

18th Conference of the IHO Hydrographic Commission on Antarctica (HCA)
24 – 26 May 2022
and
HCA Participation in the XLIV Antarctic Treaty Consultative Meeting,
Berlin, Germany
24 May 2022

SUMMARY REPORT

Notes: 1) *All documents considered at the HCA-18 Conference are available on the HCA-18 webpage of the IHO website (<https://iho.int/en/hca18-2022>).*
 2) *For the sake of efficiency and simplicity, this summary report presents an expanded version of the [bulletin report](#) that was made available just after the Conference.*

Annexes: A. [HCA-18 agenda and timetable.](#)
 B. [List of Decisions and Actions arising from HCA-18.](#)

Introduction

1. The 18th Conference of the IHO Hydrographic Commission on Antarctica was held as a hybrid event, from 24 to 26 May 2022, in Berlin, Germany, in conjunction with the XLIV Antarctic Treaty Consultative Meeting (ATCM). The meeting was held at the Dorint Hotel with a VTC platform operated by the IHO Secretariat with some contracted IT support.
2. On the first day, the HCA Chair visited ATCM XLIV and took the opportunity to re-establish some traditional partnership links. Meanwhile, Mr Lee Truscott (UKHO), Chair of the Hydrographic Priorities Working Group (HPWG) and the Region M International Charting Coordination Working Group (ICCWG), ran a fruitful technical workshop that had not been arranged for some years, mainly due to the pandemic. Participants in this informal workshop had many opportunities to share their views on a significant number of technical proposals and options (amendments to Maritime Shipping Routes, charting options, etc.).

Participation

3. The Conference was chaired by Dr Mathias Jonas, Secretary-General of the IHO, supported by Assistant Director Yves Guillam, HCA Secretary and Ms Caroline Fontanili (IHO Secretariat), as rapporteur. Forty registered delegates from 17 Member States out of 24 (Argentina¹, Australia¹, Brazil, Chile, Colombia¹, Ecuador, France, Germany, India¹, Italy, Norway, Peru¹, Republic of Korea¹, South Africa¹, Spain¹, United Kingdom, and USA), two Observers (IAATO², SCAR¹) and one subject matter expert (IBCSO Project Representative), attended the meeting.

¹ By VTC.

² Recorded presentation.

Opening address - HCA Statutes - Status report on the actions from HCA-17 -

4. Highlighting the unique character of this Commission in the IHO, the unique situation of Antarctica in the world (governance, environment, remote situation, geography, etc.), the Chair opened the meeting announcing the entry into force of the revised HCA Statutes on 24 May 2022. Amendments approved by HCA Members by correspondence since HCA-17 make the revised HCA Statutes now fully aligned with the IHO Resolution 2/1997 - *Establishment of Regional Hydrographic Commissions (RHC)* – the Antarctic Treaty System³, the last ATCM Resolutions and the IHO Strategic Plan 2021-2026. Subsequently, the HCA agreed that, with a wider scope of responsibility than INT charts and ENC production, Art. 8.e of the General Regulations of the IHO on the HCA needed to be amended. A proposal will be submitted for Council's endorsement for submission to the 3rd Session of the Assembly for approval of IHO Member States.
5. Mr Patrick Dorr (NGA, USA) was re-elected as HCA Vice-Chair and will serve until the end of HCA-19 (2024) in accordance with the revised HCA Statutes.
6. The HCA noted that some IHO Member States (Belgium, Bulgaria, Finland, Netherlands, etc...) are parties to the Antarctica Treaty, but not HCA Members, likely because their national Hydrographic Offices are not directly involved in Antarctica matters. The HCA Chair agreed to approach them to promote the enlargement of the HCA Membership.
7. The Conference considered the progress made on the decisions and actions from the previous Conferences and HCA-17 in particular, some of them, still pending implementation or completion, were slightly amended and wording improved. Due to the pandemic, some actions were postponed to HCA-19 in general. They appear as HCA18/xx (former HCA17/xx, HCA16/xx...) in Annex B. Norway (as GGC Chair) kindly agreed to liaise with the Director of Operations, IAATO, in order to get their feedback on the applicability of the new Edition of the guidance on crowd-sourced bathymetry (B-12).

