrographic Services and Standards Committee took this initiative forward by recommending:

- . to update and standardize the title for chart coordinating bodies from Regional Charting Group to International Charting Coordination Working Group (ICCWG); and
- . to make available recommended Terms of Reference and Rules of Procedure for existing or new ICCWG to act as a template in order to unify objectives and practices, and to support coordinators. Recommended Terms of Reference and Rules of Procedure for existing or new ICCWG are set out below. The directing RHC may apply, clarify or amend these as appropriate, taking into account the particular regional circumstances.

TERMS OF REFERENCE AND RULES OF PROCEDURE FOR THE *[insert REGION name]*
INTERNATIONAL CHARTING COORDINATION WORKING GROUP (*[REGION name]*
ICCWG)

1. Background

1.1 The *[Region name]* Hydrographic Commission recognizes the need to actively develop and maintain official nautical charts, in both paper and digital formats, that support ships engaged on international voyages in its region. Accordingly, it appoints and directs a working group to undertake this task. The working group shall be named the *[Region]* International Charting Coordination Working Group (ICCWG).

[The Working Group's name is to appropriately reflect the designated area of responsibility and region, as described in S-11.]

1.2 The ICCWG is a subsidiary body of the *[Region name]* Hydrographic Commission. It shall conduct its work in accordance with these Terms of Reference and Rules of Procedure. The *[Region]* Hydrographic Commission may clarify or amend these generic Terms of Reference and Rules of Procedure for the ICCWG in order for these to be made specifically relevant and applicable to its region.

Its work is subject to the Hydrographic Commission's approval.

2. Terms of Reference

2.1 To study issues related to nautical charting of the region, in particular to coordinate the allocation of production responsibilities for paper and electronic charts (INT charts and ENC), that support ships engaged on international voyages.

2.2 To develop and maintain an integrated international chart scheme for the region.

2.3 To reach decisions on the maintenance and updating of the documents for which it is responsible.

2.4 To provide advice on chart schemes to individual Member States, in order to encourage adherence to IHO charting regulations, specifications and standards, and to promote and coordinate the production of international (INT) charts and ENC.

2.5 To develop proposals for new or amended INT chart schemes to meet evolving user needs (for example, the introduction of new or amended routing measures, the confirmed developments of international ports).

2.6 To coordinate the development and maintenance of ENC schemes, by regional agreement, to ensure consistent parameters are used in the compilation of ENC.

2.7 To act as the custodian and maintainer of official, version-controlled catalogues, depicting the status of published and planned charts, subject to formal review and approval by Member States of the *[Region]* Hydrographic Commission. However, the ENC catalogues may be maintained by RENCs subject to *[Region]* Hydrographic Commission's approval.

2.8 To provide advice to the IHO Secretariat on any amendments required to maintain S-11 Part B: International Chart Web Catalogue (for example, scale, limits, numbering) and, as appropriate, any corresponding ENC catalogue.

2.9 To provide advice to Chair NCWG and IHO Secretariat on any amendments required to maintain S-11.

2.10 To undertake professional consideration of new information of interest to the ICCWG which may impact its business and responsibilities.

3. Rules of Procedure

3.1 Membership is open to all members and associate members (Member States) of the [Region] Hydrographic Commission wishing to be represented. Each Member State shall be represented through a single point of contact. Noting the technical nature of the Group's work, participation should be limited to representatives of Hydrographic Offices concerned with nautical charting.

3.2 The Coordinator will monitor membership to encourage active participation by all chart-producing Member States within the Region.

3.3 Non-Governmental International Organizations recognized by the IHO may participate as observers in ICCWG activities, where matters of special interest to the NGIO concerned are being considered (IHO Resolution 5/1957 as amended, rule 6.c refers).

3.4 The Coordinator role shall be held by a Member State participating in the ICCWG. The election of the Coordinator, or the reconfirmation of the existing Coordinator, shall be decided by the [Region] Hydrographic Commission at an ordinary meeting or, where a meeting is not convened, by

correspondence. Election shall be determined by a simple majority of Member States present and voting (or responding, where determined by correspondence).

3.5 Normally, a Vice-Coordinator is not required to be appointed. However, if a Vice-Coordinator is appointed by the [Region] Hydrographic Commission:

- Election to the post will be by the same method as for the Coordinator;
- The Vice-Coordinator shall act as the Coordinator, with the same powers and duties, in the event that the Coordinator is unable to carry out the duties;
- The Coordinator and Vice-Coordinator will decide between them the organization of the work entailed in these posts, or these may be defined by the [Region] Hydrographic Commission.

3.6 Conduct of business will be primarily by correspondence. If meetings are required, these should be planned with due regard to efficiency and obtaining the fullest membership support (for example, by holding meetings in association with meetings of the [Region] Hydrographic Commission). All members shall inform the Coordinator in advance of their intention to attend meetings of the ICCWG. The working language shall be English.

3.7 Draft proposals will be circulated for review and comment to:

- All members of the ICCWG and, where appropriate, all members of the [Region] Hydrographic Commission;
- Coordinators of adjoining regional ICCWG, if the scheme impacts on those regions (for example, to ensure consistency and coherence of coverage across regional boundaries, for the allocation of chart numbers);
- Hydrographic Offices producing or printing charts of the Region;

- Chair NCWG, if independent advice is required.

3.8 Decisions shall be made by consensus.

3.9 Where required, a Work Plan should be developed and maintained. This should include task priorities and the expected time frames for progressing tasks. The [Region] Hydrographic Commission may delegate tasks to the ICCWG as it sees fit; it is also available to provide guidance on request (for example, in respect of priorities).

3.10 The Coordinator will report progress to meetings of the [Region] Hydrographic Commission and at other reasonable times, on request. Reports shall include but are not limited to:

- An updated Regional INT Chart Catalogue;
- An update of the ENC Catalogue relevant to the Region (if not undertaken by RENCs);
- Changes made to the scheme of INT Charts for the Region, approved by the ICCWG since the last report, together with a summary of reasons;
- Changes made to the small / medium scale ENC scheme for the Region, approved by the ICCWG since the last report, together with a summary of reasons;
- An updated Work Plan (if used).

3.11 All participants, including [Region] Hydrographic Commission members and associate members where not directly represented in the ICCWG, shall keep the Coordinator informed of any information relevant to the ICCWG. This may include:

- Submitting proposals for new INT Charts, or amendments (for example, to limits, scale of portrayal) to existing INT Charts, in the Region;
- Requesting new INT Chart numbers for new charts that are planned;
- Reporting the status of production of international charts (INT Charts and ENC).

3.12 ICCWG members shall respond in a timely manner to all reasonable requests for advice from the Coordinator (for example, requests for updating the Catalogue of the INT Charts of the Region, change in points of contact), abiding by all reasonable stated deadlines.

3.13 The work shall be done in accordance with:

- IHO Resolution 1/1997 as amended: 'Principles of the Worldwide Electronic Navigational Chart Database (WEND)', to ensure a world-wide consistent level of high-quality, updated ENCs;
- S-57: 'IHO Transfer Standard for Digital Hydrographic Data';
- S-11 Part A: 'Guidance for the Preparation and Maintenance of International (INT) Charts and ENC Schemes';
- S-4: 'Chart Specifications of the IHO and Regulations for International (INT) Charts', which provides the internationally-agreed product specification for both national and international (INT) charts;
- S-65 : 'Electronic Navigational Charts (ENCs) "Production, Maintenance and Distribution Guidance"'.

DATA FLOW DIAGRAM

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FAQ SECTION

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