



SWPHC17-071 UK National Report

United Kingdom  
Hydrographic Office

# **UNITED KINGDOM NATIONAL REPORT**

to the

**SOUTH-WEST PACIFIC  
HYDROGRAPHIC COMMISSION (SWPHC)  
17TH MEETING**

**WOLLONGONG, AUSTRALIA  
12 -14 FEBRUARY 2020**

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 the UK's Hydrographic Office (UKHO) and the UK's maritime administration, the Maritime & Coastguard Agency (MCA). Together they provide a co-ordinated approach to hydrographic and maritime safety representation, 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](http://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 and data providers, 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.

The photo above shows the class of 2019 Nippon Foundation course, with UKHO staff and IHO representatives. The Category B course is being held in Taunton, UK, from September to December 2019.

## 2. REGIONAL ACTIVITY

### PROGRAMMES OVERVIEW

#### UK Overseas Territories Programme

**2.1** The UKHO continues to run the **Overseas Territories Seabed Mapping Programme (OTSMP)**, which is reviewing the status of hydrography within the UK Overseas Territories (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 is delivering survey activity in several UK OTs through to 2020, as well as working with OTs to ensure their compliance with the Hydrographic elements of SOLAS. We are now in discussions regarding possible continuation of the programme.

**2.2** The UK fulfils the Primary charting responsibilities of the following UK OT within the SWPHC region:

- Pitcairn Islands (Pitcairn, Henderson, Ducie and Oeno Islands)

**2.3** The OTSMP has UK government funding to assess and redress the deficit of bathymetric data and lack of sound hydrographic governance in the UK's OTs. The programme is now in its fourth year and will see surveys being undertaken in Bermuda and Falkland Islands in the coming year.

#### Commonwealth Marine Economies Programme

**2.4** The UKHO is also continuing to support the **Commonwealth Marine Economies (CME) Programme**. The CME Programme is providing 17 Commonwealth Small Island Developing States (SIDS) with accurate hydrographic and scientific data relating to their marine environment, as well as capacity building for national bodies. Of these 17 countries, 9 are within the SWPHC region, including:

- Fiji, Kiribati, Nauru, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

**2.5** The UK Government's CME Programme aims to support the sustainable economic growth of SIDS by: maximizing the potential of their marine resources; helping to improve their resilience to climate change and natural disasters; protecting their environment and food security, and; ultimately improve the livelihood of local communities. The CME Programme is now in its fourth year and the UKHO continues to take a leading role in this programme with a series of surveys, equipment procurement and capacity building planned through to 2020. We are now in discussions regarding possible continuation of the programme.

### SURVEYS

**2.6** 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. The UK's National Hydrographic Committee (known as the Civil Hydrography Annual Seminar (CHAS)) meets on an annual basis and provides the necessary breadth of interests to ensure that all surveying requirements are taken into account when prioritising the work of the **Civil Hydrography Programme (CHP)**. CHAS was

expanded in 2007 to include a much wider range of organisations, which conduct hydrographic surveys. It has been successful in promoting co-operation between these organisations.

**2.7** Since the last SWPHC, a total of one survey has been carried out in the SWPHC region, namely Satellite Derived Bathymetry in Kiribati.

**2.8** Since the last SWPHC, UKHO survey operations under the OTSMP and CME programmes have covered a combined area of 13,500 KM<sup>2</sup>. In total, UKHO survey operations under the OTSMP and CME programme have covered a combined area of nearly 20,000KM<sup>2</sup>, with a further 1,600 KM<sup>2</sup> planned this FY. The CME Programme plans to continue to deliver data to the respective governments through in-country workshops before the year end.

**2.9** In November 2019, UKHO held a hydrographic governance workshop at their offices in the United Kingdom under the auspices of the CME Programme. Representatives from all countries in scope from the region attended the workshop along with a number of Caribbean nations. The workshop was designed to help raise knowledge of the need for and requirements of hydrographic governance.

**2.10** 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:

- Bermuda (Airborne Survey)
- Falklands Islands (Vessel Survey)

**2.11** The UK continues to explore how we can strengthen the relationship with countries for which we are the Primary Charting Authority (PCA). We have increased our level of engagement to better understand prioritised requirements in the SWPHC region.

**2.12** Any requests for survey assistance from nations within the SWPHC region will be considered. The UKHO has a dedicated team of specialists that manage the 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, Head of Hydrographic Programmes (a dedicated UKHO team that focuses on hydrographic survey programmes) is the initial point of contact for UKHO involvement in overseas survey programmes. Further information can be obtained from ([hydrographicprogrammes@UKHO.gov.uk](mailto:hydrographicprogrammes@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 SWPHC region.

#### Paper Charts



**3.2** Information on UK’s chart portfolio is provided on the ADMIRALTY 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:

- 16 New Editions of charts previously adopted from the Australian (AUS) series
- 17 New Editions of charts previously adopted from the New Zealand (NZ) series

