Paper for Consideration by the IRCC

Revised Management, Review and Monitoring of new INT Charts

Submitted by:	IHO Secretariat
Executive Summary:	IHO Resolution 1/1992 on the monitoring of INT charts is under review by the IRCC as a result of Decision 2.4 of EIHC-5. Subsequently, a procedure incorporating a <i>basic check-list for reviewing INT charts</i> developed by the NCWG and Regional INT Charts Coordinators was agreed at IRCC-7, and implemented on a trial basis. As a result of experience gained so far, this paper proposes to revoke IHO Resolution 1/1992 and to incorporate the new procedures in Section 100 of IHO Publication S-11 - Part A - <i>Guidance for the Preparation and Maintenance of International (INT) Chart Schemes</i> .
Related Documents	IRCC7-06B – Management and Monitoring of the IHO INT Chart Collection. NCWG2-10.2A – Review of New INT Charts by INT Charts Coordinators. A.1/G/02Rev1 (Annex B to PRO#9) – Revise IHO Publication M-3 (for IHO Resolution 1/1992) A-1, Decision 5.m – Revocation of IHO Resolution 2/1982 as amended.
Related Projects	

Introduction and Background

1. The IHO Resolution 1/1992 – *Monitoring of INT Charts* – states:

"It is resolved that the IHB will endeavour to examine all newly printed or adopted INT Charts, and to provide the concerned Member States with comments on any points of non-compliance with the Chart Specifications of the IHO for INT Charts, in order that a close conformity be achieved in future products."

2. In 2014, EIHC-5 considered the IHO Report on the Technical Capacity and Available Resources at the IHB. This led to Decision No 2.4:

"The Conference noted the Report on the Technical Capacity of the International Hydrographic Bureau and agreed to task IRCC to review arrangements for the collection and examination of INT Charts currently regulated by ... IHO Resolution 1/1992 (Monitoring of INT Charts) and to consider the need to amend or develop relevant IHO Resolutions, taking into account the comments from the Conference".

3. This issue was addressed at IRCC-7 (Decision IRCC7/3 refers), and in August 2015, a two-year trial procedure for the review of new INT charts, to be implemented by the relevant Regional INT Chart Coordinators, was decided (see IHO CL 64/2015). In order to support the work of Regional INT Chart Coordinators, a "basic quality assurance check-list for review of INT charts" was also prepared by the IHO Secretariat in liaison with the NCWG and the Regional INT Charts Coordinators (see Annex A).

4. In August 2016, the INT Charts Coordinators were invited by the IHO Secretariat to provide their feedback on this new procedure, by the end of March 2017, in order to provide recommendations on the way forward at IRCC-9, after two years of trials.

Analysis

5. The IHO Secretariat thanks the following Regional INT Charts Coordinators who provided their feedback: Australia (for Region L (SWPHC)), Brazil (for Region C1 (SWAtHC)), Finland (for Region E (BSHC)), France (for Regions F (MBSHC) & G (EAtHC)), India (for Region J (NIOHC)), South Africa (for Region H)) and UK (for Regions D (NSHC) and M (HCA)).

6. All the respondents reported that, in their regions, INT chart schemes were relatively stable so they have not been in a position to implement fully the new procedure. Despite this fact, they agreed that the *basic quality assurance check-list for review of INT charts* would be a very useful process to follow when receiving new charts. Several Coordinators

provided useful amendments to the check-list: they are reflected in Annex A in red. One Coordinator reported that the basic quality assurance check-list for review of INT charts was tested successfully for a real case.

Conclusion

7. Following the trial of the procedures since August 2015 and based on the feedback from Regional INT Charts Coordinators, it is proposed to standardize the procedure.

Recommendations

8. It is recommended that the new procedure be recognized as the quality control mechanism to ensure that an INT chart can be accepted as "Produced" in the INT Web Chart Catalogue (S-11 - Part B). The procedure may also serve as an important qualifying capacity building step with regard to new IHO Member States producing their first INT charts.

9. Following the revocation of IHO Resolution 2/1982 by the 1st Session of the IHO Assembly (see Decision 5 m, IHO Resolution 1/1992 is the only resolution in M-3 related to INT Charts. For the sake of simplicity, it is recommended to revoke IHO Resolution 1/1992 and to incorporate the new procedures as an additional item in Section 100 of IHO Publication S-11 - Part A Ed. 3.0.0 - *Guidance for the Preparation and Maintenance of International (INT) Chart Schemes.*

Justification and Impact

10. There will be no significant impact on Regional INT Chart Coordinators, in terms of resource, due to the fact that INT charts schemes are now relatively stable in most charting regions. Nowadays, very few new INT charts are produced each year.

11. The basic quality assurance check-list for review of INT charts is a useful and simple tool to be made available to facilitate the tasks carried out Regional INT Charts Coordinators and reduce their workload. It can also be used for quality-control reporting purposes.

Actions required from the IRCC

12. The IRCC is invited to:

- Consider the amendment to Section 100 of of IHO Publication S-11 - Part A Ed. 3.0.0 - *Guidance for the Preparation and Maintenance of International (INT) Chart Schemes* in Annex B, with a view to submitting an agreed version to the IHO Council for subsequent approval by the IHO Member States.

