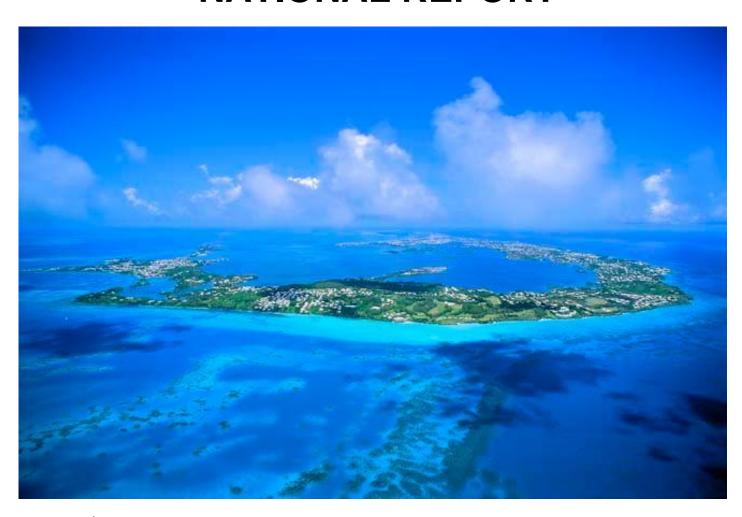


UNITED KINGDOM NATIONAL REPORT



39th UNITED STATES & CANADA HYDROGRAPHIC COMMISSION (USCHC) CONFERENCE

Halifax, Canada, 16 May 2016

This report supplements the UK Generic National Report, posted on the UKHO website

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1. UNITED KINGDOM HYDROGRAPHIC OFFICE (UKHO)

UK Delivery of Hydrographic Services

1.1 The UK delivery of hydrographic services is described in the UK Generic National Report. However, it is worth highlighting the benefits which derive from the close liaison which exists between UK's hydrographic office (UKHO) and UK's maritime administration (MCA) in providing a co-ordinated approach to hydrographic and maritime safety representation both nationally and internationally.

UKHO Governance and Targets

1.2 This is described in the UK Generic National Report to the IHO, see www.gov.uk/government/organisations/uk-hydrographic-office/about



1.3 Details of the UKHO's organisation are provided in the UK Generic National Report (section 1) together with general contact details. Specific contact details relevant to the USCHC region are included at the end of this report.

Production Systems

1.4 This is described in the UK Generic National Report.



1.5 The UK is committed to bilateral arrangements, developed in co-operation with other international government hydrographic authorities, covering a range of topics, including the use of copyright data. These also promote other forms of co-operation between the participants, helping to enhance international maritime safety and protection of the environment.

2. SURVEYS

- 2.1 Details of the management of civil hydrographic surveys in UK Home Waters are provided in the UK Generic National Report, and on the UKHO website. 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 considerably successful in promoting co-operation between these organisations.
- 2.2 Any requests for survey assistance from within the USCHC region will be assessed within the UK MoD, with advice from UKHO. UKHO can also contribute to project management of hydrographic surveys, and has a post dedicated to the phased development of new international survey activity and

capability. It acts as the initial point of contact for UKHO involvement in direct overseas surveying schemes, including United Kingdom Overseas Territories and Regional Hydrographic Commission initiatives. Further information can be obtained from Mr. Sam Harper (samuel.harper@ukho.gov.uk).

3. CHARTS

3.1 UK's Generic National Report provides information on UK's portfolio of chart products and services. The following paragraphs provide information specifically relevant to the USCHC region.