IHO liaison with ATCM, SCAR, IAATO, and other partners

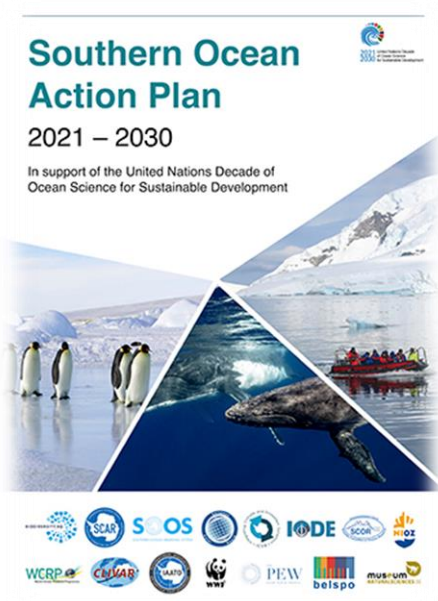
8. The HCA Chair met the Executive Secretary of the Antarctic Treaty at ATCM XLIV. Worth noting that the HCA Chair was questioned in the margins of ATCM XLIV by an official representative on the true limits of the so-called "*Southern Ocean*" (See Section 23 below).
9. A recorded report by Director Lisa Kelley from IAATO was delivered during the Conference. The HCA noted the statement by which more than 55% of the IAATO fleet contributes to Olex every year. IAATO confirmed their concerns that all HCA stakeholders were in capacity to get access to this information. The HCA noted that some actions were already in progress between the GGC Chair and Olex but agreed that there was room for improvement in the relation with Olex. Two questions were raised by IAATO:
 - a. *Is there a way to speed up the official process and share unwashed data rather than wait for an official chart to be produced?*

³ Antarctic Treaty, Article III 1.(c) states that "*scientific observations and results from Antarctica shall be exchanged and made freely available*".

- b. Can IAATO contribute to ice front data, particularly with tide water glaciers? (pictures? soundings?)

Due to her commitments in ATCM XLIV, it was not possible to discuss these issues directly in presence of Director Lisa Kelley.

10. Dr Chandrika Nath, SCAR's Executive Director, presented a very comprehensive report remotely. Her report covered SCAR's responsibilities, Sciences Groups, Expert Groups (GeoSciences and IBCSO), Scientific Research Programmes, Standing Committees and Specific Projects.



11. Reporting on the highest-ever recorded temperature following a heat wave in March 2022 in Antarctica (+40°C above March average in Concordia), the HCA Secretariat offered to have an open brainstorming discussion on the involvement of the IHO in general, and HCA in particular, on scientific matters in relation to climate change. Several HCA Members supported the idea and provided comments on this issue (Italy, UK and USA), all of them stressing the importance of marine geospatial information in order to predict, adapt, govern and support decision makers. No precise action was identified other than the analysis of the SCAR's Recommendations for Action available in their recent report: *Antarctic Climate and the Environment: A Decadal Synopsis and Recommendations for Action*.

IBCSO

12. An update on the development of the IBCSO v2 was provided by Ms Laura Hehemann, Seabed 2030 Data Manager, AWI⁴ showing very high quality images of the progress made since IBCSO v1. The next release of the GEBCO World Ocean Bathymetry, planned in June 2022, incorporates the IBCSO v2 grid. The representative of Seabed 2030 for the Southern Ocean confirmed that data exchange and storage agreements were in place between AWI, acting as Seabed 2030 Regional Data Centre, and the IHO Data Centre for Digital Bathymetry (IHO DCDB).

⁴ AWI: Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research.

GEBCO

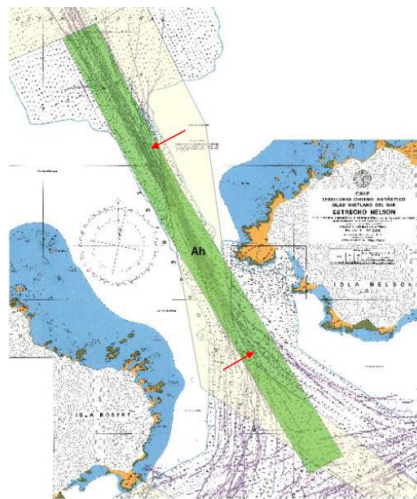
13. The HCA also noted the update on GEBCO provided by the Chair of the GEBCO Guiding Committee (GGC) and welcomed the establishment of their new GEBCO Strategy Drafting Working Group.