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

GB Chart Number	INT Chart Number	Title	Published
2470		Singapore Strait to Selat Sunda including Jawa Sea	4 <sup>th</sup> Oct 2019
2472		Indonesia, East Timor and Australia - Halmahera to Timor	26 <sup>th</sup> Sept 2019
3799		Indonesia and Papua New Guinea – Ujung Salah to Unji Point	20 <sup>th</sup> June 2019
3925		Indonesia, Papua – North Coast, Tanjung Rainbawi to Jayapura	4 <sup>th</sup> July 2019
2874		Indonesia and Australia – Pulau Sawu to Sahul Banks	19 <sup>th</sup> Sept 2019
AUS 81		Australia – West Coast, Western Australia, Approaches to Geraldton	10 <sup>th</sup> Jan 2019
PNG642		Papua New Guinea – North East Coast, Lae	22 <sup>nd</sup> Mar 2019
PNG646		Papua New Guinea – North Coast, Approaches to Madang	2 <sup>nd</sup> Mar 2019
PNG643		Papua New Guinea – North East Coast, Approaches to Lae	5 <sup>th</sup> Apr 2019
PNG520		Papua New Guinea – North East Coast, Cape Nelson to Dyke Ackland Bay	3 <sup>rd</sup> May 2019
PNG508		Papua New Guinea – South Coast, Brumer Islands to Goshen Strait	31 <sup>st</sup> May 2019
PNG509		Papua New Guinea – North East Coast ,Long Reef to Normanby Island	14 <sup>th</sup> June 2019
PNG378		Papua New Guinea – South Coast, Daru Roads to Kerema Bay	9 <sup>th</sup> Aug 2019
PNG680		Papua New Guinea – New Britain, Approaches to Blanche Bay	6 <sup>th</sup> Sept 2019
PNG683		South Pacific Ocean – Plans on East Coast, Bougainville Island	6 <sup>th</sup> Sept 2019
AUS81		Australia – West Coast, Western Australia, Approaches to Geraldton	4 <sup>th</sup> Oct 2019
PNG515		Papua New Guinea – North East Coast, Woodlark Island to Trobriand islands, including Egum Atoll	18 <sup>th</sup> Oct 2019
PNG518		Papua New Guinea – North East Coast, Goschen Strait to Ward Hunt Strait	1 <sup>st</sup> Nov 19
PNG622		Papua New Guinea – South Coast, Port Moresby	10 <sup>th</sup> Jan 20

## 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, the UKHO has released a total of 96 ENC cells. The breakdown by usage band is shown in the table below:

<b>ENC Usage Band</b>	<b>Number of GB ENC's</b>
Usage Band 1	5
Usage Band 2	17
Usage Band 3	19
Usage Band 4	31
Usage Band 5	24
Usage Band 6	0
<b>Total Number of ENCs</b>	<b>96</b>

**ENC totals by usage band as produced by UKHO**

The tables below show revisions to GB ENC coverage for the SWPHC Region during 2019/20. The subsequent diagrams illustrate the current coverage of GB ENCs within the SWPHC Region.

<b>New cells Jan 2019 – Jan 2020</b>	<b>Week No.</b>
GB300747	16/18
GB41577H	07/18
GB41577I	07/18
GB41581D	07/18
GB51581G	07/18

<b>Cancelled cells Jan 2019 - Jan 2020</b>	<b>Week No.</b>	<b>Replacements</b>
GB50714A	31/08	GB400714
GB50729C	05/18	GB400729

**Figure 1: GB ENCs West of 180°**



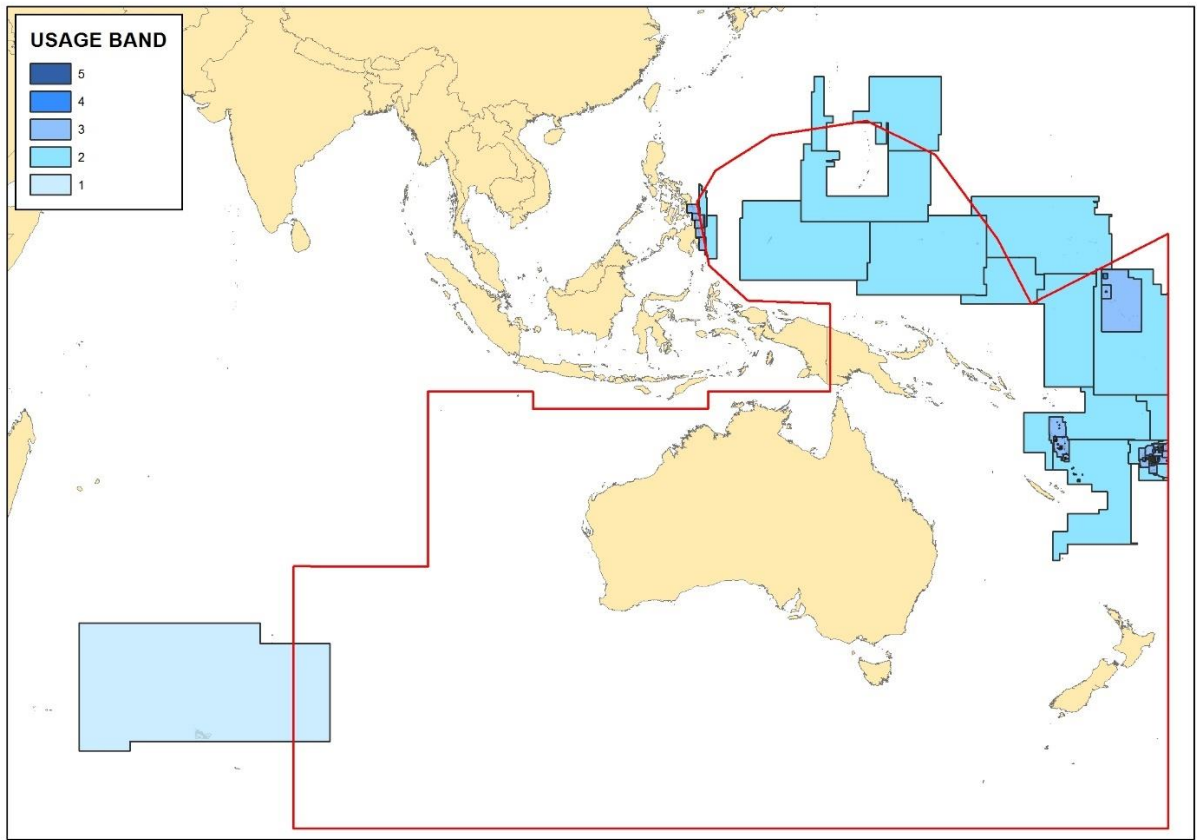
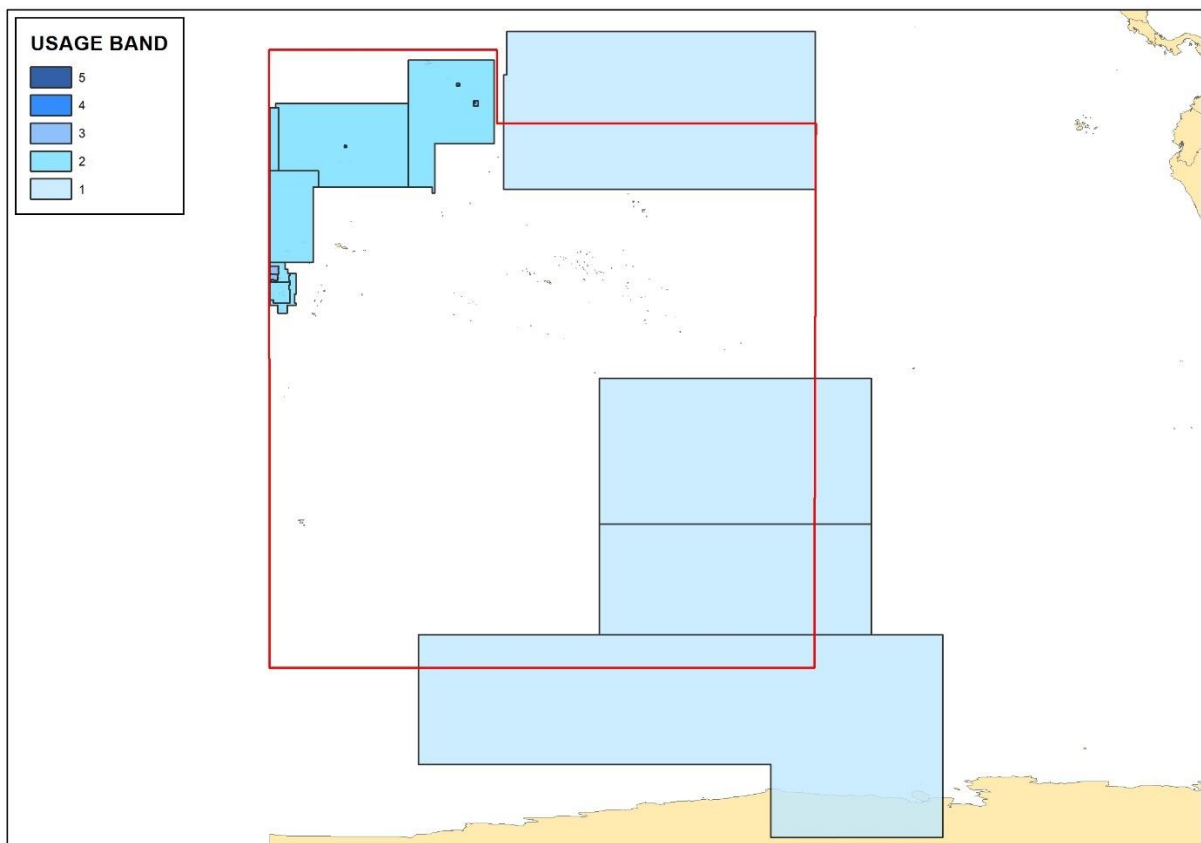


