#### XXXV Antarctic Treaty Consultative Meeting (ATCM)

10-20 June 2012, Hobart, Australia

#### **OUTCOMES FROM ATCM-XXXV**

Please find below, a set of complementary documents that have relation with the IHO Report submitted to the XXXV ATCM (not included here) and the work conducted at the XXXV ATCM:

- The Statement made by the IHO representative at the plenary meeting reporting on IHO's activities on Antarctica carried out by IHO/HCA.
- The Statement made at the meeting of the Operational Matters Working Group by the IHO representative, including some references.
- Brief Report prepared on the participation at the XXXV ATCM
- Existing AT Recommendations/Resolutions regarding Hydrography (six) that were examined by the AT Secretariat and further decided by the ATCM to task COMNAP to provide a consolidated Report to the XXXVI ATCM. This includes the full text of all the documents (ATCM XV-19 (Paris, 1989); Resolution 1 (1995) ATCM XIX, Seoul; Resolution 3 (2003) ATCM XXVI CEP VI, Madrid; Resolution 5 (2008) ATCM XXXI CEP XI, Kyiv and Resolution 2 (2010) together with the proposal to establish an HCA Drafting Group to prepare a consolidated Resolution for consideration at the XXXVI ATCM.

#### A.- STATEMENT MADE BY IHO REPRESENTATIVE IN PLENARY

Thank you Mr. Chairman,

- 1.- On behalf of the International Hydrographic Organization, IHO, I am honoured to present the Report on "Cooperation in Hydrographic Surveying and Charting of Antarctic Waters".
- 2.- The IHO's mission is "to create a global environment in which States provide adequate and timely hydrographic data, products and services for their widest possible use".
- 3.- The IHO's Hydrographic Commission on Antarctica (HCA) is responsible in promoting technical co-operation in the domains of hydrographic surveying, marine cartography, and nautical information within the Antarctic region.
- 4.- The IHO's Report is provided as Information Paper 70 and includes detailed description of the status of hydrographic surveys and nautical charting in Antarctica, nevertheless I would like to take this opportunity to highlight some elements in the Report, of particular interest to the ATCM XXXV:
- 4.1.- Several HCA Members (Brazil, Chile, France, Germany, South Africa, Spain and UK) reported that they have briefed their ATCM National delegates on the importance of improving hydrography and nautical charting for safety of navigation in Antarctica. The HCA agreed that improving coordination at a national level should be an ongoing practice.
- 4.2.- At the request of the HCA, the International Hydrographic Conference held last April in Monaco approved the inclusion of the following tasks as part of the IHO 2013 2017 Work Program :
  - a) to conduct a risk assessment for the Antarctic region and develop a Work Program to improve Antarctic charting. (2013/2014)
  - to submit to ATCM the risk assessment conducted by HCA for the Antarctic Region together with a proposed HCA work program to improve Antarctic charting, for consideration, endorsement and support from ATCM. (2015)

- 4.3.- HCA has been proactive in complying with the scope of ATCM Resolution 2/2010 and at least 9 HCA members have established links and arrangements with relevant national scientific institutions for the collection of bathymetric information.
- 4.4.- The HCA has contributed to the ATCM work participating with comments on the work conducted by several Intersessional Contact Groups:
- a) "Yachting guidelines for Antarctic cruises"
- b) "Outstanding Questions on Antarctic Tourism" and
- c) "Review of ATCM Recommendations on Operational Matters"
- 4.5.- The HCA Report invites ATCM to consider:
- a) the imminent introduction of the IMO Polar Code and to define how safety of navigation, including hydrography and aids to navigation, should be administered in Antarctica.
- b) inviting the International Maritime Organization to encourage voluntary participation in data collection activities to be included into the Polar Code.
- 5.- Looking forward, I would like to inform that following a kind invitation from the Servicio Oceanografico, Hidrografico y Meteorologico de la Armada del Uruguay, the HCA 12<sup>th</sup> Meeting will take place in Uruguay, 10 12 October 2012.
- 6.- Finally, and after chairing the HCA and having represented the IHO at the ATCMs for the last 10 years, following our regulations I will terminate my mandate on the 31 August, returning back to Chile. At this time I wish to thank all ATCM delegations and the related international organizations concerned on Antarctic matters for their permanent institutional great support and expressions of personal friendship received during the period I was honored to work together.

