



United Kingdom  
Hydrographic Office

# UNITED KINGDOM NATIONAL REPORT

## 17<sup>TH</sup> MESO AMERICAN AND CARIBBEAN SEA HYDROGRAPHIC COMMISSION (MACHC)

Belém, Brazil  
14 - 17 December 2016

This report supplements the UK Generic National Report, posted on the UKHO website  
(see [www.ukho.gov.uk](http://www.ukho.gov.uk) → About Us → Role & Purpose → UK National Report)  
and describes UK's activities of direct relevance to the MACHC Region.

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## 1. UNITED KINGDOM HYDROGRAPHIC OFFICE (UKHO)

- 1.1 UK Delivery of Hydrographic Services.** 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), UK's maritime administration and the Maritime and Coastguard Agency (MCA), in providing a co-ordinated approach to hydrographic and maritime safety representation, both nationally and internationally.
- 1.2 UKHO Governance and Targets.** This is described in the UK Generic National Report, see [www.gov.uk/government/organisations/uk-hydrographic-office/about](http://www.gov.uk/government/organisations/uk-hydrographic-office/about)



- 1.3 UKHO Organisation.** 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.
- 1.4 Production Systems.** This is described and can be found in the UK Generic National Report.



- 1.5 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 promote other forms of co-operation between the participants, helping to enhance international maritime safety and protection of the environment.
- 1.6 Commonwealth Marine Economies (CME) Programme.** In November 2015 the British Prime Minister announced a £5.6million package of measures to help small island countries reduce poverty by preserving their marine environments and making best use of their maritime resources. The Commonwealth Marine Economies (CME) Programme aims to support the sustainable growth of Commonwealth Small Island Developing States (SIDS) within the Caribbean, Pacific and Indian Ocean regions. The Programme will run for 1 year initially, with potential for further years.

The Programme is being delivered on behalf of the Foreign and Commonwealth Office (FCO) by a partnership of world-leading UK government marine expertise; UKHO, the Centre for Environment Aquaculture and Fisheries Science (CEFAS) and the National Oceanography Centre (NOC).

The main focus of the pilot year activity has been to capture, as fully as possible, the current hydrographic baseline status of the SIDS in scope, and to develop hydrographic action plans that can either be serviced by future years of the CME programme or by other funding/Capacity Building (CB) activities. In addition to this, we have carried out a number of data gathering activities in the Caribbean and are looking into the feasibility of replicating this in the Pacific in early 2017.

## 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 successful in promoting co-operation between these organisations.
- 2.2 Any requests for survey assistance from nations within the MACHC region will be assessed within the UK Ministry of Defence (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 British Overseas Territories and Regional Hydrographic Commission initiatives. Further information can be obtained from Mr. Sam Harper ([samuel.harper@ukho.gov.uk](mailto:samuel.harper@ukho.gov.uk)), whose details can be found at Annex A.
- 2.3 Survey teams from the UKHO and the CEFAS have surveyed a number of areas in St Vincent and the Grenadines and Grenada between August and October this year under CME. The team conducted very high resolution acoustic surveys using a multibeam echosounder and associated equipment, as well as habitat and species surveys using drop cameras. All work will be combined to create updated bathymetric information and habitat maps. The Grenada survey covered 29km<sup>2</sup> while the St Vincent and the Grenadines surveys covered 58km<sup>2</sup>.
- 2.4 UKHO has now commissioned a large airborne lidar survey of the remainder of the shallow waters of all the islands of St Vincent and the Grenadines and Grenada. This will be at a slightly lower spatial resolution than the acoustic data, but will help to update navigational products and services. This data will improve coverage in a region where considerable areas were either unsurveyed or surveyed by leadline up to two centuries ago. This work is expected to take over a month of airborne sorties, and will be the largest such survey to have been conducted in the Caribbean, covering over 500km<sup>2</sup>.

## 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 relevant to the MACHC region.



**3.2 Paper Charts.** Information on UK's global chart portfolio is provided on the UKHO website. Working with our many valued partners in the region, the following charts have been published since the last MACHC meeting as New Charts or full New Editions:

GB Chart Number	Title	Published
1105	Mexico – West Coast, Approaches to Guaymas	10 Dec 15
1106	Mexico – West Coast, Mazatlan	10 Dec 15
4407	North Atlantic Ocean, Trinidad to the Mid-Atlantic Ridge	10 Dec 15
2765	South America – North Coast, Suriname, Suriname River – Entrance to Toevlucht	17 Dec 15
960	Brazil – East Coast, Cabedelo and Maceio	17 Dec 15
2261	Colombia – North Coast, Puerto Barranquilla and Approaches	17 Dec 15
8158	Port Approach Guide Veracruz	24 Dec 15
4013	International Chart Series, North Atlantic Ocean, Western Part	24 Dec 15
454	West Indies – Jamaica – South Coast, Kingston Harbour	31 Dec 15
8165	Port Approach Guide Puerto Lazaro Cardenas	14 Jan 16
2751	Mexico – East Coast, Approaches to Coatzacoalcos and Pajaritos	21 Jan 16
359	Mexico – East Coast, Dos Bocas Terminal	21 Jan 16
2626	Mexico – East Coast, Bay of Campeche	21 Jan 16
1307	Mexico – East Coast, Bahia de Campeche	28 Jan 16
1220	Central America – East Coast, Gulf of Honduras and Yucatan Channel	28 Jan 16
8181	Port Approach Guide Port Everglades	11 Feb 16
8195	Port Approach Guide Coatzacoalcos	03 Mar 16
1049	Mexico – West Coast, Punta Colnett to Rosarito	10 Mar 16
3768	United States and Mexico, Gulf of Mexico, Brownsville to Altamira	24 Mar 16
8209	Port Approach Guide Tampico and Altamira	24 Mar 16
8211	Port Approach Guide Cartagena	24 Mar 16
2064	West Indies, Antigua	07 Apr 16
2261	Colombia – North Coast, Puerto Barranquilla and Approaches	14 Apr 16
804	West Indies – Guadeloupe, Pointe-a-Pitre and Approaches	21 Apr 16
2432	Colombia – North Coast, Bahia de Cartagena	28 Apr 16
410	West Indies – Cuba – North West Coast, Bahia de Mariel and Approaches	05 May 16
8227	Port Approach Guide Miami	05 May 16
332	Bermuda Islands, Grassy Bay and Great Sound including Little Sound	12 May 16
499	West Indies – Windward Islands, Harbours in Saint Lucia	12 May 16

867	Bermuda, North and South Channels to Great Sound	12 May 16
<b>GB Chart Number</b>	<b>Title</b>	<b>Published</b>
868	Bermuda, Eastern and Western Approaches to the Narrows including Murray's Anchorage	12 May 16
1315	Bermuda Islands, Five Fathom Hole, The Narrows and Saint George's Harbour	12 May 16
8236	Port Approach Guide Lake Charles	02 Jun 16
2267	Caribbean Sea, Ports on the North Coast of Colombia	16 Jun 16
8242	Port Approach Guide Kingston	23 Jun 16
1628	Venezuela, Puerto Cabello and Approaches	14 Jul 16
3841	United States – Gulf of Mexico, Mississippi, Pascagoula Harbor	14 Jul 16
8250	Port Approach Guide Freeport (Bahamas)	21 Jul 16
3183	United States – Gulf of Mexico – Texas, Approaches to Galveston Bay	21 Jul 16
3186	United States, Gulf of Mexico – Texas – Galveston Bay, Houston Ship Channel Pelican Island to Barbours Cut	04 Aug 16
3150	United States – Gulf of Mexico – Alabama, Mobile Bay	18 Aug 16
3854	United States – Gulf of Mexico – Louisiana – Texas, Freeport to Calcasieu Pass	18 Aug 16
1798	Central America, Ports on the Caribbean Coast of Costa Rica	25 Aug 16
3187	United States – Gulf of Mexico, Texas, Houston Ship Channel – Morgans Point to Carpenters Bayou	01 Sep 16
3850	United States – Gulf of Mexico, Galveston Bay to Ship Shoal	01 Sep 16
1498	Venezuela, Puerto La Cruz and Approaches	15 Sep 16
593	West Indies, Approaches to Guadeloupe	22 Sep 16
3852	United States – Gulf of Mexico, Pensacola Bay to Tampa Bay	06 Oct 16
3684	United States – East Coast, Florida, Port of Palm Beach with Approaches	13 Oct 16
804	West Indies – Guadeloupe, Pointe-a-Pitre and Approaches	20 Oct 16
2191	Caribbean Sea – Venezuela, Morro de Puerto Santo to Cabo Codera	20 Oct 16
2192	Caribbean Sea – Venezuela, Cabo Codera to Punta Aguide	20 Oct 16
3858	United States – Gulf of Mexico, Pass a Loutre to Dauphin Island	20 Oct 16
443	Cuba – South Coast, Bahia de Santiago de Cuba	03 Nov 16



**3.3 Digital Charts.** As noted in Section 3.1, UK's Generic National Report provides information on UK's portfolio of chart products and services.