Figure 2: GB ENC East of 180°





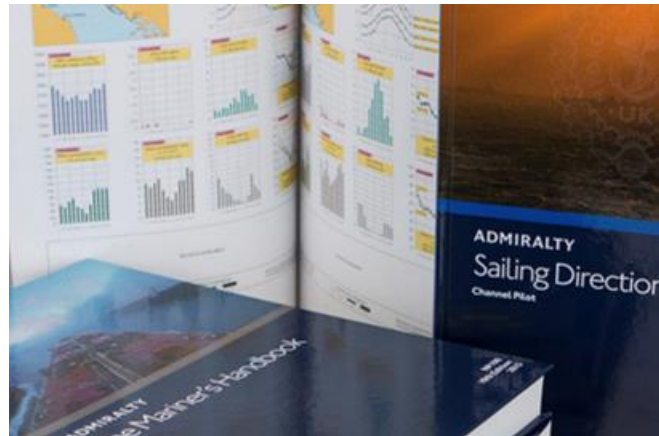
### ENC Distribution

**3.5** The UKHO, along with other European hydrographic offices, was a founder member of the International Centre for ENCs (IC-ENC) Regional ENC Coordination Centre (RENC). IC-ENC 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 (VAR) 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 ADMIRALTY website ([www.admiralty.co.uk](http://www.admiralty.co.uk)).

## 4. PUBLICATIONS

### Paper Publications



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

NP15 Australia Pilot Vol 3 - Last ed: 14/06/18

NP51 New Zealand Pilot - Last ed: 17/12/15

NP60 Pacific Islands Pilot Vol 1 - Last ed: 25/01/18

NP61 Pacific Islands Pilot Vol 2 - Last ed: 09/03/17

- New Editions published since last SWPHC:

NP14 Australia Pilot Vol 2 - Last ed: 20/06/19

NP62 Pacific Islands Pilot Vol 3 - Last ed: 09/01/20

- New Editions to be published:

NP13 Australia Pilot Vol 1 - Last ed: 27/04/17 Next ed: 07/05/20

NP39 South Indian Ocean Pilot - Last ed: 06/04/17 New ed. 18/06/20

These publications are all maintained on a continuous revision cycle and new editions are published every 3-5 years or as required.

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

### Digital Publications



**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 ([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 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 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

**5.2** 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.

**5.3 GMDSS.** With the exception of Australia and New Zealand, GMDSS coverage in the SWPHC region is generally sparse. 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 Co-ordinators.