Thank you Mr. Chairman

# B.- STATEMENT MADE BY IHO REPRESENTATIVE AT THE OPERATIONAL MATTERS WORKING GROUP

Thank you Mr Chairman,

The successful development of several initiatives discussed this afternoon are "hydrographic survey" or "bathymetric data" dependant. The importance of hydrography does not seem to have been addressed as a must for safety and operations in Antarctica; with the exception of mentioning that as a result of a research after an accident, it was found that charted depth was not reliable.

No nautical chart	Prob	pably No a	acce	ess to	SAI	R operatir	ng site				
No bathymetry				,		•		time	tsunami	chart,	generate
inundation models, p	orepare inunda	ation map	s an	a eva	luat	ions route	es, etc.				

The IHO would like to invite ATCM to keep in mind that in order to contribute to safety operations in Antarctica, AT Parties need to commit resources to conduct hydrographic surveys on a permanent basis.

Having said that, I would like to recall that the IHO is invited to report annually to the ATCM on the "Cooperation in Hydrographic Surveying and Charting of Antarctic waters" as an expert organization.

Normally IHO's Report is presented in plenary under agenda item 4 and its content is not necessarily commented nor considered at a later stage despite the content of the report might be related particularly to « Safety and Operations in Antarctica ».

This year's report (Info Paper 70), as done in the past, provides an update of the hydro-cartographic situation in Antarctica as assessed by the IHO Hydrographic Commission on Antarctica, a body of which are members, 23 National Hydrographers from same corresponding countries represented at the ATCM.

This status report, together with many other reports submitted to the ATCM constitutes, in the view of the IHO, valuable indication of the level of safety that can be expected on Antarctic operations in the IHO's case, due to the availability or lack of reliable hydrographic information; nautical charts and marine safety information.

The IHO report INF Paper 70 also includes a few recommendations to ATCM that unfortunately due to the mechanic and structure of the ATCM, such recommendations might well be overlooked or worst, not considered at all, as it is the case.

As they are pertinent to "Safety and Operations in Antarctica" I would like to make reference to those recommendations. In concrete, the IHO invites ATCM to:

- a) Consider the adoption of the required administrative provisions to implement measures in Antarctica, in line with the obligations set in the Safe of Life at Sea Convention (SOLAS) (limited to Regulations 2, 4, 9, 27: definitions of Nautical Chart, Navigational Warnings, Hydrographic Services and Nautical Charts and Publications Updates).
- b) Consider inviting IMO to encourage voluntary participation in data collection activities to be included into the mandatory Polar Code, and
- c) Consider the way through which the implementation of the provisions contained in the mentioned IMO mandatory Polar Code will be considered, particularly on how safety of navigation, including hydrography and aids to navigation, is expected to be administered in Antarctica.

The IHO would appreciate receiving from the ATCM its views and guidance on these subjects at the earliest possible opportunity, as these matters are closely related to the work conducted by the National Hydrographic Offices participating in the IHO Hydrographic Commission on Antarctica, the coordination of which constitute one of the main objectives of the IHO aiming at supporting safety of navigation and the protection of the marine environment worldwide.

Thank you Mr. Chairman.

#### **References:**

#### Reg 2: Definitions

Nautical chart or nautical publication is a special-purpose map or book, or a specially compiled database from which such a map or book is derived, that is issued officially by or on the authority of a Government, authorized Hydrographic Office or other relevant government institution and is designed to meet the requirements of marine navigation\*.

#### Reg 4: Navigational warnings

Each Contracting Government shall take all steps necessary to ensure that, when intelligence of any dangers is received from whatever reliable source, it shall be promptly brought to the knowledge of those concerned and communicated to other interested

Governments.\*

#### Reg 9: Hydrographic services

- 1 Contracting Governments undertake to arrange for the collection and compilation of hydrographic data and the publication, dissemination and keeping up to date of all nautical information necessary for safe navigation.
- 2 In particular, Contracting Governments undertake to co-operate in carrying out, as far as possible, the following nautical and hydrographic services, in the manner most suitable for the purpose of aiding navigation:
- .1 to ensure that hydrographic surveying is carried out, as far as possible, adequate to the requirements of safe navigation;
- .2 to prepare and issue nautical charts, sailing directions, lists of lights, tide tables and other nautical publications, where applicable, satisfying the needs of safe navigation;
- .3 to promulgate notices to mariners in order that nautical charts and publications are kept, as far as possible, up to date.
  - .4 to provide data management arrangements to support these services.
- 3 Contracting Governments undertake to ensure the greatest possible uniformity in charts and nautical publications and to take into account, whenever possible, relevant international resolutions and recommendations.
- 4 Contracting Governments undertake to co-ordinate their activities to the greatest possible degree in order to ensure that hydrographic and nautical information is made available on a world-wide scale as timely, reliably, and unambiguously as possible.

