34th North Sea Hydrographic Commission Meeting (NSHC) 27th to 28th April 2021

Report of North Sea International Charting Co-ordination Working Group (NSICCWG)

Submitted by: Andrew Hinton - NSICCWG Chairman: March 2021

Related Documents: Minutes of NSHC33 June 2018

Background

- 1. The North Sea International Chart Committee (NSICC) devised the original scheme of International Charts of the North Sea. Details were set out as Appendix F to the NSICC Report to the XIth International Hydrographic Conference (1977)
- 2. After discontinuation of the NSICC in 1983 the North Sea International Chart Sub-Committee (NSICSC) succeeded this group (Conclusion 43 of the 14th NSHC Conference).
- 3. The NSICSC, in turn, was disbanded in 1988 (Conclusion 52 of the 17th NSHC-Conference), but an Ad-Hoc Working Group on INT Charts was established at the same meeting (Conclusion 53)
- 4. In 1989 (18th NSHC Conf.) the Ad-Hoc group was replaced by the NSHC INT Chart Scheming Group (Conclusion 56); the Chairman was provided by the Netherlands.
- 5. During the 20th NSHC Conference it was concluded to change the name into North-West European Charting Group (Region D) because the charts covered a larger area than the North Sea.
- 6. The Netherlands provided the Chairman/Coordinator, Hans Ferwerda, for the North-West European Charting Group (Region D) until June 2004. The United Kingdom has provided the Chairman since then.
- 7. At the NSHC 29th Conference in September 2010 (Conclusion 85), the NSHC Members agreed to change the name of the NW European Charting WG to the North Sea International Charting Co-ordination Working Group (NSICCWG) The NSHC 29th Conference also established the North Sea ENC Harmonization Working Group (NSEHWG) which reported for the first time at the 30th Conference.
- 8. The NSEHWG was disbanded at the NSHC 32nd Conference in June 2016 (NSHC decision 11/2016) because the ENC scheme in the region had reached maturity with few if any issues. The decision was taken to incorporate the remaining relevant tasks of the NSEHWG, as well as ENC coordination in the region, into the new ToR for the NSICCWG this was done at the NSHC 32 to align it with the ToRs of other regional ICCWGs. At the 33rd Conference, the new NSICCWG ToR were agreed

9. Overview

9.1 Revised management review and monitoring of INT charts (IHO CL64\15 and 89/15 refer)

In 2015, IHO CLs 64/15 and 89/15 detailed the new procedures for the management review and monitoring of INT charts. The main elements of the new process are as follows:

- All new INT Charts to be submitted to Regional INT Chart Coordinator (ICCWG) for review.
- INT Chart Coordinator (ICCWG) to verify chart's compliance with IHO standards and to provide feedback to the Producer Nation.
- Modernisation of IHO Publication S-11 Part B by implementation of the new INT Chart web
 catalogue (INToGIS). Responsibility for updating the INToGIS system for chart updates now
 lies with member states rather than the INT Chart Coordinator.

All of the above have been implemented in Area D. There are, however, still a few member states who have yet to update the web catalogue for changes to their INT charts despite reminders. We urge members to ensure the web catalogue is updated so that it remains authoritative.

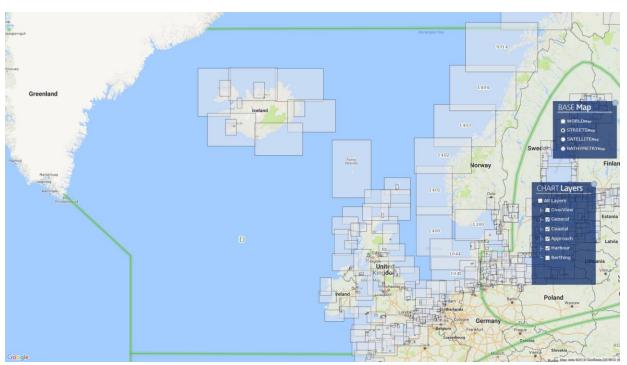
9.2 Amended TOR for NSICCWG

The proposed ToR and RoP for NSICCWG were discussed at NSHC 33 (B6) with the aim to reflect NSHC32 decision 11/2016. These were approved on condition the following amendments were to be made:

- Reference to Area D (re small and medium ENCs) should be included in the ToRs at 2.1.
- Small and medium scale ENCs agreed as primarily ENC Bands 1, 2 and 3, but where member states share a common boundary at Band 4 then these cells would also be included.

