



United Kingdom  
Hydrographic Office



# USCHC-45

Ottawa  
June 2022

## Report of UK Activities

This Report is not a formal UK National Report;  
although similar in content, it simply describes  
the UK's activities of direct relevance to the USCHC Region





## 1 **UK HYDROGRAPHIC OFFICE (UKHO):**

1.1 **UK Delivery of Hydrographic Services:** The UKHO is the UK Government's hydrographic and marine geospatial data expert. It supports the Government's Integrated Review of Security, Defence, Development and Foreign Policy (IR)) and discharge of its obligation to provide hydrographic and cartographic products and services needed for the safe passage of vessels in UK waters, and within the maritime interests of the UK Overseas Territories (UKOTs). It does this on behalf of the UK Maritime and Coastguard Agency (MCA) under the International Maritime Organization (IMO) Safety of Life at Sea (SOLAS) Convention. As a government Trading Fund, this task is fulfilled at no additional expense to the taxpayer. Together with other national hydrographic offices and the International Hydrographic Organization (IHO), the UKHO works to set and raise global standards of hydrography, cartography and navigation. Through additional specialist departments such as the Law of the Sea and Her Majesty's Nautical Almanac Office, it also supports other specialised areas of government.

1.2 **Cooperation and Partnerships:** The UK is committed to bilateral Arrangements, developed in co-operation with other international government hydrographic authorities and other agencies, covering a range of topics, including the use of copyright data. These Arrangements acknowledge appropriate Intellectual Property rights, and promote other forms of co-operation between the participants, helping to enhance international maritime safety and protection of the environment. The UKHO renewed it's Arrangement with the Canadian Hydrographic Service in Feb 21.

## 2 **SURVEYS:**

2.1 **Civil Programme:** Details of the management of civil hydrographic surveys in UK Home Waters are provided in the UK Generic National Report available at the UKHO website ([UKHO generic national report for Regional Hydrographic Commissions - GOV.UK \(www.gov.uk\)](http://www.gov.uk)). The UK's National Hydrographic Committee (known as the Civil Hydrography Annual Seminar (CHAS)) meets on an annual basis and provides the necessary breadth of interests to ensure that all surveying requirements are taken into account when prioritising the work of the Civil Hydrography Programme (CHP). CHAS was expanded in 2007 to include a much wider range of organisations, which conduct hydrographic surveys, and has been successful in promoting co-operation between these organisations.

2.2 **Global Support:** The UKHO contributes to project management for hydrographic surveys undertaken on behalf of the UKHO and UK Government interests across the globe, and has a post dedicated to the phased development of new international survey activity and capability. This post acts as the initial point of contact for UKHO involvement in direct overseas surveying schemes, including UKOTs and IHO Regional Hydrographic Commission initiatives. Further information can be obtained from Mr. David Parker ([david.parker@ukho.gov.uk](mailto:david.parker@ukho.gov.uk)).



