



UK Hydrographic
Office

NIOHC19-13.1J UK National Report

UNITED KINGDOM NATIONAL REPORT

to the

**NORTH INDIAN OCEAN
HYDROGRAPHIC COMMISSION (NIOHC)
19TH MEETING**

**MUSCAT, OMAN
25 - 28 MARCH 2019**

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

Gov.uk/ukho

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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 NIOHC 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. The 2018 NIPPON Marine Cartography and Data Assessment Category "B" course is shown above.

2. SURVEYS

2.1 Details of the management of **civil hydrographic surveys** in UK Home Waters are provided in the UK Generic National Report, and on the UKHO website. UK's National

Hydrographic Committee (known as the Civil Hydrography Annual Seminar (CHAS)) meets on an annual basis and provides the necessary breadth of interests to ensure that all surveying requirements are taken into account when prioritising the work of the Civil Hydrography Programme (CHP). CHAS was expanded in 2007 to include a much wider range of organisations, which conduct hydrographic surveys, and has been considerably successful in promoting co-operation between these organisations.

2.2 The UK Government's **Commonwealth Marine Economies (CME) Programme** aims to support the sustainable economic growth of Small Island Developing States (SIDS) by maximizing the potential of their marine resources, helping to improve their resilience to climate change and natural disasters, protect their environment and food security, and ultimately improve the livelihood of local communities. The CME Programme is now in its third year and the UK's former Foreign Secretary, Rt Hon. Boris Johnson, announced a further £9million funding for the next two years of the programme. The UKHO continues to take a leading role in this programme with a series of surveys, equipment procurement and capacity building planned through to 2020.

2.3 UK continues to explore how we can strengthen the relationship with countries for which we are the Primary Charting Authority (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 to better understand prioritised requirements in region.

2.4 The **UK Overseas Territories Seabed Mapping Programme** has central government funding to assess and redress the deficit of bathymetric data and lack of sound hydrographic governance in the UK's Overseas Territories (OTs). The programme is now in its third year and with a budget of £4.2million, will see further surveys undertaken in the the next year in the OTs.

2.5 Any requests for survey assistance from nations within the NIOHC 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. Further information can be obtained from (ihp@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 NIOHC 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 NIOHC region.

The following charts have been published since the last NIOHC meeting:

Published New Charts:

GB Chart Number	INT Chart	Title	Scale	Published
IN 301	-	Approaches to Hugli River	1:150000	19-Apr-18
IN 3011	7421	Hugli River, Gasper Channel to Haldia	1:75000	19-Apr-18
IN 2002	7351	Ports of New Mangalore and Mangalore	1:20000	24-May-18
IN 2359	7350	Approaches to Port of New Mangalore	1:50000	24-May-18
IN 2051	7333	Salaya Harbour	1:25000	31-May-18
IN 206	-	Verāval to Diu Head	1:150000	05-Jul-18
IN 207	-	Diu Head to Gopnāth Point	1:150000	05-Jul-18
IN 31	756	Bay of Bengal - Northern Portion (Krishnapanam to Bassein River)	1:1500000	19-Jul-18
IN 33	755	Bay of Bengal - Southern Portion	1:1500000	19-Jul-18
IN 211	-	Satpati to Dighi Harbour	1:150000	23-Aug-18
IN 212	-	Murud-Janjira Hr to Ratnāgiri	1:150000	23-Aug-18
IN 22	752	Mumbai to Cape Comorin	1:1500000	13-Sep-18
IN 253	7328	Verāval to Pīpāvāv	1:300000	13-Sep-18
IN 256	7340	Murud-Janjira Hr to Mālvān	1:300000	13-Sep-18
IN 293	7022	Mumbai to New Mangalore	1:750000	13-Sep-18
IN 3006	7423	Hugli River, Kukrāhātti Reach to Kolkata Docks	Various	13-Sep-18
IN 262	7365	Cape Comorin to Pāmban	1:300000	27-Sep-18
IN 210	-	Umargām to Satpati	1:150000	08-Nov-18
IN 254	7331	Approaches to Gulf of Khambhāt	1:300000	08-Nov-18
IN 255	7334	Approaches to Mumbai	1:300000	08-Nov-18
IN 292	7021	Dwārka to Mumbai	1:750000	08-Nov-18
IN 216	-	Belekeri to Kundāpura	1:150000	29-Nov-18
IN 217	-	Kundāpura to Kāsaragod	1:150000	29-Nov-18
IN 258	7348	Kundāpura to Badagara	1:300000	29-Nov-18
IN 220	-	Tānūr Nagaram to Manakkodam	1:150000	06-Dec-18
IN 221	-	Alappuzha (Alleppey) to Kollam (Quilon).	1:150000	06-Dec-18
IN 259	7356	Badagara to Kochi	1:300000	06-Dec-18
IN 3009	7407	Kākināda Anchorage	Various	28-Feb-19
IN 3042	-	Approaches to Kākināda	1:75000	28-Feb-19
IN 218	-	Kasaragod to Tellicherry	1:150000	14-Mar-19
IN 2033	7341	Sikka Creek	1:12500	14-Mar-19
IN 2039	-	Gulf of Khambhat, Northern Portion	1:75000	14-Mar-19
IN 2083	7339	Approaches to Sikka	Various	14-Mar-19

Published New Editions:

GB Chart Number	INT Chart	Title	Scale	Published
IN 3037	-	Dhāmra Port	1:12500	19-Apr-18
IN 3038	-	Approaches to Dhāmra Port	1:25000	19-Apr-18
1011	7377	Addoo Atoll to N. Huvadhoo Atoll	1:300000	26-Apr-18
1012	7374	N. Huvadhoo Atoll to Mulaku Atoll	1:300000	26-Apr-18
1013	7371	Mulaku Atoll to S. Maalhosmadulu Atoll	1:300000	26-Apr-18
1014	7368	S. Maalhosmadulu Atoll to N. Thiladhunmathee Atoll	1:300000	26-Apr-18
2067	7378	Addoo Atoll	1:25000	26-Apr-18
709	753	Maldives to Sri Lanka	1:1500000	10-May-18
1583	7389	Little Basses Reef to Pulmoddai Roads	Various	17-May-18
2197	-	Palk Strait and Palk Bay, Eastern Part	1:150000	17-May-18
100	7110	Gees Gwardafuy (Raas Casey) to Suqūṭrā (Socotra)	1:350000	24-May-18
326	7146	Southern Approaches to Madīnat Yanbu' Aṣ Ṣīnā'iyah	1:75000	24-May-18
707	-	Mumbai (Bombay) to Muscaṭ (Masqaṭ)	1:1500000	14-Jun-18
158	7008	Berenice (Barnīs) to Masamirit	1:750000	02-Aug-18
3700	-	Weligama to Colombo	Various	02-Aug-18
4071	71	Indian Ocean, Northern Part	1:3500000	02-Aug-18
IN 2016	7336	Inner App to Mumbai	1:60000	23-Aug-18
833	7442	Yangon River (Rangoon River) and Approaches	Various	13-Dec-18
3043	7131	Ports on the Coast of Egypt	Various	24-Jan-19
IN 211	-	Satpati to Dighi Harbour	1:150000	28-Feb-19
IN 2002	7351	Ports of New Mangalore and Mangalore	1:20000	28-Feb-19
IN 2079	7329	Approaches to Mundra Port	1:37500	28-Feb-19
IN 3001	7402	Approaches to Chennai	1:50000	28-Feb-19

3.3 The following New Charts and New Editions are scheduled for publication in the next six months.

New Charts to be published:

GB Chart Number	INT Chart	Title
IN 223	-	Kolachel to Manappad
IN 308	7409	Outer Approaches to Visākhatpatnam
IN 2060	7332	Approaches to Salaya
IN 3002	7410	Approaches to Visākhatpatnam
IN 3012	7411	Visākhatpatnam Harbour
IN 3035	-	Gangavaram Port

New Editions to be published:

GB Chart Number	INT Chart	Title
920	7381	Diego Garcia
3043	7131	Ports on the coast of Egypt

Digital Charts



3.4 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 NIOHC region.

ENCs

3.5 Within the NIOHC region, the UKHO has released a total of 136 ENC cells. The breakdown by usage band is shown in the table below:

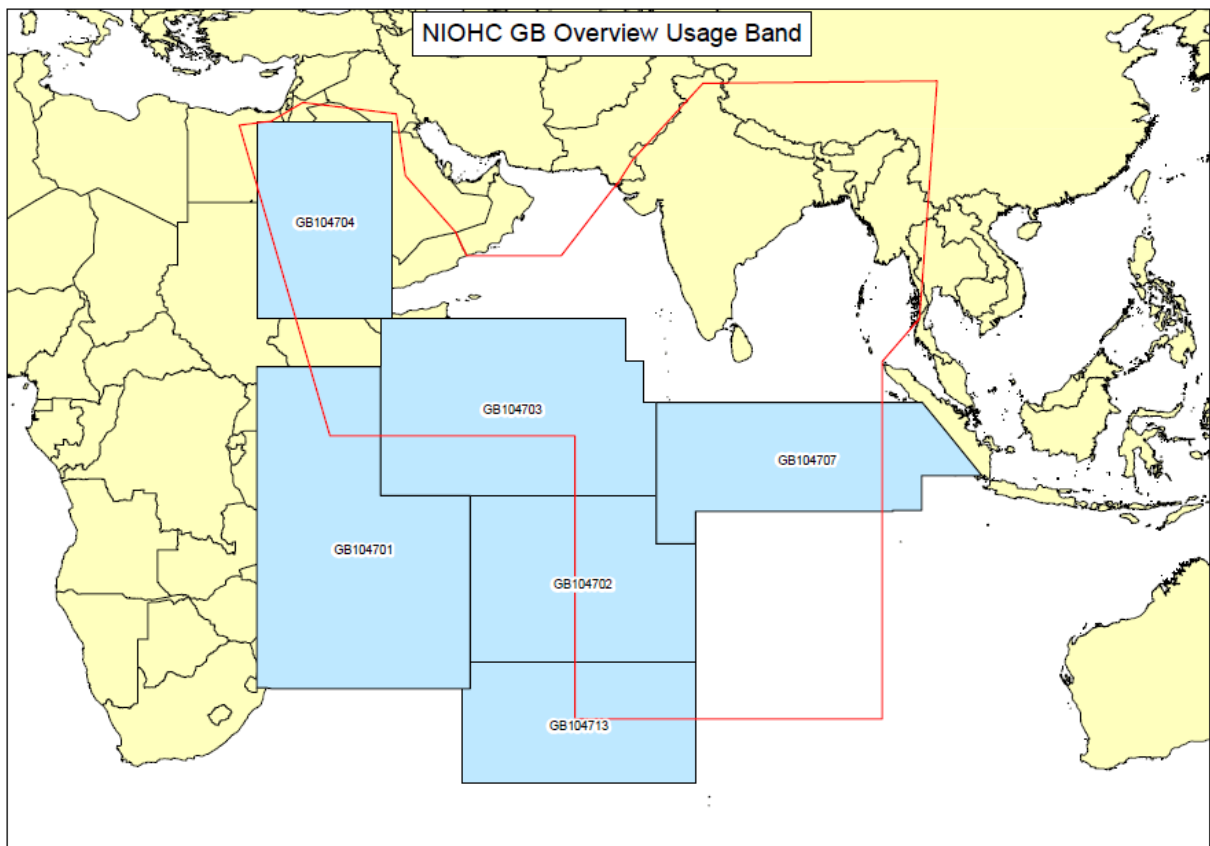
ENC Usage Band	Number of GB ENC's
Usage Band 1	6
Usage Band 2	17
Usage Band 3	36
Usage Band 4	45
Usage Band 5	31
Usage Band 6	1
Total Number of ENCs	136

The tables below show revisions to GB ENC coverage for the NIOHC region during 2018/19. The subsequent diagrams illustrate the current coverage of GB ENCs within the NIOHC Region.