These minor amendments have been made and the amended ToR are given in Annex B of this report (shown in red). They are submitted for approval by NSHC.

9.3 INT CHARTING.



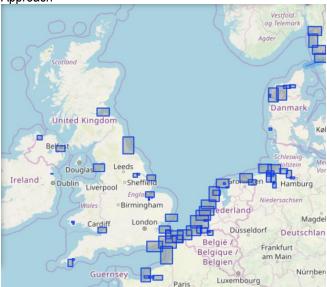
INT CHARTS IN REGION

Overview	17	Harbour	110 including plans
General	13	Berthing	35 including plans
Coastal	64	Total	294
Approach	55 including p	lans	

Coastal



Approach



Harbour



There are 294 full INT charts in the region an increase of 6 since 2018, all have been produced and published. Region D has a mature INT chart scheme compared to other INT Regions and changes are relatively few in

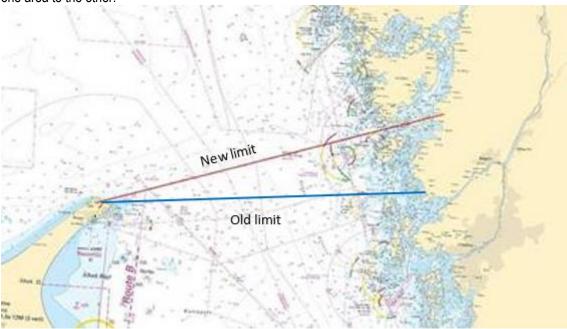
number. As such there has been no requirement for Members to meet for many years. All matters are dealt with by correspondence.

Nevertheless there have been some significant changes and developments to the INT charting scheme and ENC coverage since NSHC 33 in 2018. Details are given in sections 10 and 11 below.

9.3 A small amendment to the limits between INT Area D NSHC and Area E (Baltic Sea) in the Skaggerak/ Kattegat area has been proposed by BSICCWG – see below. This will bring the limits into line with the NAV Warning and Weather Forecasting Areas. This proposal has been approved by NSICCWG members and ratified by the BSHC.

BSHC 24 Decision: To approve proposal to refine the definition of the existing limit between Charting Region D (North Sea) and Charting Region E (Baltic Sea) in accordance with S-23 by defining coordinates for GIS-purposes.

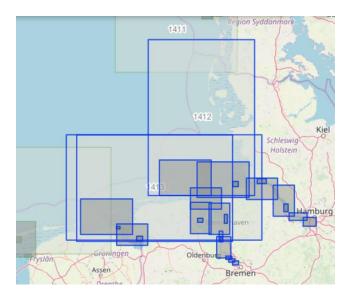
It now requires ratification by NSHC. The change does not require any INT charts or ENCs to be moved from one area to the other.