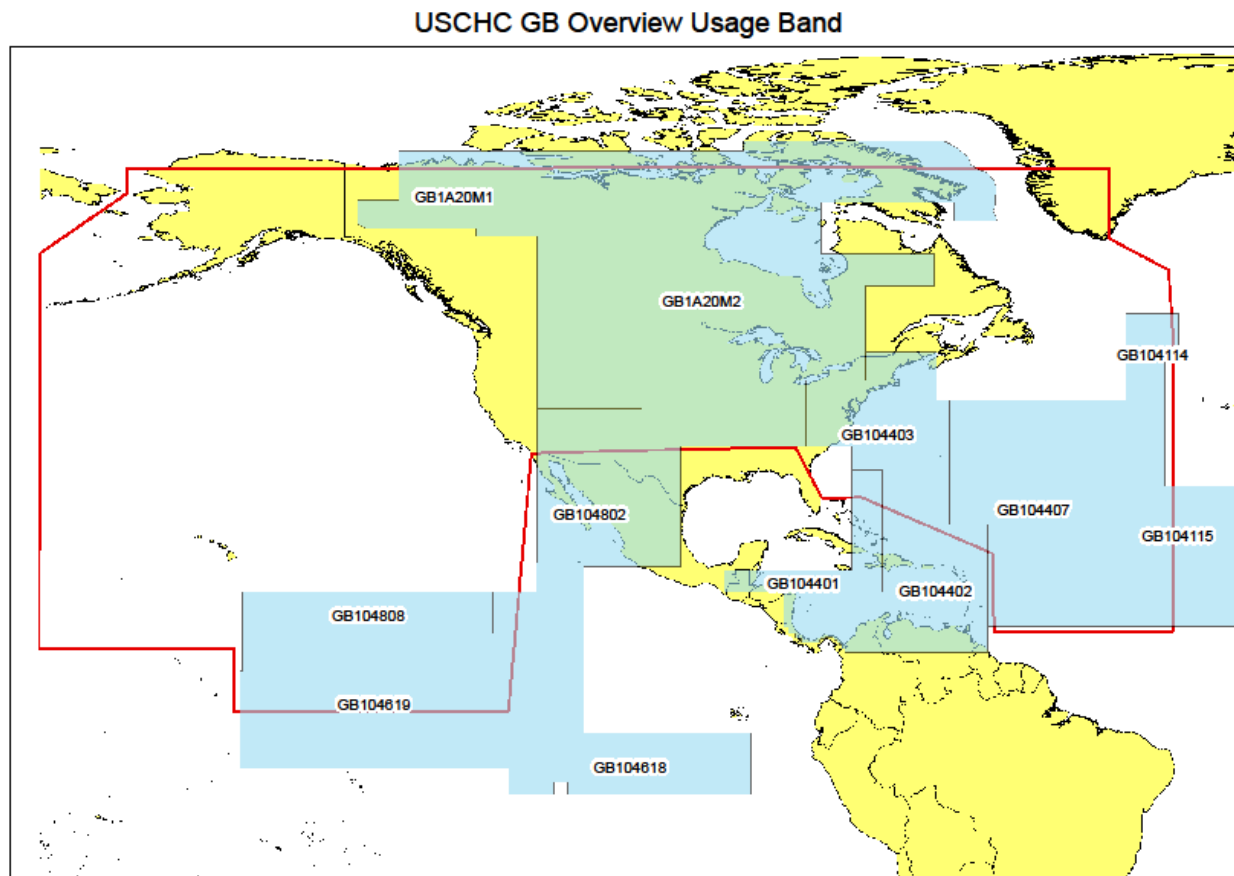
## 3 **CHARTS:**

3.1 **Paper Charts:** Information on the UKHO's global chart portfolio is provided on the ADMIRALTY website ([www.admiralty.co.uk](http://www.admiralty.co.uk)). Working with its many valued partners in the

region, it continues to publish and update our catalogue in line with prevailing safety requirements and evolving business considerations.

3.2 **Raster Charts:** The UKHO continue to maintain global raster chart coverage.

3.3 **ENCs:** Within the USCHC Region, the UK currently has published 22 ENC cells. The coverage in usage band 1 is shown below:



**Figure 1**

3.4 **ENC Distribution:** The UKHO, along with other eminent hydrographic offices, was a founder member of the International Centre for ENCs (IC-ENC) Regional ENC Co-Ordination Centre (RENC). IC-ENC concentrates its efforts on the validation and consistency of ENC data and leaves the marketing of ENCs to its value-added resellers (VARs) and chart agents. Additional details can be found on the IC-ENC website ([www.ic-enc.org](http://www.ic-enc.org)). The UKHO also acts as a VAR in its own right, particularly promoting a global range of ENCs under the AVCS brand alongside its successful ADMIRALTY range of paper charts and publications. Additional details can be found on the UKHO's ADMIRALTY website ([www.admiralty.co.uk](http://www.admiralty.co.uk)).

3.5 **Gridding:** The UKHO has chosen the parameters of a gridded scheme for S-57 and S-101 which can be applied to all GB ENCs across the globe at all scale bands. The policy is that the UKHO is happy to share our findings and parameters so that others (HOs and RHCs) can align with the UK grid. The project will be delivered by a freshly created Data Improvement Team.

3.6 **New Regional (North America and Caribbean) Geographical Technical Lead:** Many USCHC members will remember Stephanie Vincent in this role; she retired after a long and successful career in the UKHO in Apr, in the latter years supporting the USCHC

region. She was replaced by Robert Wheeler who has much experience charting the Far East. Robert will attend the Jun 22 USCHC with Simon Hardern (the Head of Partnerships and Engagement for the Americas) on behalf of the UK National Hydrographer (Rear Admiral Rhett Hatcher).

