

UNITED KINGDOM NATIONAL REPORT

to the

SOUTH-WEST PACIFIC HYDROGRAPHIC COMMISSION (SWPHC) 15TH MEETING

> NUKU'ALOFA, TONGA 21 - 23 February 2018

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 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 www.gov.uk/government/organisations/uk-hydrographic-office/about

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 SWPHC 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 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.

Commonwealth Marine Economies (CME) Programme

2.2 At the 2015 Commonwealth Summit, the then Prime Minister of UK 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 is in its second year and has had funding confirmed for a further 2 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 year one activity was to capture, as fully as possible, the current status of the blue economies 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/CB activities. To date, the following CME activities have been undertaken or are underway in the Pacific:

- Assessment visits to all UKHO Primary Charting Authority (PCA) nations
- Vanuatu survey of potential new cruise destinations in Tanna Island
- Tonga Survey of critical areas in the approaches to Nuku'alofa
- Tuvalu In partnership with SPC and Tuvalu government officials, a geodetic survey and installation of tide gauges in outer islands to establish vertical control.
- Tuvalu SDB survey of entire island chain
- Tuvalu production of a special purpose EEZ/fisheries chart
- Fiji Digitisation of 10 national charts into S-57 format
- 2.3 UK continues to explore how we can strengthen the relationship with countries for which we are the PCA. This continues to be a challenge in terms of our geographical distance from our regional partners, but we have increased our level of engagement and our CME Prog. provides a useful framework for this.

Overseas Territories Seabed Mapping Programme

2.4 UK has been successful in receiving central government funding to assess and redress the deficit of bathymetric data and lack of sound hydrographic governance in the UKs Overseas Territories (OTs). This programme is currently in year two and is funded for a further two years. Again, year one was largely focused on understanding the requirements of the OTs, and remedial survey and capacity building activity has commenced this year. Of relevance to the SWPHC is that we have begun the assessment of the requirements of Pitcairn, with particular focus on the increasing cruise traffic that the island experiences.

2.5 Any requests for survey assistance from nations within the SWPHC 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 The 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 SWPHC 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 SWPHC region. The following charts have been published since the last SWPHC meeting as New Charts or full New Editions:
 - 2 New Chart adoptions from the Australian (AUS) series and 15 new editions of charts previously adopted.
 - 14 New Editions of charts previously adopted from the New Zealand (NZ) series.
 - 10 New Chart adoptions from the AHS Solomon Island (SI) series that were transferred to Australia from the UK series

In addition, the table below lists the 10 charts that have been published, in addition to those mentioned above.

GB Chart Number	INT Chart Number	Title	Published
4652	652	Palmyra Island to Starbuck Island	16/11/2017
4626	626	Phoenix Group to Howland Island	16/11/2017
2464	6882	Mont Dore to Port Boise	19/10/2017
2465	6881	Ile Ouen to Isles des Pins	22/06/2017
4636	636	Recifs Bampton to Ile Hunter	15/02/2018
4623	623	Solomon Islands to Kosrae Island	10/08/2017
4634	634	Frederick Reefs to Solomon Islands	10/08/2017
4621	621	Mackay to Solomon Islands	19/10/2017
4622	622	Admiralty Islands to Solomon Islands	19/10/2017
4635	635	Cape Byron to Mackay	19/10/2017

The following New Charts and New Editions are planned for 2018:

- New Chart 747 (Navula Passage to Yasawa Islands, Fiji)
- New Edition 1581 Islands and Anchorages in Vanuatu (to include new plans of Loanatom and Port Resolution)

Digital Charts



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 SWPHC region.

