



## ORGANIZACION HIDROGRAFICA INTERNACIONAL

**Dossier del BHI No. S3/3055**

**CIRCULAR No. 07/2013**  
**21 de Enero del 2013**

### **CONTRIBUCION DE LA OHI A LA ELABORACION DE UN CODIGO OBLIGATORIO PARA BUQUES QUE OPEREN EN AGUAS POLARES**

Estimado(a) Director(a),

1. Los buques que operan en los entornos árticos y antárticos están expuestos a un número de riesgos singulares, que incluyen la relativa escasez de cartas marinas adecuadas. En el 2009, el Comité de la Seguridad Marítima de la OMI (MSC) aprobó propuestas para la elaboración de un código internacional de seguridad para buques que operen en aguas polares (Código Polar), que cubriría toda la gama de asuntos relativos al diseño, la construcción, el equipo, el funcionamiento, la formación, la búsqueda y salvamento y la protección ambiental para dichos buques en las aguas poco hospitalarias que rodean los dos polos. Se ha atribuido al Subcomité de la OMI sobre el Diseño y el Equipo del Buque (DE) la tarea de coordinar el trabajo, informando al MSC y al Comité de Protección del Medio Ambiente Marino (MEPC).

2. Desde el 2010 (DE53), el trabajo de elaboración del Código Polar ha progresado, principalmente en el marco de un Grupo de Correspondencia (GC) presidido por Noruega. Se solicitó oficialmente la opinión del Subcomité sobre la Seguridad de la Navegación (NAV) tras el DE56 (Febrero del 2012). Sin embargo, el resultado del examen del Grupo de Trabajo técnico durante NAV58 (Julio del 2012) no permitió precisar las cuestiones hidrográficas (ver los documentos NAV 58/14 - párrafos 13.10 a 13.18 - y NAV 58/WP.5 – párrafos 5.1 a 5.3 y Anexo 5).

3. Tras las consideraciones expresadas por la Comisión Hidrográfica de la OHI sobre la Antártida y por la Comisión Hidrográfica Regional Ártica, el Presidente del Comité Directivo del BHI aprovechó las discusiones celebradas en el MSC91 (Noviembre del 2012) para expresar su preocupación por el hecho de que no se habían destacado suficientemente las consecuencias de una escasez de levantamientos hidrográficos en las aguas polares durante la elaboración del Código Polar. El Presidente del GC invitó a la OHI a unirse a su grupo y a proporcionar sus comentarios sobre el informe, que debe ser sometido a la reunión del DE 57 en Abril del 2013. Un proyecto de informe del GC fue posteriormente proporcionado al BHI.

4. El proyecto de texto que se adjunta al informe del GC (DE 57/11/6) consiste en una Introducción, seguida de dos partes principales que tratan respectivamente de las prescripciones obligatorias (Parte A) y de las directivas adicionales (Parte B). El BHI ha preparado una sumisión en nombre de la OHI, que propone comentarios y contribuciones para la Introducción y la Parte B.

5. Se adjunta a la presente Circular la sumisión de la OHI al DE57 para información de los Estados Miembros. Desgraciadamente, debido al envío tardío del informe del GC por la Secretaría de la OMI (18 de Enero del 2013) y a la necesidad de respetar la fecha límite para la sumisión del documento al DE57 (25 de Enero del 2013), la sumisión no pudo ser completada a tiempo para ser revisada por los Estados Miembros de la OHI.

6. Considerando el estado actual del proyecto de texto y que el año previsto para su finalización es el 2014, es probable que la elaboración del Código Polar implique discusiones adicionales durante y después del DE57. Por consiguiente, el Comité Directivo invita a los Estados Miembros a informar a

su delegación en el DE57 acerca de la sumisión de la OHI y a intentar obtener su apoyo para reflejar las consideraciones hidrográficas en el Código Polar.

7. La OHI estará representada en el DE57, bajo reserva de cualquier otro compromiso incompatible. Se invita a los Estados Miembros que deseen hacer sus comentarios sobre la sumisión de la OHI antes de la sesión del DE57 a que envíen su contribución al BHI ([info@ioh.int](mailto:info@ioh.int)) antes del 1 de Marzo del 2013.

En nombre del Comité Directivo  
Atentamente,



Robert WARD  
Presidente

Anexo: Sumisión de la OHI al DE57 (DE 57/11/xx) (*en Inglés únicamente*).

SUB-COMMITTEE ON SHIP DESIGN  
AND EQUIPMENT  
57th session  
Agenda item 11

DE 57/11/XX  
18 January 2013  
Original: ENGLISH

## DEVELOPMENT OF A MANDATORY CODE FOR SHIPS OPERATING IN POLAR WATERS

### Comment on the Report of the Correspondence Group

Submitted by the International Hydrographic Organization (IHO)

#### SUMMARY

- Executive summary:* This document comments on the report of the Correspondence Group on Development of a mandatory Code for ships operating in Polar waters.
- Strategic direction:* 5.2
- High-level action:* 5.2.1
- Planned output:* 5.2.1.19
- Action to be taken:* Paragraph 8
- Related documents:* DE 57/11/6

#### Introduction

1 At DE 56 a correspondence group (GC) was established to work intersessionally to develop a mandatory Code for ships operating in Polar waters. During discussions at MSC 91, the IHO expressed concern that the consequences of poor hydrography in Polar waters had not been sufficiently highlighted in that work. The CG chair invited IHO to join the group and provide comment on the report, which was being submitted to DE 57.

