

**EIGHTH MEETING OF THE IHO INTER-REGIONAL COORDINATION COMMITTEE
(IHO-IRCC8)**

Abu Dhabi, UAE, 29-31 May 2016

REPORT

1. Opening Remarks, Introductions and Administrative Arrangements

Docs: IRCC8-01A List of Documents (IHB)
IRCC8-01B List of Participants (IHB)
IRCC8-01C List of IRCC Members (IHB)

The IRCC Chair Dr Parry OEI opened the meeting at 09h00 and Colonel Khalid Dasmal, the host provided the opening speech and highlighted the importance of the meeting. IHB President Robert Ward thanked the hosts for hosting the IRCC8 and the CBSC14, another key body of the IHO. He expressed that the IRCC has come of age with important strategic topics to address and invited the meeting participants to set the agenda for the IHO Work Programme and for the forthcoming Conference/Assembly.

The Chair addressed the meeting and thanked the hosts for hosting the IRCC8. He highlighted the activities of the IRCC that covers the whole world and the need for a sustainable IHO work programme. Chair invited the non-English native speaking participants to express their views openly and for the English native speaking participants to speak slowly and clearly, so that ideas can be raised, understood and considered. Participants were invited to introduce themselves. List of Participants is provided in [Annex A](#).

IHB introduced the relevant documents and explained the administrative arrangements for the meeting and the following decision was agreed:

Decision 1: to note the documents under agenda item 1 (docs. IRCC8-01A, IRCC8-01B and IRCC8-01C).

2. Approval of Agenda

Doc: IRCC8-02 Agenda and Timetable (IHB)

The Chair invited participants to comment on the agenda and the timetable. The agenda was adopted without changes:

Decision 2: to adopt the agenda and the timetable (doc. IRCC8-02).

3. Matters arising from Minutes of IRCC7 Meeting

Docs: IRCC8-03A Minutes of IRCC7 (IHB)
IRCC8-03B Status of Action List from IRCC7 (IHB)

The Chair introduced the IRCC7 Report which was considered and approved without changes. The Chair then invited the IRCC Secretary, IHB Director Mustafa Iptes to review the pending actions from IRCC7. The IHB President highlighted the UN "Delivering as one" concept for capacity building and IHO cooperation with the IMO and the IALA in order to improve the maritime safety. The meeting was briefed on the way the IHO provides input to the IMO Integrated Technical Cooperation Programme (ITCP): informally during the preparation of the ITCP and formally during the IMO Technical Cooperation Committee (TCC). The meeting discussed the joint Capacity Building Group activities and the visits to other organizations to learn how to attract and manage funds.

The meeting agreed on the need to have an approach that goes beyond chart production and associated services and moves towards the expanding use of geodata to try to catch the attention of politicians and decision makers and to deliver the message to the broad range of stakeholders for the development of sustainable long term projects. In order to achieve this, regions need to identify those capacity building activities that need to be tackled and also to coordinate with the other organizations the common goals, the synergies and the efforts. The meeting updated the List of Actions from IRCC7 (some considered under the appropriate agenda items) and agreed the following decision and action:

Decision 3: approve the IRCC7 Report (*doc. IRCC8-03A*) and the updated list of actions from IRCC7 (*doc. IRCC8-03B rev.2*).

Action 1: Secretariat to update *doc. IRCC8-03B* and make it available at the IHO website (deadline: 30 June 2016).

4. Review of Terms of Reference and Rules of Procedure

Doc: IRCC8-04A TOR-ROP (IHB)
IRCC8-04B rev.1 Amended TOR-ROP (IHB)

The meeting reviewed the IRCC Terms of Reference (ToR) and Rules of Procedure (RoP), *doc. IRCC8-04A*, in order to consider several editorial changes and to add the following sentence at the end of paragraph 4:

"Promote data gathering by new techniques and maximizing the use of hydrographic data from all sources". The meeting agreed on the following decision and action:

Decision 4: to endorse the amended TOR-ROP (*doc. IRCC8-04B Rev.1*).

Action 2: Secretariat to issue a circular letter seeking Member States' approval for the amended IRCC ToR and RoP (*doc. IRCC8-04B Rev.1*) for (deadline: 31 August 2016).

5. Report by the Chair and the IHB

Docs: IRCC8-05A IRCC Annual Report (Chair)
IRCC8-05B IHB Report (IHB)

The Chair introduced his report (*doc. IRCC8-05A*) highlighting the activities held since IRCC7. He highlighted the objectives of the IRCC and the importance of coordinating RHC activities and projects, including the development of work programmes under the WENDWG, the CBSC, the IBSC, the MSDIWG, the WWNWS-SC and GEBCO. He noted the increasingly complex interaction amongst the RHC and the IRCC bodies and the need to establish appropriate coordination. He also stressed that the strength of the IRCC is in its coordinating role. It should also focus on better cooperation between RHCs as well as more interaction with the relevant Sub-Committees/Working Groups. This could be achieved by, for example, looking at possible joint projects where RHCs could cooperate with Sub-Committee or Working Groups.

The IRCC Secretary presented the IHB report (IRCC7-05B). He reported the priorities of the IHB Directing Committee, the status of the ratification of the Protocol of Amendments to the IHO Convention, the status of pending memberships and of suspended Member States. He reported on the GIS developments in the IHB, the preparation of the next Conference/Assembly, the theme for World Hydrography Day (WHD) 2016 (Hydrography – the key to well-managed seas and waterways) and the success of the Capacity Building Work Programme including the recent visit / meetings at the World Bank to seek funds for implementing regional hydrographic projects.

The IRCC discussed the possible overlap between the IRCC and future Council meetings following the entry in to force of the revised Convention, their roles. It was agreed that the differences can be summarized in the table below (assuming that the IHO Assembly takes place in April):

	IRCC	Council
Membership	RHC Chairs + IRCC Bodies	IHO Member States
Subjects	Coordination of activities at regional level, including CB	Strategic thinking
Meetings date	May-June	October/November

The UK representative announced that WHD will be celebrated at the IMO Headquarters in London on 21 July in order to raise awareness of hydrography and to take the IMO closer to hydrography.

The meeting discussed the intended Maritime Funding Conference scheduled in October at the World Bank in Washington DC, USA, and the possible representation of the CBSC at the funding meeting. The

CBSC Chair informed the meeting that the CB Coordinators from the relevant RHC were invited to participate in this meeting. IHB Director Iptes informed the meeting that relevant experts / CB Coordinators from the Caribbean, Eastern Atlantic and SW Pacific will be invited to attend to the Funding Conference.

The Chair highlighted that there are significant IHO success stories that need to be publicized and invited the meeting to consider identifying good story tellers. The IHB President stressed that it may be possible to utilize contract support for this. The meeting also invited the RHC Chairs that have not yet presented updates to the IHO Work Programme to do so. The following actions and decision were agreed by the meeting:

Action 3: Secretariat to investigate how to engage with a story-teller to publicize IHO successes and report back to IRCC (deadline: IRCC9)

Action 4: RHC Chairs that have not presented updates to the IHO WP to do so (deadline: 1 July 2016).

Decision 5: to note the documents under agenda item 5 (*docs. IRCC8-05A and IRCC8-05B*).