Paper Charts



3.2 The following charts have been published since the last USCHC meeting:

GB Chart Number	INT Chart	Title	Published
4917		Cape Blanco to Heceta Head	28-May-15
4918		Yaquina Head to Columbia River	28-May-15
4919		Columbia River to Cape Alava	28-May-15
4914		San Francisco	04-Jun-15
4915		Point Arena to Cape Mendocino	04-Jun-15
4916		Cape Mendocino to Cape Sebastian	04-Jun-15
4912		Point Conception to Point Piedras Blancas	18-Jun-15
4913		Cape San Martin to Santa Cruz	18-Jun-15
48		Alki Point to Point Defiance	18-Jun-15
4908		Port Hueneme and Approaches	02-Jul-15
4910		San Diego to Long Beach including Cortes Bank	02-Jul-15
4911		Santa Barbara Channel	02-Jul-15
3204		New Jersey, New York Lower Bay and Approaches	09-Jul-15
3459		New Jersey, New York Lower Bay	09-Jul-15
2486		Penobscot Bay and Approaches	23-Jul-15
2530		San Diego Bay to Cape Mendocino	23-Jul-15
2531		Cape Mendocino to Vancouver Island	23-Jul-15
2666		Grand Banks of Newfoundland	23-Jul-15
2726		Long Island Sound, Bridgeport and Approaches	23-Jul-15
2818		Florida, St. Marys Entrance	23-Jul-15
4979		Price William Sound and Approaches	23-Jul-15
50		Puget Sound, Seattle Harbor	30-Jul-15
4766		Baie des Chateurs aux lles de la Madeleine	20-Aug-15
2809		Charleston Harbor	27-Aug-15
3457		New York, Arthur Kill, Kill Van Kull and Newark Bay	27-Aug-15

GB Chart Number	INT Chart	Title	Published
4011	INT11	North Atlantic Ocean, Northern Part	08-Oct-15
4014	INT14	North Atlantic Ocean, Eastern Part	08-Oct-15
2808		Saint Johns River, Mayport to Jacksonville	12-Nov-15
3148		St Joseph and St Andrews Bay	19-Nov-15
3457		Arthur Kill, Kill Van Kull and Newark Bay	03-Dec-15
4775		Pointe de Moisie	10-Dec-15
4801	INT801	Mexican Border to Dixon Entrance	10-Dec-15
4806		San Francisco and Vancouver Island to Mendocino Fracture Zone	10-Dec-15
4975		Dixon Entrance to Cape Saint Elias	10-Dec-15
1081		Los Angeles and Long Beach Harbors	31-Dec-15
4977		Alaska Peninsula and Aleutian Islands to Seguam Pass	31-Dec-15
4791		Fleuve Saint-Laurent a Varennes	07-Jan-16
4937		Chatham Sound, Prince Rupert Harbour	07-Jan-16
4969		Unimak and Akutan Passes and Approaches	28-Jan-16
4976		Cape Saint Elias to Shumagin Islands	28-Jan-16
4978		Amukta Pass to Attu Island	28-Jan-16
4982		Valdez Arm and Port Valdez	28-Jan-16
235		Davis Strait and South East Part of Baffin Bay	11-Feb-16
4810	INT810	Dixon Entrance to Unimak Pass	18-Feb-16
4813	INT813	Bering Sea, Southern Part	18-Feb-16
3768		Brownsville to Altamira	24-Mar-16
4741		Meadows Point to Humber River	31-Mar-16
4404	INT404	Gulf of Maine to Strait of Belle Isle	28-Apr-16
4405	INT405	Strait of Belle Isle to Davis Strait	28-Apr-16
4406	INT406	Hudson Strait and Bay	28-Apr-16
4762		Gulf of St.Lawrence	28-Apr-16
1082		San Pedro Bay	05-May-16
4937		Prince Rupert Harbour	12-May-16
2850		Approaches to Baltimore	26-May-16
4794		Great Lakes	26-May-16
4814	INT814	Bering Sea, Northern Part	26-May-16
8030		Jacksonville	14-May-15
8031		Mobile Bay	21-May-15
8050		Oakland and San Francisco	25-Jun-15
8051		Richmond with Approaches to Oakland and San Francisco	25-Jun-15
8057		New Orleans	09-Jul-15
8077		Houston	13-Aug-15
8078		Morgans Point to Carpenters Bayou	13-Aug-15
8079		Bayport and Texas City	13-Aug-15
8080		Galveston to Houston Ship Channel	13-Aug-15
8098		Corpus Christi	01-Oct-15
8103		Port Arthur and Beaumont	01-Oct-15
8112		Tampa Bay	22-Oct-15