#### Status of nautical charting in Polar waters

2. Systematic and complete hydrographic surveys have not been carried out in many polar areas due to their extensive, remote and inhospitable nature. The presence of ice throughout much of the year limits the ability to conduct hydrographic surveys. Increasingly large unsurveyed areas may be becoming available for navigation due to the melting of glaciers and sea ice. The result assessed by the IHO is that 95% of the Antarctic Region is unsurveyed and appropriate scale chart coverage is generally inadequate for coastal

navigation. The situation is similar in the Arctic Region (see for example NAV 55/INF.6 on the situation in Greenland) although consolidated figures are not available.

3. The geographical positions of features are often unreliable, and even those correctly placed relative to adjacent features may contain considerable errors if separated by large distances. Some modern charts are based on satellite imagery; however the lack of proper ground control means they are unlikely to have the same accuracy as those covering lower latitudes. Soundings, topographic detail and all other navigational information are generally incomplete. The limited depth information available may be derived from passage soundings or from old and incomplete surveys and may be of poor quality. The seabed in many areas is very irregular, which means that interpolation between charted depths is generally unreliable.

4. Inadequately surveyed areas can be identified on paper charts (and Raster Navigational Charts) using chart source or zone of confidence (ZOC) diagrams.

5. The use of Electronic Chart Display and Information Systems (ECDIS) in Polar waters requires the availability of Electronic Navigational Charts (ENCs). These must use the WGS 84 positioning datum and therefore require the accurate positioning of topography, including the coastline, and hydrography based on this datum. At present, few ENCs are available for Polar waters in Navigation Purpose bands 3 to 6 (coastal, approach, harbour, and berthing). Although the IHO has been leading an effort to prioritize, encourage and monitor the conduct of hydrographic surveys in the Polar regions through its Hydrographic Commission on Antarctica (HCA) and through the Arctic Regional Hydrographic Commission (ARHC), it will take many years for the situation to improve as national priorities generally focus on charting deficiencies at lower latitudes (see MSC/Circ.1179).

### **Impact on navigation**

6. Except in limited areas, the chart coverage of Polar waters is inadequate for coastal navigation. Therefore mariners should keep to the charted areas, except in case of absolute necessity. Even in charted areas extra vigilance should be exercised as unsurveyed and uncharted shoals may exist unless the chart is based on modern surveys that include a full search of the sea floor.

7. Based on the above considerations, the IHO proposes a number of comments and inputs to the amended draft text of the Polar Code submitted by the Correspondence Group. These are shown in the Annex.

### **Action requested of the Sub-Committee**

8. The Sub-Committee is invited to note the information provided in this document, ensure that it is reflected in the development of the Polar Code and take any other action it considers appropriate.

## Annex

### IHO comments and inputs to the amended draft text of the Mandatory Code for Ships Operating in Polar Waters attached as Annex 1 to document DE 57/11/6

#### **Preamble**

Add the following new paragraph after 2:

*The Code acknowledges that the Polar Regions impose additional navigational demands beyond those normally encountered. Except in limited areas, the chart coverage is inadequate for coastal navigation. Therefore mariners should keep to the charted areas, except in case of absolute necessity. Even in charted areas extra vigilance should be exercised as unsurveyed and uncharted shoals may exist unless the chart is based on modern surveys that include a full search of the sea floor.*

#### **Sources of hazards**

In the initial wording of this section, merge and complement items .6 and .7 as follows:

.6 ~~remoteness and possible lack of accurate and complete hydrographical data and information, reduced availability of navigational aids and seamarks with increased potential for groundings compounded by remoteness and limited readily deployable SAR facilities;~~

and renumber accordingly item .8.

In the alternative wording of this section, replace item .5 with the following text:

.5 *possible lack of accurate and complete hydrographical data and information, reduced availability of navigational aids with increased potential for groundings compounded by remoteness and limited readily deployable SAR facilities;*

#### **PART B**

Insert a new section as follows:

#### ***Additional guidance to Chapter 9***

*As the chart coverage of Polar waters is generally inadequate for coastal navigation, mariners should exercise extra care to plan and monitor their voyage accordingly, taking due account of the information and guidance in the appropriate nautical publications.*

*They should be familiar with the status of hydrographic surveys and the availability and quality of chart information for the areas in which they intend to operate. They should also be aware of potential chart datum discrepancies with GNSS positioning. They should plan their route through charted areas and well clear of known shoal depths.*

*Deviation from the planned route should be avoided and when operating on the continental shelf the echo-sounder should be working and monitored constantly to detect any sign of unexpected depth variation, especially when the chart is not based on a full search of the sea floor. Independent cross-checking of positioning information (i.e. radar and GNSS) should be undertaken at every opportunity.*

*Mariners should ensure to report to the relevant charting authority (Hydrographic Office) any information that might contribute to improving the nautical charts and publications.*