#### Reg 27: Nautical charts and nautical publications

Nautical charts and nautical publications, such as sailing directions, lists of lights, notices to mariners, tide tables and all other nautical publications necessary for the intended voyage, shall be adequate and up to date.

## Document referring to Nautical Chart ...... IP 38 by IAATO Deception Island - Whalers Bay Anchorage

Following the groundings of MV Sea Spirit, December 2011, MV Clipper Adventurer, November 2002 and MV Lyubov Orlova, 2006 during anchoring manoeuvres at Whalers Bay, Deception Island, the IAATO Marine Committee offers the following safety advisory:

- 1- Anchoring at Whalers Bay is not advisable due to poor holding ground.
- 2- Charted depths <u>are not reliable</u>; in particular the shallower area on the northern section of the bay is believed to extend further south than currently indicated.
- 3- The very low profile of the shoreline can result in misleading radar readings, indicating that the shoreline is further away than reality. This is especially the case if the radar has been adjusted to avoid sea clutter.

#### C.- REPORT AFTER THE PARTICIPATION AT THE XXXV ATCM

The XXXV Antarctic Treaty Consultative Meeting took place in Hobart, Australia, from 10 to 20 June, coinciding with the celebration of the 100<sup>th</sup> Anniversary of the first Australian expedition to Antarctica. Antarctic Treaty Parties and related Antarctic international bodies met as they do it annually, to discuss matters relating the management of the Antarctic Treaty area and to further develop the Antarctic Treaty System.

Participants allocated time to consider and discuss 64 Working Papers (WP), 84 Information Papers (IP), 41 Background Papers (BP) and 15 Secretarial Papers (SP) submitted by different Countries, International Organizations related to the Antarctic in their different conditions and the AT Secretariat. Over 300 people representing the Consultative Parties; the non Consultative Parties and International Organizations were present, including the IHO. Captain Hugo Gorziglia represented the IHO during the first five days. It is worth mentioning that two new countries became members of the ATS: Malaysia and Pakistan.

Mr. Richard ROWE, Senior Legal Adviser to the Australian department of Foreign Affairs and Trade was elected Chairman of the meeting. The meting was opened by the Hon. Tony BURKE MP, Australian Minister for Sustainability, Environment, Water, Population and Communities who welcomed all participants and highlighted the importance of the Antarctica and the involvement of Australia in the last

<sup>\*</sup> Refer to resolution A.706(17) – World-Wide Navigational Warning Service.

Refer to the appropriate resolutions and recommendations adopted by the International Hydrographic Organization.

100 years. He emphasized the success of the Antarctic Treaty System in keeping Antarctic free of conflicts; collectively well managed and environmentally protected.

The Meeting established the following three Working Groups which were chaired by those indicated:

- Legal and Institutional Affairs; Professor René Lefeber of the Netherlands;
- Tourism and Non-governmental Activities; Ambassador Donald Mackay of New Zealand and
- Operational Matters. Dr José Retamales of Chile.

During the first plenary session, Captain Gorziglia introduced IP 70, the IHO report on "Cooperation in Hydrographic Surveying and Charting of Antarctic Waters". He thanked the ATCM for having invited IHO to report on the status of hydrographic surveys and nautical charting progress made since last ATCM. It was emphasized that the XVIII International Hydrographic Conference approved to conduct a risk assessment for the Antarctic region aiming at developing a work program to improve Antarctic charting. Also it was highlighted that the Hydrographic Committee on Antarctica (HCA) had been proactive in complying with ATCM Resolution 2 (2010) and had participated in several ATCM contact groups. The IHO invited the ATCM to consider how the IMO Polar Code, when introduced, would be implemented regarding hydrographic activities in Antarctica. The report was very well received by the audience. The representative of Uruguay warmly invited all relevant member states to the October 2012 IHO/HCA meeting in Uruguay.

