MACHC19-03Z UK National Report



UNITED KINGDOM NATIONAL REPORT

to the

MESO AMERICAN - CARIBBEAN SEA HYDROGRAPHIC COMMISSION 19TH MEETING (MACHC)

CARTAGENA DE INDIAS, COLOMBIA

28 November - 1 December 2018

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

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1. UK 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 close liaison which exists between UK's Hydrographic Office (UKHO) and UK's maritime administration Maritime & Coastguard Agency (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 <u>www.gov.uk/government/organisations/uk-hydrographic-office/about</u>

UKHO Organisation



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 MACHC region are included at the end of this report.

Production Systems

1.4 This is described in the UK Generic National Report.

Cooperation and Partnerships



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/re-use of data protected by copyright and intellectual property rights of those authorities. 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 cooperation between these organisations.

2.2 The UK Government's **Commonwealth Marine Economies (CME) Programme** aims to support the sustainable economic growth of Small Island Developing States (SIDS) by maximizing the potential of their marine resources, helping to improve their resilience to climate change and natural disasters, protect their environment and food security, and ultimately improve the livelihood of local communities. The CME Programme is now in its third year and the UK's former Foreign Secretary, Rt Hon. Boris Johnson, announced a further £9million funding for the next two years of the programme. The UKHO continues to take a leading role in this programme with a series of surveys, equipment procurement and capacity building planned for the next two years.

2.3 The multibeam echo-sounder and lidar work conducted in Guyana and Jamaica last year under the Commonwealth Marine Economies Programme has completed validation at the UKHO and is currently in the process of being charted. CME Programme partners plan to deliver the data to the respective governments through in-country workshops before year end.

2.4 The **UK Overseas Territories Seabed Mapping Programme** has central government funding to assess and redress the deficit of bathymetric data and lack of sound hydrographic governance in the UK's Overseas Territories (OTs). The programme is now in its third year and with a budget of £4.2million, will see significant surveys being undertaken in the BVIs, Anguilla, the Turks and Caicos Islands. Further, an MSI and Hydrographic Governance workshop is being planned for this winter, to be delivered at the UKHO.

2.5 The following multibeam and lidar surveys have been commissioned by the UK under the CME and OTs programmes to provide high resolution data in these important navigational areas. The following surveys are now underway:

- Dominica West Coast of Dominica (Vessel Survey)
- St Lucia West Coast of St Lucia (Vessel Survey)
- Belize Belize City to Ambergris Cay
- Turks and Caicos Islands (Airborne Survey)
- British Virgin Islands (Airborne Survey)
- Anguilla (Vessel Survey)

2.6 The following surveys are currently in the process of being developed:

• Turks and Caicos Islands (Vessel Survey)

2.7 Any requests for survey assistance from nations within the MACHC region will be considered, as the UKHO has a dedicated team of specialists that manages our portfolio of survey and hydrographic development programmes. In addition to survey advice, the team are configured to provide support and advice in the development of hydrographic governance and identifying funding. Mr Sam Harper is the Head of International Programmes and Training, a dedicated UKHO team that focuses on international survey programmes, capacity building and cartographic training, and is the initial point of contact for UKHO involvement in overseas hydrographic programmes and Regional Hydrographic Commission initiatives. Further information can be obtained from (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 MACHC region.

Paper Charts



3.2 Information on UK's chart portfolio is provided on the UKHO website. The following paragraphs provide information specifically relevant to the MACHC region.

The following charts have been published since the last MACHC meeting as New Charts or full New Editions:

GB Chart Number	Title	Published
494	West Indies - Southern Martinique	11 Jan 18
1521	Venezuela - Canal de Maracaibo, Southern Part	11 Jan 18
804	West Indies - Guadeloupe, Pointe-a-Pitre and Approaches	01 Feb 18
398	Bahamas - Grand Bahama Island, Freeport Roads	08 Feb 18
1025	West Indies - Lesser Antilles, Anguilla to Guadeloupe	22 Feb 18
2943	West Indies - Jamaica and Pedro Bank	01 Mar 18
2047	West Indies - Approaches to Anguilla	29 Mar 18
2079	West Indies - Ports and Anchorages in Anguilla, Sint Maarten and Saint Barthelemy	29 Mar 18
790	Grenada, Saint George's Harbour and Approaches	05 Apr 18
799	Saint Vincent, Kingstown Harbour and Approaches	05 Apr 18
791	West Indies - Saint Vincent to Bequia	05 Apr 18
793	West Indies - The Grenadines, Northern Part	05 Apr 18
794	West Indies - The Grenadines, Central Part	19 Apr 18
797	West Indies - Grenada	19 Apr 18
CP1	Panama - North Coast, Panama Canal, Atlantic Entrance including adjacent Ports	26 Apr 18
CP2	Panama Canal - North Gatun Lake	26 Apr 18
CP3	Panama Canal - South Gatun Lake	26 Apr 18

CP4	Panama Canal - Gaillard Cut	26 Apr 18
CP5	Panama - Pacific Coast, Panama Canal, Pacific Entrance	26 Apr 18
1020	Costa Rica and Panama, Pacific Ocean Coast, Punta Morro de Puercos to Isla del Cano and Isla del Coco	17 May 18
1520	Venezuela, Canal de Maracaibo, Northern Part	07 Jun 18
2194	Venezuela and Colombia, Punta Macolla to Punta Gallinas	07 Jun 18
1277	Colombia - North Coast, Punta Canoas to Isla Fuerte	14 Jun 18
2497	Central America, Costa Rica - West Coast, Golfo de Nicoya	14 Jun 1
3959	Brazil - North Coast, Approaches to Rio Para and Rio Amazonas	21 Jun 1
1946	Central America - Pacific Coast, Guatemala and El Salvador, Quetzal and Acajutla	05 Jul 1
720	Grenada, Saint George's Harbour	26 Jul 1
364	Mexico - East Coast, Approaches to Tampico and Altamira	23 Aug 1
365	Mexico - East Coast, Puerto de Altamira	23 Aug 1
583	West Indies - Sombrero Island to Saint Christopher (Saint Kitts)	23 Aug 1
520	South America - North East Coast, Cayenne to Sao Luis	13 Sep 1
1017	Mexico - Pacific Coast, Golfo de California	13 Sep 1
1027	Mexico - Pacific Ocean Coast, Approaches to Golfo de California	13 Sep 1
1029	Mexico and United States, Pacific Ocean Coast, Punta Abreojos to San Diego Bay	13 Sep 1
1798	Central America, Ports on the Caribbean Coast of Costa Rica	13 Sep 1
359	Mexico – East Coast, Dos Bocas Terminal	27 Sep 1
1097	United States - East Coast, Florida Keys, Key Biscayne to Lower Matecumbe Key	27 Sep 1
1098	United States - East Coast, Florida Keys, Lower Matecumbe Key to Boca Grande Key	27 Sep 1
2434	Colombia - North Coast, Bahia de Cartagena	27 Sep 1
3184	United States - Gulf of Mexico, Texas, Corpus Christi and Brownsville	27 Sep 1
3699	United States - East Coast, Florida, Approaches to Port Everglades and Miami	27 Sep 1
3849	United States - Gulf of Mexico, Texas, Brazos Santiago to Galveston Bay	04 Oct 1
368	Martinique, Baie de Fort de France	11 Oct 1
369	West Indies, Northern Martinique	11 Oct 1
254	West Indies - Leeward Islands, Montserrat and Barbuda	18 Oct 1
597	West Indies, Saint Vincent to Grenada	18 Oct 1
795	West Indies, The Grenadines – Southern Part	18 Oct 1
3848	United States - Gulf of Mexico, Florida, Tampa Bay	25 Oct 1

The following charts are scheduled for publication in the next six months:

GB Chart Number	Title	
2764	Guyana - Surinam, Berbice River to Suriname River	
2763	French Guyana - Guyana - Surinam, Georgetown to Cayennne	
519	Guyana - Georgetown & Demerara River	
527	Guyana - Approaches to Demerara & Essequibo Rivers	
396	Caribbean - Barranquilla to Miskito Bank	
655	Mexico - West Coast, Puerto Lazaro Cardenas and Approaches	
NC 2996	West Indies, Cuba to Bahama Islands	
NC 3001	West Indies, Haiti to Puerto Rico	
3188	United States - Gulf of Mexico, Houston Ship Channel	
462	West Indies, The Cayman Islands	
254	West Indies, Montserrat	
454	West Indies, Jamaica - South Coast, Kingston Harbour	
456	West Indies, Jamaica - South Coast, Approaches to Kingston Harbour	
457	West Indies, Jamaica - South Coast, Portland Bight	
522	Central America - East Coast - Belize, Belize City and Approaches	
1797	Central America - East Coast - Belize, Monkey River to Colson Point	
CP1	Panama - North Coast, Panama Canal, Atlantic Entrance	
CP2	Panama Canal, North Gatun Lake	
CP3	Panama Canal, South Gatun Lake	
CP4	Panama Canal, Gaillard Cut	
CP5	Panama - Pacific Coast, Panama Canal, Pacific Entrance	

The following charts are scheduled for withdrawal in the next six months:

GB Chart Number	Title
478	West Indies - Ports in Puerto Rico
1082	United States - West Coast, San Pedro Bay
2579	West Indies - Cuba
1496	The Great Bahama Bank
3689	West Indies, Eastern Part of Haiti to Puerto Rico including Mona Passage
1266	West Indies, South-Eastern Portion of the Bahama Islands



3.3 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 MACHC region.

ENCs

3.4 Within the MACHC region, the UKHO has released a total of 216 ENC cells. The breakdown by usage band is shown in the table below:

MACHC Region Released Cells			
ENC Usage Band	Number of GB ENC's		
Usage Band 1	8		
Usage Band 2	14		
Usage Band 3	34		
Usage Band 4	66		
Usage Band 5	81		
Usage Band 6	13		
Total Number of ENCs	216		

ENC totals by usage band as produced by UKHO

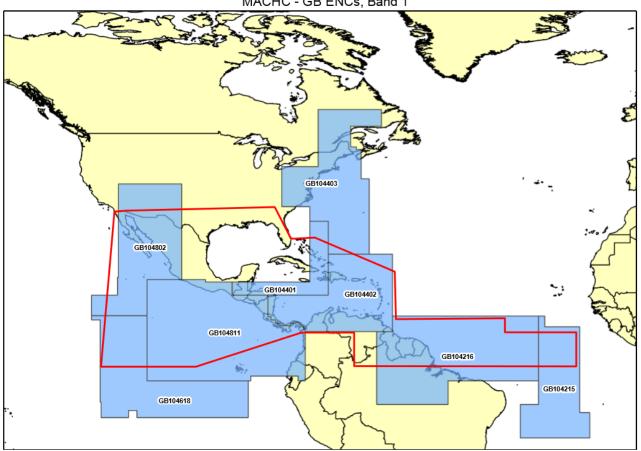
The tables below show revisions to GB ENC coverage for the MACHC Region during 2017/18. The subsequent diagrams illustrate the current coverage of GB ENCs within the MACHC Region.

New cells Nov 2017 - Oct 2018	Week No.
GB202943	12/18
GB48044B	50/17
GB40797A	02/18
GB400793	17/18
GB400795	44/17
GB40462C	52/17
GB40489A	02/18
GB41273A	52/17
GB458400	02/18
GB40477A	51/17
GB40477B	51/17
GB40794B	44/17
GB48302B	50/17
GB40791A	49/17