**5.4 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, 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.

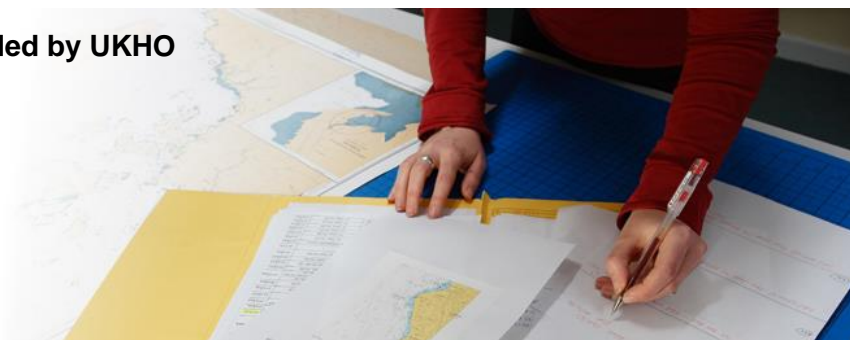
**6.2** UK provides assistance to update C-55 entries to other countries, including Fiji, Kiribati, Nauru, Tuvalu, and Vanuatu, where UKHO provides primary charting, recognising that local input remains critical to the maintenance of C-55 as an up-to-date and authoritative reference document.

## **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 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 Capacity Building Manager - Ms Lucy Fieldhouse ([Lucy.Fieldhouse@ukho.gov.uk](mailto:Lucy.Fieldhouse@ukho.gov.uk)). Ms Lucy Fieldhouse is also the Capacity Building Coordinator for the MACHC, NIOHC and SAIHC regions.

### **Cartographic Training provided by UKHO**



**7.3** UKHO provides two annual CAT B accredited nautical cartography training opportunities to international students. These are the IHO-NF CHART Project course which is funded by the Nippon Foundation and the newly established UKHO course. Applications for the Nippon Foundation course (Sep - Dec 2020) are by responding to the IHO Circular Letter. The UKHO invites participants to its version of the course as part of bilateral arrangements.

## ENC Training and Assistance



**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. SPATIAL DATA INFRASTRUCTURES

**9.1 Status of MSDI.** The UKHO has recently adopted the UNGGIM IGIF as a means of auditing its work so far in establishing an MSDI and prioritising future activities. The UKHO's aspiration is to have established itself as the de-facto owner of the UK's MSDI by 2022. This aspiration has led to a review of the UKHO's internal data platforms and Marine Data Portal.

**9.2 Relationship with the NSDI.** The UK does not yet have a recognised NSDI, however, a UK Geospatial Commission was established in 2017 with partner bodies consisting of several national geospatial agencies, including the UKHO. This Commission is focused on unlocking the value of geospatial data within the UK. It is currently establishing a UK Geospatial Strategy which is likely to form the foundation of a NSDI in the near future. The Commission is supporting several collaborative projects undertaken by the UKHO, all of which have strong links to NSDI principles.

**9.3 Involvement in regional or global MSDI efforts.** The UKHO is an active member of the UNGGIM and OGC groups which contribute towards Global MSDI activities and methodologies. The UKHO is also a member of the IHO MSDI Working group, as highlighted in 11.7 of this document, as well as most of the MSDI Working Groups within the Regional Hydrographic Commissions.

We are actively working at creating a domain with the appropriate standards to support national and international MSDIs. A good example of this is our sponsorship of S-121, a pilot project to develop a standard for the exchange of Maritime limits and boundaries.

**9.4 National implementation of the Shared Data Principles - including any national data policy and impact on marine data.** The UKHO is actively engaged with a project directed by the UK Geospatial Commission to improve the handling and publication of Government datasets. This work involves improving the discoverability of data as well as working towards a set of shared

principles within UK Government. The UKHO also continues to produce Electronic Navigational Charts to the IHO S-57 standard which contains a defined structure for metadata and the modelling of maritime related features. Work is ongoing to transition to the future IHO S-100 standards.

**9.5 MSDI national portal.** The UKHO has a Marine Data Portal which is in a state of continual development. As the organised gateway to our non-navigation data and services it gives people easy and timely access to marine location-based information from seabed to surface to help them with sustainable marine decision making. The Portal allows users access to a number of free of charge datasets and services mainly covering the UK territorial waters. The Portal provides access to premium data sets which can be purchased. The underlying Marine Data Portal technology has the capability to host other agencies', or even other nation's datasets.

**9.6 Best practices and lessons learned.** The UKHO via the (UK) Geospatial Commission is leading on a limited-scope Governance project to inform, guide and direct effective joint working between the participating UK agencies. The project will draw upon suggested 'Best Practices' as represented via the UN-GGIM IGIF with a focus on technology-agnostic Governance between formal institutions. These may be extended across the Geospatial Commission in due course, subject to circumstances.

The UKHO is currently investigating the possibility of providing MSDI Services to one of its Primary Charting Authorities as a small-scale proof of concept. Lessons learnt from this exercise may inform decisions about the UKHO's future larger scale MSDI activities.

**9.7 Challenges and achievements.** As part of the UK Geospatial Commission collaborative projects, the UKHO and other partners have made more public geospatial data available through a government hosted website [data.gov.uk](https://data.gov.uk) and are now:

- Looking at ways of standardising data licensing agreements
- Improving the discoverability of national geospatial data
- Providing guidance to better link geospatial data sets

Increasing the range of data which is ingested.

## 10. INNOVATION

**10.1 Use of new technologies.** The UKHO has established a Data Science and Data Engineering team, which uses machine learning techniques to illustrate the art of the possible. The Team has been working on a variety of prototype projects, from the automated cleaning of Bathymetry data to using satellite imagery for automatic identification of coastline, as an aid to change detection and to find mangrove forests.

## 11. OTHER ACTIVITIES

### UK Celebrations for World Hydrography Day

**11.1** The UK Hydrographic Office has celebrated World Hydrography Day and the theme of "Hydrographic information driving marine knowledge" with a number of celebratory moments throughout the year.