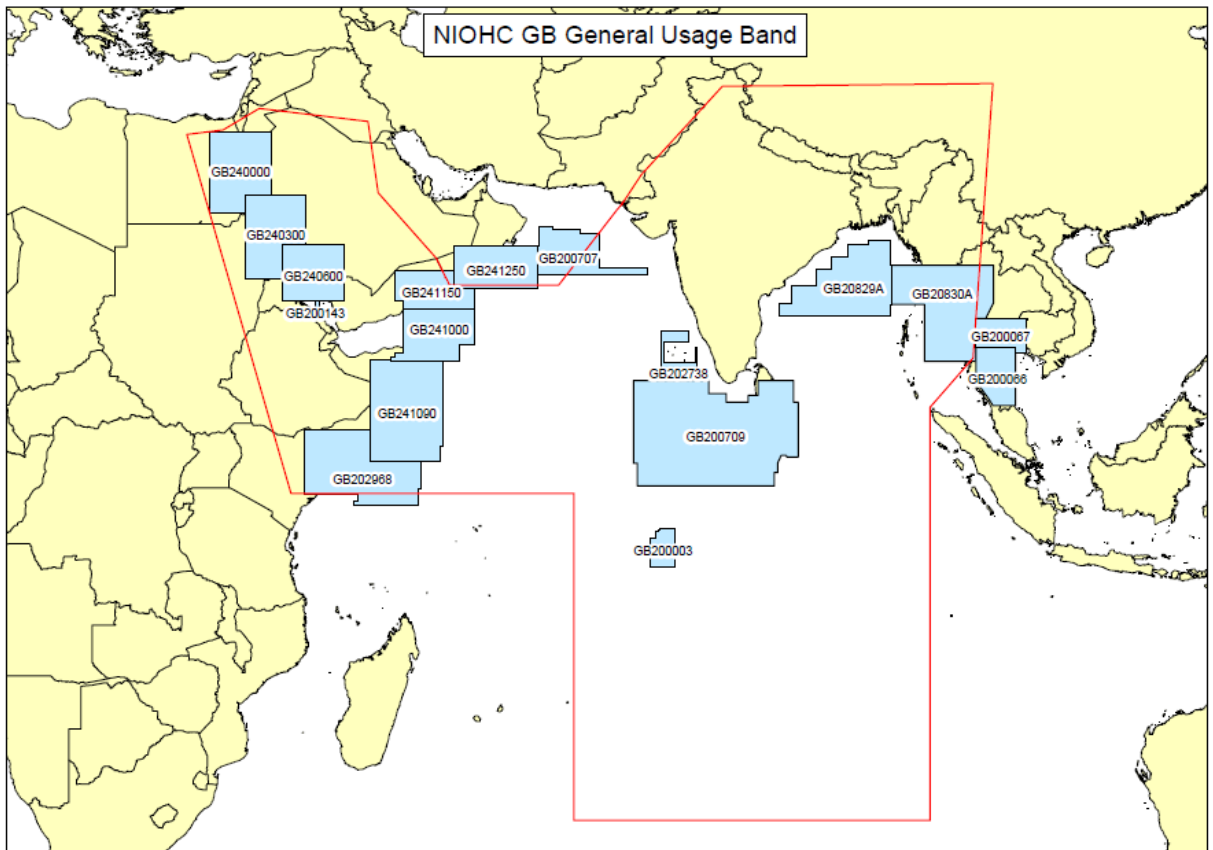
New cells Jan 2018 - Jan 2019	Week No.
GB200143	24/18
GB300726	35/18
GB300727	35/18
GB40725A	35/18
GB40725B	35/18
GB40725C	35/18

Cancelled cells Jan 2018 - Jan 2019	Week No.	Replacements
GB53043E	51/18	EG4EGR18
GB43043D	45/18	EG4EGR18