**3.4 ENC.** Within the MACHC Region, UK has published 188 ENC cells.

The breakdown by usage band is shown in the table below, and in the diagrams that follow:

ENC Usage Band	Number of GB ENC's
Usage Band 1	8
Usage Band 2	21
Usage Band 3	36
Usage Band 4	45
Usage Band 5	73
Usage Band 6	5
<b>Total Number of ENCs</b>	<b>188</b>

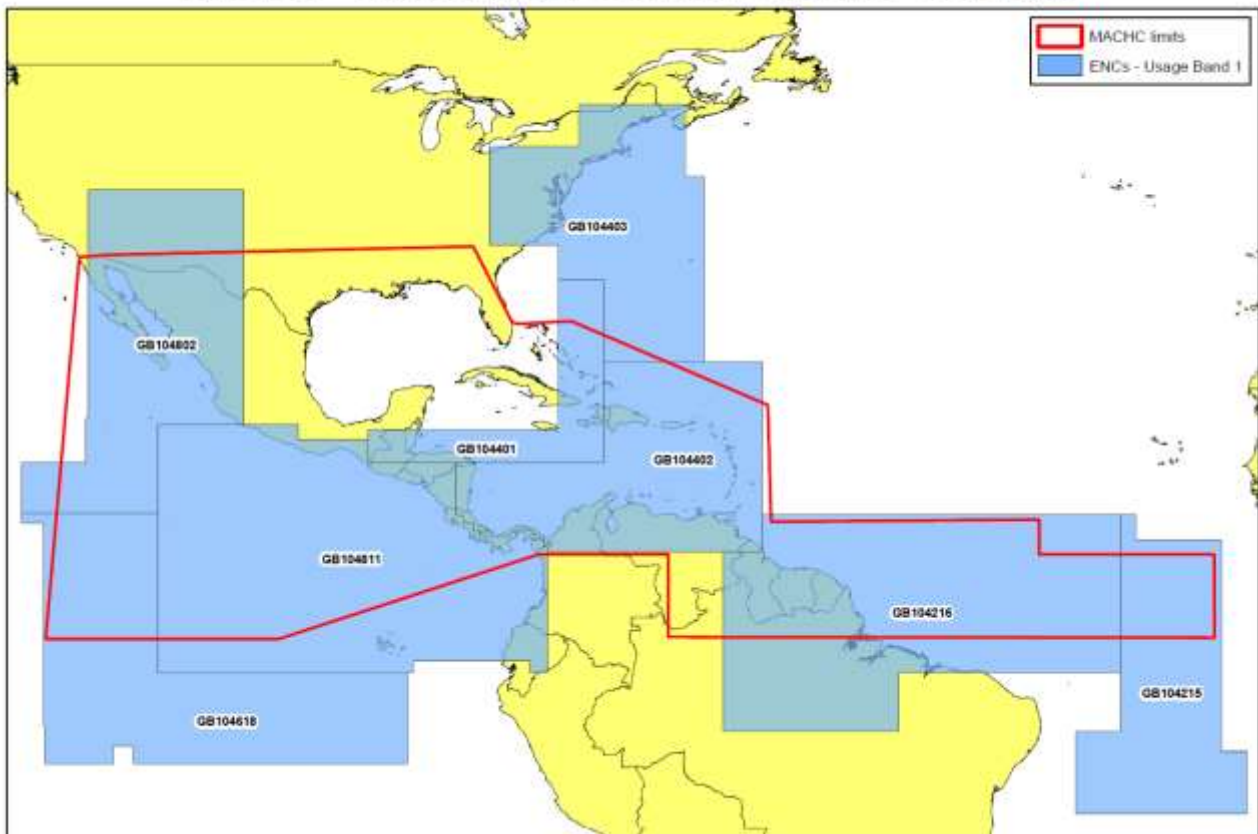
The tables below shows revisions to GB ENC coverage for the MACHC Region during 2015/16. The subsequent diagrams illustrate the current coverage of GB ENCs within the MACHC Region.

<b>New cells Dec 2015 – Nov 2016</b>	<b>Week No.</b>
GB501441	48/15

<b>Cancelled cells Dec 2015 – Nov 2016</b>	<b>Week No.</b>	<b>Replacements</b>
GB300374	48_15	No Replacement
GB302496	53_15	PA3AM496
GB389100	53_15	PA3AM929
GB42493C	53_15	PA4AM493
GB489100	53_15	PA4AM056
GB489101	53_15	PA4AM055
GB58910A	53_15	PA5AM56B
GB58910B	53_15	PA5AM56A
GB58910C	53_15	PA5AM55A
GB58911A	53_15	PA5AM400
GB601401	53_15	PA6AM401