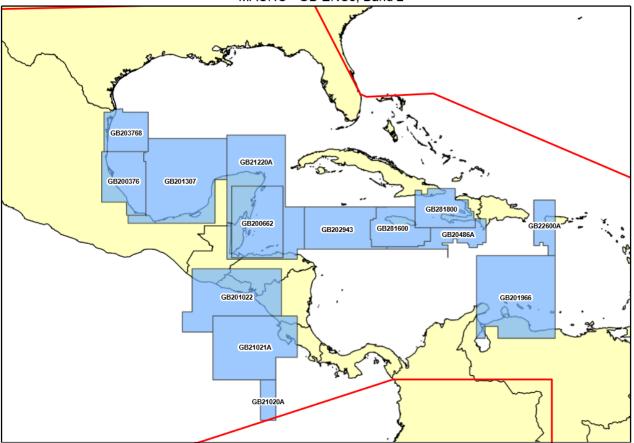
GB40794A 44/17 GB42485A 46/17 GB50793B 44/17 GB50477C 51/17 GB50697A 50/17 GB500799 17/18 GB50477D 51/17 GB50462A 29/18 GB50477D 51/17 GB500790 17/18 GB50477B 51/17 GB50794B 44/17 GB50794B 44/17 GB50794A 44/17 GB50794A 44/17 GB50795B 44/17 GB50795A 44/17 GB50795A 44/17 GB50795A 52/17 GB500790 15/18 GB50197 52/17 GB502079 15/18 GB50477A 51/17 GB60499A 52/17 GB600197 52/17 GB60499C 52/17 GB60499D 52/17 GB60499D 52/17 GB60499D 52/17		
GB50793B 44/17 GB50477C 51/17 GB50697A 50/17 GB50079A 22/18 GB500799 17/18 GB50462A 29/18 GB500790 17/18 GB500790 17/18 GB500790 17/18 GB50794B 44/17 GB50794B 44/17 GB50794A 44/17 GB50795B 44/17 GB50795A 44/17 GB50197 52/17 GB502079 15/18 GB50477A 51/17 GB50197 52/17 GB50197 52/17 GB50499A 52/17 GB600197 52/17 GB600197 52/17 GB600197 52/17 GB60499C 52/17 GB60499D 52/17	GB40794A	44/17
GB50477C51/17GB50697A50/17GB50697A22/18GB50079917/18GB50462A29/18GB50477D51/17GB50079017/18GB50477B51/17GB50794B44/17GB50794A44/17GB50795B44/17GB50795A44/17GB5019752/17GB50207915/18GB50477A51/17	GB42485A	46/17
GB50697A50/17GB52047A22/18GB50079917/18GB50462A29/18GB50477D51/17GB50079017/18GB50477B51/17GB50794B44/17GB50794A17/18GB50794A44/17GB50795B44/17GB50795A44/17GB5019752/17GB50207915/18GB50477A51/17GB5019752/17GB5019752/17GB60499A52/17GB60499A52/17GB60499C52/17GB60499D52/17	GB50793B	44/17
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GB50477B51/17GB50794B44/17GB50791A17/18GB50791A44/17GB50795B44/17GB50795A49/17GB50795A44/17GB5019752/17GB50207915/18GB50477A51/17GB60499A52/17GB6019752/17GB60499A52/17GB60499C52/17GB60499D52/17	GB50477D	51/17
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GB50791A17/18GB50794A44/17GB50795B44/17GB50793A49/17GB50795A44/17GB5019752/17GB50207915/18GB50477A51/17GB60499A52/17GB603912A52/17GB60019752/17GB60499C52/17GB60499D52/17	GB50477B	51/17
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GB60499A 52/17 GB63912A 52/17 GB600197 52/17 GB60499C 52/17 GB60499D 52/17	GB502079	15/18
GB63912A52/17GB60019752/17GB60499C52/17GB60499D52/17	GB50477A	51/17
GB60019752/17GB60499C52/17GB60499D52/17	GB60499A	52/17
GB60499C 52/17 GB60499D 52/17	GB63912A	52/17
GB60499D 52/17	GB600197	52/17
	GB60499C	52/17
GB60499B 52/17	GB60499D	52/17
	GB60499B	52/17