6. RHC Reports

Docs: IRCC8-06A Nordic HC (NHC Chair)
 IRCC8-06B North Sea HC (NSHC Chair)
 IRCC8-06C East Asia HC (EAHC Chair)
 IRCC8-06D US/Canada HC (USCHC Co-Chair)
 IRCC8-06E Mediterranean and Black Seas HC (MBSHC Chair)
 IRCC8-06F Baltic Sea HC (BSHC Chair)
 IRCC8-06G Eastern Atlantic HC (EAHC Chair)
 IRCC8-06H South-East Pacific Regional HC (SEPRHC Chair)
 IRCC8-06I South-West Pacific HC (SWPHC Chair)
 IRCC8-06J Meso American - Caribbean Sea HC (MACHC Chair)
 IRCC8-06K Southern Africa and Islands HC (SAIHC Chair)
 IRCC8-06L North Indian Ocean HC (NIOHC Chair)
 IRCC8-06M ROPME Sea Area HC (RSAHC Chair)
 IRCC8-06N South West Atlantic HC (SWAtHC Chair)
 IRCC8-06O Arctic Regional HC (ARHC Chair)

RHC Chairs introduced their reports and presented the key achievements, the challenges being faced and the lessons learned in each Region:

a) NHC

The NHC representative introduced the report (*doc. IRCC8-06A*) on behalf of the Chair and highlighted that the region strongly support the proposals made by the WENDWG regarding the Admiralty Information Overlay (AIO) to be discussed at the relevant agenda item. He presented the developments of Electronic Navigational Charts (ENC) for the leisure market and how this may become a requirements of maritime administrations for certain vessels relying on Electronic Charting systems (ECS) rather than ECDIS. One possibility is to derive similar standards to the ENCs for the leisure users. The SEPRHC Representative gave an overview of the developments in Chile where derived products are already agreed with industry and the concerns with the updates rather than with copyrights. The meeting considered that guidelines may be useful. Such guidelines could indicate the use and the minimum level of functionality of official data used in derived products for the leisure market. The following action was agreed:

Action 5: NHC Chair to provide a status report for the use of official data for the production of leisure charts and report back to the IRCC the findings and best practices (deadline: IRCC9).

b) NSHC

The NSHC Chair introduced the report (*doc. IRCC8-06B*) and updated the meeting on the work done by its working groups on ENC harmonization, MSDI, resurveys and tides. He also presented the organization of a risk assessment process and the implementation of Lowest Astronomical Tide (LAT) in the North Sea and its harmonization across the borders. He expressed concern over how States are

represented in the Council and suggested the use of the term "Member States selected by the RHCs" rather than "Representatives of the RHCs".

c) EAHC

The EAHC Chair introduced the report (*doc. IRCC8-06C*) and informed the meeting about Capacity Building activities in the region, work on resolving ENC overlaps, the creation of e-Marine Information Overlays (e-MIOs) and the establishment of a regional MSDI. He also highlighted that Brunei Darussalam had been admitted as a full Member of the EAHC. The meeting agreed the following decision:

Decision 6: to note the acceptance of Brunei Darussalam as a Member to the EAHC.

d) USCHC

The USCHC Co-Chair (Canada) introduced the report (*doc. IRCC8-06D*) and highlighted the work done on Satellite Derived Bathymetry to support nautical cartography, the combined USA/Canada participation in LIDAR activity and the intention of USA/Canada to fully participate in IHO Working Groups and Committees as appropriate.

He expressed that the USCHC will work to establish a regional MSDI that will allow greater discoverability and usability of hydrographic data to consumers. This is in support of marine activities beyond safety of navigation, such as coastal managers, industry researchers and disaster relief efforts that use hydrographic data. He said that both nations are committed to making MSDI and data-centricity a core focus as a means to standardize the collection, management, interoperability and dissemination of data.

The meeting discussed the importance of metadata and the use of Crowd-Sourced bathymetry (CSB) in an MSDI. Chair invited the USCHC Co-Chair to share their experience with CSBWG.

e) MBSHC

The MBSHC Chair introduced the report (*doc. IRCC8-06E*) and highlighted the large number of coastal States and IHO Member States in the region, with good capacities, with complex geography that is prone to maritime incidents. He mentioned that nautical charting remains the main concern of the Members and that in some areas the difficulty of charting coordination, especially in ENCs, is more likely to affect the navigation than the lack of charts. He also informed the meeting of the Capacity Building activities in the region and the increased participation of non-IHO Member States in the meetings and activities of the Commission, including those in the Black and Caspian Seas.

f) BSHC

The BSHC Representative introduced the report (*doc. IRCC8-06F*) on behalf of the Chair which covered the work done by the BSHC working groups on re-survey, on chart datum, on its bathymetric database, on MSDI and on INT Charts. He also highlighted the good relationship with the Helsinki Commission (HELCOM) within the Baltic Sea Action Plan and the EU, in particular with the European Commission's development of the EU Baltic Sea Strategy.

g) EAthC

The EAthC Chair introduced the report (*doc. IRCC8-06G*) and started by highlighting the complexities in a region with a large number of coastal States. He noted the increasing interest of several countries in relation to hydrography, noting the case of Congo that has applied for Membership of the IHO and Liberia that had requested a Technical Visit, recently done, together with recent developments in Côte d'Ivoire and cooperation with the Maritime Organization of West and Central Africa (MOWCA). He also reported the achievements of the Capacity Building activities such as the definition study (HydroMAOC), the development of e-learning, the preparation for the IMO-IHO training for francophone Africa (to be confirmed) and the high-level visit to MOWCA next October.

He also stressed the difficulties in getting feedback from the NAVAREA II National Coordinators. This could be due to the lack of points of contact, the lack of awareness of decision makers on the importance of hydrography for the governance of the maritime domain, and the lack of data available for the national infrastructures. In addition it could also be difficulties in communication due to the

number of languages and the absence of a hydrographic service in the majority of the countries in the region.

The EAthC Chair also highlighted the difficulties related to monitoring and improving the status of nautical information, surveys, and charting, developing and implementing INT chart and ENC schemes, and especially in raising the awareness of the importance of hydrography in the region and promoting capacity building. He also presented the perspective of Morocco in engaging political decision makers through the creation of a National Coordinating Committee for Hydrography, Oceanography and Cartography. This allowed for the acquisition of a 73m hydrographic and oceanographic ship to be delivered in 2018, and of hydro-oceanographic material. Training and education was also identified and personnel from Morocco are attending numerous hydrographic-related courses abroad and in-country.

The meeting considered that gaining political support is key for the development of hydrography in the region and the participation of MOWCA is crucial for the engagement of the broad range of stakeholders. In response to the need for training course conducted in the Portuguese language, Brazil offered Capacity Building assistance for the Portuguese speaking countries in the region. The meeting agreed the following decisions:

Decision 7: to note the key contribution from France to support the development of French speaking countries in general and Morocco in particular.

Decision 8: to note the active role by Morocco for the development of capacities in the region.

h) SEPRHC

The SEPRHC Representative introduced the report (*doc. IRCC8-06H*) on behalf of the Chair. He updated the meeting on the INT Chart and ENC production in the region and acknowledged the support from the CBSC to the work on technical issues. He elaborated on the regional guidelines on responses to disasters explaining that there is a mutual support hot line amongst the countries and each country in the region has its own warning system. He also emphasized that the assessment of the environmental information is always key in responses to disasters, including those that are not natural, such as plane crashes. He shared that in the case of Chile, all the information is produced and made available automatically without the need for a user request. This highlights the importance of MSDI in handling geodata, including oceanographic data and satellite images. The meeting noted the usefulness of being proactive in ensuring geodata is readily available for immediate use when a disaster occurs.