## MACHC - Usage Band 1 Overview GB ENC Coverage



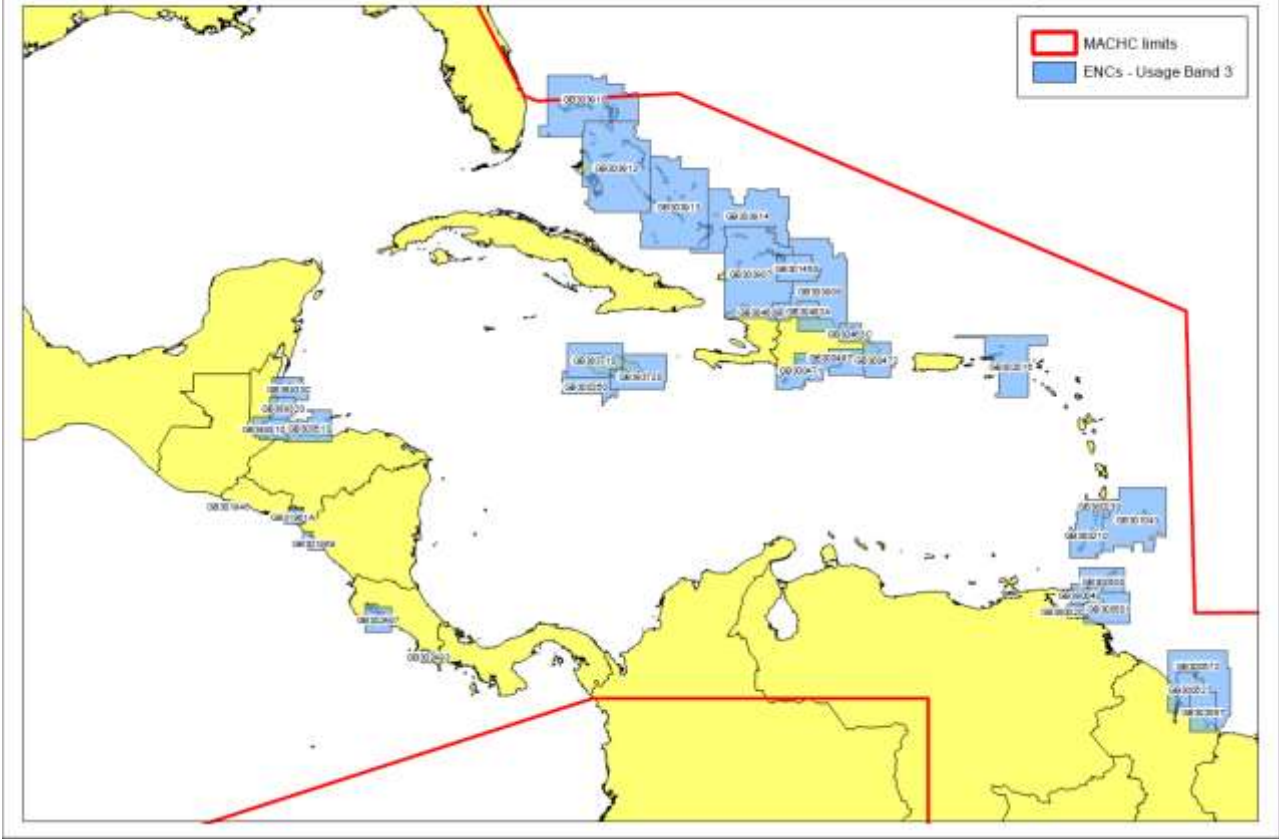
## MACHC - Usage Band 2 GB ENC Coverage



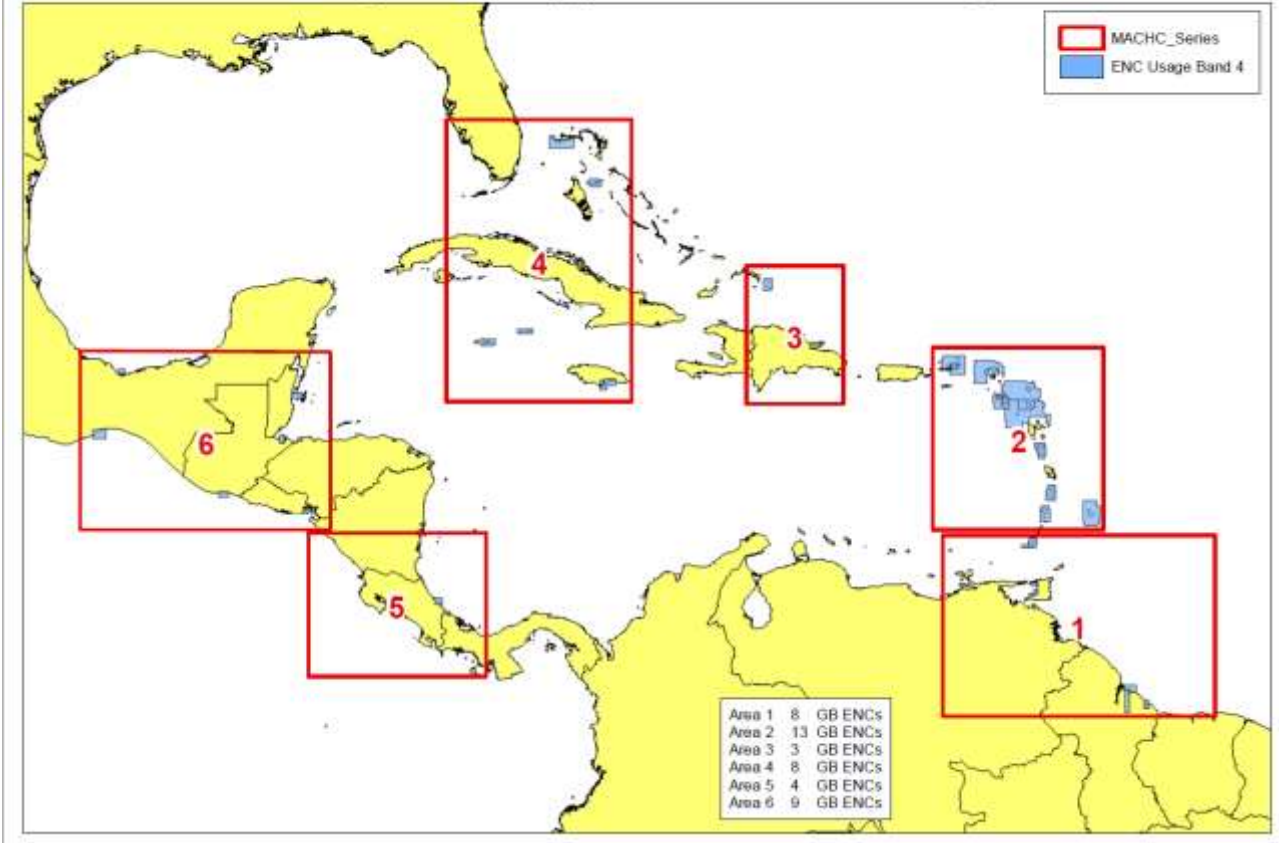