Out of the numerous papers presented and discussed, the following are considered to have particular relation with IHO:

#### SP 9 "Report of the ICG on Review of ATCM Recommendations on Operational Matters"

This report recommended different actions, including the deletion of some recommendations that are obsolete and non in force. Nevertheless there were several requiring further thoughts before agreeing its destiny. The IHO representative offered to review those recommendations dealing with Hydrography as it was done in the previous period, aiming at preparing a consolidated text covering Hydrography. The Meeting welcomed the offer of the IHO and requested to provide such consolidated text to the ATCM XXXVI for consideration. COMNAP, which was tasked to lead the overall revision process, expressed its readiness to submit a WP together with the IHO to the next ATCM on Hydrographic related recommendations.

This matter will be addressed at the next HCA meeting for consideration and progress.

# WP 13 "Understanding Risk to National Antarctic Program Operations and Personnel in Coastal Antarctica from Tsunami Events"

This paper was prepared by COMNAP and SCAR. The Meeting supported COMNAP's recommendation that organisations with expertise in tsunami detection, modelling, research and warning system management should work together with COMNAP and SCAR on the next phase of this project, namely, to develop a simple, cost-effective, practical tsunami warning communications plan and tsunami awareness education materials. Due to the vital role that bathymetry plays in this matter, the IHO representative offered assistance if needed, an offer that was appreciated by ATCM.

# WP 17 "Compiling Yacht Guidelines to Complement Safety Standards of Ship Traffic around Antarctica"

This paper contains the outcome of the work conducted by the ICG led by Germany on the subject, to which the IHO through the IHB contributed ensuring that such guidelines include the availability of an appropriate, relevant and up-to-date nautical chart set covering the area planned to be sailed. The Meeting agreed on Resolution 10 (2012) recommending the Parties to use the "Checklist of yacht specific items for preparing safe Antarctic voyages" when assessing proposed yacht visits to Antarctica.

#### WP28 "Jurisdiction in Antarctica"

Following discussions, the ATCM agreed on Resolution 2(2012) recommending Parties cooperate to institute discussion on issues related to the exercise of jurisdiction in the Antarctic Treaty Area. An intersesional contact group (ICG) was established to progress cooperation on questions related. The IHO

as expert participant at the XXXV ATCM would be invited to provide input to the ICG.

# IP 70 "Report by the IHO on Cooperation in Hydrographic Surveys and Charting of Antarctic Waters"

Following a strong intervention made by the IHO representative at the Operational Matters Working Group and despite IP was presented in plenary the first day of the meeting, the WG decided to give close consideration to IP 70.

The IHO representative called on Parties to recognise the importance of the IHO/HCA work, noting that increased exchange of hydrographic information by Parties was crucial to its aim to improve hydrography and nautical charting for the safety of navigation and protection of the marine environment in Antarctica. It was reminded that the 11<sup>th</sup> Meeting of the IHO HCA held in October 2011 agreed that improving coordination at a national level should be an ongoing practice amongst Parties. Also attention was drawn to the IHO's 2013-2017 work programme, which includes a risk assessment for the Antarctic region and the development of a work programme to improve Antarctic charting (2013/14).

The Parties welcomed the report and thanked the IHO for its work. The Meeting noted the importance of hydrographic charting to avoid loss of life and serious vessel incidents. New Zealand reported that it was actively seeking to collaborate with other National Antarctic Programmes to complete hydrographic survey coverage of shipping lanes in the Ross Sea and supported the IHO's request to Parties to encourage voluntary participation in data activities. The United Kingdom noted that while it fully supported the work of the IHO, and its HCA in particular, it questioned whether, since the Polar Code was still in development, now was the time for the ATCM to communicate on the specific matter of voluntary participation in data collection.

The Meeting offered the opportunity to have interesting informative discussions with the Executive Secretaries of IAATO and COMNAP, as well as with delegations that included navigation / hydrographic / maritime advisors among their components. This valuable contact offered the opportunity to enhance coordination on ongoing challenges.

As the Meeting was much shorter that in the past, the IHO representative had the opportunity to attend the Operational Working Group meeting. This offered the opportunity to reach the political as well as the technical level with the IHO Report.

The next ATCM Meeting shall take place in Brussels, 20 to 29 May 2013.

Captain Hugo Gorziglia HCA Chairman & IHB Director

#### D.- EXISTING RECOMMENDATIONS/RESOLUTIONS REGARDING HYDROGRAPHY

Following an examen made by the AT Secretariat of the exisiting Recommentations and Resolutions, those related to Hydrography were "advised to" consider updating or keeping as they stand. The XXXV ATCM decided to task COMNAP to review these documents and the IHO Representative offered to provide a unique text covering the concept of the existing six texts in order to facilitate referencing by avoiding too many references.