National HCA Members' Summary Reports

14. The national reports provided by HCA Members were very informative and well received. The investments in progress by several nations in the development of their own National Polar Strategic Plans, supported by the future commissioning of new Polar Research Vessels, were duly acknowledged. HCA Members were encouraged to share all data collected by these new assets and to provide them either to the IHO DCDB or Seabed 2030 Regional Data Centres.

Update from the Hydrographic Priorities Working Group (HPWG) – Status of INT Charts and ENC Production – S-100 Implementation

15.



BC 'Ah' – Nelson Strait (INT9151 BR/CL)
Amended reflect AIS traffic and underlying data quality

Using traffic density analysis, the HPWG Chair provided an outstanding review of the adequacy of the Maritime Shipping Routes in the Peninsula and a compilation of the updates received from Members on INT charts and ENC production, together with production options for some areas (corridors, Deception Island, etc.).

16. Following a comprehensive analysis of existing MSRs, the amendments proposed by the HPWG Chair were approved.
17. The HCA noted the recommended options offered by the UK (as Region M Chart Coordinator) (Doc. HCA18-07.4A refers) to address the Deception Island charting issues and allocate INT charts and ENCs production responsibilities in this area. Argentina, Chile and Spain were invited to consider the proposed options and report to the HCA Secretariat and Region M Coordinator with either their agreement on the way forward or submission of alternative options.
18. Following the workshop, the HCA reminded the Region M ICCWG recommendations on the general WEND principles/guidelines for the establishment of ENC Schemes in the region:
- where not ENC first, the INT chart and ENC scheme is aligned;
 - where producing ENC only, proposal must be circulated to Region M Coordinator in advance for being considered than submitted to HCA for formal approval.

- law standards in force, all proposals must be designed to avoid overlaps.

19. Beyond the traditional survey and charting issues, the HCA engaged in the preparation of the future. Anticipating the outcome of IRCC-14 on the recommendations from the WENDWG with regard to the S-100 Implementation Roadmap per region, the HCA agreed to establish an HCA S-100 Implementation Working Group. Some actions are planned to prepare the governance and production strategies for the top priority S-100 based products (S-101, S-102, S-104, S-111, S-122, S-124, S-128, and S-411). Some leading HCA Members were identified to lead the work related to the HCA S-100-IGIF Matrix, that was officially presented at IRCC-14 the week after HCA-18.

INToGIS – HCA GIS

20. The HCA Secretariat provided an update on the future of INTOGIS (INToGIS III, S-128 compliant, Catalogue of INT Charts, S-57 ENC's, and S-100 Products and Services) and the HCA GIS.
21. As a parallel action to those undertaken in the Arctic Regional Hydrographic Commission, the HCA tasked the Region M ICCWG to monitor the developments on S-101 ENC gridded schemes for covering Polar Regions in the future.
22. The HCA Secretariat proposed a new straightforward procedure based on submitting survey coverage metadata to be displayed in HCA GIS which was agreed by the HCA Members. The HCA Secretariat invited HCA Members to submit their data and survey coverage metadata to IHO Secretariat using this new HCA submission formstack procedure (push mode). At the same time, the HCA Secretariat was also invited to develop harvesting-type solutions when these data already exist on national portals (pull mode). An experimentation will be made.

Any Other Business

23. The HCA Chair re-opened the discussion on the issue raised by the publication of an article⁵ in National Geographic recognizing a 5th ocean in the world (the so-called “Southern Ocean”) while a Note on the Oceans in the foreword of IHO Publication S-23, indicates why this body of water has been omitted in S-23, Edition 3, 1953. Noting the wide usage of “IBCSO”⁶ by GEBCO for instance, HCA agreed to consider the possibility of submitting an IHO Resolution at the next Assembly by which “*The IHO recognizes the Southern Ocean as the maritime area surrounding the Antarctic, its Northern limit being...*” (wording still to be defined).