**Note:** most of the GB cells in Mexican waters will be withdrawn when the corresponding Mexican cells are released



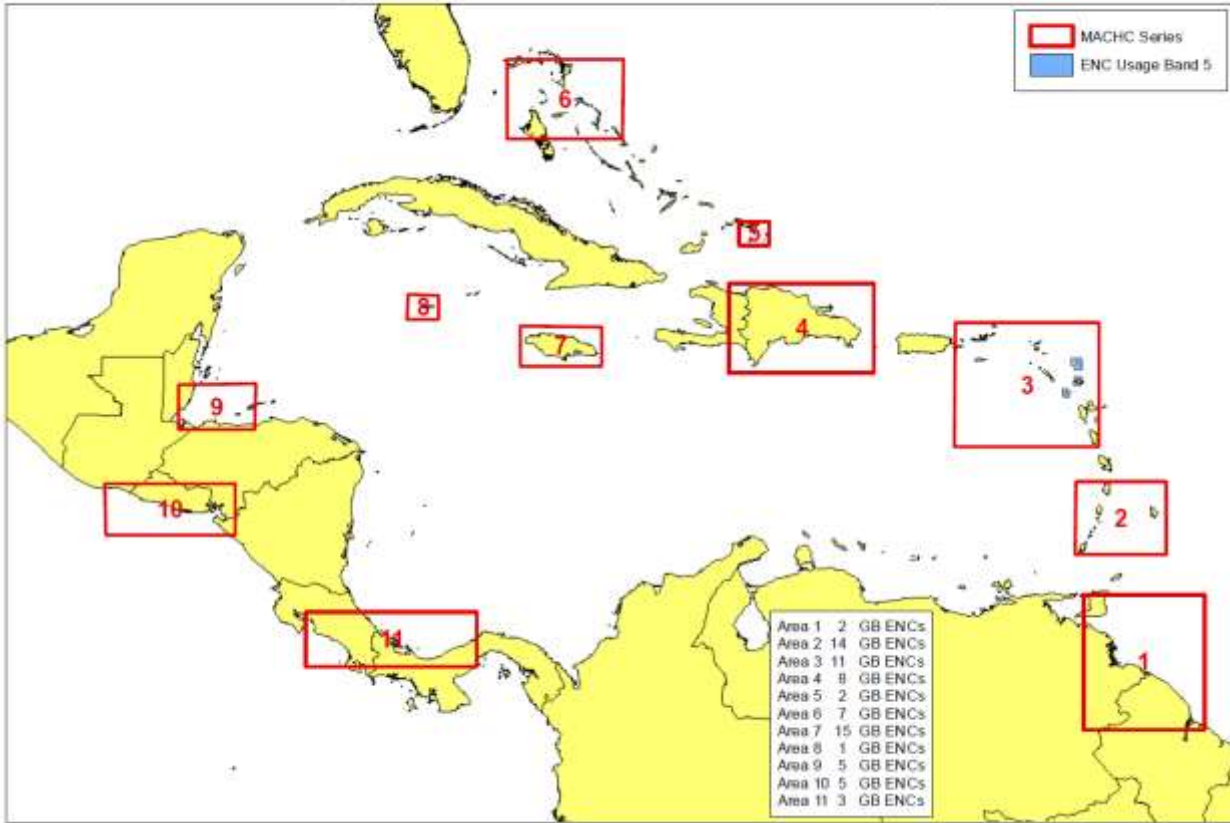
### MACHC - Usage Band 3 Coastal GB ENC Coverage