The relevant part of the AT Secretariat report is included bellow as well as the text of the six documents referred.

It is propose that HCA establishes a drafting group to prepare a new and consolidated text to be submitted to ATCM XXXVI through COMNAP, who is in charge of producing a consolidated report.

#### References from the AT Secretariat

#### **5. HYDROGRAPHY**

Recommendation XV-19 (1989) calls for Parties to increase their mutual cooperation in the hydrographic survey and charting of Antarctic waters in order to contribute to the safety of navigation and the protection of the Antarctic environment and for scientific purposes; and to coordinate their activities within the framework of IHO and SCAR, as appropriate. There was agreement that general principles contained in this recommendation are current, but some Members of the group expressed doubts regarding whether the second operative paragraph is still necessary, since it could be superseded by the more detailed regulations in Res. 3 (2003) and Res. 5 (2008).

ICG ADVICE: Given its general nature, this recommendation is current, but considering the second operative paragraph, the ATCM may wish to update it.

IHO does not have a problem with the existing text.

Resolution 1 (1995) encourages Parties with hydrographic surveying and charting capabilities in Antarctica to coordinate their efforts through the IHO. The IHO Permanent Working Group for Cooperation in Antarctica (PWGCA) should continue its endeavours to achieve comprehensive, updated coverage of hydrographic charting through the INT chart scheme. However, Resolution 3 (2003) largely repeats these recommendations and, in addition, the IHO's PWGCA was replaced by the Hydrographic Commission on Antarctica (HCA). Therefore, we can consider Resolution 1 (1995) as superseded by Resolution 3 (2003) which is, in turn, current.

ICG ADVICE: Although this resolution seems to be superseded by Resolution 3 (2003), it is cited in this recommendation as a precedent to the establishment of the Hydrographic Committee on Antarctica (HCA). Therefore, the ATCM may wish to update it.

While the IHO can concur with the advice, probably it might be wise to keep it as Resolution 3 (2003) makes explicit reference to Resolution 1 (1995) as well as to Recommendation XV-19 (1989).

Resolution 3 (2003) requires Parties to cooperate and coordinate activities related to hydrographic surveying and charting of Antarctic waters.

ICG ADVICE: This recommendation is current.

IHO concurs.

Resolution 5 (2008) is similar to the earlier recommendations, but does add more specific recommendations such as that Parties should cooperate with the HCA to clarify HCA requirements for the collection of hydrographic data of sufficient quality for use in the development of electronic navigation charts; and identify priority areas for the collection of additional hydrographic and bathymetric data. It also calls on Parties to encourage national programme vessels and other vessels, as appropriate, to collect hydrographic and bathymetric data on all Antarctic voyages, as practicable; to forward any Antarctic hydrographic and bathymetric data collected to the relevant international chart producer for charting action; and to endeavour to find additional resources towards improving hydrographic surveying and charting in the Antarctic region.

ICG ADVICE: This recommendation is current.

**IHO** concurs.

Resolution 2 (2010) requests Parties to support and promote liaison and cooperation between National Antarctic Programmes, national hydrographic offices and the HCA, to ensure the legacy of the IPY in the field of hydrography.

#### ICG ADVICE: This resolution is current.

**IHO** concurs.

#### References from the existing texts

### Recommendation ATCM XV-19 (Paris, 1989) COOPERATION IN THE HYDROGRAPHIC CHARTING OF ANTARCTIC WATERS

The Representatives,

Recognising the importance and historical values of activities carried out by the countries who developed the present knowledge of Antarctic hydrography;

Aware that there have been significant increases in both the number and size of vessels operating in Antarctic waters in recent vears:

Recognising that severe environmental conditions in the Antarctic give rise to particular risks for shipping and hydrographic activities:

Recognising that the sea ice conditions can lead to the diversion of shipping from acknowledged routes, thus requiring the extension of charting into waters contiguous to such routes;

Conscious that the safety of life at sea and the protection of the Antarctic marine environment and dependent and associated ecosystems requires that the Consultative Parties should take all possible steps open to them, by improving the charting of Antarctic waters, to ensure the safety of navigation so that maritime accidents are reduced to a minimum;

Recognising that the resources available to devote to hydrographic surveys and the accurate positioning and depiction of the Antarctic coastline are scarce:

Conscious of the benefits to be gained by making provision for international cooperation between those countries which undertake hydrographic surveys and nautical charting of Antarctic waters and of utilising to the maximum extent cooperative arrangements which already exist routinely between hydrographic offices and, therefore, of the need to avoid the establishment of a parallel system:

Aware of the role traditionally played by the International Hydrographic Organization (IHO) in contributing to cooperation between hydrographic offices, and by the Scientific Committee on Antarctic Research (SCAR) in all cartographic and other scientific activities in Antarctica;

Recommend to their Governments that :

- 1. They increase their mutual cooperation in the hydrographic survey and charting of Antarctic waters in order to contribute to the safety of navigation, the protection of the Antarctic environment and dependent and associated ecosystems, and for scientific purposes.
- 2. For the purposes of hydrographic survey and charting and associated terrestrial surveys and mapping, they coordinate their activities within the framework of IHO and SCAR, as appropriate.

### Resolution 1 (1995) - ATCM XIX, Seoul STRENGTHENING COOPERATION IN HYDROGRAPHIC SURVEYING AND CHARTING OF ANTARCTIC WATERS

The Representatives of the Consultative Parties,

Having noted that as an implementation of the Recommendation XV-19 the International Hydrographic Organization has established within its Member States a Permanent Working Group on Cooperation in Antarctica with the aim of coordinating hydrographic surveys and producing international nautical charts along the standards of the IHO;

Recognizing the significant step forward made by the IHO Permanent Working Group for Cooperation in Antarctica (PWGCA) which has established a scheme of INTERNATIONAL charts to ensure safe navigation in Antarctic waters;

Considering that the INT chart scheme for Antarctica has been agreed by IHO Member States and that a number of them volunteered for chart production;

Considering that the PWGCA permanently liaises with SCAR for supporting scientific research which needs hydrographic products; Noting that the IHO INT chart scheme for the Antarctic region has the support of COMNAP;

Considering that the Antarctic waters require a considerable effort in manpower and equipment to carry out hydrographic surveys adequate for nautical chart production,

#### Recommend that:

1. All Consultative Parties with a hydrographic surveying and charting capability in Antarctica are encouraged to stress nationally that their surveying and charting activities in Antarctica are being coordinated through the IHO's PWG on Cooperation in Antarctica. In particular, they should emphasize the INT chart scheme initiative and their national contribution to it, which international cooperation through the IHO implements Recommendation XV-19 of the XVth Antarctic Treaty Consultative Meeting, and emphasizes the international commitment and nature of their Antarctic activities particularly when seeking national support for

hydrographic surveying and charting priorities and budget.

2. That the IHO PWG on Antarctica should continue its endeavours to achieve comprehensive, up-dated, coverage of Hydrographic charting, as envisaged by Recommendation XV-19, through the INT chart scheme.

# Resolution 3 (2003) - ATCM XXVI - CEP VI, Madrid CO-OPERATION IN HYDROGRAPHIC SURVEY AND CHARTING OF ANTARCTIC WATERS

The Representatives,

Noting that, in response to Recommendation XV-19 and Resolution 1 (1995), the International Hydrographic Organisation (IHO) has established, amongst its Member States, a Hydrographic Committee on Antarctica (HCA) with the aim of co-ordinating ydrographic survey in the region and producing international nautical charts within the standards of the IHO;

Welcoming the report introduced by the Director of the IHO on progress that is being made by the HCA in the production of the ternational (INT) scheme of nautical charts for Antarctic waters, though noting that substantial further works remains to be done;

Recalling that the INT chart scheme for Antarctica has been agreed by IHO Member States and that a number of them have volunteered to assist with chart production;

Recognising that the HCA routinely liaises with SCAR in the support of scientific research requiring hydrographic products;

Noting also the valuable contribution to the INT chart scheme by SCAR, COMNAP and IAATO;

Noting further the entry into force of a revised version of Chapter V of the Convention for the Safety of Life at Sea on 1 July 2002 and in particular its Regulation 9 on Hydrographic Services;

Cognisant of the importance of accurate and up-to-date nautical charts as an essential aid to the safety of navigation in Antarctic waters:

#### Recommend that:

- 1. All Consultative Parties with a hydrographic surveying and charting capability in Antarctic waters encourage their national authorities to redouble their efforts to:
- Co-ordinate their hydrographic surveying and charting activities through the IHO's Hydrographic Committee on Antarctica;
- Support and contribute to the ongoing development of the INT chart scheme for Antarctic waters agreed by the IHO;
- Promote the international nature of their Antarctic activities particularly when seeking national support for hydrographic surveying and charting priorities.
- 2. The IHO Hydrographic Committee on Antarctica continue its endeavours to achieve comprehensive, up-to-date coverage of hydrographic charting and chart production through the INT scheme for Antarctic waters;
- 3. The item on Co-operation in Hydrographic Surveying and Charting of Antarctic Waters be again included in the agenda of the XXVII ATCM.