Conclusion

24. Noting the 3rd Session of the IHO Assembly in April 2023, the Chair proposed that the 19th Conference of the IHO Hydrographic Commission on Antarctica be held in 2024. The HCA welcomed the offer made by Italy to host it in Venice, Italy, from 27 to 29

⁵ <https://www.nationalgeographic.com/environment/article/theres-a-new-ocean-now-can-you-name-all-five-southern-ocean>.

⁶ Source: www.gebco.net; “*The International Bathymetric Chart of the Southern Ocean (IBCSO) is endorsed by international organizations such as the Intergovernmental Oceanographic Commission (IOC) of UNESCO, the International Hydrographic Organization (IHO), and the Scientific Committee on Antarctic Research (SCAR) as an Expert Group under the GeoSciences Group.*”

March 2024 and noted the intention from Chile, to host HCA-20, in 2025, in Punta Arenas (*dates and venue to be confirmed*).

25. In conclusion, Dr Mathias Jonas, Secretary-General of the IHO and HCA Chair, on behalf of HCA Members, commended Mr Lee Truscott (UKHO), Chair of HPWG and Region M ICCWG Coordinator, for his exceptional investment and devotion in the preparation of HCA-18 and for the outstanding quality of his reports and recommendations.

**IHO Hydrographic Commission on Antarctica (HCA)
18th Conference Berlin, Germany, 24 – 26 May 2022**

AGENDA AND TIMETABLE

Note: all time in UTC+2, CEST.

Monday 23 May	HCA-18
1800 -2000	Antarctic Informal Brainstorming Gathering - DORINT Hotel
Tuesday 24 May	HCA-18 – Hydrographic Priorities Working Group (HPWG)
	Join the meeting: <i>link will be published on the HCA-18 webpage in due course.</i>
0900-0930	Welcome, IT testing session for VTC participants
0930	HPWG Working Session
1030-1050	Coffee Break
1050	HPWG Working Session
1230-1330	Lunch Break
1350	Region M ICCWG Working Session
1500-1520	Coffee Break
1520	Region M ICCWG Working Session
1700	End of HPWG and Region M ICCWG Working Sessions

Wednesday 25 May	HCA-18 – Hydrographic Priorities Working Group (HPWG) Session 1
0900	1. Opening – Welcome Address <i>Docs: HCA18-01A List of Documents</i> <i>HCA18-01B List of Participants</i> <i>HCA18-01C HCA Chair Introduction</i>
0920	2.- Approval of Agenda and Timetable <i>Docs: HCA18-02A Agenda & Timetable</i>
0925	4.- Election of Vice-Chair <i>Docs: HCA18-04A Election of Vice-Chair</i>
0930	3.- HCA Membership Status <i>Docs: HCA18-03A HCA Membership and Observers List</i> <i>HCA18-03B HCA Statutes in force (until 23 May 2022)</i> <i>HCA18-03C New Edition of the HCA Statutes – Proposal to amend General Regulations of the IHO (Annex 4).</i>
0950	5.- Review of Status of List of Actions resulting from HCA-17 <i>Docs: HCA18-05A Status of Actions List from the 17th HCA Conference</i> <i>HCA18-05B Minutes of the 17th HCA Conference</i>
1000	7.- HCA activities in relation to the IHO Work Programme 7.1 Interaction with IOC GEBCO /IBCSO/Seabed 2030 <i>Docs: HCA18-07.1A GEBCO/IBCSO 2.0/Seabed 2030 Project Report</i>
1030-1050	Coffee Break
1050	7.2 HCA National Reports <i>Docs: HCA18-07.2A National Summary Reports (Argentina, Australia, Brazil, ...)</i>
1230-1330	End Session 1 - Lunch Break – Session 2
1350	7.3 HCA Hydrography Priorities Working Group <i>Docs: HCA17-07.3A HPWG Report</i>
1500-1520	Coffee Break
1520	7.2 HCA National Reports (cont.) <i>Docs: HCA18-07.2A National Summary Reports (Argentina, Australia, Brazil, ...)</i>
1700	End of Session 2