The meeting noted the importance of shallow water bathymetry from GEBCO in order to support tsunami modelling worldwide.

i) SWPHC

The SWPHC Chair introduced the reports (*docs. IRCC8-06I1, IRCC8-06I2 and IRCC8-06I3*) and highlighted that Solomon Islands and Vanuatu had applied for IHO Membership in 2015. He informed the meeting on Capacity Building activities in the region supported by the IHO (technical visits, training and workshops) and others provided by donor agencies (Japan International Cooperation Agency (JICA) for example). He emphasized the support received from New Zealand through its Pacific Region Navigation Initiative (PRNI), a five-year programme focusing on navigation-related aspects of maritime safety using risk assessment and economic impacts as key components of identifying priorities.

He also presented key aspects of the impact of Tropical Cyclone *Winston* in Fiji and the support provided in the region, noting that the impact was greater on the land than at sea, with a significant loss of lives. He described the exchange of messages for coordination and the role of the Pacific Community (SPC) in providing MSDI in support of those involved. The UK, as the Primary Charting Authority (PCA), provided satellite imagery analysis for the assessment of coastal damage and navigation. The meeting agreed the following decisions:

Decision 9: to note the high level of engagement and capacity building activity being undertaken in the SWPHC region.

Decision 10: to note the very good support provided to Fiji by SWPHC members and regional bodies following Tropical Cyclone *Winston*.

Decision 11: to note the application for IHO membership by Solomon Islands and Vanuatu.

j) MACHC

The MACHC Chair introduced the report (*doc. IRCC8-06J*) and highlighted the difficulties of communication due to the different languages in use across the region that have led to changes in the Statutes regarding the provision of continuous interpretation at meetings, and the work done by the Integrated Charting Committee in coordinating the charting in the region, with 47 new ENC's produced. He informed the meeting of the work done by NOAA on a port gap analysis that identified that 48 out of 373 worldwide ports and anchorages are not covered by ENC's in usage bands 4, 5 and 6, the progress on risk assessment methodology to identify hydrographic priorities and the development of the Marine Economic Infrastructure Programme.

He highlighted the need for Capacity Building as envisioned in the 5-year Work Plan 2013-2017 and the need for more courses in Spanish, the growing number of regional initiatives, such as the Mexican CB project "*Strengthen the hydrographic abilities in Mesoamerican and the Caribbean sea*" (FOCAHIMECA in Spanish), the Organization of the Eastern Caribbean States (OECS) project, the creation of the Latin American chapter of the Hydrographic Society of the Americas (THSOA), and a surveying support initiative for the British Overseas Territories.

k) SAIHC

The SAIHC Vice-Chair introduced the report (*doc. IRCC8-06K*) on behalf of the Chair and updated the meeting with the status of INT Charting and ENC production, and Capacity Building activities. He expressed concern over the non-provision of data to INT Chart Producers despite the existing recommendations and resolutions.

President Ward highlighted that there are several countries in Eastern Africa that appear to have well-established spatial data infrastructures covering the land area but are ignoring or are disconnected from the maritime domain.

l) NIOHC

The NIOHC Vice-Chair introduced the report (*doc. IRCC8-06L*) on behalf of the Chair who could not attend the meeting due to the cyclone that had recently hit Bangladesh with damages and casualties. He reported on the work done on INT Charting and ENC coverage, expressing the need for better communication between chart coordinators across the RHCs, and on Capacity Building activities. He highlighted the current issues in the region: data centricity, disaster responses, crowd-sourced bathymetry, the challenges of surveying and charting in dynamic river environments and cooperation with other organizations.

m) RSAHC

The representative of Saudi Arabia introduced the report (*doc. IRCC8-06M*) and highlighted developments regarding the approval of the Protocol of Amendments to the IHO Convention and of the approval of the applications for membership of the IHO, INT Charting coordination, GEBCO and shallow water bathymetry, Capacity Building, MSI Coordination and the RHC protocols for responses to disasters. He also reported on developments in the hydrographic service in Saudi Arabia where extensive hydrographic surveys were recently completed and new ones are planned, improvements in the tide gauge network, 32 new ENC's produced, newly trained hydrographers and several other projects underway.

Director Iptes highlighted the current vacancy in the Chair and Vice-Chair positions in the RSAHC and pointed out that this has created difficulties for communication and management of the RSAHC.

n) SWAtHC

The SWAtHC Chair introduced the report (*doc. IRCC8-06N*) and informed the meeting of the progress made with INT Charts and ENC production, in particular the resolution of inconsistencies and overlaps as a result of the high level of cooperation and coordination in the region, and the provision of ENC data to GEBCO. He also reported on the Capacity Building activities supported by the IHO and on the national initiatives for students from Namibia and Panama.

GEBCO acknowledged the provision of ENC data for shallow water and the USA congratulated the region on resolving the trans boundary issues in the La Plata River.

o) ARHC

The ARHC Chair introduced the report (*doc. IRCC8-06O*) and highlighted the developments on the Arctic Voyage Planning Guides, the ongoing efforts to solve ENC overlaps and the project to establish an Arctic-MSDI in coordination with other organizations. He reported on the engagement with other stakeholders in the region in order to implement crowd-sourced bathymetry, satellite-derived bathymetry, MSDI and risk assessment analysis. The meeting also discussed CSB (from all sources) and SDB for the benefit of navigation in the Arctic region.

Decision 12: to note the documents under agenda item 6 (*docs. IRCC8-06A, IRCC8-06B, IRCC8-06C, IRCC8-06D, IRCC8-06E, IRCC8-06F, IRCC8-06G, IRCC8-06H, IRCC8-06I, IRCC8-06J, IRCC8-06K, IRCC8-06L, IRCC8-06M, IRCC8-06N and IRCC8-06O*).

7. Reports from IRCC Bodies

Docs:

- IRCC8-07A Hydrographic Commission on Antarctica (HCA Chair)*
- IRCC8-07B World-Wide Navigational Warning Service Sub-Committee (WWNWS-SC Chair)*
- IRCC8-07C Capacity Building Sub-Committee (CBSC Chair)*
- IRCC8-07D WEND Working Group (WENDWG Chair)*
- IRCC8-07E MSDI Working Group (MSDIWG Chair)*
- IRCC8-07F1 CSB Working Group (CSBWG Chair)*
- IRCC8-07F2 Draft CSB Guidance Document (CSBWG Chair)*
- IRCC8-07G IHO-EU Network Working Group (IENWG Chair)*
- IRCC8-07H1 FIG-IHO-ICA IBSC (IBSC Chair)*
- IRCC8-07H2 S-5A Standards development and feedback from Member States and Stakeholders (IBSC Chair)*
- IRCC8-07H3 Proposal to include the Hydrographer competence in S-44 (IBSC Chair)*
- IRCC8-07H4 Syllabus of Cat. A for Hydrographic Surveyors for the Cat. B holder (Japan)*
- IRCC8-07H5 IBSC Comments to doc IRCC8-07H4 (IBSC Chair)*
- IRCC8-07I1 IHO-IOC GEBCO Guiding Committee (GGC Chair)*
- IRCC8-07I2 rev. 1 Scanning and Archiving the Five GEBCO Map Editions (IHB)*

The Chairs of the IRCC bodies introduced the reports with the main achievements, challenges faced, lessons learned and work programs in each body. The Chair invited the Committee to discuss the inputs and to provide guidance of each body's work programme.

a) HCA

The HCA Chair introduced the report (*doc. IRCC8-07A*) and informed the meeting on the outcomes of the Hydrographic Priorities Working Group in identifying the priority areas requiring surveys for charting purposes and coordinating chart coverage schemes. He also reported the status of INT Chart and ENC coverage and the IHO GIS for Antarctica, and stressed that the state of hydrographic surveying and nautical charting in Antarctica continues to pose serious risks for the safety of navigation, despite the efforts from a number of IHO Member States, through their national Hydrographic Offices, to improve the situation.

