



NORDIC HYDROGRAPHIC COMMISSION (NHC)

NHC report to IRCC10

Goa, India 4-6 June 2018

1. **Chair:** Mr Patrik Wiberg, (SE) from April 2017
Mr Rainer Mustaniemi, (FI) from April 2018

Vice-Chair: Mrs Annika Kindeberg, (SE) from April 2017
Mr Jarmo Mäkinen, (FI) from April 2018
2. **Membership**
Members: Denmark, Finland, Iceland, Norway, Sweden
Associate member(s): None
Observers: IHO representative, Secretary General, Dr Mathias Jonas
3. **Meetings:**
Since last IRCC9 meeting there has been one NHC meeting:
NHC62 in Arkö, Sweden 10-12 April 2018

Next meeting (NHC63) will be in Helsinki, Finland, 9-11 April 2019.
4. **Current NHC Working Groups:**
 - a) Nordic Survey Expert Group (NSEG)
 - b) Nordic Chart Production Expert Group (NCPEG)
5. **Status of IRCC9 actions (relevant for the NHC)**

No	Action (Agenda item)	Responsible	Deadline	Status
2	to engage with Member States in their regions to identify potential instructors to accompany MSI trainings in order to become MSI trainers and report back to IRCC	RHC Chairs	IRCC10	DONE
3	to consider using Trainer for Trainers (TFT) and e-learning methods to support the development of CB Phase 1 for developing coastal States and report back to IRCC	RHC Chairs	IRCC10	-



4	to encourage the attendance of Member States and Observers at WWNWS-SC meetings, to highlight the use of the Joint Manual on MSI to ensure correct terminology and formats are used in MSI messages, to encourage closer engagement of the National MSI Coordinators of Member States with the relevant NAVAREA Coordinator(s) and report back to IRCC	RHC Chairs	IRCC10	Addressed via BSHC and NSHC
5	to encourage closer coordination between NAVAREA Coordinators and Regional CB Coordinators in planning and student selection for the CB MSI training courses	RHC Chairs	IRCC10	Addressed via BSHC and NSHC
10	to invite Member States to investigate the possibilities of fund raising and engagement in CB via national organizations and report back to the IRCC	RHC Chairs	IRCC10	DONE
14	to encourage the Member States in the region to consider making all ENC data available through the RENCs (7)	RHC Chairs	December 2017	DONE
15	to encourage the work of the IHO community to increase existence of ENC schemes at regional level (7)	RHC Chairs	December 2017	Addressed via BSHC and NSHC
18	to encourage Member States in the region to nominate RHC MSDI Ambassadors to promote MSDI and to help Member States to prepare the national reports with respect to the status of MSDI (7)	RHC Chairs	IRCC10	DONE
21	to encourage IHO Member States to release datasets or subsets into the public domain via the IHO DCDB (7)	RHC Chairs	September 2017	Addressed via BSHC and NSHC
22	to request IHO Member States to consider reviewing data gathering restrictions within their maritime areas of jurisdiction to enable CSB activities to be undertaken (7)	RHC Chairs	September 2017	DONE
23	to encourage IHO Member States to support the CSB initiative with positive actions, such as requiring all research vessels collect bathymetric data for late uploading, when on passage or when it does not interfere with other research activities (7)	RHC Chairs	September 2017	DONE
29	to encourage Member States to organize contribution of bathymetric data in shallower coastal areas to GEBCO in order to support the production of higher resolution gridded data products and report back to IRCC (7)	RHC Chairs	IRCC10	Addressed via BSHC and NSHC
32	to encourage Member States in the region to consider using satellite derived bathymetry and risk assessment methodologies in uncharted or poorly charted areas in their respective regions as a way of developing survey priority areas as part of attracting donor funding and report back to IRCC (8)	RHC Chairs	IRCC10	Addressed via BSHC and NSHC
33	to encourage the use of satellite derived bathymetry and risk assessment methodologies for developing survey priority areas as part of attracting donor funding using the project	RHC Chairs	IRCC10	DONE