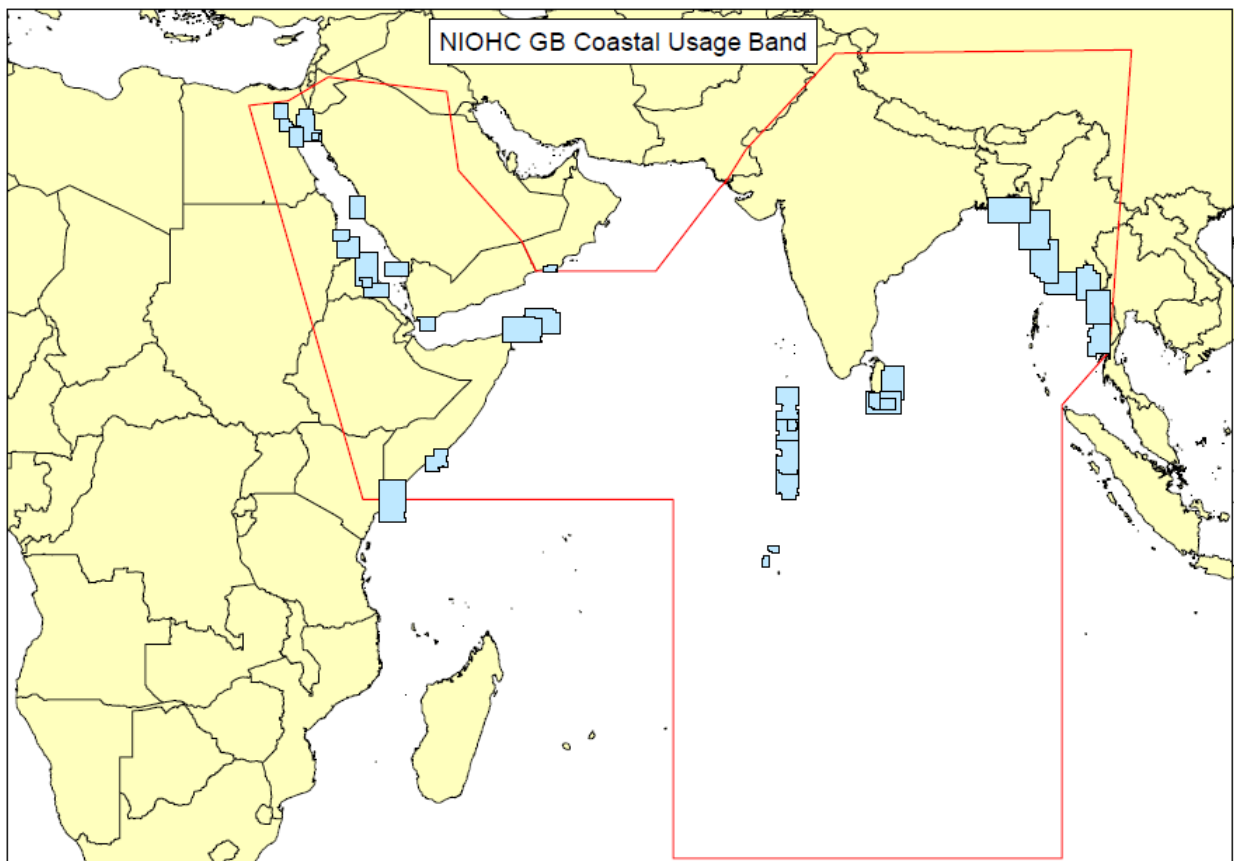
The subsequent diagrams illustrate the current coverage of GB ENC's within the NIOHC Region.