He emphasized that the available resources remain limited and there is not much prospect of significant improvements in the near future leading to the need for new policy and coordinating action by governments together with other organizations to obtain relevant bathymetric data. He also highlighted that the engagement with the Antarctic Treaty Consultative Meeting (ATCM) is problematic as the Secretariat are not authorized to engage directly with the HCA or the IHO as part of seeking to address the shortfalls in hydrographic knowledge and charting.

b) WWNWS-SC

The WWNWS-SC Representative introduced the report (*doc. IRCC8-07B*) on behalf of the Chair and informed the meeting of the work done on the SafetyNET and NAVTEX Manuals, both approved by the International Maritime Organization (IMO) Sub Committee on Navigation, Communications and Search and Rescue (NCSR) following the new review process approved by IRCC7. He also reported on the work of the Drafting Review Working Group to update the relevant IMO Resolutions, the review of the MSI

self-assessment reports and of the GMDSS Master Plan.

He highlighted the engagement with other Intergovernmental Organizations and the increased cooperation between NAVAREA and METAREA Coordinators, the technical assessment of potential new GMDSS mobile satellite service providers and issues related to the Tsunami Early Warning System. He emphasized the Capacity Building training courses conducted on MSI and the need for additional French and Spanish speaking instructors.

The meeting discussed the issues expressed in the WWNWS-SC Chair's report and agreed the following actions:

Action 6: RHC Chairs to encourage the attendance of Member States and Observers at WWNWS-SC meetings (Permanent).

Action 7: RHC Chairs to raise awareness of the impact of e-navigation on the provision of MSI in the respective regions and to highlight the use of the Joint Manual on MSI to ensure correct terminology and formats are used in MSI messages (Permanent).

Action 8: RHC Chairs to encourage closer engagement of the National MSI Coordinators of Member States with the relevant NAVAREA Coordinator (Permanent).

Action 9: RHC Chairs to encourage closer coordination between NAVAREA and Capacity Building Coordinators in planning and student selection for the CB MSI training courses (Permanent).

c) CBSC

The CBSC Chair introduced the report (*doc. IRCC8-07C*) and highlighted the main developments with respect to the involvement of donor agencies in comprehensive projects, a concept incorporated in the IHO Capacity Building Strategy, with progress in the Organization of the Eastern Caribbean States (OECS) project, led by UK, in the Pacific Region Navigation Initiative (PRNI), led by New Zealand, the Commonwealth project, led by UK and the FOCAHIMECA Project, led by Mexico. He highlighted the fact that the OECS Project resulted from a regular CB activity several years ago.

He informed the meeting how the CB Work Programme is prioritized using the guidance in the IHO Capacity Building Strategy, the IHO Resolutions and the Capacity Building Procedures, and highlighted the major challenges related to forecast limitations in the level of CB funding in the future, the growing number of submissions that amounted to more than 1 Million Euros in 2017, difficulties in planning activities when funds are not secured, the lack of assessment of the status of the Capacity Building phases in coastal States by CB Coordinators for a sustainable provision of measures and for performance monitoring, no continuity and the high workload of the CB Coordinators, rising demands for the coordination of the growing number and the complexity of regional projects.

He also acknowledged that the IHB had improved its administrative support to CB since IRCC7 by reallocating resources within the IHO Staff, but that these options are limited and that the secretarial support for the Capacity Building activities is still insufficient. He welcomed the work done by the IHB and the Republic of Korea for the development of an integrated Capacity Building management system that has the potential to reduce the administrative burden in the Secretariat. The CBSC Chair also reported on the new and improved Capacity Building procedures and called attention for the need for improvements in liaison between the CBSC and the WWNWS-SC for the proper assessment and subsequent provision of training in MSI. He also informed the meeting of the continuing and generous contributions from the Republic of Korea and from the Nippon Foundation of Japan, as well as from other international organizations and from industry, through the provision of funding, experts, trainers, software and equipment.

The meeting considered the importance of providing appropriate level of support to the Capacity Building activities. Participants explained how they use contract support and the opportunity to combine permanent and contract staff. Participants also expressed that there will be opportunities with new memberships and the reorganization of the IHO due to the amendments to the Convention. The following actions were agreed:

Action 10: Secretariat to seek to increase secretarial support to the CB Activities and the CBWP and report back to IRCC (deadline: IRCC9).

Action 11: WWNWS-SC Chair to liaise with the CBSC Chair to improve the assessment of the status of the phase achieved in Capacity Building in coastal States and report back to IRCC (deadline: IRCC9).

Action 12: EAHC Chair to submit the technical visit reports executed in 2014 (deadline: 31 July 2016).

At the request of the Chair, UK presented the Project known at the time as "*Project Neptune*" that may provide hydrographic support to 20 Commonwealth small States in the Caribbean, the South-West Pacific and the North Indian Ocean. He highlighted the significance of the recent awareness of the Foreign and Commonwealth Office of the benefits of supporting overseas territories and that the Project was announced by the Prime Minister in terms of the development of the blue economy and the use of marine coastal resources.

Participants discussed the importance of partnership in programmes where hydrography is included in a broader scope of maritime development.

d) WENDWG

The WENDWG Chair introduced the report (*doc. IRCC8-07D*) and informed the meeting of the key aspects of ENC overlaps, with little progress being made so far. Singapore is leading a research work in the Malacca Straits seeking a pragmatic approach and the use of available tools and systems. He also reported on RENC harmonization and on the IHO ENC Catalogue. The status of ENC coverage is: small scale 100%; medium scale 90%; and large scale 97%.

He highlighted the proposed changes to the performance indicators that will be discussed later in the agenda, in order to reflect the IHO progress in ENC production and an assessment of satisfaction by end-users and stakeholders. He also described the existing barriers to the full implementation of the WEND principles, with some of the top 2000 ports still having inadequate coverage and some ENCs not being available or not distributed through a RENC.

Italy noted that during the WENDWG-6 meeting, it was recognized that the Top 2000 ports list is not up-to date and not always fully in line with national perspectives and that Action WENDWG6/10 (List of Ports) is: "*US to provide the IHB with the NGA World Port Index Database (Pub. 150) and liaise with the US Representative at the IMO to get a possible IMO List of the Top 2000 ports*". The WENDWG might endorse a new top 2000 port list, starting from this new list and in consultation with HOs.

He pointed out that ENC updates should be as frequent as with the corresponding paper chart, which may require some Capacity Building support, that there is need to raise awareness of the standards so as to address errors in conformance and that overlapping ENC data undermines the credibility of the IHO. He also reported on the developments and the key aspects of the Admiralty Information Overlay (AIO), including the benefit/risk assessment report from the UKHO.