### Visit from HRH The Princess Royal - 25 April 2019

**11.2** To officially open our new building and celebrate World Hydrography Day, we held a commemorative event attended by HRH The Princess Royal. During her visit, The Princess Royal delivered a speech to an audience of UKHO staff and over 100 guests who gathered from across the world to celebrate the landmark occasion. In her speech, she commended the UKHO for the vital role it plays in supporting maritime navigation, safety, security, and marine development around the UK and worldwide.



The Rt Hon Earl Howe, Deputy Leader of the House of Lords and Minister of State for Defence, was also in attendance. He addressed guests to speak of the UKHO's long and successful history of supplying navigation services to shipping companies around the world, as well as its continued contribution to defence and the long-term prosperity of the UK and its allies around the world.

### **Science, Technology, Engineering and Maths (STEM) activities**

**11.3** Throughout the year, our STEM Ambassadors have attended a number of events to promote our work as an organisation and encourage young people in the South West into STEM careers. Some of the outreach work in which we have been actively involved this year includes guest lecturing at a 'Science of the Sea' community event in Taunton to celebrate British Science Week, and participating in the regional Big Bang Near Me science fairs. Central to these events was the theme of hydrography, with educational activities including:

- An Augmented Reality bathymetry sandbox to explain the science behind mapping the seafloor
- An activity on ocean environment marine sounds
- A bathymetry pairing game, featuring images of wrecks taken from hydrographic surveys
- A bathymetric drone coding challenge activity

### **Broader UK Government Work**

**11.4** The 2020s have been designated by the United Nations as the Decade of Ocean Science for Sustainable Development. In addition, the G7 at the 2018 summit in Charlevoix, Canada also recognised the importance of the oceans by publishing the Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities. Seabed Mapping is a key component to both.

**11.5** In 2019, the UK Department for Transport published its *Maritime 2050 (M2050) Navigating the Future strategy*. Along with the Government Office for Science's (GO Science) Foresight Future of the Sea Report, M2050 recognises the critical role of the maritime sector for the growth and development of the UK, including its Overseas Territories, as a primary facilitator of global trade. Both pivotal documents also recognise that marine geospatial data is essential to unlocking a sustainable and prosperous global blue economy and that the UKHO is a world leading authority in this area. The UKHO is currently working to bring together all the stakeholders in the UK's Marine Geospatial Community to ensure we have a comprehensive and inclusive approach to pursuing and developing opportunities to deliver against national and international priorities.

**11.6** The UK Member State, consisting of the UK, the Overseas Territories and Crown Dependencies, will be audited in September 2020 against the IMO Instrument Implementation Code (commonly known as the Triple I Code). This has raised awareness of the importance of maritime compliance and the benefits to everyone. To compliment the work of the UKHO's OT Seabed Mapping Programme, the UK Maritime and Coastguard Agency have a UK Government aid funded programme to review maritime obligations compliance, search and rescue and oil pollution response.

**11.7** The Commonwealth Litter Programme (CLiP), is led by the UK through the Centre for Environment Fisheries and Aquaculture Science (Cefas). Funded by Defra, the programme will support four developing countries across the Commonwealth to take action on plastics entering the oceans. The programme will contribute to the UK meeting its responsibilities under the Commonwealth Blue Charter, which calls for Commonwealth countries to drive action and share expertise on issues affecting the world's oceans, including marine litter. CLiP will contribute to delivering the objectives under the UK and Vanuatu-led Commonwealth Clean Oceans Alliance (CCOA), which calls on other countries to pledge action on plastics. CCOA also promotes actions in line with the United Nations Sustainable Development Goal 14 (life below water) to conserve and sustainably use the oceans, as well as contributing to the UK Government's 25 Year Environment



Plan. The programme will work in the South Pacific, Caribbean and Africa. In May 2019, work began in Belize. The programme will encompass the following five pillars:

- Land based sources of litter
- Sea based sources of litter
- Removal of litter from the marine environment
- Science and Education
- Outreach

**11.8** The UK's Joint Nature Conservation Committee continues its work in the Overseas Territories, providing technical assistance to support biodiversity and wider environmental management strategies and scientific advice. Their UK Government aid funded programme *Natural Capital in the Caribbean and South Atlantic Overseas Territories* uses economic assessments and analysis, spatial mapping and satellite data to provide an assessment of natural capital in a number of the UK's Caribbean and South Atlantic Overseas Territories.

### **Satellite Derived Bathymetry (SDB)**

**11.9** Under the Commonwealth Marine Economies Programme, UKHO completed a shallow water SDB survey for Kiribati covering a total area of 6,054km<sup>2</sup>. The work was conducted by a contractor with full project management and data validation by UKHO. The data is intended for checking navigational products and inform decisions on future survey needs.

In addition to the SDB, satellite imagery was also used to produce digital land cover classification maps and seamless cloud-free natural colour image mosaics of all of Kiribati's 33 island groups. All satellite derived products were handed over to the Government of Kiribati in July 2019, where they will be of use as an aid to environmental, economic and administrative management.

## UKHO's International Activities

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

<b>International Hydrographic Organisation - HSSC</b>		<b>Chair/Vice Chair</b>	<b>Member</b>
DQWG	Data Quality Working Group		x
ENCWG	ENC Standards Maintenance Working Group	x	x
HSSC	Hydrographic Services and Standards Committee		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
<b>International Hydrographic Organisation - IRCC</b>		<b>Chair/Vice Chair</b>	<b>Member</b>
CBSC	Capacity Building Sub-Committee		x
CSBWG	Crowd-sourced Bathymetry Working Group		x
DRWG	Document Review Working Group of NAVTXT		x
HCA	Hydrographic Commission on Antarctica		x
IRCC	Inter-Regional Coordination Committee		x
MACHC	Meso American and Caribbean Sea Hydrographic Commission		x
MBSHC	Mediterranean and Black Seas Hydrographic Commission		x
MSDIWG	Marine Spatial Data Infrastructure Working Group		x
NIOHC	North Indian Ocean Hydrographic Commission		x
NSHC	North Sea Hydrographic Commission		x
RSAHC	ROPME Sea Area Hydrographic Commission		x
SAIHC	Southern African and Islands Hydrographic Commission	x	x
SWPHC	South-West Pacific Hydrographic Commission		x
WENDWG	Worldwide ENC Database Working Group		x
WWNWS	Worldwide Navigational Warning Service		x
<b>International Maritime Organisation</b>		<b>Chair/Vice Chair</b>	<b>Member</b>
NAVTEX	NAVTXT Coordination panel	x	x
<b>International Association of Marine Aids to Navigation and Lighthouse Authorities</b>		<b>Chair/Vice Chair</b>	<b>Member</b>
ENAV	E-navigation Committee		x
<b>Other International Bodies</b>		<b>Chair/Vice Chair</b>	<b>Member</b>
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