Thursday 26 May	HCA-18 – Hydrographic Priorities Working Group (HPWG) Session 3
0900	6.- ATCM, COMNAP, SCAR, and IAATO <i>Docs: HCA18-06.1A Review of existing ATCM Resolutions HCA18-06.1B SCAR activities affecting the IHO HCA18-06.1C IAATO activities affecting the IHO HCA18-06.1D HCA Members participation/attendance in ATCM XLIV – See Note#5 from the ATCM XLIV Secretariat</i>
0930	7.5 IHO HCA GIS <i>Docs: HCA18-07.5A Update on the IHO HCA GIS – INTOGIS III in Polar Regions</i>
0950	7.2 HCA National Reports (cont.) <i>Docs: HCA18-07.2A National Summary Reports (Argentina, Australia, Brazil, ...)</i>
1030-1050	Coffee Break
1050	7.4 Region M ICCWG <i>Docs: HCA18-07.4A Region M ICCWG Report – Implementation of S-100 services in Region M</i>
1200	8.- Any Other Business – Preparation of IRCC-14 and C-6 <i>Open Discussion on the limits and naming of the [Southern Ocean] – Way forward</i>
1230-1330	End Session 3 - Lunch Break – Session 4
1350	8.- Any Other Business – Preparation of IRCC-14 and C-6 (cont.) <i>Open Discussion on the limits and naming of the [Southern Ocean] – Way forward</i>
1430	9.- Date and Venue of Next Conferences <i>HCA-19, in 2024 (dates and venue to be discussed)</i>
1440	10.- Review of the Decisions and Actions List
1530	11.- Closure – End of Conference
	End of Session 4 – End of HCA-18

18th Conference of the IHO Hydrographic Commission on Antarctica (HCA)

Berlin, Germany (hybrid), 24 – 26 May 2022

LIST OF DECISIONS and ACTIONS FROM HCA-18

(as of 26 May 2022)

Decision/Action	Agenda Item	Details	Target Date	Status (May 2022)
	1.	Opening – Welcome Address		
HCA18/01		HCA agreed on the objectives of the conference presented by HCA Chair.		Decision
	2.	Approval of Agenda and Timetable		
HCA18/02		HCA Members approved the agenda and timetable.		Decision
	3.	HCA Membership Status and Statutes		
HCA18/03		HCA invited the HCA Secretariat to promote HCA Membership to those States who are IHO Member States and Parties to the Antarctica Treaty (Belgium, Bulgaria, Finland, Netherlands, Poland, Ukraine, ...). HCA Secretariat to contact these IHO Member States by HCA CL.	HCA-19 End of 2022	
HCA18/04		HCA Members and Observers to provide their updates on the HCA Membership List to the HCA Sec. as appropriate.	Permanent	
HCA18/05		HCA commended the HCA Vice-Chair for his active contribution in the development of the adopted amendments to the HCA Statutes. The new Statutes entered into force on 24 May 2022.		Decision HCA Letter 02/2022 refers.

Decision/Action	Agenda Item	Details	Target Date	Status (May 2022)
HCA18/06		Following the adoption of the new HCA Statutes, HCA endorsed the proposed amendments to Art. 8.e of the General Regulations of the IHO. HCA Secretariat to submit these proposed amendments for Council's endorsement, then to A-3 for approval.	18 July (for C-6), 20 December (for A-3)	Decision
	4.	Election of Vice-Chair		
HCA18/07		Mr Patrick Dorr (NGA, USA) was re-elected as HCA Vice-Chair and will serve until the end of HCA-19 (2024).		Decision Art. 5.2 of HCA Statutes applies.
	5.	Review of Status of List of Actions resulting from HCA-17		
HCA18/08 (former HCA17/05, HCA16/06, HCA15/07)		HCA agreed that, as a matter of principle, the current producer nations in Antarctica should be encouraged to consider the future production and distribution of S-100 based products for Antarctica, in their areas of charting responsibility.		Decision
HCA18/09 (former HCA17/07, HCA16/07b)		HCA Members , bound by the Antarctic Treaty ⁷ , are encouraged to ensure that bathymetric information contained in their surveys (survey coverage metadata as a minimum) is transmitted to the IHO DCDB (ATCM Resolution No 06/2019, as approved at ATCM XLII).	Permanent	Decision
HCA18/10 (former HCA17/11)		Noting the benefits that can be made from CATZOC values in HCA ENC's for risk assessment purposes, HCA agreed to keep the C-55 geographic segmentation in Antarctica as it is, for the time being.	Permanent	Decision
	6.	IHO and ATCM		
	6.1	IHO Liaison with ATCM, SCAR, IAATO		

⁷ Antarctic Treaty, Article II 1.(c) states “scientific observations and results from Antarctica shall be exchanged and made freely available.”