ENCs

3.4 Within the SWPHC Region, UK has published 104 ENC cells.

The breakdown by usage band is shown in the table below:

ENC Usage Band	Number of GB ENC's		
Usage Band 1	5		
Usage Band 2	23		
Usage Band 3	23		
Usage Band 4	28		
Usage Band 5	25		
Usage Band 6	0		
Total Number of ENCs	104		

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

New cells Jan 2017 - Jan 2018	Week No.
GB204420	22/17
GB204626	39/17
GB204652	39/17
GB304495	10/17
GB304496	10/17
GB304497	21/17
GB40488A	22/17

Cancelled cells		
Jan 2017 - Jan 2018	Week No.	Replacements
GB204634	33/17	AU220150
GB301709	33/17	SB408157 SB408158
GB301713	33/17	SB409159 SB409160
GB303994	33/17	AU306156
GB303995	33/17	SB310157
GB303996	33/17	SB408158 SB408159 SB409158 SB409159 SB410159 SB410158
GB303997	33/17	SB311160 SB408159 SB408160 SB409159 SB409160 SB409161 SB410159 SB410160
GB303998	33/17	SB311160 SB409160 SB409161 SB410160 SB410161 SB410162 SB411161 SB411162
GB401750	33/17	SB410160
GB41735A	33/17	SB409156
GB41735D	33/17	SB409156 SB409157
GB500386	26/17	GB400386
GB51735A	33/17	SB5102P2
GB51735B	33/17	SB5102P3
GB51735C	33/17	SB5102P5
GB51750B	33/17	SB5101P1
GB601750	33/17	SB5101P1

Figure 1 GB ENC's West of 180°

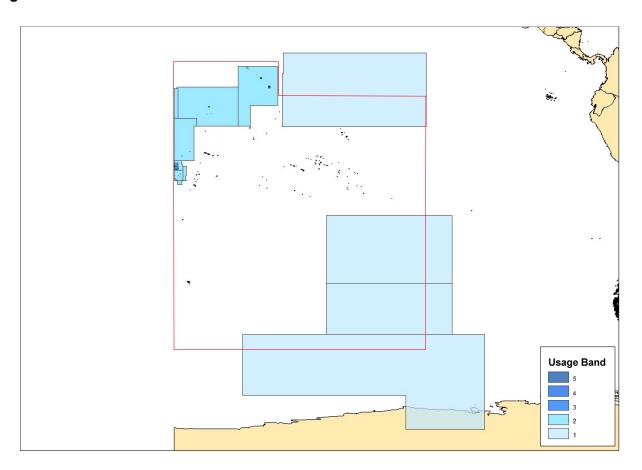
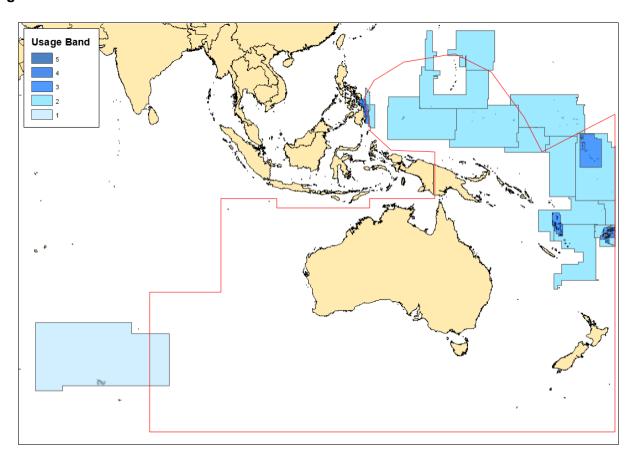


Fig 2: 1 GB ENC's East of 180°



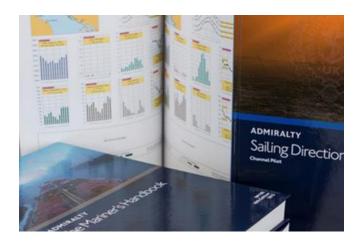
ENC Distribution

3.5 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).

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).

