ARHC9-C2

**Arctic Regional Hydrographic Commission (ARHC)**

**Murmansk, Russian Federation 17-19 September 2019**

**Report of the Arctic International Charting Coordination Working Group (AICCWG)**

**Submitted by**: Edward Hands Chair of AICCWG, Norway.

**Related documents**:

- Minutes of ARHC8, September 2018

- Revised ToR for AICCWG

**Background**

The AICCWG was established at the ARHC meeting in Tromsø, Norway, October 2012. Mr. Edward Hands of The Norwegian Hydrographic Service has acted as Chairman of AICCWG since May 2017.

The AICCWG consists of the following representatives:

* Norway: Edward Hands Edward.hands@kartverket.no
* Canada: Laura Colombe Laura.Colombe@dfo-mpo.qv.ca
* Denmark: Elizabeth Helen Hahessy elihh@gst.dk
* United States: Drusilla Morgan (NGA) Drusilla.A.Morgan@nga.mil

 Colby Harmon (NOAA) colby.harmon@noaa.gov

* Russian Federation: Sergey Egorov esv12@ramler.ru

There have been no physical meetings of the members for several years as all matters have been dealt with through correspondence. The chair has performed the role of coordinator.

**Updated Terms of Reference (ToR) for AICCWG**

At the 8th meeting of ARHC in September 2018 it was acknowledged that there is very limited INT chart coverage in Region N, with only Norway producing official INT charts. Following discussions it was decided that the terms of reference for the working group should be amended, reducing the emphasis of INT chart coordination and broadening the remit to include the provision of other hydrographic services.

The ToR for AICCWG were revised to reflect Action ARHC8-04 and a draft version was circulated to AICCWG member and endorsed. The draft ToR are given in Annex A and B of this report and are submitted for approval by ARHC.

**INT Chart Status**

The INT chart portfolio for Region N consists of nine charts, all of which are produced by Norway. It is acknowledged that there is limited scope to develop INT chart coverage in the region. It was agreed at ARHC 8 Conference in September 2018 that attention should be directed towards developing ENC schemes and other hydrographic services such as S-100 products in the region. These changes are reflected in the proposed revisions to the ToR for AICCWG.

**ENC Status**

All nominated representatives of AICCWG were asked to provide status updates and plans relating to ENC production in their respective hydrographic offices. The responses are summarised here:

Norway:

Three new ENCs have been produced for Svalbard:

* NO3C5036
* NO4D4933
* NO4D5036

In addition, the coverage has been extended in three usage band 3 ENCs based on paper chart 537 (Hinlopenstretet N. Fosterøyane – Norporten):

* NO3C5028
* NO3C4836
* NO3C4828

Canada: ENC CA373464 - Spence Bay was released November 2018.

United States:

The extents of all NOAA ENC charts are being reschemed into a gridded layout to replace the existing layout based on the irregular shapes of the paper charts.

Two new ENCs in usage band 2 have already been produced:

* US2ARCGD
* US2ARCHD

A planned scheme for all other charts in usage bands 2 through 5 is proposed and the process of producing the new ENCs is gaining momentum. Although there is no firm schedule for completion of the project it is expected that, the area around the Alaskan North Slope will be one of the first to be completed.

**ENC Coverage Issues**

The ARHC representative to WEND submitted a report to WENDWG9, which provided a full description of the status of the ENC scheme in the region with details of the overlap issues present.

Significant progress has been made in eliminating gaps and overlaps in ENC coverage with work complete on all but three overlapping issues, all of which are assessed as low risk.

**INToGIS**

The AICCWG coordinator has been involved in the testing of INToGIS II ahead of its release. Many improvements have been made and the improved functionality will greatly improve the ability to monitor ENC Schemes in the region. Once commissioned it is believed that INToGIS will be an incredible useful tool

A workshop aimed at demonstrating the new functionalities of INToGIS II and the management procedures is proposed for later this year and the AICCWG coordinator will attend this event.