Decision/Action	Agenda Item	Details	Target Date	Status (May 2022)
HCA18/11 (former HCA17/08, HCA16/08, HCA15/11)		IAATO to check if the new approved guidance on crowd-sourced bathymetry (B-12) can be implemented technically – possibly by exporting from Voyage Data Recorder recordings (experimentation in progress). NO (as GGC Chair) to engage with IAATO Director of Operations on this matter.	HCA-19	
HCA18/12 (former HCA17/14, HCA16/11)		Noting that pro-active actions are necessary to have “IHO activities” in their agenda meetings, HCA Chair (ideally represented by HCA Member according to the host country/region) to consider the possibility of participating regularly in ATCM, COMNAP, SCAR and IAATO meetings.	HCA-19 , and as appropriate	
HCA18/13		HCA noted that HCA Chair had some contacts with partners and met the Executive Secretary of the Antarctic Treaty at ATCM XLIV.		
HCA18/14		HCA to consider the report delivered by SCAR , in particular: <ul style="list-style-type: none"> Recommendations in the SCAR publication: <i>Antarctic Climate Change and the Environment: A decadal synopsis and recommendations for action</i>. the Southern Ocean Action Plan in support for the UN Ocean Decade ...and events: <ul style="list-style-type: none"> UN Oceans Conference 2022: <i>Polar Oceans: Engine to the Global Ocean</i> (26 June 2022). 	HCA-19	
HCA18/15		HCA noted the Olex issue and invited Members to contribute to the relevant IHO bodies (CSBWG, DQWG) on this matter.		
	7.	HCA activities in relation to the IHO Work Programme		
	7.1	Interaction with IHO-IOC GEBCO and IBCSO		

Decision/Action	Agenda Item	Details	Target Date	Status (May 2022)
HCA18/16		HCA noted the progress report on the development of IBCSO 2.0 by the GEBCO representative (Doc. HCA18-07.1A refers).		
HCA18/17 (former HCA17/18, HCA16/15)		HCA to assess/monitor the effectiveness of the data flow processes between Seabed 2030 Data Centres (AWI) and the IHO DCDB.	HCA-19	US (J. Lowell to check with IHO DCDB Director whether this action is still needed).
HCA18/18		HCA noted the update on GEBCO provided by the Chair of the GEBCO Guiding Committee (GGC) and welcomed the establishment of their new GEBCO Strategy Drafting Working Group.		
HCA18/19		Following up on ATCM Resolution 6 (2019), HCA Chair to invite HCA Members to report at HCA-19, as part of their national reports, how they engage with their national marine research institutes to improve their contribution to GEBCO / Seabed 2030.	HCA-19	
	7.2A	National Reports		
HCA18/20		HCA noted the national reports delivered or provided by AU, BR, CL, CO, EC, ES, FR, GB, GE, IT, JP, KR, NO, NZ, PE, US, UY and ZA and commended the HOs for the high quality of the information provided.		Decision
HCA18/21		HCA noted the existence of some national Polar Strategic Plans (2021-2030) and invited HCA Members to consider the role that the HCA could and should play for a coordinated implementation if appropriate in application of the new amended HCA Statutes and the IHO Strategic Plan 2021-2026. Proposals to be considered at the next Conference.	HCA-19	
HCA18/22		HCA Members to consider participating in the OGC-IHO FMSDI ⁸ Pilot Project.	HCA-19	

⁸ The Federated Marine Spatial Data Infrastructure (FMSDI) Pilot.