4. PUBLICATIONS

Paper Publications



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

NP14 Australia Pilot Vol 2 - Last ed: 14/06/16 NP51 New Zealand Pilot - Last ed: 17/12/15

New Editions published since last SWPHC:

NP13 Australia Pilot Vol 1 - Last ed: 27/04/17 NP39 South Indian Ocean Pilot - Last ed: 06/04/17 NP61 Pacific Islands Pilot Vol 2 - Last ed: 09/03/17 NP62 Pacific Islands Pilot Vol 3 - Last ed: 22/12/16

• New Editions to be published:

NP15 Australia Pilot Vol 3 - Last ed: 24/09/15 New ed: 14/06/18 NP60 Pacific Islands Pilot Vol 1 - Last ed: 30/01/14 New ed: 25/01/18

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

Digital Publications



- **4.2** 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) 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

- **Responsibilities.** The UK's principal responsibility within the SWPHC region is for its UK Overseas Territories, namely the Pitcairn Islands (Pitcairn, Henderson, Ducie and Oeno Islands), and those Commonwealth of Nations countries where the UK is the primary charting authority (PCA), including:
 - Fiji
 - Kiribati
 - Nauru
 - Tuvalu
 - Vanuatu

UK maintains close liaison with the NAVAREA Co-ordinators for NAVAREAS X (Australia) and XIV (New Zealand), which cover the SWPHC area. Any information received at UKHO which requires urgent promulgation is passed to the respective NAVAREA Co-ordinator on a 24 hr basis.

- 5.2 GMDSS. With the exception of Australia and New Zealand, GMDSS coverage in the SWPHC 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 navigational warnings in a timely and efficient manner in their coastal regions, or to utilise the communications facilities of the NAVAREA X and XIV Coordinators.
- **5.3 Notices to Mariners**. Assistance with promulgating Notices to Mariners and other paper and electronic chart correcting material should also be encouraged through co-operation with other hydrographic offices in the region if required.

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 provides assistance to update C-55 entries to other countries, including Fiji, Kiribati, Nauru, Tuvalu, and Vanuatu, 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** This year, the UKHO has built upon discussions held previously with LINZ, AHS and SPC aimed at minimising the chances of duplication of effort and increasing coordination of the CB elements of PRNI, IHO and CME in the region. One such endeavour was a joint UKHO and LINZ scoping mission to Tonga ahead of CME and PRNI survey activity.
- 7.3 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 Mr Jeff Bryant (jeff.bryant@ukho.gov.uk). Mr Jeff Bryant is also the Capacity Building Coordinator for the MACHC, NIOHC, SAIHC and RSAHC regions.



- **7.4** 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. The following SWPHC students have benefitted from these opportunities:
 - Bursary Course Jan Apr 2018: Matthew Heaven, Australia and Alison Cantrell, New Zealand.

- Nippon Course Sept Dec 2017: Kelepi Bainivalu, Fiji.
- Bursary Course Jan Mar 2017 : James Jason Morrell, Fiji, and Sioeli Alokuo'ulu Malu Fifith - (Joe), Tonga.
- **7.5** 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 & Capacity Building Manager, Mr Jeff Bryant (see above for details).



7.6 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)

7.7 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

The IHO theme for the 2017 World Hydrography day was

"Mapping out seas, oceans and waterways - more important than ever"

- **9.1** The UK celebration of WHD 2017 was held as an evening reception at Lancaster House, London in July 2017. Guests were welcomed by the Rt. Hon. the Earl Howe, Minster of State for Defence, John Humphrey, the UKHO Chief Executive, and Rear Admiral Tim Lowe, UK National Hydrographer. The guests at this high-level networking opportunity event included; Mr Robert Ward, General Secretary of the International Hydrographic Organization, Vice-Admiral Ben Key, RN Fleet Commander and many representatives from Government, Ports, Harbours, maritime related commercial companies, Embassies and Consulates.
- **9.2** The reception also saw Robert Ward presented with a gift of an 18th century chart, in recognition of his contributions to the hydrographic community during his period of office as President and Secretary General of the International Hydrographic Organization.