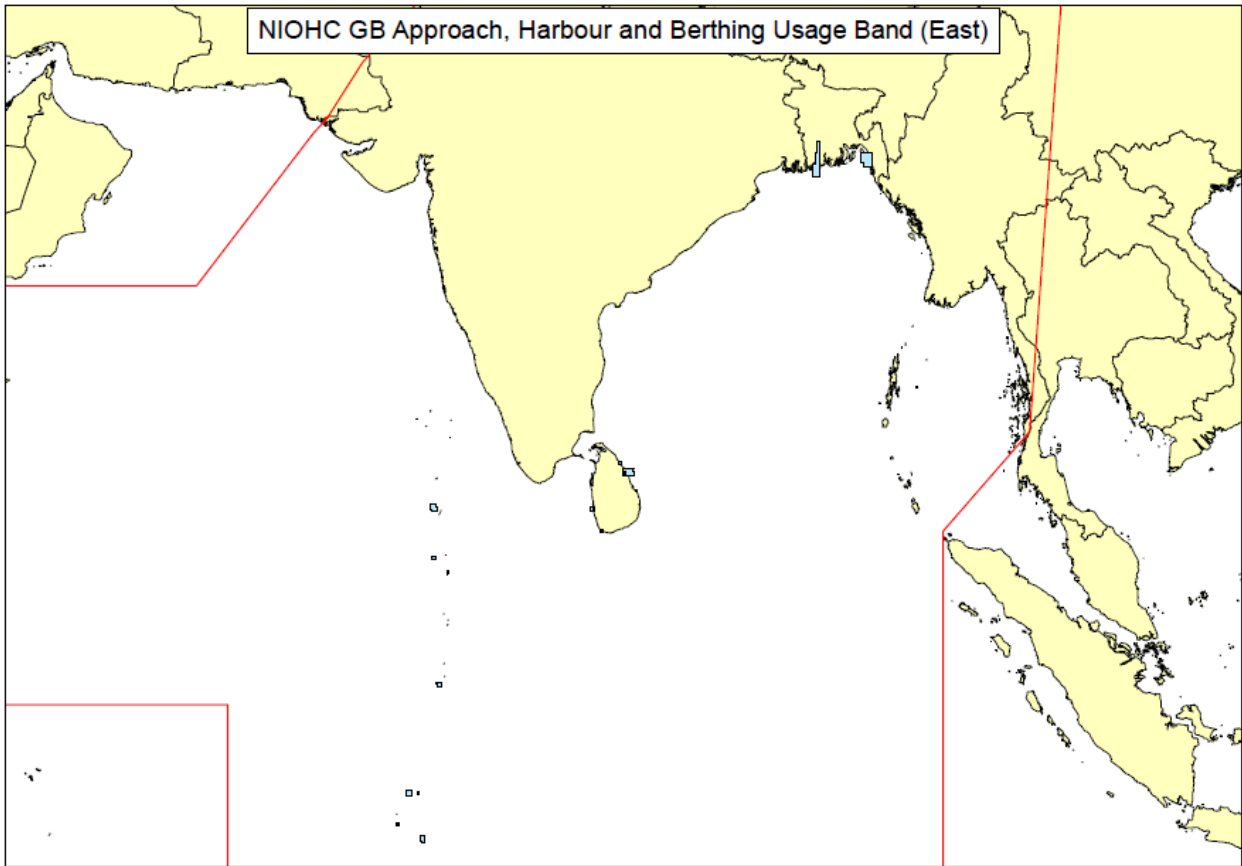
UKHO produced GB overview ENC's



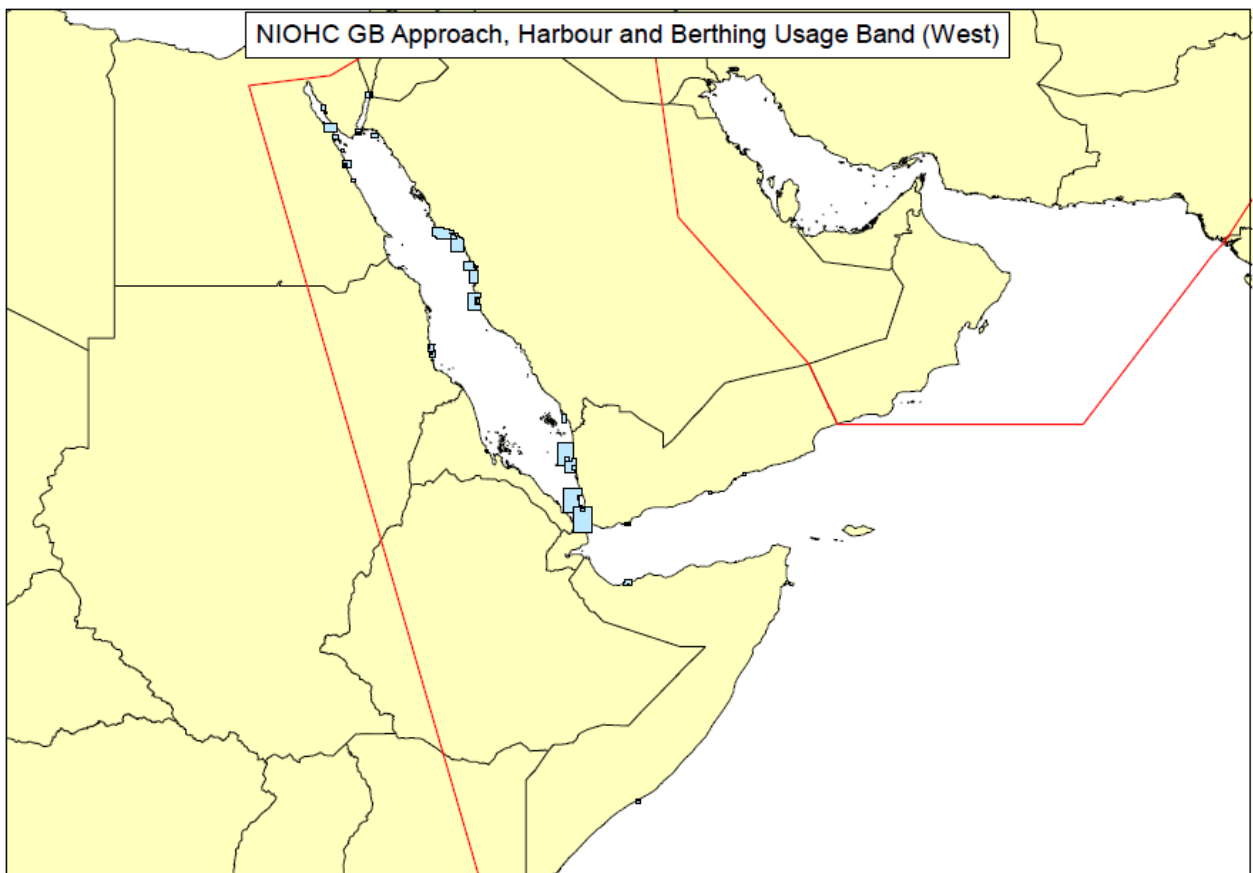
UKHO produced GB general ENC's



UKHO produced GB coastal ENC's



UKHO produced GB approach, harbour and berthing ENC (E)



UKHO produced GB approach, harbour and berthing ENC (W)

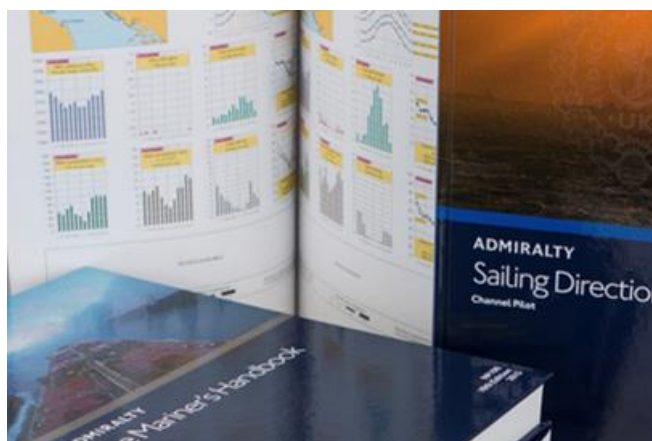
ENC Distribution

3.6 The UKHO, along with other European hydrographic offices, was a founder member of the International Centre for ENC's (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 ENC's 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 ENC's 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 NIOHC region are as follows:

NP39	South Indian Ocean Pilot	Last ed: 06/04/17
NP64	Red Sea and Gulf of Aden Pilot	Last ed: 26/07/18

- New Editions to be published:

NP3	Africa Pilot Vol 3	Last ed: 21/04/16	Next ed: 18/04/19
NP21	Bay of Bengal Pilot	Last ed: 30/01/14	Next ed: 16/05/19
NP38	West Coast of India Pilot	Last ed: 29/09/16	Next ed: 07/11/19

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 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). 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 NIOHC region is for its UK Overseas Territories, namely British Indian Ocean Territory (BIOT).