- Consider any other actions as appropriate.

Annex A

Basic check-list for INT Chart Coordinators when reviewing new INT charts

(draft version 1.2: 8 August 2016 with some amendments in red by INT Charts Coordinators)

References: A. S-4 and INT-1,2,3, Editions in force

- B. S-11 Part A, Edition in force
- C. Digital Reference Tool for Cartographers
- D. IHO CL 64/2015 Revised Management, Review and Monitoring of New INT Charts.

Extract of S-4, Edition 4.6.0:

- **A-104.1** An 'INTERNATIONAL (INT) CHART' is a chart which: a. is produced with limits and scale in conformity with an internationally
 - agreed scheme of such charts b. carries the INT number of that sheet,
 - c. conforms to the Chart Specifications of the IHO (S-4 Parts B and C),
 - d. conforms to the Regulations of the IHO for International Charts (S-4 Part A).

<u>Note</u>: It is up to the Producer Nation to consider if the new INT chart should be sent to the Regional INT Area Coordinator BEFORE publication allowing enough time for any subsequent corrections to be incorporated by the Producer Nation.

Торіс	Possible Useful References S-4 S-11 Part A (Section 100) ²	Compliant with RHC's decisions and/or IHO standards (yes / no)	Comments by INT Chart Co-ordinator		
Step 1 – Compliance with the agreed regional INT chart scheme (S-11 Part A 100.3.10)					
INT Chart Number ¹	A-204, <i>100.3.8</i>		New numbers allocated by INT Chart Coordinators		
Limits ¹	100.3.7				
Scale, latitude of reference	B-211, <i>100.3.4</i>				
Projection, Horizontal Datum and Vertical References	B-203, B-202, B- 302, B-405, <i>100.3.5</i>				
Dimensions (printable on A0?)	B-222, 100.3.6				
Any other relevant observation		·			
Step 2 – Maintenance regime – Consistency and Impact with ENC coverage					

¹ Optional, as it is assumed that INT Chart Number and Limits have already been agreed by the Regional INT Chart Coordinator when the Producer Nation submitted their INT chart proposal at the beginning of the process.

Торіс	Possible Useful References S-4 S-11 Part A (Section 100) ²	Compliant with RHC's decisions and/or IHO standards (yes / no)	Comments by INT Chart Co-ordinator
Maintenance regime in place by the producer nation (new Editions, NtMs)	A-401, A-402, B- 600, <i>100.3.13</i>		
Consistency with ENC coverage in the area (transition plan, updates by the same producer or established agreement for data exchange, etc.)	B-104		
Any other relevant observation			
Step 3 – Content (Reminder: 'mu	ist' indicates a mand	atory requirement	- S-4, B-120.4 refers)
INT symbols and INT abbreviations	Refer to INT1, INT3 A-302.5, B-122, B-125,		
Chart construction: Border detail, graduation, grids, linear scales	B-210 to B-215, INT2		
Title, crests, notes	B-240 to B-242		
Chart numbering, Marginal information	B-250		
Use of colours	B-140 to B-146		
References, including plans, adjacent charts and sources	B-243 to B-255, B-290 to B-296		
Topography: Port facilities, landmarks	B-320 to B-340		
Bathymetry, dangers and associated tints	B-400 to B-429		
Superimposed information: Routeing, limits and areas, ESSA, boundaries, cables, off- shore production	B-430 to B-449		
Aids to navigation, IALA maritime buoyage region, marine services	B-450 to B-497		
Language, names	B-510, B-552		
Consistency with overlaps and other scale charts (<i>if possible</i>)	B-100.5, <i>100.3.7</i>		

Draft amendment to Section 100 of IHO Publication S-11 - Part A Ed. 3.0.0 - Guidance for the Preparation and Maintenance of International (INT) Chart Schemes

Add section 3.14 as follows:

3.14 Monitoring of INT Charts

The following procedure is to be implemented by the Regional INT Chart Coordinators (or INT Charting Coordination Working Group – ICCWG)

- a. New INT Chart Producer Nations to provide the first edition of any INT chart to the relevant Regional INT Chart Coordinator (or ICCWG) for review as soon as convenient during the production cycle;
- b. **INT Chart Coordinators/ICCWGs** to manage the review of any first edition INT chart produced by a new INT Chart Producer Nation to verify its compliance with the IHO standards, and to provide feedback to the Producer Nation and to report results to the next RHC meeting. This review can be supported using the *basic quality assurance check-list for review of INT charts* available in Annex II;
- c. All INT Chart Producer Nations to provide first editions and new editions of INT charts to the relevant Regional INT Chart Coordinator (or ICCWG) three months prior to every RHC meeting to enable the Regional INT Chart Coordinator (or ICCWG) to validate the current INT chart scheme;
- d. All editions of INT charts submitted under actions a) and b) to be subsequently forwarded to the IHO Secretariat to be included in the IHO Secretariat INT Chart Reference Collection, for internal use; and
- e. **All Member States** to provide an update to the IHO published list of on-line chart catalogues, either directly or systematically when updating the Yearbook.

Annex II

Basic check-list for INT Chart Coordinators when reviewing new INT charts

(final version 1.3, June 2017 as endorsed at IRCC-9)

See Annex A to Doc. IRCC9-03C