4 **PUBLICATIONS:**



4.1 **Paper Publications:** The ADMIRALTY Sailing Directions in the USCHC region are:

Number	Title
NP4	South East Alaska Pilot
NP8	Pacific Coast of Central America and United States Pilot
NP12	Arctic Pilot, Vol 3
NP23	Bering Sea and Strait Pilot
NP25	British Columbia Pilot, Vol 1
NP26	British Columbia Pilot, Vol 2
NP50	Newfoundland and Labrador Pilot
NP59	Nova Scotia and Bay of Fundy Pilot
NP65	St. Lawrence Pilot
NP68	East Coast of the United States Pilot, Vol 1
NP69	East Coast of the United States Pilot, Vol 2
NP69A	East Coasts of Central America and Gulf of Mexico Pilot
NP70	West Indies Pilot Vol.1

These publications are all maintained on a continuous revision cycle and new editions are published every 3 years or as required.

4.2 **Digital Publications:** The UKHO continues to develop digital equivalents to its existing paper publications to support the IMO mandation of ECDIS; these Publications have advantages to the mariner of providing additional functionality and minimising the task of updating.



4.3 **Digital Catalogue:** The ADMIRALTY Digital Catalogue may be downloaded free from the UKHO's ADMIRALTY website ([www.admiralty.co.uk](http://www.admiralty.co.uk)); it includes details of all paper and digital charts and publications and is updated weekly. It is a useful tool to check the ENC coverage within the region and to show the latest edition dates of both charts and publications.

## 5 **MARITIME SAFETY INFORMATION:**



5.1 **Responsibilities:** The UK's principal responsibility within the USCHC Region is for its UKOT of Bermuda.

5.2 **Notices to Mariners:** ADMIRALTY Notices to Mariners are available on the UKHO website, which is now updated on a daily basis. The UKHO no longer publishes hard-copy weekly Bulletins.

## 6 **CAPACITY BUILDING:**

6.1 **IHO Capacity Building Sub-Committee:** The UK fully supports the IHO Capacity Building Sub-Committee (CBSC) Strategy and particularly its emphasis on facilitating Phase 1 and appropriate Phase 2 capacity to enable coastal states to meet their obligations under SOLAS Chapter V Regulations 4 and 9. The UK will continue to contribute resources to both CBSC initiatives and to providing bilateral assistance.

6.2 **Technical Support and Training:** The UK has participated in numerous technical visits and workshops for varying programmes of work, in several RHC regions. In the USCHC region, the UKHO has supported a University of New Hampshire (the NOAA Chart Adequacy Worksh) with its training output.

6.3 **Capacity Building Coordinator:** The UKHO has a post dedicated to capacity building. Its key aims are to ensure that capacity building is properly considered in the UKHO activity and that the UKHO's capacity building activities are fully coordinated. It acts as the initial point of contact for UKHO involvement in capacity building activities, including UK involvement in regional hydrographic commission initiatives and IHO's CBSC activities. Further information can be obtained from Lucy Fieldhouse ([lucy.fieldhouse@ukho.gov.uk](mailto:lucy.fieldhouse@ukho.gov.uk)).

6.4 **Cartographic Training provided by UKHO:** A general description of training provided by the UKHO is included in the UK Generic National Report. Further details of the training opportunities offered by the UKHO can be found on the UKHO website (also see Para 7.5).

6.5 **ENC Training and Assistance:** The UKHO strongly supports the successful uptake of type approved ECDIS using Official ENCs, and is pro-active in offering assistance to other nations to produce, maintain and distribute ENCs. Details of courses, sponsorship,

venues and options for bespoke training provided by the UKHO can be provided on request.

## 7 **OTHER ACTIVITIES:**

7.1 **UK Overseas Territories, and other countries/territories where the UKHO acts as Primary Charting Authority (PCA):** The UKHO, on behalf of UK Government, recognises the importance of reducing contingent liability in the maritime environment. With renewed vigour, this is being addressed through supporting ongoing programmes of commissioned hydrographic surveys and marine data gathering, training and capacity building initiatives with specific countries/territories, and technical innovation. Within the USCHC region, the UK is the PCA for Bermuda; it is progressing a programme of work to update the status of hydrography within the UKOTs and continues to highlight the importance and utility, both locally and within UK Government, of Hydrography and the wider blue economy within the context of those territories.