## **12. CONCLUSION**

**12.1** The UK maintains a strong commitment to the South West Pacific region, through its primary charting responsibilities, its work on the UK Overseas Territories Programme and its commitment to the Commonwealth Marine Economies programme.

**12.2** UKHO continues to enable safer navigation by revising and maintaining existing paper and electronic portfolios of charts and publications; and introducing new adoptions, New Charts, New Editions and New Cells, where appropriate. Our programmatic data capture supports regional safety of navigation while also supporting wider maritime economic infrastructure governance and growth.

**12.3** Noting increasing demand and the International Hydrographic Organisation's direction to enable the maximum and widest use of Hydrographic maritime and marine information and data, the UKHO will continue its development into a Marine Geospatial Information Agency through its programme of data science and engineering aimed at developing greater understanding and insight.

**12.4** UKHO has recently appointed a new National Hydrographer, Rear Admiral Peter Sparkes, and a new Head of Partnering and Engagement for Asia Pacific, Mr Chris Hunt. In line with UK Government strategy, commitments to safety of the mariner and supporting sustainable economic growth, there is an opportunity restate our ongoing commitment to the region. It is hoped that our future focus will support consolidation of the best aspects of existing UKHO engagement within the region and identify opportunities for future collaboration.

**Taunton**

**January 2020**

## UKHO POINTS OF CONTACT

**UKHO Website:** [GOV.uk/UKHO](http://GOV.uk/UKHO)

The general UKHO address is:  
UK Hydrographic Office,  
Admiralty Way,  
TAUNTON  
Somerset  
TA1 2DN  
United Kingdom



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

E-mail: [internationalrelations.ukho@ukho.gov.uk](mailto:internationalrelations.ukho@ukho.gov.uk)  
Telephone: +44 (0)1823 484444

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

### **Mr Chris Hunt**

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

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

### **Mr Paul Hardacre**

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Telephone: +44 (0)1823 483427

Input to the IHO Publication P-5 (*Yearbook*)  
United Kingdom of Great Britain and Northern Ireland

<b>Country information / Informations sur le pays/ Información sobre el país</b>	
-Declared National Tonnage -Tonnage national déclaré -Tonelaje Nacional Declarado	48102992 tons (CCL7/2016)
National day -Fête nationale -Fiesta nacional	Second Saturday in June (Trooping the Colours)
-Date first joined IHO -Date d'adhésion à l'OHI -Fecha de adhesión a la OHI	21/06/1921
-Date ratification Convention -Date de ratification de la Convention -Fecha de ratificación de la Convención	03/05/1967
Official Representative to IHO (as designated by Member Government) <b>UNITED KINGDOM HYDROGRAPHIC OFFICE</b>	
<b>Contact information/ Informations de contact / Información de contacto</b>	
-National Hydrographer or equivalent -Directeur du service hydrographique ou équivalent -Director del Servicio Hidrográfico o equivalente	National Hydrographer RAdm Peter SPARKES Postal address: Admiralty Way, TAUNTON, Somerset, TA1 2DN, United Kingdom Tel: + 44 (0) 1823 484444 Fax: + 44 (0) 1823 284077 E-mail: IBTE@UKHO.gov.uk
-Web site -site web -sitio web	<a href="http://www.gov.uk">http://www.gov.uk</a>
Agency information	
Date of establishment	12 August 1795
Relevant National Legislation	TS Baseline 25.09.64 12nm TS Limit 15.05.87 200nm EFZ 22.12.76
Top level parent organization	Publication of analogue and digital navigational charts and supporting publications, transmission of maritime safety information, Notices to Mariners (weekly), provision of geodetic, oceanographic and geophysical data and publications to meet defence requirements. Provision of tidal information and Ocean currents.
Number of INT charts published	782
Total number of paper charts	739 SNC (2018)
Number of ENC cells published	2966 GB cells (2018)
Type of publications produced	Full suite of Admiralty Charts and Publications including some digital products. For details see UK Catalogue of Admiralty Charts and Publications (NP131) or the UKHO web site: <a href="http://www.gov.uk/UKHO">http://www.gov.uk/UKHO</a>

Other Organizations providing national Hydrographic Services  
 Autre Organismes fournissant des services hydrographiques au niveau national.