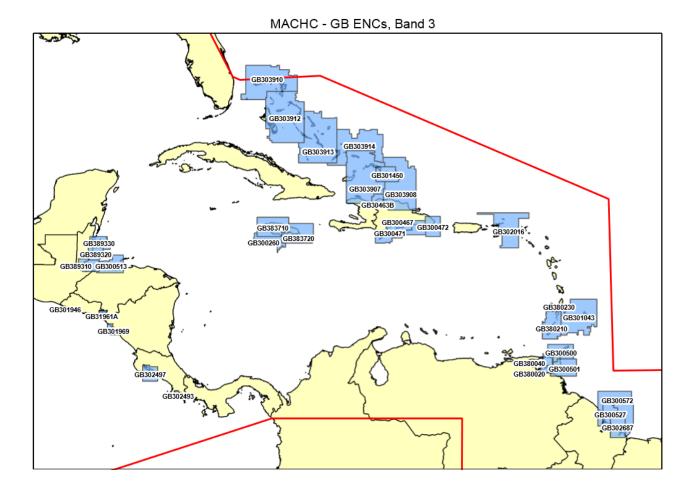
Cancelled cells		
Nov 2017 - Oct 2018	Week No.	Replacements
GB201023	30/18	MX208087
GB201024	30/18	MX208086, MX208087
GB201026	30/18	MX208085, MX208086
GB201027	30/18	MX208082, MX208083
GB201028	30/18	MX208082
GB201029	30/18	MX208080, MX208082
GB21017N	30/18	MX208081, MX208083
GB21017S	30/18	MX208081, MX208083
GB21218A	12/18	GB202943
GB500197	52/17	GB600197
GB50499A	52/17	GB60499A
GB50499B	52/17	GB60499B
GB50499C	52/17	GB60499C
GB50499D	52/17	GB60499D
GB50799A	17/18	GB50791A
GB50799B	17/18	GB500799
GB50799C	17/18	GB500790

MACHC - GB ENCs, Band 1

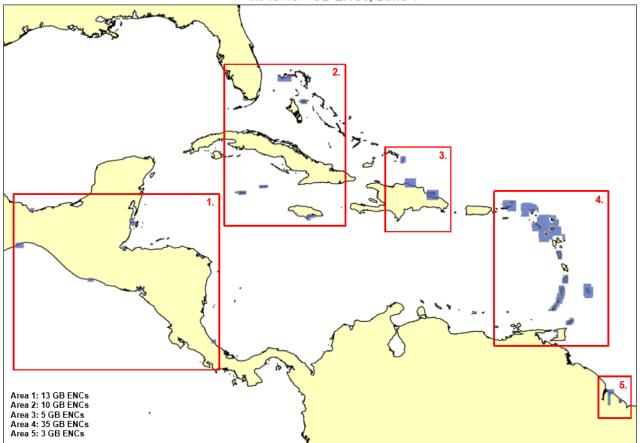


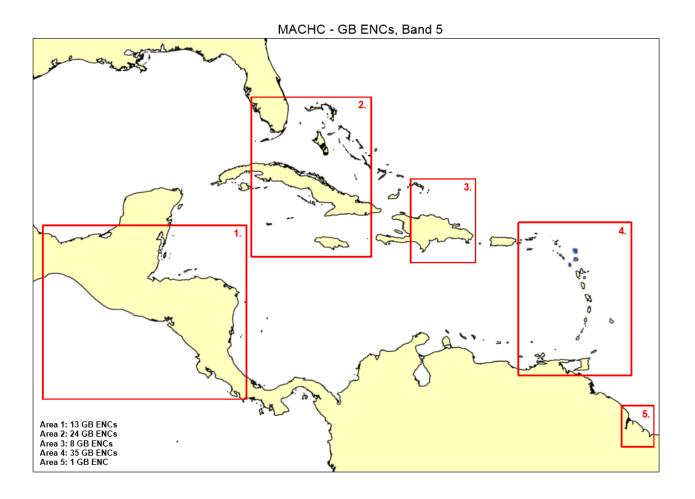
MACHC - GB ENCs, Band 2



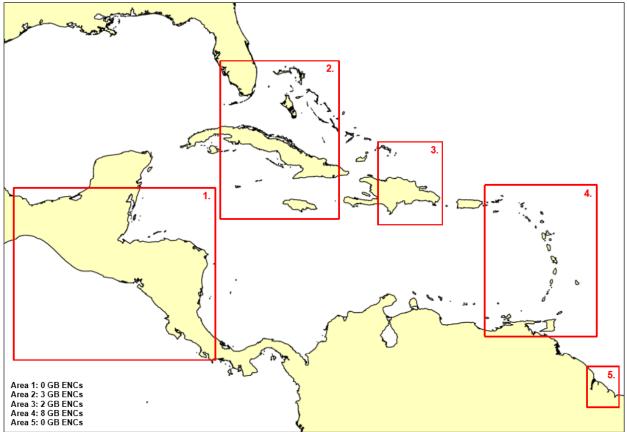


MACHC - GB ENCs, Band 4





MACHC - GB ENCs, Band 6



ENC Distribution

3.5 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).