**The ARHC is invited to**:
1. Note the report

2. Approve the draft Terms of Reference and Rules of Procedure for the Arctic International Charting Coordination Working Group (AICCWG) shown in Annex A and B

3. Encourage AICCWG representatives to keep the charting coordinator updated with status, plans and proposals for charting in the region.

Annex:

1. Draft Terms of Reference and Rules of Procedure for the Arctic International Charting Coordination Working Group (Redline version)
2. Draft Terms of Reference and Rules of Procedure for the Arctic International Charting Coordination Working Group (Clean version)

ANNEX A

**TERMS OF REFERENCE AND RULES OF PROCEDURE**

**For the**

**ARCTIC INTERNATIONAL CHARTING COORDINATION**

**WORKING GROUP (AICCWG)**

(Version 1.2, September 2019)

References: 1. ARHC-3 Conference (Tromsø, Norway, October 2012).

 2. Editorial corrections (January 2018)

 3. ARHC-8 Conference (Action ARHC8/04)

**1. Background**

1. The Arctic Regional Hydrographic Commission recognizes the need to actively develop and maintain hydrographic services[[1]](#footnote-1) including official nautical charts in particular~~, 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 Arctic International Charting Coordination Working Group[[2]](#footnote-2) (AICCWG).
2. The AICCWG is a subsidiary body of the Arctic Regional Hydrographic Commission. It shall conduct its work in accordance with these Terms of Reference and Rules of Procedure. Its work is subject to the Hydrographic Commission’s approval.

**2. Terms of Reference**

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) and other hydrographic services (including S-100 based products, the provision of nautical information, and surveys), that support ships engaged on international voyages.
2. To develop and maintain an integrated international chart scheme for the region.
3. To reach decisions on the maintenance and updating of the documents and products for which it is responsible.
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 ENCs and international (INT) charts where appropriate.
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).~~  To coordinate the development of additional hydrographic services that support navigation in the region.
6. To coordinate the development and maintenance of small / medium scale ENC schemes, by regional agreement, to ensure consistent parameters are used in the compilation of ENC.
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 Arctic Regional Hydrographic Commission.
8. To provide advice to IHO Secretariat on any amendments required to maintain S-11 Part B: Catalogue of ENCs and International Charts (for example, scale, limits, numbering) ~~and~~, as appropriate, ~~any corresponding ENC catalogue~~.
9. To provide advice to the Chair of NCWG and IHO Secretariat on any amendments required to maintain S-11 Part A ‘Guidance for the Preparation and Maintenance of International (INT) Chart and ENC Schemes.
10. To undertake professional consideration of new information of interest to the AICCWG which may impact its business and responsibilities.

**3. Rules of Procedure**

1. Membership is open to all members and associate members (Member States) of the Arctic Regional 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.
2. The Coordinator will monitor membership to encourage active participation by all Member States within the Region.
3. Non-Governmental International Organizations recognized by the IHO may participate as observers in AICCWG activities, where matters of special interest to the NGIO concerned are being considered (IHO Resolution 5/1957 as amended, rule 6.c refers).
4. The Coordinator role shall be held by a Member State participating in the AICCWG. The election of the Coordinator, or the reconfirmation of the existing Coordinator, shall be decided by the Arctic Regional 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).

