



IHB File No. S3/0128

CIRCULAR LETTER 17/2007  
05 February 2007

IHO HYDROGRAPHIC COMMITTEE ON ANTARCTICA  
Data for S-55 "Status of Hydrographic Surveying and Nautical Charting World-Wide"  
GIS for Antarctica

**Reference:** a) CL15/2007 dated 2 February – Minutes of the 6<sup>th</sup> HCA Meeting

Dear Hydrographer,

1 In September 2005 a letter was issued requesting Members and Observers of the IHO Hydrographic Committee on Antarctica (HCA) to submit without further delay the information on their activities which would enable the data in S-59 to be updated and displayed in an on-line GIS, and an overview to be derived for S-55 (See **Annex A**). Significant input is still awaited both from HCA Member States and from other IHO Member States who are not represented in the committee but are active in the region. It is increasingly urgent for the IHO to provide the strategic overview in S-55 to inform discussions in IMO and in the annual Antarctic Treaty Consultative Meeting (ATCM).

**2 Maritime Safety Information (MSI) and GMDSS**

At its 6<sup>th</sup> meeting the HCA reviewed the status of MSI and GMDSS coverage for the region and a summary was prepared for S-55. It is now requested that the NAVAREA Co-ordinators for Areas VI, VII, X, XIV and XV review the information placed in the S-55 on-line data-base ([www.iho.int](http://www.iho.int)) and confirm its accuracy.

**3 Nautical Charting**

The HCA has prepared a detailed assessment of the status of chart production for the region, and this can be found in Annex G to the Minutes of the 6<sup>th</sup> meeting on the IHO website. It is requested that all IHO Member States confirm that their activities are described accurately in this document, so that the HCA GIS can be updated and percentage coverage deduced for S-55.

**4 Hydrographic Surveying**

The most difficult task for the Working Group which is developing the HCA GIS is the population of the layer showing the areas which have been surveyed. Some Member States have already been asked to provide bounding coordinates / trackline positions which are missing in the S-59 survey database. As noted in HCA Letter 3/2005, further progress also depended on the submission of additional metadata by the Member States that had conducted the surveys. The HCA directed that additional guidance should be given to enable this task to be completed as a matter of the greatest urgency. **Annex B** has been produced to list the precise survey metadata and geometry which is required. All IHO Member States with activities in the HCA/INT Chart Region M are now asked:

- To submit the required data for surveys not listed in S-59, in accordance with Annex B.
- To supplement existing S-59 data (Refer to file S-59\_Surveys.xls on the IHO website: [www.iho.int](http://www.iho.int) > Reg. Hydro Commissions > HCA > Miscellaneous > IHO GIS for Antarctica) with the metadata listed as items 5, 7 and 9 in Annex B.

- To supply any generalised 200m contour line they may hold in digital form, ideally in a common GIS format e.g. Shape (.shp), although other digital forms e.g. S-57 format are acceptable.

This data is requested **by 31 May 2007**. Thereafter, regular updates should be provided, ideally as a submission for the annual HCA meetings.

On behalf of the Directing Committee  
Yours sincerely,

A handwritten signature in black ink, appearing to be 'H. Gorziglia', written in a cursive style.

Captain Hugo GORZIGLIA  
Director

Annex A: HCA Letter No. 3/2005 dated 2 September 2005 (relevant part only).

Annex B: Metadata required for surveys completed in HCA/INT Chart Region M.

**EXTRACT FROM HCA LETTER 3/2005**

IHB Files Nos. S3/0128, S3/4230/M

2 September 2005

**HCA Letter No. 3/2005**

**To:** Members and Observers of the IHO Hydrographic Committee on Antarctica (HCA)

**Subjects:** a) S-55 "Status of Hydrographic Surveying and Nautical Charting World-Wide"  
b) Request from the IHB (IHB File No S3/0123 dated 31<sup>st</sup> August 2005)  
c) Updated Draft Agenda, Annotated Agenda and Timetable

**References:** 1) HCA Letter No. 1/2005 dated 24 March 2005  
2) HCA Letter No. 2/2005 dated 16 June 2005

Dear Members,

This HCA Letter refers to three different subjects that, for practical reasons, I have decided to consider in just one letter, avoiding sending three separate ones. I apologize for this.

**A.- S-55 "STATUS OF HYDROGRAPHIC SURVEYING AND NAUTICAL CHARTING WORLD-WIDE".**

1. Captain Barritt, the co-ordinator of the revision of S-55, and Lieutenant Silva of the Chilean Hydrographic Service have been examining the best means of providing an over-view of the status of surveys, charting and MSI in Antarctica. At our last meeting it was agreed that the information in S-55 should be in 2 parts: Antarctica, excluding Antarctic Peninsula, and Antarctic Peninsula.

2. Some of you have provided information on your activity in the region. It has become clear, however, that your data cannot be combined meaningfully without asking each of you to go back to S-59 and to classify each survey and chart using the S-55 criteria. Only then will it be possible to derive a percentage analysis. Some of this work has been done already in the Tables attached to HCA Survey Programme Working Group Letter No. 1/2005. It is requested that, if possible, the necessary data be made available for the forthcoming HCA meeting in New Zealand on 2-4 November 2005. It is also requested that you inform the HCA of any provision which your country makes for MSI/GMDSS in Antarctica.

3. At the 2005 meeting there will be a demonstration of the electronic database, which effectively replaces S-59, and becomes the IHO regional data-layer for the Antarctic. [In due course it will be possible to update entries electronically, but, for the time being, new information should continue to be forwarded to the IHB.]

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Original signed by Captain Hugo M. GORZIGLIA  
IHB Director and Chairman of HCA

**METADATA AND GEOMETRY  
FOR SURVEYS CONDUCTED IN HCA/INT CHART REGION M**

(Refer to file HCA\_Surveys.xls on the IHO website:

[www.iho.int](http://www.iho.int) > Reg. Hydro Commissions > HCA > Miscellaneous > IHO GIS for Antarctica)

1. **IHO Member State Hydrographic Office which has appraised and approved the survey for charting purposes.**
2. **Organisation responsible for the conduct of the survey.**
3. **Dates during which the survey was conducted.**
4. **Description of the area covered by the survey.**
5. **Horizontal datum for the survey.**
6. **Scale of the survey.**
7. **Survey Order in accordance with S-44 (4<sup>th</sup> Edition).**
8. **Details of sounding technique** (MBES; Sidescan Sonar Sweep; echo-sounding without sidescan sonar sweep).
9. **Recommended S-55 criteria** (Adequately surveyed; requires re-survey at larger scale or to modern standards).
10. **WGS co-ordinates for all corners of the survey area.** Surveys have been divided into 3 categories:
  - Square survey areas, i.e. delimited by 2 latitudes and 2 longitudes. The survey area is defined by the geographical coordinates (Long, Lat, in degrees and decimal degrees to the 4th decimal) of its SW and NE corners.
  - Polygonal survey areas. The survey area is defined by the geographical coordinates of the successive corners of the polygon, starting and ending with the same position to close the polygon.
  - Soundings on passage. The ship's track-line is defined by the geographical coordinates of the successive positions of the ship. If MBES or swath sounding, an indication of the swath width should be provided; alternatively the insonified area may be treated as a "polygonal survey".