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 (<u>www.admiralty.co.uk</u>).

4. PUBLICATIONS

Paper Publications



- **4.1** The Admiralty Sailing Directions in the MACHC region are as follows:
 - NP5 South America Pilot Vol 1
 NP7 South America Pilot Vol 3
 NP7A South America Pilot Vol 4
 NP8 Pacific Coasts of Central America & United States Pilot
 NP69A East Coasts of Central America & Gulf of Mexico Pilot
 NP70 West Indies Pilot Vol 1
 NP71 West Indies Pilot Vol 2

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

Full details of the ADMIRALTY publication range and their status can be found on the ADMIRALTY website <u>https://www.admiralty.co.uk</u>.



4.2 The UKHO offers digital equivalents to its existing paper publications to support the IMO mandate of ECDIS. These publications provide mariners with additional functionality and automate the task of updating.

4.3 The UKHO produces a range of ADMIRALTY Digital Publications which are digital versions of ADMIRALTY paper Nautical Publications. These publications are subscription-based and updatable by Notice to Mariners.

- **ADMIRALTY e-Nautical Publications (AENP):** e-Book versions of ADMIRALTY Sailing Directions and reference publications.
- **ADMIRALTY Digital List of Lights (ADLL):** Digital versions of ADMIRALTY lights publications.
- ADMIRALTY TotalTide (ATT): Digital versions of ADMIRALTY tidal publications.
- **ADMIRALTY Digital Radio Signals (ADRS):** Digital versions of ADMIRALTY radio signal publications.

4.4 The **ADMIRALTY Digital Catalogue** (ADC) can be downloaded free from the ADMIRALTY website (<u>www.admiralty.co.uk</u>). It includes details of all paper and digital charts and publications and is updated weekly. It is a useful tool to check chart 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 MACHC region is for its UK Overseas Territories (listed in **9.3**) and those Commonwealth of Nations countries where the UK is the primary charting authority (PCA), including:

- Antigua and Barbuda
- The Bahamas
- Barbados
- Belize
- Bermuda
- Dominica
- Grenada
- Guyana
- Jamaica
- Saint Lucia
- St.Kitts and Nevis
- St.Vincent and The Grenadines
- Trinidad and Tobago.

UK maintains close liaison with the NAVAREA Co-ordinators for NAVAREAS IV and XII which cover the MACHC area. Any information received at UKHO which requires urgent promulgation is passed to NAVAREAS IV or XII co-ordinators.

5.2 GMDSS. With the exception of the USA, GMDSS coverage in the MACHC region is generally sparse and administrations should be encouraged to develop their capabilities and infrastructure and to provide at least Phase One hydrographic capability to promulgate MSI in a timely and efficient manner. This can be achieved by utilising existing (or establishing new) National Co-ordinators for MSI within each littoral state in the region and fostering direct liaison with NAVAREA Co-ordinators for Navigational Warnings and with Regional Hydrographic Offices.

5.3 Notices to Mariners. The current Admiralty weekly Notices to Mariners are now supplemented by daily updates; these are available on the UKHO website.

6. C-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. The latest status is correctly depicted within C-55.

6.2 UK has also provided assistance to update C-55 entries to other countries, including Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, St. Kitts and Nevis, St. Vincent and The Grenadines, and Trinidad and Tobago, where the UKHO provides primary charting, 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 The 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 International Training and 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 IHO capacity building activities, including UK involvement in regional hydrographic commission initiatives and IHO Capacity Building Sub Committee (CBSC) activities. Further information can be obtained from the International Training and Capacity Building Manager - Ms Lucy Fieldhouse (Lucy, Fieldhouse@ukho.gov.uk). Ms Lucy Fieldhouse is also the Capacity Building Coordinator for the MACHC, NIOHC and SAIHC regions.