7.2 **Future of Navigation:** The UKHO continues to explore technology and wider opportunities through which safe navigation can be optimised and delivered. Our Future of Navigation initiative embraces the potential of the S-100 suite of datasets, together with the exchange of real-time data across different user platforms, to develop new services in voyage optimisation and port integration.

7.3 **In-House Printing of SNCs:** Technology now allows the UKHO to enable all its approved international chart agents and Distributors to print ADMIRALTY SNCs on demand. The requirement for an in-house printing facility has dramatically reduced in recent years: the service will, therefore, be terminated in Sep 22, with the residue of direct-supply customers being offered alternative delivery options.

7.4 **The Nippon Foundation-Sponsored GEOMAC Cat B Courses:** The UKHO delivered the 12<sup>th</sup> Nippon-sponsored IHO-accredited Cartography Cat B Course (now broadened to include ENC training, and referred to as a GEOMAC Cat B course) between Jan and May 22. Candidates from nine countries attended. The UKHO will host and delivery the next two courses, combined total of 16 candidates, between Aug and Dec 22.

7.5 **Centre for Seabed Mapping:** As the pre-eminent UK agency for hydrography, marine cartography and safe navigation, the UKHO is well-placed to become the aggregator and focal point for the many other sources of marine data available in the UK and UKOT waters. The UK Government will shortly (21 Jun 22) be announcing the establishment of the UK Centre for Seabed Mapping as a new strand of the UKHO's responsibilities.

7.6 **The Nippon Foundation - GEBCO SB2030 Project:** The UKHO has recently signed a data sharing MOU with the SB2030 Project. This MOU will enable the UKHO to develop its data contribution plan to the SB2030 Project. Where the UKHO is the PCA and has the appropriate permissions, the UKHO will share (100m) gridded bathymetry data with SB2030 to help improve the GEBCO grid product. The UKHO has also entered a technical cooperation agreement with Teledyne Caris and SB2030 which enables the Seabed 2030 Regional and Global Centres to use the ADMIRALTY GAM service. The ADMIRALTY GAM Service was developed by the UKHO and is a tool that cleans noise in single track bathymetry survey data. This tool will help to improve the speed and human effort associated with processing of bathymetry data. The GAM service is now also available commercially.



7.7 **Crowd Sourced Bathymetry:** The UK has not yet formally responded to the IHO Circular Letter 21/2020 but hopes to provide a positive response very shortly. The UKHO has just finished facilitating a series of discussions with the various Government department stakeholders in order to achieve an agreed UK position on the matter and hopes to be able to share this position with the international community soon. The UKHO realises that there are benefits to Crowd Sourced Bathymetry data collection, particularly in areas where there have been no formal hydrographic programmes, or where the quality of existing hydrographic data held is poor or coverage is sparse. The UKHO is also actively engaged and supportive of the IHO Crowd Sourced Bathymetry Working Group and has contributed to the recent creation of Communication Material that is available on the IHO website, which aims to increase awareness and participation in the collection of crowd sourced bathymetry.



## 8 **CONCLUSION:**

The UKHO continues its commitment to carrying forward hydrographic activities through the work of the IHO's Regional Hydrographic Commissions; it notes that each commission has its own particular opportunities and challenges. It has a strong commitment to the Caribbean, North America and Arctic areas, through its Primary Charting responsibilities and through its continuing interest in developing regional hydrographic self-sufficiency through capacity building measures.

The UK, through the UKHO and the MCA, continues to pursue opportunities to improve access to bathymetric data gathering in waters around PCAs, particularly to support Caribbean Sea cruise-ship traffic.

The provision of adequate ENC coverage, in support of the IMO carriage requirement for ECDIS that have progressively come into force from 2012, presents a significant challenge globally; the USCHC already has comprehensive ENC coverage.

With a diverse range of shipping interests in the Region, from the Caribbean to the Arctic, improving the effective distribution of hydrographic publications and updates remains paramount.

**Taunton, 27 May 22**