GB Chart Number	INT Chart	Title	Published
8113		Approaches to Tampa Bay	22-Oct-15
8122		Portland	05-Nov-15
8149		Tacoma	24-Dec-15
8150		Seattle	24-Dec-15
8181		Port Everglades	11-Feb-16
8187		New York Lower Bay and Approaches	25-Feb-16
8188		Newark Bay and Arthur Kill	25-Feb-16
8189		New York Upper Bay	25-Feb-16
8200		Delaware River, Philadelphia and Camden	24-Mar-16
8201		Wilmington and Marcus Hook	24-Mar-16
8202		Delaware Bay and Approaches	24-Mar-16
8224		Baltimore	21-Apr-16
8227		Miami	05-May-16
8236		Lake Charles	02-Jun-16

Charts in the 8xxx series are Port Approach Guides

3.3 Charts scheduled for publication in the next six months:

GB Chart Number	INT Chart	Title	Published
4754		Halifax Harbour, Point Pleasant	
3150		Mobile Bay	
47		Point No Point to Alki Point	
897		San Diego Bay	
2890		Approaches to Narragansett Bay	
3688		Cape Fear River and Approaches	
3183		Approaches to Galveston Bay	
3186		Houston Ship Channel	
2866		Cape Carnival to Key West	
2456		Nantucket Sound, Western Part, Buzzards Bay	
3187		Houston Ship Channel, Barbours Cut	
3850		Galveston Bay to Ship Shoal	
3852		Pensacola Bay to Tampa Bay	
3858		Pass a Loutre to Dauphin Island	
3854		Free Port to Calcasieu Pass	

3.4 Charts scheduled for independent withdrawal in the next six months

GB Chart Number	INT Chart	Title	Published
3005		Florida Reefs, Dry Tortugas	

Digital Charts



- **3.5** As noted in section **3.1**, UK's Generic National Report provides information on UK's portfolio of chart products and services. The following paragraphs provide information specifically relevant to the USCHC region.
- **3.6** Within the USCHC region, the UKHO has released a total of 22 ENC cells; the breakdown by usage band is shown in the table 2; the limits of the ENC's are shown with figures 1-5.

USCHC Region Released Cells			
ENC Usage Band	Number of GB ENCs		
Overview	12		
General	2		
Coastal	2		
Approach	2		
Harbour	3		
Berthing	1		
Total number of released ENCs	22		