10. INT Chart Rescheming since 2018

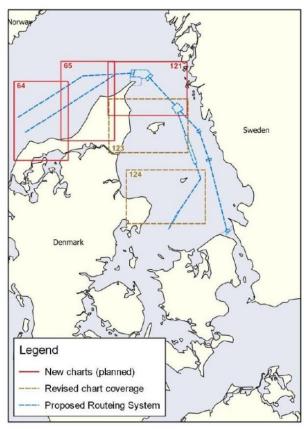
Germany

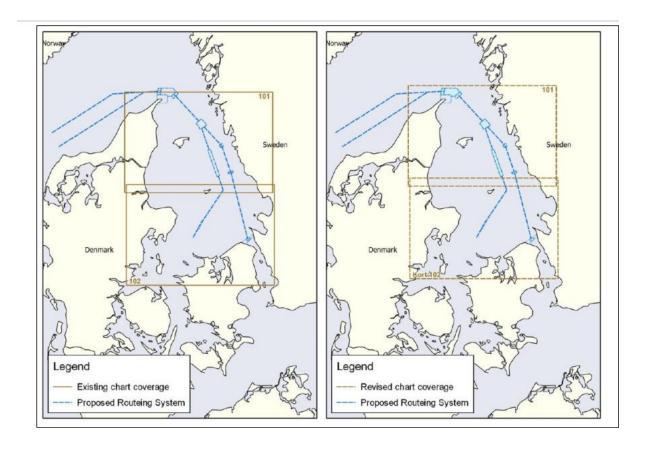
Germany continues to transfer its remaining INT charts to AO size and standardised scales of 1:12,500, 1:30,000, 1:50,000, 1:150,000. The latest rescheming has involved the Rivers Jade, Weser and Elbe as well as coastal and general scales – Charts affected include INT 1456, 1460, 1412, 1413. Several harbour scale plans on these charts have also been removed from INT chart coverage and transferred to national coverage.



Denmark

In preparation for the new Routeing Measures in the Kattegat to be implemented 1st July 2020, there have been some changes to the INT scheme in the region. This is an area that now falls within Area E with the limit change described above. It has therefore been passed to the BSICCWG to consider.





BelgiumBelgium have made a slight amendment to INT1474 inserting a new inset plan of the Port of Zeebruge.

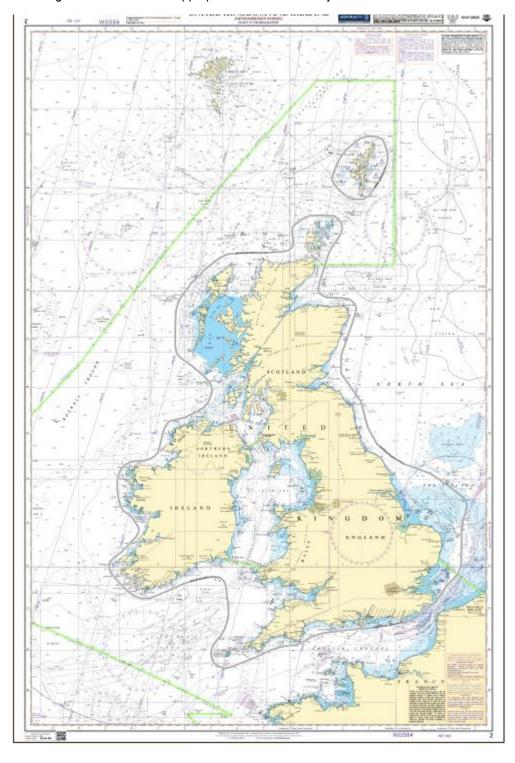


UK

UK has made significant progress in implementing the new generalisation policy for General and Overview scale INT charts in UK waters. This was described at NSHC 32 and 33 and involves the display of an Omission of Detail line where that chart is third scale coverage. Information shown is then heavily filtered out behind the line and only information useful for passage planning is shown. INT 160 below shows how it looks after the new policy has been applied.

The new policy has been applied to all general and overview charts in UK waters now. It has significantly reduced the number of NMs applied to each chart and reduced maintenance costs. It has made the compilation of new editions of such charts simpler and quicker and it is also popular with chart users as their own maintenance time has been reduced. As the concept has been a success UK are looking to enhance it soon.