# Resolution 5 (2008) - ATCM XXXI - CEP XI, Kyiv Improving hydrographic surveying and charting to support safety of navigation and environmental protection in the Antarctic region

The Representatives,

Considering that reliable hydrographic data and nautical charts are essential to safe maritime operations;

Noting the increase in marine traffic, particularly tourist vessels, in the Antarctic region;

Concerned about the increased risk of harm to ships, persons and the environment in inadequately charted waters in the region;

Noting that the collection of accurate survey data will improve navigational safety and support scientific research;

Recognising the role of the International Hydrographic Organization Hydrographic Commission on Antarctica (HCA) in the coordination of hydrographic charting in the Antarctic region and the value of cooperating with relevant expert bodies;

#### Recommend that their Governments:

- 1. cooperate with the HCA to improve hydrographic surveying and charting in the Antarctic region, including working to
- a. clarify HCA requirements for the collection of hydrographic data of sufficient quality for use in the development of electronic navigation charts, and
- b. identify priority areas for the collection of additional hydrographic and bathymetric data;
- 2. encourage their national programme vessels and other vessels, as appropriate, to collect hydrographic and bathymetric data

on all Antarctic voyages, as practicable;

- 3. forward any Antarctic hydrographic and bathymetric data collected to the relevant international chart producer for charting action; and
- 4. endeavour to find additional resources towards improving hydrographic surveying and charting in the Antarctic region.

#### Resolution 2 (2010)

#### The contribution of the IPY to hydrographic knowledge of waters of the Antarctic Treaty area

#### The Representatives

Considering the appeal made by the Hydrographic Commission on Antarctica (HCA) of the International Hydrographic Organization (IHO) with respect to improving collection of hydrographic data and charting in the Antarctic region; Noting the increase in scientific expeditions in the Southern Ocean in the Antarctic Treaty area, as part of the International Polar Year (IPY) 2007 – 2008;

Noting also other relevant charting surveys of the Southern Ocean in the Antarctic Treaty area;

Considering that vessels of the National Antarctic Programmes and others linked to the IPY are being urged to compile, whenever possible, hydrographic and bathymetric data on all Antarctic voyages;

Acknowledging that access to and management of observations and data collected during the IPY is fundamental to ensuring the legacy of the IPY:

Taking into account the fact that new forms of data forwarding have been developed since the publication of Resolution 5 (2008); Taking into account also Recommendation No. 4 of the Antarctic Treaty Meeting of Experts on Management of Ship-borne Tourism in the Antarctic Treaty Area, which was held in Wellington, New Zealand on 9-11 December 2009, to continue contributing to the information about hydrographic survey and cartography; Recommend that their Governments:

- 1) Support and promote contacts and liaison between National Antarctic Programmes and national hydrographic offices;
- 2) Endeavour to ensure that hydrographic and bathymetric data collected by the National Antarctic Programmes' ships and others linked with their activity in the Antarctic, be forwarded by the National Antarctic Programmes, or by other means, to the national hydrographic services using the IHO Collection and Rendering of Hydrographic Data Form;
- 3) Encourage National Antarctic Programmes to work with their national hydrographic offices to assist the HCA in producing a full inventory of hydrographic data so that they can be considered for use in the production of international nautical charts under the international charting scheme coordinated by the HCA;
- 4) Promote liaison and cooperation between national hydrographic offices and the HCA to ensure the legacy of the IPY in the field of hydrography, thereby contributing to the improvement of nautical charts and the safety of navigation in waters of the Antarctic Treaty area, which in turn will help safeguard life at sea, protect the Antarctic environment, and further support scientific activities: and
- 5) Continue contributing to the report of hydrographic and bathymetric data, using appropriate instruments of their hydrographic services or offices and the IHO Collection and Rendering of Hydrographic Data Form to ensure a timely production of Antarctic nautical charts

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