Table 1

USCHC GB Overview Usage Band

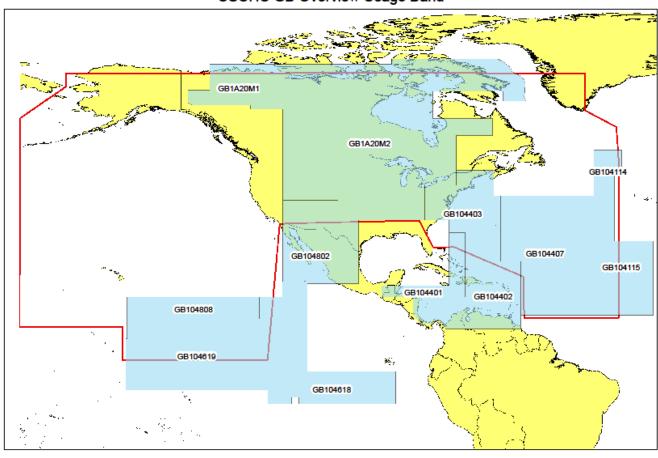


Figure 1

USCHC GB General Usage Band

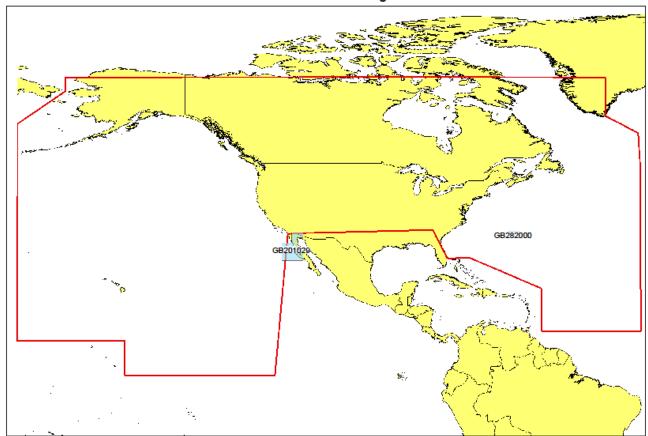


Figure 2
USCHC GB Coastal Usage Band

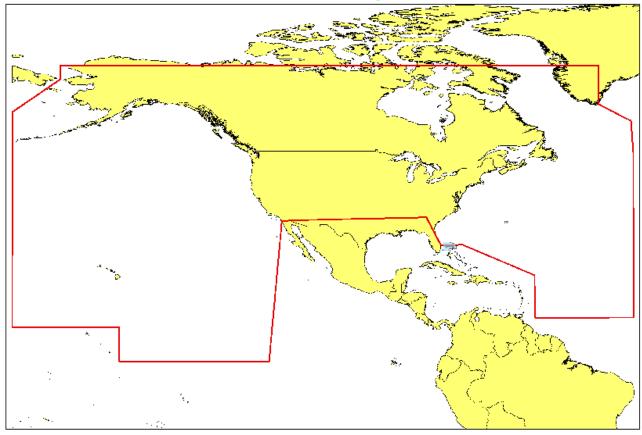


Figure 3

USCHC GB Approach Usage Band

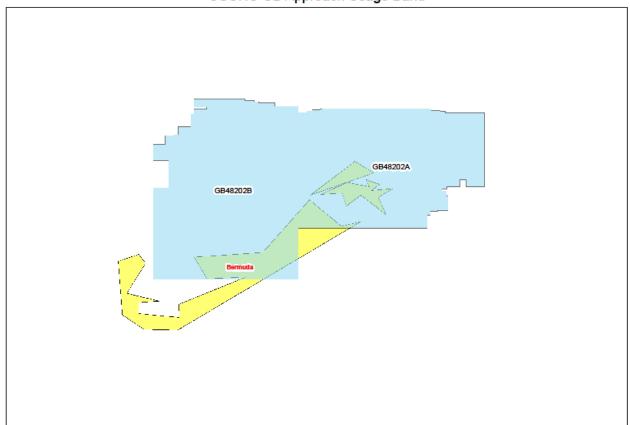


Figure 4
USCHC GB Berthing Usage Band

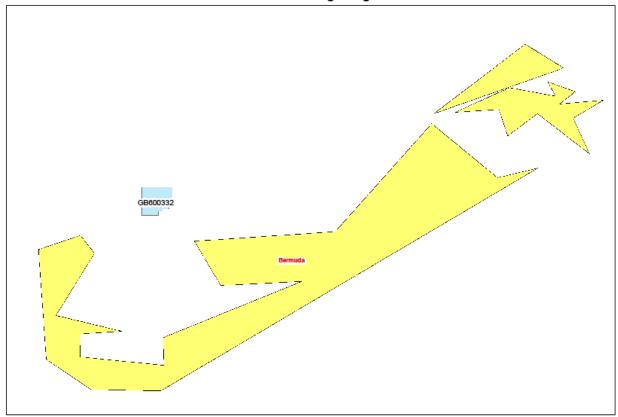


Figure 5

ENC Distribution

- **3.7** The UKHO, along with other European hydrographic offices, was a founder member of the IC-ENC RENC. IC-ENC (International Centre for ENCs) concentrates its efforts on the validation and consistency of ENC data and leaves the marketing of ENCs to the shipping industry to its value-added resellers and chart agents. Additional details can be found on the IC-ENC website (www.ic-enc.org).
- 3.8 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 website (www.ukho.gov.uk)

4. PUBLICATIONS



4.1 The Admiralty Sailing Directions in the USCHC region are as follows:

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

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

Digital Publications



4.3 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.

- **4.4** The UKHO has produces e-Nautical Publications (e-NPs) which are the digital version of Admiralty paper Nautical Publications. The e-NPs are subscription based pdf style e-books that are updatable by Notices to Mariners.
- **4.5** The Admiralty digital catalogue may be downloaded free from the UKHO website (www.ukho.gov.uk); it includes details of all paper and digital charts and publications and is updated weekly. It is a useful tool to check on the ENC coverage within the region and to show the latest edition dates of both charts and publications.