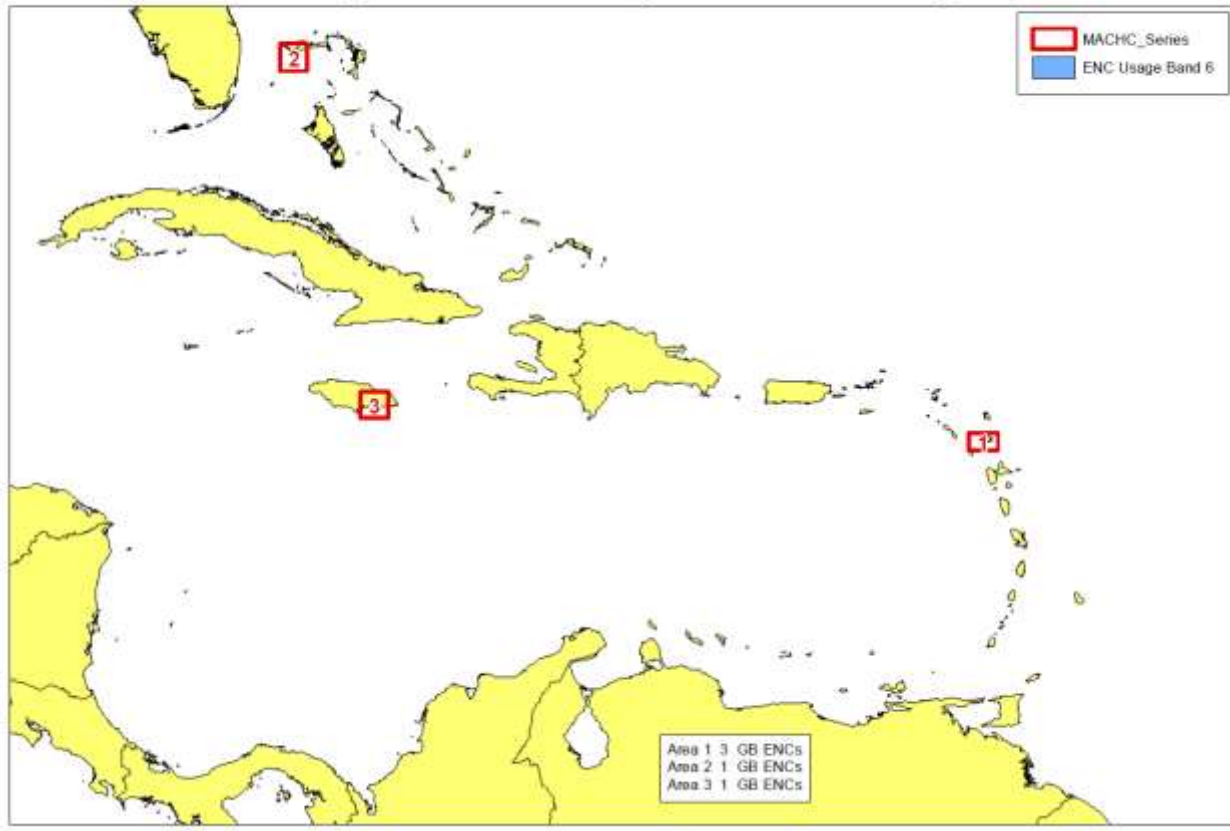
### MACHC - Usage Band 4 Approach GB ENC Coverage Overview



## MACHC - Usage Band 5 Harbour GB ENC Coverage Overview



## MACHC - Usage Band 6 Berthing GB ENC Coverage Overview



**3.5 ENC Distribution.** The UKHO, along with other European hydrographic offices, was a founder member of the International Centre for ENCs (IC-ENC) Regional ENC Co-Ordination Centre (RENC). The IC-ENC concentrates its efforts on the validation and consistency of ENC data and leaves the marketing of ENCs to the shipping industry and 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))