7.3 The UKHO provides two annual CAT B accredited nautical cartography training opportunities to FGHO students. These are the IHO-NF CHART Project course which is funded by the Nippon Foundation and the newly established UKHO course. It should be noted that in 2019 only the IHO-NF CHART Project course will be provided. Applications for the Nippon Foundation course are by responding to the IHO Circular Letter on the subject (this year it was CL04 / 2018). The UKHO invites participants to its version of the course as part of bilateral arrangements.

7.4 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 or by contacting the UKHO's International Training and Capacity Building Manager, Ms Lucy Fieldhouse (see above for details).

ENC Training and Assistance



7.5 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)

7.6 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

UK Celebrations for World Hydrography Day

opportunity to meet expert mariners and representatives from UKHO.

9.1 Acknowledging the 2018 World Hydrography Day theme "Bathymetry - the foundation for sustainable seas, oceans and waterways", UKHO hosted an interactive family day in June at the Museum of Somerset in Taunton, UK. This free to attend event was aimed at showing the local community the importance of hydrography and the vital role it plays in our lives. The event offered a range of maritime-themed activities for both children and adults, including navigating around obstacles by calculating depths, and an augmented reality sandbox showing bathymetry in action, with responsive contours projected onto the sand as it was moved and sculpted by visitors. The event was well attended by adults and children, giving them an

9.2 UKHO hosted a national celebration of World Hydrography as an evening reception at Trinity House, London, the headquarters of England's Lighthouse Authority, on 9th October 2018 to coincide with the 2nd International Hydrographic Organization (IHO) Council meeting, attended by over 30 Member State representatives. The event, which attracted over 160 attendees from across the national and international maritime community included guests representing marine and maritime interests, including government policy makers, academia and scientists. RAdm Tim Lowe spoke of the importance of bathymetry and wider marine geospatial data in developing sustainable marine economies: "We are the enablers, harnessing bathymetry - that foundation data - to support the development of sustainable and resilient blue economies. I believe that we all have a collective responsibility to ensure that marine geospatial data is part of this journey. Whether that is by providing access to vast stores of information or by promoting the development of skills and expertise, as demonstrated by our ten NIPPON students here this evening, to ensure that we unlock that information's potential, we all have a fundamental role to play."

The event also included the presentation of the prestigious Alexander Dalrymple Award to the UKHO's Jeff Bryant, who was the thirteenth recipient of the award and was nominated for the global impact he has made as former International Training and Capacity Building Manager. Over his career, spanning 45 years, Jeff coordinated the training of hundreds of students and secured our long-term partnership with the NIPPON Foundation. This annual award established by the UKHO is named in honour of Alexander Dalrymple FRS, who, following orders from King George III in 1795, set up what is now the UK Hydrographic Office.

United Kingdom Overseas Territories

9.3 UK fulfils the Primary charting responsibilities of the following UK Overseas Territories within the MACHC region:

- Anguilla
- British Virgin Islands
- Cayman Islands
- Montserrat
- Turks and Caicos Islands

The UKHO continues to run an Overseas Territories Seabed Mapping Programme, which is reviewing the status of hydrography within the UK OTs, 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 UK OTs. Under this programme, UKHO are delivering survey activity in a number of UK OTs during 2018 (reported in section 2), as well as working with OTs to ensure their compliance with the Hydrographic elements of SOLAS, and plan further similar activity in future years.

Satellite Derived Bathymetry (SDB)

9.4 Since August 2016, the UKHO now have a specification and framework contract with several SDB companies to be able to acquire SDB data if we need it, predominantly for the UK OTs and CME programmes.

In early 2018 we completed an SDB data acquisition project on this framework for an area in Tuvalu. We are currently preparing a new SDB project covering Kiribati.

Broader UK Government Work

9.5 In July 2018 the UK Government announced new measures to ensure British Overseas Territories in the Caribbean have the support they need in the event of a hurricane. These include Royal Fleet Auxiliary vessel Mounts Bay remaining in the Caribbean vicinity throughout hurricane season. UKHO has formalised the provision of its capabilities to our Overseas Territories during a period of crisis, e.g. hurricane or shipwreck.