Following an initial discussion on the WEND WG report, Norway made the following statement: "*Norway recognizes the usefulness of the Admiralty Information Overlay for certain areas in the world. That being said it, the PRIMAR Member States / Hydrographic Offices (HO) and other nations have experienced that the AIO in their waters can also be misleading and confusing for the mariner. AIO has been a demanding topic for more than seven years. Several letters have been sent on behalf of all PRIMAR member states, the Nordic Hydrographic Offices and individual hydrographic offices that require UKHO to stop issuing AIO for the waters for which these HO's are charting authority. The AIO is not ordinary additional information overlay that provides information on meteorological conditions, icing conditions or any other non-ENC related information. It provides information about the quality of an ENC.*

The AIO is not issued by just any commercial distributor, but by the biggest hydrographic office in the world that has a global nautical paper chart portfolio. Any product issued by UKHO/AVCS is therefore easily perceived as a product issued by an official government chart authority. If that product provides information on the quality of another countries ENC's, it directly challenges that countries charting authority. It is unfortunate that mariners are made to believe that they need the AIO to safely navigate in addition to the ENC. The IRCC has tasked the WEND WG to investigate the AIO issue and come with a proposal to IRCC. The proposal of the WEND WG is clear. AIO should not be promulgated unless the hydrographic office who is charting authority has given permission to do so. It is good to see the proposal from the WEND WG is also the viewpoint from the PRIMAR Member States, from the NHC, the SWAtHC, and many other nations."

The UK representative then made the following statement: *It is clear that the WEND Working Group have identified the need for a solution for awareness and use of Permanent&Temporary (P&T) updates in ECDIS as reflected in their recommendation to explore this as part of S-101 development. A solution to this issue via S101 is many years away yet we have a solution now in the form of the AIO. Taking this into account the AIO was developed by UKHO as a reseller of digital services to mariners, for the convenience of our users and in response to a demand from Value Added Reseller (VAR) customers. It doesn't change the ENC's in any way and doesn't change the requirements on those navigating electronically. It is a free service provided by the VAR – there is no charge for AIO.*

It is difficult to understand why there is a call by the WENDWG to withdraw a VAR service Information Overlay, which doesn't change the ENC's in any way, was produced for the convenience of its customers and is liked and utilised by a wide number of users – the authority of the IHO to try and enforce this withdrawal is questioned. As has been stated many times the UKHO is very willing to work with other HO's to improve the AIO service provided by the VAR, although to date this genuine offer has not been utilised. It has been made clear by statements from others in the room that for them this is in fact a commercial issue as they have not developed an ability to deliver this valuable service to the mariner, surely this is no reason to deny the mariner such information?

High level description of AIO:

The ADMIRALTY Information Overlay or AIO is an overlay, like many other overlays available to the mariner that is designed to provide the user with additional information in the same way as weather, piracy and ice overlays. It does not change the ENC data in any way and can be easily switched off to reveal the original ENC display. AIO is intended for use during passage planning. It displays ADMIRALTY T&P Notice to Mariners (i.e. those that effect the equivalent Admiralty SNC), where they have been published. It also highlights potentially navigationally significant differences between ENC's and ADMIRALTY paper charts where they haven't been resolved between UKHO and the ENC producer – it is not a critique of the ENC.

France also made the following statement: AIO handles information for safety of navigation of the same kind than those supposed to be included in ENC's, and is not like other information overlay dealing with topics which are not within the responsibility of hydrographic services. If there is a necessity to complement information provided by ENC produced by the liable hydrographic service, this should be agreed by the parties. In this respect, the wording proposed for consideration to IRCC should be more generic, and not designating specifically AIO.

Following the discussions and presentation of additional views from the IRCC Members and considering the suggested proposals with regard to the MIO issue, the Committee agreed on a recommended action from the WENDWG Chair concerning MIO which is described below. Norway supported the text proposed by the WENDWG Chair. The UK representative did not disagree. The Committee then agreed on the following decisions and actions:

Decision 13: to endorse the continuation of the WENDWG under its current ToR and according to the proposed work plan.

Decision 14: to endorse the recommended actions from WENDWG concerning Marine Information Overlays (MIOs) as follows:

- 1. Taking into account the report of WENDWG6 concerning the situation where a Marine Information Overlay (MIO) is used to assist in drawing attention to any differences between a published paper chart and the corresponding ENC or to assist in displaying T&P notices for an ENC recommends:**
 - a. All parties concerned with producing the respective MIO, paper chart and ENC should agree on the promulgation of the MIO for the relevant sea area concerned.**

- b. In such circumstances, and mindful of serving the best interests of the mariner, those producers of the MIO and related paper chart and/or ENC should work together bilaterally.
 - c. Production of the MIO should be carried out in close cooperation of producers of both the paper chart and the ENC
 - d. The MIO should utilize the same T&Ps source as the producer of the ENC.
2. In parallel there is a need to raise awareness of T&P NM updates for ENCs, and HSSC is encouraged to include within its work plan for the ENCWG the delivery of an improved solution for T&P updates in future S-101 based ECDIS. In the interim period possibilities of S-124 should be considered

Decision 15: to note that further progress on delivering global ENC coverage is now largely dependent upon new surveys or re-surveys of areas where there is no satisfactory coverage.

Action 13: RHC Chairs to work to reduce overlaps by applying the WEND Principles in defining approve ENC schemes (Permanent).

Action 14: WENDWG to draft an IHO Resolution to address the overlapping issues and report to the IRCC (deadline: IRCC9).

e) MSDIWG

The MSDIWG Chair introduced the report (*doc. IRCC8-07E*) and started with an overview of what is MSDI and its key elements. He reported that the WG is working with the CBSC to identify "ambassadors" for MSDI and to provide training for trainers, and is also investigating the possibility of delivering MSDI courses in cooperation with the Intergovernmental Oceanographic Commission (IOC) of UNESCO and other organizations.

He also reported that the WG is developing a compendium of best practices following the research undertaken by Canada that will be incorporated in the revision of IHO Publication C-17. He reported that the revision of C-17 will also contain an additional chapter with guidance to hydrographic services on mechanisms that can be established to improve national access to bathymetric and related data collected for commercial or scientific purposes.

He also highlighted the preparation of a paper for the next Conference/Assembly and the creation of the Open Geospatial Consortium (OGC) Ad-hoc Maritime Domain that will consider the creation of a conceptual model for MSDI, with the participation of MSDIWG Members. He also emphasized that the level of reporting of MSDI activities by Member States to RHCs remains inconsistent and some RHCs have yet to give MSDI sufficient visibility as a standing agenda item. He suggested that the National Reports to the RHC meetings incorporate the following items: the status of MSDI; plans for involvement in MSDI; and challenges facing the Hydrographic Offices.

The Chair invited Canada to present the results of the survey of IHO Member States to identify the level of development of MSDI to support the distribution of maritime information. Canada gave an overview of the survey results and concluded that there is huge economic potential in establishing an MSDI, that technology is available, that data exists in abundance and that policy and governance are required for this development. The meeting then agreed on the following decision and actions:

Decision 16: to endorse the continuation of the MSDIWG under its current ToR and according to the proposed work plan.