## 4. PUBLICATIONS



**4.1 Paper Publications.** 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.

**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 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 MACHC region is for its British Overseas Territories (BOTs; listed in **9.1**) and those Commonwealth of Nations countries where the UK is the primary charting authority (PCA), including:

- Antigua and Barbuda
- The Bahamas
- Barbados
- Belize
- 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 Waters, including the British Overseas Territories within the MACHC area. For the latest update see C-55; 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 provides 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 **IHO Capacity Building Sub-Committee.** UK fully supports the IHO Capacity Building Sub-Committee strategy (CBSC) and particularly its emphasis on facilitating 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 **Technical Support and Training.** UK has participated in numerous technical visits and workshops for varying programmes of work, in several RHC regions. In the MACHC region UKHO organised and provided an instructor to support the delivery of an MSI Training Course. Other regional activities for which the UKHO assisted in arrangements were a sub-regional MSDI for Spanish speakers and a Seminar on Raising Awareness of Hydrography for MACHC Associate Members and Observers which will precede this meeting.
- 7.3 **Capacity Building Coordinator for the MACHC.** UKHO has a post dedicated to capacity building. Its key aims are to ensure that capacity building is a properly considered 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 CBSC activities. Further information can be obtained from Mr. Jeff Bryant ([jeff.bryant@ukho.gov.uk](mailto:jeff.bryant@ukho.gov.uk)). Mr. Bryant is the Capacity Building Coordinator for the MACHC, SAIHC, NIOHC and RSAHC regions and his contact details can be found at Annex A.



**7.4 Cartographic Training provided by UKHO.** 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.



**7.5 ENC Training and Assistance.** The UKHO strongly supports the successful uptake of type approved ECDIS using Official ENC, 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 are included in the UK Generic National Report.

**7.6 Survey Training at Flag Officer Sea Training - Hydrography, Meteorology and Oceanography (FOST-HM).** Nationally and internationally certified courses delivered by FOST-HM in Plymouth, are described in the UK Generic National Report.

## 8. OCEANOGRAPHIC ACTIVITIES

8.1 These are described in the UK Generic National Report.

## 9. OTHER ACTIVITIES

**9.1 British Overseas Territories (BOTs).** UK undertakes Primary charting of the following British Overseas Territories with the MACHC region:

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

The UKHO has begun a programme of work to review the status of hydrography within the BOTs, 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 BOTs. This has involved raising awareness of the importance of hydrography in forums such as the Red Ensign Group Conference and the UK Overseas Territories and Crown Dependencies Attorney Generals Conference, as well as seeking opportunities to collaborate with regional projects,



such as the Organisation of Eastern Caribbean States (OECS) scoping study, and donor funded projects such as the Darwin Plus survey of the British Virgin Islands. In addition, the UKHO has for specific periods secured the use of Royal Navy assets 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

We expect remedial survey and capacity building activity to commence in year two of the OT's Seabed Mapping Programme. Of relevance to the MACHC is that we have begun the assessment of the requirements of Anguilla, with particular focus on the increasing the volume of cruise traffic visiting the islands.

**9.2 Co-operation with OECS.** The UKHO have continued to work with the OECS on their Hydrographic Scoping Study which is now nearing completion. A key element of this work has been the development of a simplified Risk assessment/survey prioritisation methodology that has been used to provide object justification of the survey areas selected. The next step will be to work with the OECS to identify funding sources and commence data gathering within the next financial year.

**9.3 UK Celebrations for World Hydrography Day.** The IHO theme for the 2016 World Hydrography Day was

*“Hydrography- the key to well-managed seas and waterways”*

The UK celebration of WHD 2016 took place at the International Maritime Organization Headquarters, London in July 2016. The United Kingdom Hydrographic Office (UKHO), in collaboration with CEFAS and NOC, used displays to demonstrate the hydrographic management of seas and waterways and how hydrographic data can be utilised for wider activity.

This high-level event was aimed at Ministers, CEOs, directors, the chairs and senior managers of national organisations and offered an excellent networking opportunity in a central London location. Welcomed by the UKHO Chief Executive John Humphrey and National Hydrographer Rear Admiral Tim Lowe, guests included, the Minister Lord Earl Howe, Mr Ashok Mahapatra, IMO Director, Maritime Safety Division and Dr Parry Oei, Director (Port Services)/Chief Hydrographer Maritime and Port Authority of Singapore.