**CAPTAIN HYDROGRAPHY & METEOROLOGY AND  
 HYDROGRAPHER OF THE NAVY**

Contact information / Informations de contact / Información de contacto			
Head of the Hydrographic Office (if different from the person indicated above) -Directeur du service hydrographique (si différent de la personne indiquée ci-dessus) -Jefe del Servicio Hidrográfico (si es diferente de la persona indicada anteriormente)	Head of Hydrographic Office - Royal Navy. Capt(HM)/Hydrographer of the Navy Capt.(HM) Derek RAE Tel: + 44 (0) 1752 555780 Fax: + 44 (0) 1752 555844 E-mail: navydevflot-capthmhofn@mod.uk or <a href="mailto:Derek.rae531@mod.gov.uk">Derek.rae531@mod.gov.uk</a>		
Other point(s) of contact -Autre(s) point(s) de contact -Otros punto(s) de contacto	Postal address: COMDEVFLOT, Room 260, Defiance Building HM Naval Base Devonport, PLYMOUTH, Devon, PL2 2BG, United Kingdom of Great Britain and Northern Ireland		
Agency information / Information sur l'agence / Información sobre la agencia			
Top level parent organization - Organisme mère -Organización asociada de nivel superior	Ministry of Defence - Fleet Commander		
Principal functions of the organization or the department - Attribution principales de l'organisme ou du département - Principales funciones de la Organización o el departamento	Commander of RN ships, units and personnel engaged in collection analysis and dissemination of all forms of geospatial information through the hydrographic, meteorological and oceanographic disciplines.		
Detail of surveying vessels/ Aircraft -Détail des bâtiments hydrographiques/aéronefs -Detalle de buques hidrográficos/Aeronaves	Displacement -déplacement -Desplazamiento	Commissioning Date -date de mise en service - Fecha de puesta en servicio	Crew -équipage -Personal
HMS SCOTT (H131)	13500	1997	63
HMS PROTECTOR	5000	2011	88
HMS ECHO (H87)	3470	2002	72
HMS ENTERPRISE (H88)	3470	2002	72
HMSL GLEANER (H86)	26	1983	8
Other information of interest - Autres informations utiles -Otra información de interés	HM personnel are also borne in other RN vessels. Capt(HM) directs all hydrographic, meteorological and oceanographic support to the fleet. The programme for Civil hydrography in UK waters is managed by the Maritime & Coastguard Agency and is outsourced to the commercial sector. Training in hydrographic surveying and meteorology is provided for naval personnel by the Flag Officer Sea Training (HM) Unit Officer Commanding FOST (HM) HMS DRAKE HM Naval Base Devonport PLYMOUTH Devon PL2 2BG Details of courses are available at: <a href="http://www.mod.uk/DefenceInternet/AboutDefence/Whatwedo/TrainingandExercises/IDT/IDTRN">www.mod.uk/DefenceInternet/AboutDefence/Whatwedo/TrainingandExercises/IDT/IDTRN</a>		

Input to the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*)  
 Country: United Kingdom of Great Britain and Northern Ireland - no change to current publication

Country: Pitcairn Dependencies

<b>C-55 Summary for:</b>				<b>Comments on Charts:</b>
Country:	Pitcairn Dependencies			
Country Iso Code:	PN			
Country SubCode:				
INT Region:	L			
Country/Depend:				
Last updated:	08/01/2019			
Provided by:	UK			
<b>Chart coverage</b>	<b>Passage (%)</b>	<b>Coastal (%)</b>	<b>Port (%)</b>	<b>Comments on Surveys:</b> 1. Consists of steep-to oceanic islands with no indications of off-lying dangers.
INT	100	100	25	
RNC	100	100	25	
ENC	100	0	0	
<b>Status of Paper Charts</b>				
Paper charts with depths in meters (%)			100	
Paper charts referenced to a satellite datum (%)			50	
<b>Status of surveys</b>	<b>Adequate (%)</b>	<b>Resurvey (%)</b>	<b>No survey (%)</b>	
0-200m	0	0	100	
> 200m	0	0	100	

<b>MSI</b>	<b>Y/N</b>	<b>Comments on MSI:</b>
Local warning	Unknown	Local authority responsibility - no requirement to promulgate internationally.
Coastal warning	YES	Only via NAVAREA coordinator & SafetyNET. Available/offered, but not currently used.
Nav warning	YES	Only via NAVAREA coordinator & SafetyNET.
Port warning	YES	Through UKHO.
<b>GMDSS</b>	<b>Y/N</b>	<b>Comments on GMDSS:</b>
Master Plan	NO	
Area A1	NO	
Area A2	NO	
Area A3	NO	
NAVTEX	NO	
SafetyNet	NO	



Input to the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*)  
Country: Fiji

<b>C-55 Summary for:</b>				<b>Comments on Charts:</b> 1. Data provided by UK. 2. All UK coverage now metric and WGS84.
Country:	Fiji			
Country Iso Code:	FJ			
Country SubCode:				
INT Region:	L			
Country/Depend:				
Last updated:	08/01/2019			
Provided by:	UK			
<b>Chart coverage</b>	<b>Passage (%)</b>	<b>Coastal (%)</b>	<b>Port (%)</b>	<b>Comments on Surveys:</b> 1. Depths fall away quickly beyond the edge of the fringing reefs of the steep to Atolls and Islands. 2. Priority is for modern surveys of the minor ports and anchorages, which are only covered by lead-line surveys.
INT	100	100	100	
RNC	100	100	100	
ENC	100	100	100	
<b>Status of Paper Charts</b>				
Paper charts with depths in meters (%)			100	
Paper charts referenced to a satellite datum (%)			100	
<b>Status of surveys</b>	<b>Adequate (%)</b>	<b>Resurvey (%)</b>	<b>No survey (%)</b>	
0-200m	7	63	30	
> 200m	15	0	85	

<b>MSI</b>	<b>Y/N</b>	<b>Comments on MSI:</b>
Local warning	YES	Data provided by UK
Coastal warning	YES	Data provided by UK
Nav warning	YES	Data provided by UK
Port warning	NO	Data provided by UK
<b>GMDSS</b>	<b>Y/N</b>	<b>Comments on GMDSS:</b>
Master Plan	NO	
Area A1	NO	
Area A2	YES	
Area A3	YES	
NAVTEX	NO	Data provided by UK
SafetyNet	NO	

Input to the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*)  
Country: Kiribati