Decision 17: to note the outcomes of survey conducted by Canada on the Status Update of Marine Spatial Data Infrastructure (MSDI) Implementations.

Action 15: MSDIWG to finalize the ongoing revision of the IHO Publication C-17 and submit to IHB to seek comments from MSs (deadline: 31 October 2016).

Action 16: Secretariat to circulate the draft new edition 2.0.0 of the IHO Publication C-17 seeking comments and inputs from MSs (deadline: 30 November 2016).

Action 17: Secretariat to submit the draft new edition 2.0.0 of the IHO Publication C-17 to IRCC (deadline: IRCC9).

Action 18: MSDIWG to finalize the white paper to be presented at the next Conference/Assembly and to submit to IRCC for intersessional endorsement (deadline: 1 August 2016).

Action 19: IRCC Chair to notify the HSSC Chair on the development of the OGC Candidate Standard to replace Coordinate Reference Systems (CRS) (deadline: 30 August 2016).

Action 20: MSDIWG to follow up the developments at the OGC Maritime Domain Working Group and report back to IRCC (deadline: IRCC9).

Action 21: RHC Chairs to invite Member States to provide following information in the National Reports to RHC meetings: the status of MSDI; plans for involvement in MSDI; and challenges facing the HO (Permanent).

f) CSBWG

The CSBWG Chair introduced the reports (*doc. IRCC8-07F1* and *IRCC8-07F2*) with its vision (*The floor of our oceans and seas revealed*) and mission (*Empower mariners to map the gaps*) for this recently formed body of the IRCC. She reported the development of the guidance document for CSB that will take in to consideration technical and legal aspects, and the proposed revised ToR for the consideration of the IRCC.

She also reported on Crowd-Sourced Bathymetry (CSB pilot projects being undertaken by NOAA and with superyachts (SeaID), to capture and semi-automatically upload data to the IHO DCDB, and on the quality assessment and quality assurance issues that are being considered. These include guidance on the determination of the uncertainties in CSB data. She emphasized the need to have data-centric systems and to acknowledge that all data have value and may serve a purpose, and the importance of educating the potential observers in order to improve the reliability and quality of the collected data.

The Chair stressed the need to ensure that all data that is collected is assessed and qualified and invited the WG to consider how to represent the quality of the data in hydrographic products. The meeting then agreed on the following decisions and actions:

Decision 18: to endorse the continuation of the CSBWG under the proposed ToR and according to the proposed work plan.

Decision 19: to acknowledge the data centric approach of the CSBWG that should continue working with CSB, SDB and with data from all sources.

Action 22: IHB to seek comments from Member States on the draft CSB Guidance document and report to the CSBWG (deadline: 30 July 2016).

Action 23: CSBWG to further develop the draft CSB Guidance document and report back to IRCC (deadline: IRCC9).

g) IENWG

The IENWG Representative introduced the report (*doc. IRCC8-07G*) on behalf of the Chair and highlighted the work that is being done on coastal mapping and maritime spatial planning, in terms of availability and dissemination of maps, sharing experience and developing standards and best practices. The meeting agreed on the following decision:

Decision 20: to endorse the continuation of the IENWG under its current ToR and according to the proposed work plan.

h) IBSC

The IBSC Secretary introduced *doc. IRCC8-07H1* and highlighted the main activities since IRCC7, when the Board conducted annual and extraordinary meetings, achieved the adoption of the new Edition 1.0.0 of the IHO Publication S-5B, finished the draft new Edition 1.0.0 of the IHO Publication S-5A, continued the development of the new Editions 1.0.0 of the IHO Publications S-8B and S-8A and engaged with stakeholders during Hydro 2015 and MACHC16. He reported that during the last IBSC39 meeting in Brest, France the Board reviewed a record of 18 programmes, continued the revision of the Standards of Competence for Hydrographic Surveyors and Nautical Cartographers and established the Work Programme for S-8B and S-8A.

He also reported the completion of the transfer of the IBSC Fund from the International Federation of Surveyors (FIG) to the IHO with necessary amendments to the IBSC Rules of Procedures to reflect this transfer, and acknowledged the progress made at the IHB for the management of the IBSC Fund and to other IBSC administration. He highlighted that administrative support is key to managing the increasing

number of submissions, given that the IBSC foresees more than 20 submissions in 2017, and for the maintenance of the publications under the responsibility of the IBSC. UK considered that the timeline for the revision of S-8A and S-8B is too tight due to the preparation of the next Conference/Assembly and other meetings, however the majority of the meeting participants considered that it was feasible. Following the discussions on current IBSC related matters, the Committee agreed on the following decision and action:

Decision 21: to endorse the work plan for the revision of the IHO Publications S-8A and S-8B.

Action 24: IRCC Chair to notify the IBSC Chair on the concerns expressed by UK on the timeline for the revision of the IHO Publications S-8A and S-8B (deadline: 15 July 2016).

The IBSC Secretary introduced *doc. IRCC8-07H2* on behalf of the Chair and highlighted the main steps that are followed by the IBSC in accordance with IHO Resolution 2/2007 in order to receive feedback from the broad range of stakeholders. Japan introduced *doc. IRCC8-07H4* presenting the views of the EAHC on the need to have a separate set of Standards of Competence for Category "A" Hydrographic Surveyors that have already obtained a Category "B" certificate. The IBSC Secretary then introduced *doc. IRCC8-07H5* on behalf of the Chair, with the response from the IBSC to the views of the EAHC expressed in the paper from Japan.

NSHC/MACHC Chair drew the attention to an inconsistency in the definition of the time frame in the *Guidelines for the Implementation of the Standards of Competence for Hydrographic Surveyors* and the IBSC response in *doc. IRCC8-07H5*. He highlighted that it was unclear whether the course duration timeframes were required minima (iaw Guidelines) or recommendations (iaw *doc. IRCC8-07H5*). Moreover conclusion 7 of *doc. IRCC8-07H5* addressed the concern of Japan when a Category "B" precedes a Category "A" programme. Both issues should now be addressed in the Guidelines for implementation.

The Committee considered all the key elements of the proposals on the draft Edition 1.0.0 of the S-5A and agreed on the following decisions and actions:

Decision 22: to endorse the draft Edition 1.0.0 of the IHO Publication S-5A (Annex B of *doc. IRCC8-07H2*).

Decision 23: to not support the creation of a separate training path for Category "A" Hydrographic Surveyors that have already received a Category "B" certificate.

Action 25: Secretariat to circulate the draft Edition 1.0.0 of the IHO Publication S-5A and seek the approval of Member States (deadline: 30 June 2016).

Action 26: IBSC Chair to clarify the course duration timeframes indicated in S-5A, S-5B, S-8A and S-8B in the *Guidelines for the Implementation of the Standards of Competence for Hydrographic Surveyors* (deadline: 30 September 2016).

The IBSC Secretary introduced *doc. IRCC8-07H3* on behalf of the Chair that indicated that the human element may be a valid component in determining the statistical uncertainty associated with hydrographic surveys. The meeting discussed whether the methodology described in IHO Publication S-44 is the appropriate place to address the human component and that the use of a complementing quality management system may be a better option. The meeting also noted that HSSC has already established a Hydrographic Surveys Scoping Project Team (H2SPT) that may investigate such matters. The meeting then agreed the following decisions and actions:

Decision 24: including the human element in the quality assurance process for hydrography is important.