	rationale as presented in doc. IRCC9-08C (8)			
34	to encourage Member States to participate in the workshop on satellite derived bathymetry sponsored by Canada in March 2018 (8)	RHC Chairs	December 2017	DONE
35	to invite Member States to provide technical resources to the DQWG and report back to IRCC (9)	RHC Chairs	IRCC10	DONE
36	to note the list of events organized by other intergovernmental and stakeholders indicated in doc. IRCC9-09B, consider how the IHO might be represented in those events that are considered relevant and liaise with the IHO Secretariat for the appropriate and report back to IRCC (9)	RHC Chairs	IRCC10	DONE
37	to encourage Member States to support the establishment of the UN-GGIM Working Group on Marine Geospatial Information (WG-MGI) by working with their national representatives to the UN-GGIM to offer interventions in favour of the WG-MGI during the next UN-GGIM meeting (10)	RHC Chairs	June 2017	DONE
38	to encourage Member States to attend the next UN-GGIM meeting and the UN-GGIM-MGI Side Event (10)	RHC Chairs	July 2017	DONE
39	to promote the UN-GGIM in their regions (10)	RHC Chairs	Permanent	DONE
44	to invite Member States to review entries related to their region in IHO C-55 and P-5 (Yearbook) at least annually (11)	RHC Chairs	Permanent	DONE
43	to consider using the IHO Online Registration System for their meetings and report back to IRCC (11)	RHCs	IRCC10	NHC will be ready to test Online Registration for next NHC meeting

6. Agenda items

The main subjects dealt with during the reporting period were the following:

- Report status, plans and development of nautical publications
- E-Navigation and future needs for improved hydrographic services and Standards
- Marine Spatial Planning
- Marine Spatial Data Infrastructure
- Validation on Crowdsourced bathymetry
- Workshops in order to exchange knowledge and share experience in surveying technics Lidar, Multibeam etc.
- Nordic Chart Production. Development of new chart production systems
- Validation of Chart Production Tools



- Development of new Bathymetric Database
- Development of Automatic Contour Builder
- Official S57-data for non-SOLAS/non-ECDIS vessels (discussion, practices)
- Marine Information Overlays (MIO)
- RENC operations
- Co-operation in case of Crisis and Disasters affecting NHC MS
- Revision of NHC Statutes
- New Routeing System in Kattegat
- SE to arrange training course (CAT B, Hydrographic Surveyors) in Gothenburg University (SE)
- Harmonized chart datum between DK, SE and NO

6.1 MIO/AIO

AIO's are still being issued for Finnish and Swedish waters despite the very clear IRCC decision on this issue and both ENC producing nations (Sweden and Finland) not agreeing with the AIO producer HO for AIO's to be promulgated for their waters.

Sweden have, as a result of bilateral meetings with UKHO, investigated if a possible technical solution could be developed to eliminate the negative consequences for the safety of navigation with AIO in Swedish waters, where full operational T- and P-services are available in ENCs. No such technical solution could be found and Sweden is therefore preparing a letter with a formal request to terminate any MIO/AIO service over Swedish waters, to be send to MIO/AIO service providers.

7. NHC cooperation with other organizations

NHC is represented in the IHO-EU Network Working Group. The IHO-EU Network Working Group (IENWG) has been established by the Inter-Regional Coordination Committee (IRCC) to monitor and deal with the activities and processes related to hydrographic aspects under the aegis of the European Union (EU). Both Norway and Sweden are partners in the Coastal

Mapping project related to a possible future Joint European Coastal Mapping Program.

8. NHC Conclusions:

- New revision of NHC Statutes.
- SE to arrange new Hydrographic Surveying Course (CAT B) in Gothenburg in November 2018.



- To include S-100 derived product development to NCPEG ToRs to support relevant IHO Working Groups.
- To propose IRCC10 if national requirements for ECDIS Backup Arrangements could be documented in association with S-66 (Facts about Electronic Charts and Carriage Requirements) to get better visibility for the end users.
- Sweden is the NHC representative in the WENDWG.
- NHC MS will investigate the possibility to include ENC symbology for ECDIS in national INT I.
- All NHC WG ToRs shall be published on the IHO website.

9. Achievements and lessons learned

- Experiences with Green Laser Bathymetry Surveys.
- New Routeing System in Kattegat will be established 1 July 2020.
- Development of Automatic Contour Builder- Rolling Coin Method.

10. Actions required from the IRCC10

- The IRCC10 is invited to take a note of the NHC report.
- The IRCC10 to consider, how to get better visibility of national requirements for ECDIS backup arrangements and S-66, for the end users.
- Take into consideration to put the MIO matter back on the IRCC and WEND-WG agenda.