<b>C-55 Summary for:</b>				<b>Comments on Charts:</b> 1. Data provided by UK. 2. All UK coverage now metric and WGS84.
Country:	Kiribati			
Country Iso Code:	KI			
Country SubCode:				
INT Region:	L			
Country/Depend:				
Last updated:	08/01/2019			
Provided by:	UK			
<b>Chart coverage</b>	<b>Passage (%)</b>	<b>Coastal (%)</b>	<b>Port (%)</b>	<b>Comments on Surveys:</b> 1. Depths fall away quickly beyond the edge of the fringing reefs of the steep to Atolls and Islands. 2. Priorities are to survey International Routes disproving Vigias and to survey inshore waters to modern standards.
INT	100	100	100	
RNC	100	100	100	
ENC	100	100	100	
<b>Status of Paper Charts</b>				
Paper charts with depths in meters (%)			100	
Paper charts referenced to a satellite datum (%)			100	
<b>Status of surveys</b>	<b>Adequate (%)</b>	<b>Resurvey (%)</b>	<b>No survey (%)</b>	
0-200m	0	20	80	
> 200m	0	0	100	

<b>MSI</b>	<b>Y/N</b>	<b>Comments on MSI:</b>
Local warning	YES	Only locally
Coastal warning	YES	Only locally
Nav warning	YES	Only locally
Port warning	YES	Only locally
<b>GMDSS</b>	<b>Y/N</b>	<b>Comments on GMDSS:</b>
Master Plan	NO	No GMDSS Plan yet
Area A1	NO	
Area A2	NO	
Area A3	NO	
NAVTEX	NO	
SafetyNet	NO	

Input to the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*)  
Country: Nauru

<b>C-55 Summary for:</b>				<b>Comments on Charts:</b> 1. Data provided by UK. 2. All UK coverage now metric and WGS84.
Country:	Nauru			
Country Iso Code:	NR			
Country SubCode:				
INT Region:	L			
Country/Depend:				
Last updated:	08/01/2019			
Provided by:	UK			
<b>Chart coverage</b>	<b>Passage (%)</b>	<b>Coastal (%)</b>	<b>Port (%)</b>	<b>Comments on Surveys:</b> 1. Data provided by UK. 2. Nauru is a steep-to oceanic Island. One ED shoal to the NE requires a disproving search.
INT	100	0	0	
RNC	100	0	0	
ENC	100	0	0	
<b>Status of Paper Charts</b>				
Paper charts with depths in meters (%)			100	
Paper charts referenced to a satellite datum (%)			100	
<b>Status of surveys</b>	<b>Adequate (%)</b>	<b>Resurvey (%)</b>	<b>No survey (%)</b>	
0-200m	0	0	100	
> 200m	0	0	100	

<b>MSI</b>	<b>Y/N</b>	<b>Comments on MSI:</b>
Local warning	NO	Data provided by UK
Coastal warning	NO	Data provided by UK
Nav warning	NO	Data provided by UK
Port warning	NO	Data provided by UK
<b>GMDSS</b>	<b>Y/N</b>	<b>Comments on GMDSS:</b>
Master Plan	NO	Data provided by UK
Area A1	NO	Data provided by UK
Area A2	NO	Data provided by UK
Area A3	NO	Data provided by UK
NAVTEX	NO	Data provided by UK
SafetyNet	NO	Data provided by UK

Input to the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*)  
Country: Tuvalu

<b>C-55 Summary for:</b>				<b>Comments on Charts:</b> 1. Data provided by UK. 2. Only one chart BA2983 (Funafuti and Plans) is in use within Tuvalu waters and only provides coverage of Funafuti Atoll. The remaining eight islands in Tuvalu are covered by BA4625 which at a scale of 1:1,500,00 is not suitable for coastal navigation.
Country:	Tuvalu			
Country Iso Code:	TV			
Country SubCode:				
INT Region:	L			
Country/Depend:				
Last updated:	08/01/2019			
Provided by:	UK			
<b>Chart coverage</b>	<b>Passage (%)</b>	<b>Coastal (%)</b>	<b>Port (%)</b>	<b>Comments on Surveys:</b>
INT	100	50	20	
RNC	100	50	5	
ENC	100	50	0	
<b>Status of Paper Charts</b>				
Paper charts with depths in meters (%)			100	
Paper charts referenced to a satellite datum (%)			100	
<b>Status of surveys</b>	<b>Adequate (%)</b>	<b>Resurvey (%)</b>	<b>No survey (%)</b>	
0-200m	10	7	83	
> 200m	10	0	90	

<b>MSI</b>	<b>Y/N</b>	<b>Comments on MSI:</b>
Local warning	NO	
Coastal warning	NO	
Nav warning	NO	
Port warning	NO	
<b>GMDSS</b>	<b>Y/N</b>	<b>Comments on GMDSS:</b>
Master Plan	NO	
Area A1	NO	
Area A2	NO	
Area A3	NO	
NAVTEX	NO	
SafetyNet	NO	

Country: Vanuatu - no change to current publication

## National MSI Self-Assessment

*Country:* United Kingdom - Pitcairn Dependencies  
*Organization:* United Kingdom Hydrographic Office

## 1. Maritime area

*Waters around the Pitcairn Islands*

## 2. Operational Points of Contact for the National Coordinator

INSTITUTION	TELEPHONE	FACSIMILE	EMAIL
N/A			

## 3. GMDSS Master Plan

*GMDSS Master Plan up to date – not applicable for this country*

Equipment Type for Ports and Local Area	Software Version	Date of Up-date

Year Y-2		Year Y-1		Year Y	
Total	Average elapsed time	Total	Average elapsed time	Total	Average elapsed time
xx	xx.x Mins	xx	xx.x Mins	xx	xx.x Mins

## 4. NAVTEX Coverage:

*N/A*

## 5. Operational Issues:

*N/A*

## 6. Contingency Planning

*N/A*

## 7. Capacity Building

*N/A*

## 8. Other Activities

*N/A*

9. National Maritime Website

*N/A*

10. Recommendations

*Nil*

11. Summary

*There is no maritime radio station on Pitcairn Island apart from a local VHF station to communicate with visiting cruise ships.*