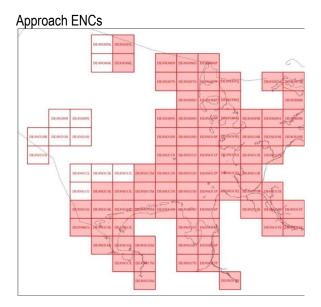
Concept was presented to NCWG-5 in 2019 as an option available to HOs to reduce maintenance and encourage mariners to use an appropriate scale chart. It is yet to be included in S4



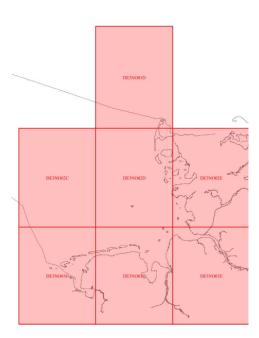
11. ENC Rescheming since 2018

Germany

Germany is in the process of rescheming its Approach and Coastal ENCs to a gridded system in the North Sea as shown below. The red cells are now completed. Germany do not intend to grid ENCs in the harbour, berthing, general and overview usage bands.



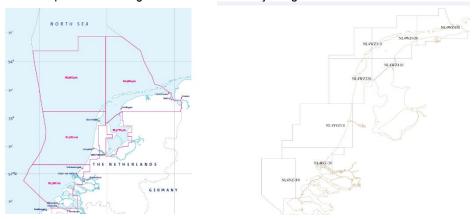
Coastal ENCs



Germany have also made significant progress on removing overlaps and gaps on their Band 1, 2 and 3 cells.

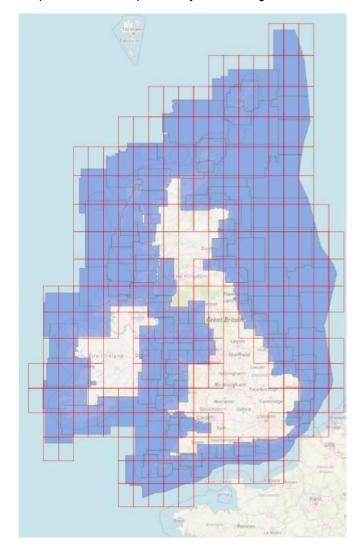
Netherlands

Netherlands are also in the process of rescheming all their ENC band coverage into a more gridded system. Close cooperation is being conducted with the adjoining German ENC rescheme.



United Kingdom.

UK are also considering various options before making a final decision on moving to a gridded ENC scheme. Graphic below shows preliminary ideas for a gridded Band 3 series.



ENC Overlaps and gaps issue.

The NSHC representative to WEND raised this issue at WENDWG11. This is a long standing issue that NSICCWG members feel needs resolving by relaxing the IHO guidance of only allowing a 5 metre overlap buffer

zone at national data limits - IHO Resolution 1/2018 Chapter 2.1.8 - Seamless ENC coverage, S-57, APPENDIX B.1, Annex A. Many members feel this is very much low priority on small scale Usage Bands and virtually impossible to achieve on certain irregular national limits. We are therefore proposing the use of the risk based ENC overlap and gap criteria used by the RENCs which is based on ENC usage band, compilation scale, depth of water, AIS data instead.

We have been asked to report to WENDWG12 on how we intend to deal with the matter.

12.. The NSHC is invited to:

- a. Approve the minor amendments to the NSICCWG ToR in Annex A.
- b. Approve the slight change in border limits between Areas D and E (Para 9.3)
- c. Note the status of the INT Chart schemes via IHO INToGIS and ENC Chart Catalogue links.

Annex: A Revised ToR for NSICCWG.

Annex: B. Low priority ENC overlaps provided by IC-ENC for WENDWG8.

Andrew Hinton - NSICCWG Chairman.

March 2021

ANNEX A: REVISED TERMS OF REFERENCE FOR NSICCWG.

TERMS OF REFERENCE AND RULES OF PROCEDURE FOR THE NORTH SEA INTERNATIONAL CHARTING COORDINATION WORKING GROUP (NSICCWG),

Document control.