Commonwealth Nations

9.6 The UK is the current chair of the Commonwealth Heads of Government Meeting (CHOGM18), which was held between the 16th and 21st April, in London. The next CHOGM will be in 2020, and the UKHO has demonstrated its commitment to furthering the Commonwealth's Blue Charter aspirations by announcing funding for a number of initiatives including continued support to the CME Programme.

The UKHO continues to take a leading role in pushing ocean's policy within government and is working on a number of initiatives that should see continued focus on seabed mapping for the commonwealth and beyond.

UKHO's International Activities

9.7 Due to UKHO's technical expertise, primary charting responsibilities and UK OTs the UK is represented at the following groups:

Intern	ational Hydrographic Organisation - HSSC	Chair/Vice Chair	Member
DQWG	Data Quality Working Group		Х
ENCWG	ENC Standards Maintenance Working Group	х	Х
HSSC	Hydrographic Services and Standards Committee		Х
NCWG	Nautical Cartography Working Group		Х
NIPWG	Nautical Information Provision Working Group	х	Х
S-100WG	S-100 Working Group		Х
TWCWG	Tides, Water Level & Currents Working Group		Х
Intern	International Hydrographic Organisation - IRCC		Member
CBSC	Capacity Building Sub-Committee		Х
CSBWG	Crowd-sourced Bathymetry Working Group		Х
DRWG	Document Review Working Group of NAVTXT		Х
HCA	Hydrographic Commission on Antarctica		Х
IRCC	Inter-Regional Coordination Committee		Х
MACHC	Meso American and Caribbean Sea Hydrographic		Х
	Commission		
MBSHC	Mediterranean and Black Seas Hydrographic		Х
	Commission		

MSDIWG	Marine Spatial Data Infrastructure Working Group		х
NIOHC	North Indian Ocean Hydrographic Commission	x	x
NSHC	North Sea Hydrographic Commission		X
RSAHC	ROPME Sea Area Hydrographic Commission		X
SAIHC	Southern African and Islands Hydrographic	x	x
	Commission	A	~
SWPHC	South-West Pacific Hydrographic Commission		х
WENDWG	Worldwide ENC Database Working Group	х	Х
WWNWS	Worldwide Navigational Warning Service		Х
International Maritime Organisation		Chair/Vice Chair	Member
NAVTEX	NAVTXT Coordination panel	х	Х
Internation	al Association of Marine Aids to Navigation and	Chair/Vice	Mambar
	Lighthouse Authorities	Chair	Member
ENAV	E-navigation Committee		Х
Other International Bodies		Chair/Vice Chair	Member
IAU	International Astronomical Union		Х
CIRM	Comité International Radio-Maritime		Х
BALTICO	Navarea1 member states meeting	х	
ISO	International Standards Organisation		Х
OGC	Open Geospatial Consortium	х	х

10. CONCLUSION

10.1 UK has a strong commitment to the Meso American and Caribbean Sea region, through its primary charting responsibilities, its continuing interest in developing regional hydrographic self-sufficiency through capacity building measures and more recently through its work to review the status of hydrography within the UK Overseas Territories and its commitment to the Commonwealth Marine Economies (CME) programme.

10.2 The UK, through the UKHO and the national maritime administration (Maritime Coastguard Agency), continues to pursue opportunities to improve access to bathymetric data gathering in waters around UK Overseas Territories.

10.3 There is a continuing challenge to link the scarce local data gathering resources into a broad programme of prioritised chart compilations and new editions to meet the needs of the mariner.

10.4 The provision of adequate ENC coverage, in support of the IMO carriage requirement for ECDIS completed in July 2018, was a challenge in the MACHC region as well as other regions. Good progress continues to be made to improve the availability and quality of suitable ENC coverage along with digital publications to support the digital bridge.

10.5 With a diverse range of shipping interests in the Region, improving the effective distribution of information to support the marine and maritime user remains paramount.

10.6 Noting the increasing demand and the International Hydrographic Organisation's (IHO) direction to enable the maximum and widest use of Hydrographic maritime and marine information and data, the UKHO is now well on the journey into looking at how it can meet this demand as part of its transformation to a Marine Geospatial Information Agency and Hydrographic Office.

Taunton, October 2018

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