Normally, a Vice-Coordinator is not required to be appointed. However, if a Vice-Coordinator is appointed by the Arctic Regional 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.
1. 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 Regional Hydrographic Commission). All members shall inform the Coordinator in advance of their intention to attend meetings of the AICCWG. The working language shall be English.
2. Draft proposals will be circulated for review and comment to:
* All members of the AICCWG and, where appropriate, all members of the Regional 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 of NCWG of IHO Secretariat, if independent advice is required.
1. Decisions shall be made by consensus.
2. Where required, a Work Plan should be developed and maintained. This should include task priorities and the expected time frames for progressing tasks. The Arctic Regional Hydrographic Commission may delegate tasks to the AICCWG as it sees fit; it is also available to provide guidance on request (for example, in respect of priorities).
3. The Coordinator will report progress to meetings of the Arctic Regional 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;
* Changes made to the scheme of INT Charts for the Region, approved by the AICCWG 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 AICCWG since the last report, together with a summary of reasons;
* An updated Work Plan (if used).
1. All participants, including Arctic Regional Hydrographic Commission members and associate members where not directly represented in the AICCWG, shall keep the Coordinator informed of any information relevant to the AICCWG. This may include:
* Submitting proposals through the INT Chart Web Catalogue (INToGIS) 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).
1. AICCWG 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.
2. 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) Chart 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.
* IHO Publication S-65: ‘Electronic Navigational Charts (ENC’s) “Production, maintenance and Distribution Guidance”.

ANNEX B

**DRAFT TERMS OF REFERENCE AND RULES OF PROCEDURE**

**For the**

**ARCTIC INTERNATIONAL CHARTING COORDINATION**

**WORKING GROUP (AICCWG)**

(Version 1.2, September 2019)

References: 1. ARHC-3 Conference (Tromsø, Norway, October 2012).

 2. Editorial corrections (January 2018)

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**1. Background**

1. The Arctic Regional Hydrographic Commission recognizes the need to actively develop and maintain hydrographic services[[3]](#footnote-3) including official nautical charts in particular 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 Arctic International Charting Coordination Working Group[[4]](#footnote-4) (AICCWG).
2. The AICCWG is a subsidiary body of the Arctic Regional Hydrographic Commission. It shall conduct its work in accordance with these Terms of Reference and Rules of Procedure. Its work is subject to the Hydrographic Commission’s approval.

**2. Terms of Reference**

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) and other hydrographic services (including S-100 based products, the provision of nautical information, and surveys), that support ships engaged on international voyages.
2. To develop and maintain an integrated international chart scheme for the region.
3. To reach decisions on the maintenance and updating of the documents and products for which it is responsible.
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 ENCs and international (INT) charts where appropriate.
5. To coordinate the development of additional hydrographic services that support navigation in the region.
6. To coordinate the development and maintenance of small / medium scale ENC schemes, by regional agreement, to ensure consistent parameters are used in the compilation of ENC.
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 Arctic Regional Hydrographic Commission.
8. To provide advice to IHO Secretariat on any amendments required to maintain S-11 Part B: Catalogue of ENCs and International Charts (for example, scale, limits, numbering), as appropriate.
9. To provide advice to the Chair of NCWG and IHO Secretariat on any amendments required to maintain S-11 Part A ‘Guidance for the Preparation and Maintenance of International (INT) Chart and ENC Schemes.
10. To undertake professional consideration of new information of interest to the AICCWG which may impact its business and responsibilities.

**3. Rules of Procedure**

1. Membership is open to all members and associate members (Member States) of the Arctic Regional 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.
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4. The Coordinator role shall be held by a Member State participating in the AICCWG. The election of the Coordinator, or the reconfirmation of the existing Coordinator, shall be decided by the Arctic Regional 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).

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* 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.
1. 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 Regional Hydrographic Commission). All members shall inform the Coordinator in advance of their intention to attend meetings of the AICCWG. The working language shall be English.
2. Draft proposals will be circulated for review and comment to:
* All members of the AICCWG and, where appropriate, all members of the Regional Hydrographic Commission;
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* 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.
* IHO Publication S-65: ‘Electronic Navigational Charts (ENC’s) “Production, maintenance and Distribution Guidance”.
1. See definition in SOLAS, Chapter V, Regulation 9. [↑](#footnote-ref-1)
2. See generic ICCWG TORs in Annex I of S-11 Part A. [↑](#footnote-ref-2)
3. See definition in SOLAS, Chapter V, Regulation 9. [↑](#footnote-ref-3)
4. See generic ICCWG TORs in Annex I of S-11 Part A. [↑](#footnote-ref-4)