Report from the International Hydrographic Organisation (IHO)

on Activities in Antarctica from 1998 - 2000

The IHO continues to co-operate directly with WG-GGI by maintaining up-to date the gazetteer of the Antarctic waters under-sea feature names. The gazetteer is extracted from the General Bathymetric Chart of the Ocean (GEBCO) database. The latest version of that gazeteer is going to be sent to Dr. Ramorino (ENEA Rome) on time for the SCAR XXVI meeting.

The International Charts scheme for the Antarctica was approved by the IHO nations since 1996. The production of the INT charts started some years ago and is now developing. For the production of those charts is essential that adequate hydrographic surveys are conducted in Antarctica as recommended by the ATCM in Seoul in 1995. Unfortunately not always the National Antarctic Programmes include this activity, consequently the pace with which the new charts, including reliable sea bottom information, can be published is still extremely slow.

The IHB continues to keep up-to date the IHO Publication S-59: Status of hydrographic surveys and nautical charting in the Antarctica. Copy of this publication has been mailed to Mr. Drew Clarke.

The IHB considers it important the co-operation of the the IAATO (International Association of the Antarctic Tours Operators) and Commodore Leech made an interesting presentation to the Secretariat of that Association in 1999 in New York. In particular he indicated the risks of carrying into the antarctic waters, passenger vessels and requested co-operation from the masters of those vessels to locate any danger they were aware of. The results till now have been very modest.

Some progress has been made on the important subject of spatial data standards for bathymetric data. IHO has begun the process of aligning the S-57 data standard with the family of spatial data standards of the ISO. This will enable S-57 data to be included into larger spatial data sets. However very little S-57 data exists for the Antarctic, and the Antarctic will remain a low priority area for the production of such data. Some raster data exists [copies of the majority of charts], and this could perhaps be included in the Antarctic SDI data bases in some way. Also some bathymetric data from the GEBCO digital charts may be utilised. This is in MGD 77 format.

However the great majority of Antarctic bathymetry is historic, and progress of conversion to TC 211 standards will be slow, unless the GIANT project can find some special purpose funding.

The real issue, as indicated in paragraph 2, is the lack of systematic, high quality bathymetric data in large areas of the Antarctic seas. Improvements in standardisation of exchange formats for multi-beam data will facilitate integration of data gathered in the future into other spatial data sets. The IHO has a working group studying this issue.

The IHO is most anxious to co-operate with the SCAR WGGI in resolving the problem of utilising hydrographic data within the Antarctic GSDI, and appreciates the urgency of developing a workable transfer standard for hydrographic data for SDI applications.

It should also be noted that the programmes of IHO Member States in Antarctica contribute to the environmental protection objectives of SCAR, since they contribute to the *prevention* of shipwrecks and the consequent environmental damage. IHO notes with pleasure that efforts are being made by COMNAP and others to address the improvement of the navigation infrastructure in Antarctica.

For the SCAR WGGI meeting in Tokyo the IHO will be represented by Dr. Yasuhiro Ganeko of the Hydrographic Department of Japan.