Action 27: IRCC Chair to request to HSSC to consider the human element component in its consideration of the quality assurance process for hydrography (deadline: 10 September 2016).

Decision 25: to commend the work done by the IBSC with respect to the review of the large number of submissions and the revision of the Standards of Competence for Hydrographic Surveyors and Nautical Cartographers.

i) IHO-IOC GEBCO Guiding Committee

The GEBCO Guiding Committee Chair introduced the report (*doc. IRCC8-0711*) and highlighted the key components of the GEBCO project and the progress made since the last IRCC7, including the increasing number of GEBCO Scholars supported by the Nippon Foundation over the last 11 years. He also emphasized the need to develop a GEBCO Data Store in coordination with the IHO DCDB, to develop mechanisms to promote the collection of bathymetric data, to promote GEBCO as the authoritative bathymetric dataset of the world's oceans and to develop affordable methods to produce raster copies of the GEBCO map archive.

He also reported that consideration should be given to match user requirements to cover coastal and shallow waters and for higher resolution bathymetric data for deep water and informed the meeting on the Forum for Future Ocean Floor Mapping (F-FOFM). He also presented the progress made with the shallow water bathymetry initiative using ENC data (Usage Bands 2 and 3) to improve the GEBCO Grid.

The meeting discussed ways to improve GEBCO, including the need for more engagement, to have Member States attending the GEBCO meetings and to have commercial ships, companies and offshore industry engaged in providing deep water bathymetry. The IHB Director stressed that there has been a lack of communication from the Chair of GEBCO Guiding Committee and this needs to be resolved. The IHB President also emphasized that the GGC Chair's report does not properly reflect the support that the IHO provides to GEBCO.

The following actions were agreed:

Action 28: GGC Chair to revise the report and the accompanying presentation to properly reflect the support provided by the IHO and to remove inconsistencies (deadline: 30 June 2016).

Action 29: GGC Chair to invite and encourage Member States to participate in the annual GGC meetings (Permanent).

The IHB introduced *doc. IRCC8-0812 rev. 1* by providing the current status of the scanning of the GEBCO chart archive, and requesting Member States to provide scanned versions of any of the missing sheets that they may have in their archives for inclusion in the online digital archive. The meeting agreed on the following decisions and action:

Decision 26: to note the current status of scanning the GEBCO chart series.

Decision 27: to acknowledge the work done by Italy and Japan in supporting the scanning process.

Action 30: RHC Chairs to invite Member States to provide scanned version of any of the missing sheets, that they may have in their archives, to the IHB for inclusion in the online digital archive (deadline: 31 August 2016)

Decision 28: to note the documents under agenda item 7 (*docs. IRCC8-07A, IRCC8-07B, IRCC8-07C, IRCC8-07D, IRCC8-07E, IRCC8-07F1, IRCC8-07F2, IRCC8-07G, IRCC8-07H1, IRCC8-07H2, IRCC8-07H3, IRCC8-07H4, IRCC8-07H5, IRCC8-07I2 and IRCC8-07I2 rev. 1*).

8. Inputs from Member States and other bodies affecting IRCC

Docs: IRCC8-08A Input from HSSC7 (HSSC)

IRCC8-08B Relations with IGOs, NGOs and IHO Stakeholders (IHB)

The Chair invited the presentation of highlights from the reports and how they impact the RHCs and the IRCC bodies, and on the representation of the IHO at international and regional events.

The HSSC Chair introduced the report (*doc. IRCC8-08A*) and highlighted the work of the HSSC WGs in the development of the IHO technical standards, including with the very low participation in the Hydrographic Dictionary WG, and the preparation for the inputs to the IHO Strategic Plan (2009).

The IRCC Secretary introduced the report (*doc. IRCC8-08B*) and highlighted the status of relations with other International Organizations, the United Nations priority on good management of seas and waterways, the IHO Stakeholders' Forum at HSSC7 and the engagements during the 10th GEBCO Science Day, UNCLOS and MSDIWG7 and those that are planned for the next intersessional period. He also presented the potential future Stakeholders' events and invited the Chairs of the RHCs to represent the IHO at the relevant meetings as appropriate.

The IHB President highlighted that participation at the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) lacks the participation of national hydrographers. The meeting agreed the following decisions and action:

Action 31: RHC Chairs, in coordination with Member States, to be attentive to opportunities to raise awareness on the role of hydrography and the importance of improving mankind's knowledge of the seas and oceans in support of the sustainable development goals, disaster risk reduction and the integrity of the oceans (Permanent).

Decision 29: to note the reports under agenda item 8 (*docs. IRCC8-08A and IRCC8-08B*), including the list of events in Annex A of *doc. IRCC8-08B*.

9. Data gathering and Management, Maximizing the use of Hydrographic Data

Doc: IRCC8-09A Update on Data gathering and Management, Maximizing the use of Hydrographic Data (IHB)

The IRCC Secretary introduced the report (*doc. IRCC8-09A*) that provided a progress report on data gathering and management, including crowd-sourced bathymetry, satellite derived bathymetry, in order to maximize the use of hydrographic data. He reported on the ongoing activities with CSBWG and GEBCO, the proposed improvement to the IHO Publications and the status of surveys and charting around the world. The meeting agreed on the following decision:

Decision 30: to note the report (*doc. IRCC8-09A*).

10. Developments on GIS

Doc: IRCC8-10 Update on the INToGIS Project (IHB)

The IRCC Assistant Secretary presented the report (*doc. IRCC8-10*) on the developments on the IHB GIS and the INToGIS Project and how they impact the RHCs and the Member States' activities. He highlighted the progress made in the IHO Country Information Database and the associated Regional Information Database, in the IHO ENC Catalogue, in the INToGIS and in the development of an online Registration Service for IHO meetings.

USA and Canada congratulated the IHB on the developments and suggested that the GIS-based information is very useful but is spread across several web pages sometimes making it difficult to locate. They suggested investigating the possibility of a more user-friendly interface. The meeting then agreed on the following actions and decisions:

Action 32: RHC Chairs to invite Member States to send updated information to the Secretariat with respect to the IHO Publications C-55 and P-5 on an annual basis (deadline: 31 July 2016). Note: supersedes the previous IRCC7 Action.

Action 33: Secretariat to investigate the development of a single portal for the GIS-related information and report back to IRCC (deadline: IRCC9)

Decision 31: to note the report (*doc. IRCC8-10*).

11. IHO Strategy

11.1 IHO Strategic Plan and Long-term Work Programme

Doc: IRCC8-11.1 Revision of the IHO Strategic Plan and IRCC Input to the Long-term Work Programme (IHB)

The IRCC Secretary introduced the report (*doc. IRCC8-11.1*) setting out the framework for the revision of the IHO Strategic Plan 2009 (SP2009) and the revision requirements of the current SP2009 and its relation to the IRCC roles and responsibilities. The Chair highlighted key aspects of the SP2009 related to the Committee and participants were invited to provide their input on the revision of the SP2009 and the long-term work programme. He requested the Committee to:

- a. consider whether any amendments are required to the vision, mission or object of the Organization, noting that the object of the Organization is embedded in Article II of the amended Convention on the IHO;
- b. identify any specific new areas of potential IHO activity that do not fit within the existing Strategic Plan;
- c. consider whether the existing Strategic Directions remain suitable to drive the work programme of the IHO or require amendments or additions; and
- d. consider its contribution to the preparation of the multi annual IHO Work Programme for the forthcoming Inter-Conference / Assembly period.