Version 1: Andrew Hinton dated 25/10/2017 Version 2: Andrew Hinton dated 26/01/2018 Version 3: Andrew Hinton dated 13/02/2020

1.Background

- 1.1 The North Sea Hydrographic Commission recognizes the need to actively develop and maintain official nautical charts, in both paper and digital formats, to support ships engaged on international voyages in its region. Accordingly, it appoints and directs a working group to undertake this task. The working group shall be named the North Sea International Charting Coordination Working Group (NSICCWG).
- 1.2 The NSICCWG, is a subsidiary body of the North Sea Hydrographic Commission. It shall conduct its work in accordance with these Terms of Reference and Rules of Procedure. The North Sea Hydrographic Commission may clarify or amend these generic Terms of Reference and Rules of Procedure for the NSICCWG in order for these to be made specifically relevant and applicable to its region. Its work is subject to the Hydrographic Commission's approval.

2. Terms of Reference

- 2.1 To study issues related to nautical charting of the region (INT Area D), in particular to coordinate the allocation of production responsibilities for paper and electronic charts (INT charts and ENC), that support ships engaged on international voyages.
- 2.2 To develop and maintain an integrated international chart scheme and ENC scheme for the region.
- 2.3 To reach decisions on the maintenance and updating of the documents for which it is responsible.
- 2.4 To provide advice on chart schemes to individual Member States, in order to encourage adherence to IHO charting regulations, specifications and standards, and to promote and coordinate the production of INT charts and ENCs.
- 2.5 To develop proposals for new or amended INT chart schemes to meet evolving user needs (for example, the introduction of new or amended routeing measures, the confirmed developments of international ports).
- 2.6 To coordinate the development and maintenance of small and medium scale ENC schemes (Usage Bands 1, 2 and 3) and, if required, resolve any outstanding ENC consistency or coverage issues with or between members, by regional agreement, to ensure consistent parameters are used in the compilation and scheming of ENCs. Where member states share a common boundary at Usage Band 4 then these ENC cells should also be included.
- 2.7 To act as the custodian and maintainer of official, version-controlled catalogues, depicting the status of published and planned charts, subject to formal review and approval by Member States of the North Sea Hydrographic Commission. However, the ENC catalogues may be maintained by RENCs subject to North Sea Hydrographic Commissions approval.
- 2.8 To provide advice to IHO Secretariat on any amendments required to maintain S-11 Part B: International Charts Web Catalogue INTOGIS with for example, scale, limits, numbering.
- 2.9 To provide advice to the Chair NCWG and IHO Secretariat on any amendments required to maintain S-11
- 2.10 To undertake professional consideration of new information of interest to the NSICCWG that may impact its business and responsibilities.
- 2.11 To manage the review of new editions or publications of INT charts, to check their compliance with IHO standards and to report at every forthcoming North Sea Hydrographic Commission Conference.

3. Rules of Procedure

- 3.1 Membership is open to all members and associate members (Member States) of the North Sea Hydrographic Commission wishing to be represented. Each Member State shall be represented through a single point of contact. Noting the technical nature of the Group's work, participation should be limited to representatives of Hydrographic Offices concerned with nautical charting.

 3.2 The Coordinator will monitor membership to encourage active participation by all chart-producing Member States within the Region.
- 3.3 Non-Governmental International Organizations recognized by the IHO may participate as observers in NSICCWG activities, where matters of special interest to the NGIO concerned are being considered (IHO Resolution 5/1957 as amended, rule 6.c refers).
- 3.4 The Coordinator role shall be held by a Member State participating in the NSICCWG. The election of the Coordinator, or the reconfirmation of the existing Coordinator, shall be decided by the North Sea Hydrographic Commission at an ordinary meeting or, where a meeting is not convened, by correspondence. Election shall be determined by a simple majority of Member States present and voting (or responding, where determined by correspondence).
- 3.5 Normally, a Vice-Coordinator is not required to be appointed. However, if a Vice-Coordinator is appointed by the North Sea Hydrographic Commission:
- Election to the post will be by the same method as for the Coordinator;
- The Vice-Coordinator shall act as the Coordinator, with the same powers and duties, in the event that the Coordinator is unable to carry out the duties;
- The Coordinator and Vice-Coordinator will decide between them the organization of the work entailed in these posts, or these may be defined by the North Sea Hydrographic Commission.