UK maintains close liaison with India, the NAVAREA Co-ordinator for NAVAREA VIII and with Pakistan, the neighbouring NAVAREA IX Co-ordinator. Any information received at UKHO which requires urgent promulgation is passed to the respective NAVAREA Co-ordinator on a 24 hour basis.

5.2 GMDSS. Coverage in the NIOHC region is generally modest and administrations should be encouraged to develop their capabilities and infrastructure further and to provide at least Phase One hydrographic capability to promulgate MSI in a timely and efficient manner through their National Co-ordinators in coastal regions, or to utilise the communication facilities of NAVAREA VIII and IX Co-ordinators as appropriate for navigational warnings.

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

6. C-55 LATEST UPDATE

6.1 As described in the UK Generic National Report, the UKHO is committed to providing regular updates to the C-55 entries for UK Home Waters and its Overseas Territories including British Indian Ocean Territory within the NIOHC area. The latest status is correctly depicted within C-55.

6.2 UK has also provided assistance to update C-55 entries to other countries, including Bangladesh, Eritrea, Maldives, Seychelles, Somalia, Sri Lanka, Sudan, Yemen and Yemen Socotra Island, where the UKHO has primary charting responsibility, is in primary charting

transition or provides GB ENC coverage, 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 UK organised a Phase 1 skills course which was delivered in Goa, India, in January 2019. Participants from Mauritius are undertaking Survey Technician training and Senior Survey Technician training, both taking place in Goa, India.

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 - Ms Lucy Fieldhouse (Lucy.Fieldhouse@ukho.gov.uk). Ms Lucy Fieldhouse is the Capacity Building Coordinator for the MACHC, NIOHC and SAIHC regions.

Cartographic Training provided by UKHO



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. It should be noted that in 2019 only the IHO-NF CHART Project course will be provided. Applications for the Nippon Foundation course (Sep - Dec 2019) are by responding to the IHO Circular Letter CL04 / 2019. The UKHO invites participants to its version of the course as part of bilateral arrangements.

Participants from the NIOHC region this year were:

UKHO Course (Jan - Apr 2018): Australia and Indonesia.

Nippon Course (Sept - Dec 2018): Indonesia, Pakistan and Sri Lanka.

ENC Training and Assistance



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

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

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

8. OCEANOGRAPHIC ACTIVITIES

This is described in the UK Generic National Report.

9. OTHER ACTIVITIES

UK Celebrations for World Hydrography Day

9.1 Acknowledging the 2018 World Hydrography Day theme “Bathymetry - the foundation for sustainable seas, oceans and waterways”, UKHO hosted an interactive family day in June at the Museum of Somerset in Taunton, UK. This free to attend event was aimed at showing the local community the importance of hydrography and the vital role it plays in our lives.

The event offered a range of maritime-themed activities for both children and adults, including navigating around obstacles by calculating depths, and an augmented reality sandbox showing bathymetry in action, with responsive contours projected onto the sand as it was moved and sculpted by visitors. The event was well attended by adults and children, giving them an opportunity to meet expert mariners and representatives from UKHO.

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

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

9.3 UKHO will celebrate World Hydrography Day focused on the 2019 theme - "Hydrographic information driving marine knowledge" - by inviting families of UKHO employees to attend an open day at UKHO's brand new office in June. This will include interactive and virtual reality displays to demonstrate the wealth of marine data that is used to inform a wide range of marine activities.

United Kingdom Overseas Territories

9.4 UK fulfils the Primary charting responsibilities of the UK Overseas Territories, namely British Indian Ocean Territory (BIOT) within the NIOHC region.

The UKHO continues to run an Overseas Territories Seabed Mapping Programme, which is reviewing the status of hydrography within the UK OTs, and continues to highlight the importance and utility, both locally and within UK government, of Hydrography and the wider blue economy within the context of the UK OTs. Under this programme, UKHO are delivering survey activity in a number of UK OTs during 2019, as well as working with OTs to ensure their compliance with the Hydrographic elements of SOLAS, and plan further similar activity in future years.

Broader UK Government Work

9.5 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 NIOHC region, BIOT 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 2018, the Blue Belt Programme held a BIOT Conservation Management Planning Workshop. By 2020, the desired outcome is BIOT has a marine environment that is managed to the highest international standards, with effectively regulated marines activities underpinned by robust science.

Commonwealth Nations

9.6 The UK is the current chair of the Commonwealth Heads of Government Meeting (CHOGM18), which was held between the 16th and 21st April 2018, in London. The next CHOGM will be in 2020, and the UKHO has demonstrated its commitment to furthering the Commonwealth's Blue Charter aspirations by announcing funding for a number of initiatives including continued support to the CME Programme.

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

UKHO's International Activities

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

International Hydrographic Organisation - HSSC		Chair/Vice Chair	Member
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	x
S-100WG	S-100 Working Group		x
TWCWG	Tides, Water Level & Currents Working Group		x
International Hydrographic Organisation - IRCC		Chair/Vice Chair	Member
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	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	x
WWNWS	Worldwide Navigational Warning Service		x
International Maritime Organisation		Chair/Vice Chair	Member
NAVTEX	NAVTEXT Coordination panel	x	x

International Association of Marine Aids to Navigation and Lighthouse Authorities		Chair/Vice Chair	Member
ENAV	E-navigation Committee		x
Other International Bodies		Chair/Vice Chair	Member
IAU	International Astronomical Union		x
CIRM	Comité International Radio-Maritime		x
BALTICO	Navarea1 member states meeting	x	
ISO	International Standards Organisation		x
OGC	Open Geospatial Consortium	x	x

10. CONCLUSION

10.1 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.