5. MARITIME SAFETY INFORMATION



- **5.1** The UK's principal responsibility within the USCHC region is for its Overseas Territory of Bermuda. UK maintains close liaison with both USA and Canada, the NAVAREA Co-ordinators for NAVAREA IV and XII, and for XVII and XVIII respectively. Any information received at UKHO which requires urgent promulgation is passed to the respective NAVAREA Co-ordinator on a 24 hour basis.
- **5.2** The current Admiralty weekly Notices to Mariners are supplemented by daily updates and are available on UKHO website.

6. C-55 (previously known as S-55) LATEST UPDATE

- **6.1** As described in the UK Generic National Report, the UKHO is committed to providing regular updates to the C-55 entries for UK Home Waters and its Overseas Territories, including Bermuda within the USCHC area; this entry is up to date. We have incorporated the additional breakdown of chart coverage (percentage of metric and WGS84 charts) as requested in IHO Circular Letter 102/2008.
- **6.2** UK has also provided assistance to update C-55 entries to other countries, where the UKHO retains the primary charting responsibility, recognising that local input remains critical to the maintenance of C-55 as an up-to-date and authoritative reference document.

7. CAPACITY BUILDING

- **7.1** UK fully supports the IHO Capacity Building Sub-Committee (CBSC) strategy and particularly its emphasis on getting Phase 1 and appropriate Phase 2 capacity in place to enable coastal states to meet their obligations under SOLAS Chapter V Regulations 4 and 9. UK will continue to contribute resources to both CBSC initiatives and to providing bilateral assistance.
- **7.2** UKHO has a post dedicated to capacity building. Its key aims are to ensure that capacity building is properly considered in UKHO activity and that 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 Capacity Building Sub Committee activities. Further information can be obtained from Mr Jeff Bryant (jeff.bryant@ukho.gov.uk).



7.3 A general description of training provided by 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.



7.4 The UKHO strongly supports the successful uptake of ECDIS using ENC, and is happy to assist other nations to produce, maintain and distribute ENCs. Details of courses, sponsorship, venues and options for bespoke training provided by the UKHO are included in the UK Generic National Report.

Survey Training at Flag Officer Sea Training - Hydrography, Meteorology and Oceanography (FOST-HM)

7.5 Nationally and internationally certified courses delivered by FOST-HM in Plymouth, are described in the UK Generic National Report.

8. OCEANOGRAPHIC ACTIVITIES

This is described in the UK Generic National Report.

9. OTHER ACTIVITIES

World Hydrography day

9.1 The UKHO celebrated World Hydrography Day 2015 in conjunction with The Institute of Marine Engineering, Science and Technology event "Oceans of Knowledge: Realising the Benefits of Ocean Information" at the Royal Institution, London, followed by an evening reception hosted by Mr John Humphrey (Chief Executive, UKHO) and Rear Admiral Tim Lowe (National Hydrographer, UKHO).



- **9.2** Our World Hydrography Day guests, including Robert Ward, President of the IHO, were invited from across the maritime sector to an event exploring the economic, safety and environmental benefits of improved observation and prediction of our oceans and seas, which inevitably increased awareness of the vital role that hydrography plays in everyone's life.
- 9.3 Julian Brazier MP, Parliamentary Under Secretary of State and Minister for Reserves, presented the annual Alexander Dalrymple award to 2015's winner, Rear Admiral Patricio Carrasco, Director of the Hydrographic and Oceanographic Service of the Chilean Navy (SHOA). The award is a symbol of recognition for outstanding dedication and contribution to hydrography and, as such, is an extremely

prestigious award in this sector. It takes its name from Alexander Dalrymple who established the Hydrographic Office in 1795 and is regarded as a leading figure in the history of the development of hydrography.

9.4 The 2016 UK World Hydrography celebrations will be held across the country under the theme of **Hydrography - the key to well-managed seas and waterways** as an outreach programme and will culminate in an event in London, at the Headquarters of the International Maritime Organization, IMO.