Decision/Action	Agenda Item	Details	Target Date	Status (May 2022)
HCA18/23		HCA tasked the Region M ICCWG to monitor the ARHC (Region N) developments on ENC gridded schemes possible solutions in Polar regions.	HCA-19	
HCA18/24		<p>HCA noted the information provided by the US (NGA) about the conversion process of their national DNCs into ENCs.</p> <p>HCA invited the US (NGA) first to report at the next WENDWG meeting on this matter (impact on existing ENC schemes and coverage, ...).</p>	WENDWG-13 / HCA-19	
	7.3A&B	HCA Hydrography Priorities Working Group		
HCA18/25		<p>HCA approved the amendments to the Peninsula MSRs as proposed by the HPWG Chair.</p> <p>HPWG Chair to reformat the supporting plan and continue monitoring adequacy against AIS data in preparation of HCA-19</p> <p>HPWG Chair to keep IAATO (and COMNAP eventually) informed of the MSR changes.</p>	<p>HCA-19</p> <p>Permanent</p>	
HCA18/26		Beyond the Peninsula, HCA Members active in these regions are invited to collate relevant data and provide MSR information if any to the HPWG Chair for subsequent analysis against AIS data in preparation of the next Conference.	<p>May 2023</p> <p>HCA-19</p>	
HCA18/27		HCA Members to supply survey metadata to HCA GIS, through or cc HPWG chair, using the formstack online submission process.	Permanent	

Decision/Action	Agenda Item	Details	Target Date	Status (May 2022)
HCA18/28		<p>HCA approved the recommendation to seek IAATO review of regional Aids to Navigation.</p> <p>HCA Members to keep the current list available on the IHO HCA webpage up-to-date.</p>	HCA-19	
	7.4A	Region M ICCWG		
HCA18/29		<p>HCA noted the recommended options offered by GB (as Region M Chart Coordinator) (Doc. HCA18-07.4A refers) to address the Deception Island charting issues and allocate INT charts and ENC's production responsibilities in this area.</p> <p>AR, CL and ES to consider the proposed options and report to the HCA Secretariat and Region M Coordinator with either their agreement on the way forward or submission of alternative options.</p> <p>Final decision to be reported by the HCA Chair by correspondence and to be implemented in INTToGIS (INT and ENC's schemes).</p>	<p>End of September 2022</p> <p>December 2022</p>	
HCA18/30 (former HCA17/22, HCA16/21)		<p>Meanwhile, and during this case study phase (see Action HCA18/.. above), HCA urges the different producers of charts covering Deception Island (AR, CL, ES, GB) to establish a robust technical procedure iaw S-4 and S-11, to exchange <u>data</u> that are relevant for safe navigation in this area, and report to the HCA Chair/Secretary on the progress made in the development of this procedure (Doc. HCA18-07.4A refers).</p>	HCA-19	In progress
HCA18/31		<p>HCA agreed that there is no need to keep INT 9136 in the Region M Charting Scheme.</p>		Decision

Decision/Action	Agenda Item	Details	Target Date	Status (May 2022)
HCA18/32		HCA tasked the Region M Coordinator to reconsider the need for INT 9110 in liaison with CL.	HCA-19	
HCA18/33		In liaison with the RENCs, FR / NZ to resolve the overlap between NZ11490E and FR275910 as appropriate and keep the Region M Coordinator informed.	HCA-19	
HCA18/34		CL in liaison with Region M Coordinator to consider options for improved coverage of Artigas regarding existing INT scheme.	HCA-19	
HCA18/35		If planned, UY to submit any larger scale ENC covering Artigas to the Region M Coordinator for approval process by HCA.	End of June 2022	
HCA18/36		CL, BR & PE in liaison with Region M Coordinator to resolve potential ENC overlap regarding Mackellar Inlet.		
HCA18/37		UY to submit any larger scale ENC proposal.		
HCA18/38		The HCA approved: <ul style="list-style-type: none"> - the Region M ICCWG recommendations to change the INT scheme for INT9113 Lydstad Bay and Sally Cove. - proposal for Biscoe Wharf/ Rothera ENC first (possibly ENC only) similar to coverage INT 9113 coverage. 		
HCA18/39		The HCA reminded the Region M ICCWG recommendations on the general WEND principles/guidelines for the establishment of ENC Schemes in the region: <ul style="list-style-type: none"> - where not ENC first, the INT chart and ENC scheme is aligned; - where producing ENC only, proposal <u>must</u> be circulated to Region M Coordinator in advance for being considered than submitted to HCA for formal approval. - iaw standards in force, all proposals <u>must</u> be designed to avoid overlaps. 	Permanent	