10.2 UK has a strong commitment to the Northern Indian Ocean and Red Sea areas. Since the previous NIOHC in April 2018, UKHO has continued its activity in support of its Primary Charting responsibilities and through its continuing interest in developing regional hydrographic self-sufficiency through capacity building measures.

10.3 There is a continuing challenge to link the scarce local data gathering resources into a broad programme of prioritised products.

10.4 The UKHO continues to enable safer navigation through an extensive portfolio of analogue and digital navigational products with global distribution capability. At the same time, the organization is also transforming to deliver a Marine Geospatial Information vision to unlock the wider utility of data within the maritime space.

Taunton

February 2019

UKHO POINTS OF CONTACT

UKHO Website: GOV.uk/UKHO

The general UKHO address is:
United Kingdom Hydrographic Office,
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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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For bilateral arrangements and other international partnering matters within the NIOHC region, please contact:

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

Email: SDImpactAnalysis@ukho.gov.uk

Input to the IHO Publication P-5 (*Yearbook*)**Country: United Kingdom and Northern Island****Organization: UK Hydrographic Office****P-5 Update sent via email to IHO 23.01.19 for UK as below**

Contact information/ Informations de contact / Información de contacto	
-National Hydrographer or equivalent -Directeur du service hydrographique ou équivalent -Director del Servicio Hidrográfico o equivalente	Post: National Hydrographer & Acting Chief Executive Name: Rear Admiral Tim Lowe Postal address: Admiralty Way, TAUNTON, Somerset, TA1 2DN United Kingdom Tel: +44 (0)1823 484444 Fax: +44 (0)1823 284077 Email: international.relationsukho@ukho.gov.uk
-Head of the Hydrographic Office (if different from the person indicated above) -Directeur du Service Hydrographique (si différent de la personne indiquée ci-dessus) -Director del Servicio Hidrográfico (si diferente de la persona indicada anteriormente)	Post: Name: Postal address: Tel: Fax: Email:
-Other point(s) of contact -Autre(s) point(s) de contact -Otros punto(s) de contacto	<i>No change</i>
-Web site -site web -sitio web	<i>No change</i>
Country information / Informations sur le pays/ Información sobre el país	
-Declared National Tonnage -Tonnage national déclaré -Tonelaje Nacional Declarado	Tonnage: 48102992 tons Date: 2018
-National day -Fête nationale -Fiesta nacional	<i>No change</i>
-Date of establishment and Relevant National Legislation -Date de mise en place et législation nationale pertinente -Fecha de constitución y legislación nacional pertinente	<i>No change</i>

-Date first joined IHO -Date d'adhésion à l'OHI -Fecha de adhesión a la OHI	<i>No change</i>
-Date ratification Convention -Date de ratification de la Convention -Fecha de ratificación de la Convención	<i>No change</i>
-Remarks on membership -Remarques sur l'adhésion -Comentarios sobre la adhesión	<i>No change</i>
Agency information/ Information sur l'agence/ Información sobre la agencia	
-Top level parent organisation -Organisme mère -Organización asociada de nivel superior	<i>No change</i>
-Principal functions of the organisation or the department -Attribution principales de l'organisme ou du département -Principales funciones de la Organización o departamento	<i>No change</i>
-Annual operating budget -Budget annuel -presupuesto anual	<i>No change</i>
-Total number of staff employed -Effectifs totaux -Número total de personal empleado	<i>No change</i>
-Number of INT charts published -Nombres de cartes INT publiées -Número de cartas INT publicadas	<i>No change</i>
-Total number of paper charts published-Nombre total de cartes papier publiées-Número total de cartas de papel publicadas	739 SNC (2018)
-Number of ENC cells published -Nombres de cellules ENC publiées	2966 GB cells (2018)

-Número de células ENC publicadas				
-Number of Other charts -Nombre d'Autres cartes -Número de Otras cartas	<i>No change</i>			
-Type of publications produced -Type d'ouvrages produits -Tipo de publicaciones producidas	<i>No change</i>			
-Detail of surveying vessels/ aircraft -Détail des bâtiments hydrographiques / aéronefs -Detalle de los buques hidrográficos / aeronaves <i>No change</i>	-Name -Nom -Nombre	-Displacement -Déplacement -Desplazamiento	-Date Launched -Date de mise en service -Fecha de botado	-Number of crew -Nombre de l'équipage -Tripulación
-Other information of interest -Autres informations utiles -Otra información de interés	<i>No change</i>			

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: British Indian Ocean Territory (BIOT)

C-55 Summary for:				Comments on Charts: New Editions published in August 2017 of four charts covering changes to the regulations and restrictions affecting the Strict Nature Reserve areas in the outer islands. ENC covers the only significant port - Diego Garcia.
Country:	UK - British Indian Ocean Territory			
Country Iso Code:	IOT			
Country SubCode:	IO			
INT Region:	J			
Country/Depend:	United Kingdom of Great Britain and Northern Ireland - British Indian Ocean Territory			
Last updated:	11/02/2019			
Provided by:	UK			
Chart coverage	Passage (%)	Coastal (%)	Port (%)	Comments on Surveys: 1. Depths fall away sharply at the edge of the atolls. 2. Apart from Diego Garcia, modern surveys are required in the other atolls to locate all dangers.
INT	100	70	100	
RNC	100	70	100	
ENC	100	70	50	
Status of Paper Charts				
Paper charts with depths in meters (%)			100	
Paper charts referenced to a satellite datum (%)			100	
Status of surveys	Adequate (%)	Resurvey (%)	No survey (%)	
0-200m	5	0	95	
> 200m	0	0	100	

MSI	Y/N	Comments on MSI:
Local warning	Unknown	Local authority responsibility - no requirements 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.
GMDSS	Y/N	Comments on GMDSS:
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: Eritrea - no change to current publication