United Kingdom Overseas Territories (UKOTs)

9.5 Within the USCHC region, UK undertakes Primary Charting of Bermuda. The UKHO has begun a programme of work to review the status of hydrography within the United Kingdom Overseas Territories (UKOT), 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 the UKOTs. This has involved raising awareness of the importance of hydrography as well as seeking opportunities to collaborate with regional projects. In addition, the UKHO has supported the use of Royal Navy surveying vessels to supplement survey activity in the region. The UKHO has been working with the UK Foreign and Commonwealth Office to conduct an audit of data collected under the Marine Scientific Research licensing programme; the intention is that where bathymetric data has been collected but not supplied to the UKHO, this will be requested and assessed for charting action



Satellite Derived Bathymetry (SDB)

9.6 Following the 2014 trial of Satellite Derived Bathymetry (SDB) conducted in Antigua, the UKHO published our first chart (GB 2066) containing data collected using this technique. Whilst this was only made possible because the 'ground truth' reference data collected as part of the trial, it allowed the uncertainties to be quantified; it does mark a step change for the UKHO and the way that unconventional data gathering techniques are used.

International

9.7 The UK is represented on the following groups, based to its technical expertise, and its Primary Charting and UKOT responsibilities:

Inte	rnational Hydrographic Organisation	Chair/Vice Chair	Member
ABLOS	Advisory Board on Law of the Sea	X	X
CSBWG	Crowd-sourced Bathymetry Working Group		X
DPSWG	Data Protection Scheme Working Group	X	X
DQWG	Data Quality Working Group		X
ENCWG	ENC Standards Maintenance Working Group	X	X
GEBCO	General Bathymetric Chart of Oceans		X
HSSC	Hydrographic Services and Standards Committee		x
MSDIWG	Marine Spatial Data Infrastructure Working Group		X
NCWG	Nautical Cartography Working Group		X
NIPWG	Nautical Information Provision Working Group		X
S-100WG	S-100 Working Group		X
TWCWG	Tides, Water Level & Currents Working Group		X
WENDWG	Worldwide ENC Database Working Group	X	X
WWNWS	Worldwide Navigational Warning Service		X
Inte	rnational Hydrographic Organisation	Chair/Vice Chair	Member
HCA	Hydrographic Commission on Antarctica		X
MACHC	Meso American and Caribbean Sea Hydrographic Commission		х
MBSHC	Mediterranean and Black Seas Hydrographic Commission		х
NIOHC	North Indian Ocean Hydrographic Commission		х
NSHC	North Sea Hydrographic Commission		X
RSAHC	ROPME Sea Area Hydrographic Commission		X
SAIHC	Southern Africa and Islands Hydrographic Commission	X	Х
SWPHC	South-West Pacific Hydrographic Commission		х
Ir	nternational Maritime Organisation	Chair/Vice Chair	Member
NCSR	Navigation, Communication, Search and Rescue		Х
NAVTEX	NAVTXT Coordination panel	X	X
DRWG	Document Review Working Group of NAVTXT		X
International Association of Marine Aids to Navigation and Lighthouse Authorities		Chair/Vice Chair	Member
ENAV	E-navigation Committee		X
WVTSAB	World Vessel Traffic System Advisory Board		X
	Other International Bodies	Chair/Vice Chair	Member
IAU	International Astronomical Union		X
CIRM	Comité International Radio-Maritime		X
BALTICO	Navarea1 member states meeting	X	
ISO	International Standards Organisation		X
OGC	Open Geospatial Consortium		X

10. CONCLUSION

The UKHO continues its commitment to carrying forward hydrographic activities through the work of the IHO's Regional Hydrographic Commissions, and notes that each commission has its own particular opportunities and challenges.

UK has a strong interest in the Caribbean, North America and Arctic areas, through its Primary Charting and through its continuing interest in developing regional hydrographic self-sufficiency through capacity building measures within those regions.

The UK, through the UKHO and the national maritime administration (MCA), continues to pursue opportunities to improve access to bathymetric data gathering in waters around United Kingdom Overseas Territories, particularly to support Caribbean Sea cruise-ship traffic.

The provision of adequate ENC coverage, in support of the IMO carriage requirement for ECDIS that comes progressively 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, May 2016



UKHO POINTS OF CONTACT

UKHO Website: www.ukho.gov.uk

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For bilateral arrangements and other international partnering matters within the USCHC region, please contact:

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International Capacity Building Manager

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