- **9.3** As part of the events to mark the 2017 World Hydrography Day in June, the United Kingdom Hydrographic Office (UKHO) hosted an interactive family day around 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. This year's event was expanded to include 'UKHO Archives' and 'Electronic Charting' exhibitions together with an outdoor Royal Navy exhibition, in the courtyard, which was very popular and acted as a link between the two events.
- 9.4 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. Mr Adam Greenland, National Hydrographer, Land Information New Zealand was awarded the 2017 Alexander Dalrymple Award in recognition of his tireless contribution to the International Hydrographic Community, particularly for his leadership and driving force in the aid-funded Pacific Region Navigation Initiative (PRNI), which focused on navigation related aspects of maritime safety to support Pacific Island Countries fulfil their own SOLAS obligations. Mr Greenland was unable to attend the reception but his sister, Jessica Waterhouse accepted the award on his behalf later awarded personally in NZ at the High Commission Residence.

Satellite Derived Bathymetry (SDB)

9.5 Based on the specification published towards the end of 2016, the UKHO have now let the first contract for SDB for 7 islands in Tuvalu covering a total area of 795km². The work being conducted by a contractor is due for delivery in February and after validation by the UKHO will be used to check navigational products and inform decisions on future survey needs.

A number of other nations that fall under the UK OT and CME programmes are currently being assessed for further SDB work in 2018/19.

Broader UK Government Work

9.6 Blue Belt Programme In support of the UN Global Goals for Sustainable Development, the UK Government has committed £20 million to a four year programme providing long term protection and sustainable management of over four million square kilometres of marine environment across the UK Overseas Territories.

The Blue Belt Programme supports delivery of the UK Government's manifesto commitment to provide long term protection of:

- improve scientific understanding of the marine environment
- develop and implement evidence based, tailored marine management strategies including surveillance and enforcement
- ensure management is sustainable and long term

The programme is being delivered in partnership between the Centre for Environment, Fisheries and Aquaculture Science (Cefas) and the Marine Management Organisation (MMO) with the UK Overseas Territories on behalf of the Foreign and Commonwealth Office and the Department for Environment, Food and Rural Affairs.

From the SWPHC region, Pitcairn is in scope as the programme is initially focused on Territories which have designated, or committed to designating, large scale areas (>50% of their maritime zone, or of recognised international importance) for marine protection to ensure these areas are effectively managed and enforced.

In 2017, the UK worked in partnership with the New Zealand Royal Navy and the National Maritime Information Centre (NMIC) to deliver an aerial patrol over targeted areas in the Pitcairn Islands EEZ. This focused on identifying vessels who have disabled their AIS tracking devices.

Commonwealth Nations

9.7 From the 16-20th April 2018, London will host the Commonwealth Summit, culminating in the Commonwealth Heads of Government Meeting.

For the Hydrographic and Oceanographic communities, this provides an opportunity to highlight the importance of up-to-date and modern ocean data (in all forms) to help nations develop their blue and ocean economies, and ultimately prosper. During the summit, it is hoped that an event highlighting the CME Programme will be held on or around the 17th April 2018.

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:

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

10. CONCLUSION

Since the last UK National Report presented at SWPHC 14 in December 2016, we have continued our strong commitment to hydrographic activity within the South West Pacific Region.

We have strengthened our relationships with countries for which we are PCA and, working alongside other countries and national/international stakeholders, we have led the hydrographic component of UK's Commonwealth Marine Economies (CME) Programme. Here we have undertaken a wide range of activities that range from Technical Assessment Visits to all of our PCA nations; through essential survey work in critical sea areas; to important chart digitization and production.

In parallel, as part of UK's Overseas Territories Seabed Mapping Programme, we are working with Pitcairn to assess detailed requirements that focus on SOLAS improvements in light of increased shipping traffic.

Important business-as-usual work has continued at our Headquarters to enable safer navigation. We have continued to revise and maintain our existing paper and electronic portfolio of charts and publications; whilst also introducing a range of adoptions, New Charts, New Editions and new cells.

These wide-reaching activities are part of the UK commitment to meeting our own, and assisting others to meet their, SOLAS obligations; whilst also providing support to maintain and improve the blue economies of Small Island Developing States.

Taunton
January 2018

UKHO POINTS OF CONTACT

UKHO Website: GOV.uk/UKHO

The general UKHO address is:

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

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Telephone: +44 (0)1823 484444

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

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For matters related to **Sailing Directions** within the SWPHC region, please contact:

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