As part of the events to mark the 2016 World Hydrography Day in June, the UKHO hosted an interactive family day on the theme of 'Getting to know the UKHO', which gave the opportunity for hundreds of parents and children to participate in fun hydrographic activities as well as meet expert mariners and representatives from the UKHO. The activity at the Museum of Somerset followed on from the success of STEMFEST 2016 where the UKHO joined with Taunton School to celebrate British Science week in March. Students from Years 6-13 from 500 local schools and colleges came together at this festival of Science, Technology, Engineering and Maths (STEM).

**9.4 Alexander Dalrymple Award.** In celebration of World Hydrography Day, the UK Hydrographic Office has established the Alexander Dalrymple Award in recognition of an individual's outstanding dedication and contribution to hydrography. The annual award 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. Dr Parry Oei, Chief Hydrographer Maritime and Port Authority of Singapore was awarded the 2016 Alexander Dalrymple Award in recognition of his tireless contribution to the International Hydrographic Community, particularly for his leadership and

guidance within both the East Asia Hydrographic Commission's capacity building initiatives and the tripartite Marine Electronic Highway Working Group in the Straits of Malacca and Singapore.



**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 commitment to the Meso-American and Caribbean Sea region, through its primary charting and through its continuing interest in developing regional hydrographic self-sufficiency through capacity building measures.

Recognising the importance of the MACHC region, the UK has introduced a new Head of International Partnering for the Caribbean region, (Mr Sam Gillchrest; ([Samuel.Gillchrest@ukho.gov.uk](mailto:Samuel.Gillchrest@ukho.gov.uk)) to work with and establish new relationships across the Caribbean Islands to further support the development of hydrographic capability. Sam's contact details can be found at Annex A.

The UK, through the UKHO, Foreign and Commonwealth Office, Department for International Development and the Maritime and Coastguard Agency continues to pursue opportunities to improve access to bathymetric data gathering in waters around British Overseas Territories and eligible members of the Commonwealth, particularly to support the development of Caribbean maritime economies and enable the sustainable management of marine flora and fauna. This can be seen from the wide ranging activities and commitment to the MACHC region under the CME and OT's Seabed Mapping Programme work currently ongoing.

There is a continuing challenge to exchange information from local sources to charting authorities to enable the updating of navigational products and services.

The provision of adequate ENC coverage, in support of the IMO carriage requirement for ECDIS that came into force from 2012, presents a significant challenge in the MACHC region as well as others.

With a diverse range of shipping interests in the Region, improving the effective distribution of hydrographic information and updates remains paramount.

In summary, the UK and UKHO recognise the strategic importance of the MACHC region and as can be seen from this report we are heavily investing and supporting regional partners.

## **Taunton**

**November 2016**

### Annex

A. UKHO Points of Contact.

## ANNEX A: UKHO POINTS OF CONTACT

**UKHO Website:** [www.ukho.gov.uk](http://www.ukho.gov.uk)

The general UKHO address is:

United Kingdom Hydrographic Office,  
Admiralty Way,  
TAUNTON  
Somerset  
TA1 2DN

United Kingdom

E-mail: [customerservices@ukho.gov.uk](mailto:customerservices@ukho.gov.uk)  
Telephone: +44 (0)1823 337900 or +44 (0)1823 484444  
Fax: +44 (0)1823 723380



For further information on this report, UKHO representation in international forums, and UKHO activities in general, please contact:

E-mail: [InternationalPartnering&Engagement@UKHO.gov.uk](mailto:InternationalPartnering&Engagement@UKHO.gov.uk)

### For bilateral arrangements and capacity building within the MACHC region, please contact:

**Mr Chris Thorne,**  
Head of International Partnering (Americas)

E-mail: [Chris.Thorne@ukho.gov.uk](mailto:Chris.Thorne@ukho.gov.uk)  
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+1 202 445 3956 (Mobile)

**Mr Samuel Gillchrest**  
Head of International Partnering (Caribbean Islands)

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**Mr Jeff Bryant,**  
International Capacity Building Manager

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+ 44 (0)7768152235

**Mr Samuel Harper**  
International Hydrographic Projects Manager

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Telephone: +44 (0)1823 483473  
+44 (0)7776471346

### For charting matters in the MACHC region, please contact:

**Mrs Stephanie Vincent,**  
Geographic Manager - North and Central  
America and Caribbean

E-mail: [Stephanie.Vincent@UKHO.gov.uk](mailto:Stephanie.Vincent@UKHO.gov.uk)  
Telephone: +44 (0)1823 483584

**Mr Lee Truscott**  
Geographic Manager - South America

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Telephone: +44 (0)1823 483995

### For Sailing Direction matters in the MACHC region, please contact:

E-mail: [SDImpactAnalysis@ukho.gov.uk](mailto:SDImpactAnalysis@ukho.gov.uk)