Decision/Action	Agenda Item	Details	Target Date	Status (May 2022)
HCA18/40		Anticipating the outcome of IRCC-14 on the recommendations from the WENDWG with regard to the S-100 Implementation Roadmap per region, HCA agreed to establish an HCA S-100 Implementation Working Group (HCA Secretariat leads).		Decision
HCA18/41		<p>Following up on Action WENDWG12/33 (IGIF pathway matrix per S-1xx product, per RHC), HCA agreed on some guiding initial principles and leaders to fill the HCA S-100-IGIF Matrix:</p> <ul style="list-style-type: none"> - S-101: GB (as Region M Charting Coordinator, continuity by S-57 conversion) - S-102: GE (in liaison with AWI, as Seabed 2030 Data Centre/IBCSO) - S-104: US (in its global capacity in ocean modelling) - S-111: US/FR (in its global capacity in ocean modelling) - S-122: EC/GE (making benefits of experience gained in Ecuador and BSHC) - S-124: AR, AU, CL, ZA, NZ (as NAV Coordinators) - S-128: NO/GB (as Operators of PRIMAR/IC-ENC) - S-411 – Ice information: AR/CL/GE 	WENDWG-13/ HCA-19	
	7.5A	IHO HCA GIS		
HCA18/42		HCA agreed to launch the HCA online formstack for data submission.	HCA-19	Decision
HCA18/43		<p>All HCA Members to submit data and survey coverage metadata to IHO Secretariat using HCA submission formstack...</p> <p>... and HCA Secretariat to consider also harvesting-type solutions when these data are already available on national portals..</p>	<p>All, Periodic (once a year, June)</p> <p>HCA-19</p>	

Decision/Action	Agenda Item	Details	Target Date	Status (May 2022)
HCA18/44		HCA noted that the WENDWG endorsed the strategy, way forward and timelines proposed by KHOA for the subsequent development of INTOGIS III (incl. catalogue of S-1xx products/services S-128 compliant), as presented at the meeting) (Decision WENDWG12/23) and since the approval of Ed.1.0.0 of S-128 at HSSC-14 to monitor S-128.	HCA-19	
	8.	Any other business – Preparation of IRCC-14 and C-6		
HCA17/25		HCA Chair informed the participants that the recent publication of an article ⁹ in <i>National Geographic</i> recognizing the naming Southern Ocean was noted by the IHO Secretariat. Related requests by media were responded with explanations on how this name has been discussed in the course of the historic reviewing of S-23. By means of this statement it was also pointed out that IHO itself is not a naming authority and has no mandate to denominate the “Southern Ocean” to the area.		Background information only Discussed at HCA18, under agenda item 8.1.
HCA18/45		Noting the Status of S-23 Ed. 3, 1953 (Decision A2/24 refers), HCA agreed to submit a proposed IHO Resolution to A-3 for IHO Member States’ approval, by which “ <i>The IHO recognizes the Southern Ocean as the maritime area surrounding the Antarctic [with the Northern limit being...]</i> ” (wording still to be defined).	20 December 2022 (deadline for submission to A-2)	
	9.	Date and Venue of Next Conferences		
HCA18/46		HCA Members welcomed the offer from Italy to host HCA-19, from 27- 29 March 2024 (<i>dates to be confirmed</i>). HCA Chair to invite Chile to consider the possibility of hosting HCA-20 in Nov.-Dec. 2025 in Punta Arenas (dates and venue to be confirmed).	End of December 2022	

⁹ <https://www.nationalgeographic.com/environment/article/theres-a-new-ocean-now-can-you-name-all-five-southern-ocean>

Decision/Action	Agenda Item	Details	Target Date	Status (May 2022)
	10.	Closure – End of Conference		
HCA18/47		In conclusion, Dr Mathias Jonas , Secretary-General of the IHO and HCA Chair, on behalf of HCA Members, commended Mr Lee Truscott (UKHO), Chair of HPWG and Region M ICCWG Coordinator, for his exceptional investment and devotion in the preparation of HCA-18 and for the outstanding quality of his reports and recommendations.		