 3.6 Conduct of business will be primarily by email correspondence. If meetings are required, these should be planned with due regard to efficiency and obtaining the fullest membership support (for example, by holding meetings in association with meetings of the North Sea Hydrographic Commission). All members shall inform the Coordinator in advance of their intention to attend meetings of the NSICCWG. The working language shall be English.
- 3.7 New INT chart and/ or ENC proposals, subject to NSICCWG approval, shall be submitted to the Coordinator by email correspondence or during NSICCWG meetings.
- Proposals should include details of the changes, the impact on the INT chart/ ENC scheme, the reasons why the changes are being made and any issues that may result. They should be accompanied by relevant graphics.
- The Coordinator, in agreement with the proposer, will decide whether the proposal is significant enough for circulation for review and comment by NSICCWG Members.
- A reasonable stated deadline for NSICCWG members to reply will be set by the Coordinator for all circulated proposals.
- Comments, if any, must be provided before the deadline specified by the Coordinator.
- If one NSICCWG Member wishes to reject a proposal, it needs to provide the Coordinator with a comment on why it is to be rejected.
- If a NSICCWG Member does not respond to the Coordinator it will be deemed as an acceptance of the proposal.
- The Coordinator will circulate the outcome of each proposal to NSICCWG Members.

Draft proposals will be circulated for review and comment to:

- All members of the NSICCWG and, where appropriate, all members of the North Sea Hydrographic Commission;
- Coordinators of adjoining regional NSICCWG, if the scheme impacts on those regions (for example, to ensure consistency and coherence of coverage across regional boundaries, for the allocation of chart numbers);
- Hydrographic Offices producing or printing charts of the Region if required.
- The Chair NCWG if independent advice is required.

- 3.8 Consensus is required prior to implementation of any decision. Every decision can be reconsidered providing valid technical arguments are presented. All decisions made at any NSICCWG meetings will be disseminated to NSHC Member States afterwards
- 3.9 Where required, a Work Plan should be developed and maintained. This should include task priorities and the expected time frames for progressing tasks. The North Sea Hydrographic Commission may delegate tasks to the NSICCWG as it sees fit; it is also available to provide guidance on request (for example, in respect of priorities).
- 3.10 The Coordinator will report progress to meetings of the North Sea Hydrographic Commission and at other reasonable times, on request. Reports shall include but are not limited to:
- An updated Regional INT Chart Catalogue;
- An update of the ENC Catalogue relevant to the Region (if not undertaken by RENCs);
- Changes made to the scheme of INT Charts for the Region, approved by the NSICCWG since the last report, together with a summary of reasons;
- Changes made to the ENC scheme for the Region, approved by the NSICCWG since the last report, together with a summary of reasons;
- An updated Work Plan (if used).
- 3.12 All participants, including North Sea Hydrographic Commission members and associate members where not directly represented in the NSICCWG, shall keep the Coordinator informed of any information relevant to the NSICCWG. This may include:
- Submitting proposals for new INT Charts, or amendments (for example, to limits, scale of portrayal) to existing INT Charts, in the Region;
- Requesting new INT Chart numbers for new charts that are planned;
- Reporting the status of production of international charts (INT Charts and ENC).
- Provision of new editions or publications of INT charts three months prior to every North Sea Hydrographic Commission Conference.
- 3.13 NSICCWG members shall respond in a timely manner to all reasonable requests for advice from the Coordinator (for example, requests for updating the Catalogue of the INT Charts of the Region, change in points of contact, NSICCWG emails), abiding by all reasonable stated deadlines.
- 3.14 The work shall be done in accordance with:
- IHO Resolution 1/1997 as amended: Principles of the Worldwide Electronic Navigational Chart Database (WEND), to ensure a world-wide consistent level of high-quality, updated ENCs;
- S-57: IHO Transfer Standard for Digital Hydrographic Data;
- S-11 Part A: 'Guidance for the Preparation and Maintenance of International (INT) Chart and ENC Schemes';
- S-4: Chart Specifications of the IHO and Regulations for International (INT) Charts, which provides the internationally-agreed product specification for both national and international (INT) charts;
- S-65: Electronic Navigational Charts (ENCs) 'Production, Maintenance and Distribution ENC Production Guidance.