Participants discussed the need to highlight MSDI, CSB and CB in a revision of SP2009 and to take account of the inputs provided by the WENDWG and the CBSC Chairs. They also identified the need to enlarge the Vision in order to emphasise the international and intergovernmental dimension, as well as the importance of IT and digital services in the way the IHO is doing business (Strategic Assumption 4 on Technological Trends).

The meeting also considered the need to identify the constraints that can cap the ambitions and the plans of the Organization, in particular those related to Capacity Building, to identify the gaps between the RHCs and the way to reduce these gaps, to explore industry's capacity rather than only request its engagement and to highlight that hydrographic services cover the whole range from survey to data processing to products to the end users (the whole value chain). The emphasis should change from the "importance" of hydrography to the "value" of hydrography. The Chair stressed that the success stories need to be brought to the attention of the international arena. The meeting agreed the following actions:

Action 34: IRCC Members to submit additional input to the revision of the SP2009 to the Secretariat (deadline: 10 June 2016).

Action 35: Secretariat to take into account the inputs received from the IRCC8 (deadline: 1 July 2016).

11.2 Review of IRCC Work Programme Indicators and Performance Monitoring

Docs: IRCC8-11.2A Risk Analysis and Mitigation, and the Progress Monitoring Process in Relation to IRCC (IHB)

IRCC8-11.2B Feedback from MBSHC (MBSHC Chair)

The IRCC Secretary introduced the report (*doc. IRCC8-11.2A*) and informed the meeting of the current methodology of risk management and progress monitoring via Strategic and Working-level Performance Indicators. He stressed that obtaining the appropriate annual data and information for the PIs currently in use and the additional six-monthly progress reports is problematic in a number of cases and it may be that in some instances, the chosen PI is not a good indicator or that it is simply too difficult to measure or to report. He concluded that for these reasons, and as required by EIHC-5 Decision 3, the progress monitoring and risk management framework should be considered again at the next Conference/Assembly in 2017.

The meeting discussed the current PIs, experiences gained and lessons learned from RHCs and IRCC Bodies, the revision requirements of the PIs and the existing progress monitoring and risk management framework in relation to the IRCC.

In conclusion, the NSHC/MACHC Chair stated that those PIs where no data is available should be deleted. At the close of the discussion, the IHB President remarked on the fact that despite the availability of the current performance monitoring mechanism and its results, he observed that it had not been used to steer any of the work or decisions of IRCC8 and in that context, the value and usefulness of the PIs might be questioned. France highlighted that PIs should be considered in their role of presenting the achievements of IHO to the outer world.

The meeting agreed on the following decisions and action:

Decision 32: to note the reports under agenda item 11 (*docs. IRCC8-11.1 IRCC8-11.2A and IRCC8-11.2B*).

Decision 33: to endorse the proposals by CBSC and WENDWG to amend the IHO Strategic Plan 2009 (*doc. IRCC8-07C and IRCC8-07D*).

Decision 34: to endorse the deletion of the PIs that do not have data or that serve no purpose.

Decision 35: to support a significant revision of the monitoring process in conjunction with the IHO Strategic Plan 2009.

Action 36: Secretariat to collate the submissions from the CBSC and WENDWG and to propose the PIs that have no data or that serve to no purpose to be deleted and submit to the IRCC for intersessional approval (deadline: 10 August 2016).

12. Procedure for RHCs to Designate their Representatives to the IHO Council

Doc: IRCC8-12 Extract of the General Regulations of the IHO after the approval of the amendments to the IHO Convention (IHB)

The IHB President explained the principles of the procedure for selecting members of the IHO Council as stated in the General Regulations of the IHO that will enter in to force after the approval of the amendments to the IHO Convention. He explained that the Secretary-General will ask Member States in which RHC they wish to be counted and if a Member State does not indicate a choice, then the Secretary-General will allocate an RHC based on the criteria described at EIHC-5.

The meeting discussed the procedure in the knowledge that that the Council is composed of Member States and not Representatives of the RHCs. The meeting agreed on the following actions:

Action 37: RHC Chairs to send to the IHB a copy of their regulations regarding the designation of Member States to occupy the seats on the IHO Council allocated to their Commission (deadline: 23 January 2017).

Action 38: Secretariat to collate the inputs from the RHCs on their regulations regarding the designation of Member States to occupy the seats on the IHO Council allocated to their Commission and disseminates to the IRCC (deadline: 30 January 2017).

13. IRCC Input to the XIXth International Hydrographic Conference / 1st Session of the IHO Assembly

Doc: IRCC8-13 IRCC input to the next IHC / Assembly (Chair)

The Chair invited the IHB to report on its preparations for the XIXth International Hydrographic Conference / 1st Session of the IHO Assembly. The Chair then highlighted the preparation of the draft IRCC report to the next IHC/Assembly and invited IRCC Members to provide their input on the draft report and draft agenda of the next Conference/Assembly.

The IRCC Secretary introduced doc. IRCC8-13 which included the proposed template for the IRCC, subordinated bodies and RHCs to report to the next Conference/Assembly and the meeting agreed on the decision:

Decision 36: to adopt the template to report to the 19th Conference/1st Assembly (*doc. IRCC8-13*).

14. Other information papers

There were no additional information papers.

15. Next IRCC Meetings (Venue and Date)

The Chair invited the meeting to confirm the dates and venue for IRCC9 and IRCC10 and also requested offers to host IRCC11. The meeting then agreed the following decision:

Decision 37: to hold the next meetings as indicated below:

IRCC9: 12-14 June 2017 in Paramaribo, Suriname, preceded by the CBSC15 (7-9 June).

IRCC10: May / June 2018 in Goa, India, subject to confirmation, with Italy as the backup in case India is not able to host IRCC10.

IRCC11: May / June 2019 in Italy, subject to confirmation and not hosting IRCC10.

16. Any other business

The Chair invited participants to introduce any other business items. There were none.

17. Review of the Actions and Decisions

The IRCC Assistant Secretary presented the list the actions and decisions agreed during the meeting and collected inputs from the participants. The following decision and action were agreed:

Decision 38: to approve the draft action list.

Action 39: Secretariat to upload the draft action list to IRCC8 web page as doc. IRCC8-17 Draft List of Actions (deadline: 10 June 2016).

The revised List of Actions is provided in [Annex B](#) and the List of Decisions is provided in [Annex C](#).

18. IRCC Work Programme Management

The Chair invited the meeting to contribute to the IRCC Work Programme for 2016-2017 and to prepare the IRCC input to the IHO Work Programme for 2018-2020 and the following action was agreed:

Action 40: Secretariat to review the WP and the action list and organize the following:

- a) IRCC Work Programme 2016-2017 will be composed with the permanent actions
- b) Group the action list by the responsible IRCC Member
- c) Review the permanent agenda item to incorporate agenda-related actions (deadline: 31 August 2016).

The IRCC Work Programme for 2016-2017 is provided in [Annex D](#).

19. Closure

The Chair closed the meeting at 17h05 on 31 May 2016.

ANNEXES:

- A) [List of Participants](#)
- B) [List of Actions](#)
- C) [List of Decisions](#)
- D) [IRCC Work Programme for 2016-2017](#)