Reference: HSSC1 Meeting (Singapore, 22-24 October 2009)

IRCC7 Conference (Mexico, June 2015)

S-11 Part A Edition 3.0.0 (April 2017)

NSHC 32 Conference (21–23 June 2016)_

ANNEX B. ENC OVERLAPS IN THE NSHC REGION FOR WENDWG8 (2020)

				OVERLAPS	Distance
A_CELLNAME	B_CELLNAME	USAGEBA	REGION	COUNT	(approx)
GB100160	DK1NORSO	1	North Sea Hydrographic Commission	3	15 meters
NO1A3000	DK1NORSO	1	North Sea Hydrographic Commission	3	10 meters
DK1NORSO	DE121000	1	North Sea Hydrographic Commission	1	14 meters
GB100160	DE121000	1	North Sea Hydrographic Commission	1	6 meters
NL1NZ100	GB100160	1	North Sea Hydrographic Commission	1	20 meters
NO2B1200	GB22182D	2	North Sea Hydrographic Commission	9	58 meters
NO2B1600	GB22182D	2	North Sea Hydrographic Commission	6	131 meters
DK2NORSO	DE221000	2	North Sea Hydrographic Commission	3	18 meters
NL2NZ200	GB2A2182	2	North Sea Hydrographic Commission	3	5 meters
NL2NZ200	DE221000	2	North Sea Hydrographic Commission	2	24 meters
NO2A0404	GB2C2182	2	North Sea Hydrographic Commission	2	105 meters
NO2B0400	GB2C2182	2	North Sea Hydrographic Commission	2	76 meters
NO2B0800	GB2C2182	2	North Sea Hydrographic Commission	2	
NO2B0404	GB2C2182	2	North Sea Hydrographic Commission	1	190 meters
NO2B0412	DK2NORSO	2	North Sea Hydrographic Commission	1	16 meters
NO2B0800	GB22182D	2	North Sea Hydrographic Commission	1	94 meters
NO2B0804	GB2C2182	2	North Sea Hydrographic Commission	1	70 meters
FR367350	BE3VLBNK	3	North Sea Hydrographic Commission	9	17 meters
DK3HORRO	DE321001	3	North Sea Hydrographic Commission	5	10 meters
NO3B1200	GB300295	3	North Sea Hydrographic Commission	5	24 meters
NO3A0404	GB300272	3	North Sea Hydrographic Commission	2	220 meters
NO3B0404	GB300278	3	North Sea Hydrographic Commission	2	218 meters
NO3B0800	GB300295	3	North Sea Hydrographic Commission	2	88 meters
NL3YM500	NL3NZ400	3	North Sea Hydrographic Commission	1	23 meters
NO3B0404	GB300272	3	North Sea Hydrographic Commission	1	176 meters
NO3B0800	GB300291	3	North Sea Hydrographic Commission	1	10 meters

From Germany - April 2021 -

 ${\tt DE121000-DK1NORSO-GB100160-NL1NZ100-DE121000\ was\ replaced\ by\ DE1NO000\ and\ the\ edge\ adjustment\ was\ coordinated\ with\ DK,\ NL\ and\ GB.}$

 $\label{eq:decomposition} DE221000 - DK2NORSO - GB2C2182 - NL2NZ200 - DE221000 \ was \ replaced \ by \ DE2NO000 \ and \ the edge \ adjustment \ was \ coordinated \ with \ DK, \ NL \ and \ GB.$

DE321001 – DK3HORRO - DE321001 was replaced by DE3NO01D, DE3NO02D und DE3NO02E and the edge adjustment was coordinated with DK.