Country: Maldives

C-55 Summary for:				Comments on Charts: 1. Figures provided by UK. 2. Large scale coverage is confined to Maale, Ihavandhippolhu and Addoo Atolls.
Country:	Maldives			
Country Iso Code:	MDV			
Country SubCode:	MDV			
INT Region:	J			
Country/Depend:	C			
Last updated:	11/02/2019			
Provided by:	UK			
Chart coverage	Passage (%)	Coastal (%)	Port (%)	Comments on Surveys: 1. Data provided by UK. 2. Depths fall away dramatically on the edge of each atoll and the risk to shipping from the lack of surveys is very slight. 3. The priority is modern survey of the atolls, including sidescan sonar of the routes into Maale. 4. Areas throughout the Maldives have been surveyed by the Indian Navy. Data has not yet been released to the primary charting authority for charting purposes.
INT	100	100	20	
RNC	100	100	20	
ENC	100	20	20	
Status of Paper Charts				
Paper charts with depths in meters (%)			100	
Paper charts referenced to a satellite datum (%)			100	
Status of surveys	Adequate (%)	Resurvey (%)	No survey (%)	
0-200m	0	3	97	
> 200m	0	1	99	

MSI	Y/N	Comments on MSI:
Local warning	NO	
Coastal warning	NO	
Nav warning	YES	Only via NAVAREA coordinator
Port warning	NO	
GMDSS	Y/N	Comments on GMDSS:
Master Plan	NO	
Area A1	NO	
Area A2	NO	
Area A3	NO	
NAVTEX	NO	
SafetyNet	NO	

Country: Seychelles

C-55 Summary for:				Comments on Charts: 1. Figures provided by UK. 2. Large scale chart coverage is restricted to the majority of the inhabited islands.
Country:	Seychelles			
Country Iso Code:	SYC			
Country SubCode:	SYC			
INT Region:	H			
Country/Depend:	C			
Last updated:	11/02/2019			
Provided by:	UK			
Chart coverage	Passage (%)	Coastal (%)	Port (%)	Comments on Surveys: 1. The geological formation of the Seychelles is such that depths beyond the shelf edge fall away dramatically from approximately 50m to 2000m. The majority of this area is covered only by passage soundings. The majority of the area of the Seychelles Bank between Mahé, Silhouette, Praslin, and la Digue islands has been surveyed by the Indian Navy. Data has not yet been released to the Primary Charting Authority for charting purposes. No NMs have been issued warning of navigational dangers. 2. Priorities are: a. Survey of the main north and south approach routes to Victoria. b. The banks and vigias near I. Coetivy lie on the flanks of a trans-ocean sea-lane and require thorough examination. c. The shoal areas on the N and S edge of the Seychelles Bank where it is transitted by the lane between the defined "Areas to be avoided" require survey to full modern standards. d. I. Denis, I. aux Vaches, Les Amirantes, Bancs Africains and Desroches all require survey to full modern standards. 3. A resurvey programme is to be conducted in Victoria Harbour and approaches following harbour works.
INT	100	100	100	
RNC	100	100	100	
ENC	100	75	50	
Status of Paper Charts				
Paper charts with depths in meters (%)			100	
Paper charts referenced to a satellite datum (%)			100	
Status of surveys	Adequate (%)	Resurvey (%)	No survey (%)	
0-200m	25	40	35	
> 200m	0	0	100	

MSI	Y/N	Comments on MSI:
Local warning	YES	
Coastal warning	NO	
Nav warning	YES	Via NAVAREA VII Co-ordinator.
Port warning	YES	Passed to UKHO.
GMDSS	Y/N	Comments on GMDSS:
Master Plan	YES	
Area A1	NO	Planned
Area A2	NO	Planned
Area A3	NO	
NAVTEX	YES	
SafetyNet	NO	

Input to the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*)
Country: Somalia - no change to current publication

Input to the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*)
Country: Sudan - no change to current publication

Country: Yemen

C-55 Summary for:				Comments on Charts: The chart coverage of the Yemen is adequate for the ports, approaches and for passage. The coastal coverage is not complete along the Gulf of Aden coast. However due to the nature of the seabed the current charting provides the mariner with enough detail for safe navigation in this area.
Country:	Yemen			
Country Iso Code:	YEM			
Country SubCode:	YEM			
INT Region:	J			
Country/Depend:	C			
Last updated:	11/02/2019			
Provided by:	UK			
Chart coverage	Passage (%)	Coastal (%)	Port (%)	Comments on Surveys: Priorities are: a. Maritime Shipping Routes: modern survey of all shoal areas between the Hanish Islands and a point 15nm N of Jebel At Tair. A TSS is proposed west of Jebel At Tair. b. Ports and Approaches: the approaches to Salif, Hodeidah and Mokha
INT	100	50	100	
RNC	100	50	100	
ENC	100	50	100	
Status of Paper Charts				
Paper charts with depths in meters (%)			100	
Paper charts referenced to a satellite datum (%)			100	
Status of surveys	Adequate (%)	Resurvey (%)	No survey (%)	
0-200m	1	6	93	
> 200m	5	2	93	

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

Country: Yemen Socotra Island

C-55 Summary for:				Comments on Charts: The chart coverage of Socotra is coastal and passage. There are currently no ports charted.
Country:	Yemen Socotra Island			
Country Iso Code:	YEM			
Country SubCode:	YEM1			
INT Region:	J			
Country/Depend:	C			
Last updated:	11/02/2019			
Provided by:	UK			
Chart coverage	Passage (%)	Coastal (%)	Port (%)	Comments on Surveys: Numerous vigias exist in the waters around Socotra.
INT	100	100	0	
RNC	100	100	0	
ENC	100	100	0	
Status of Paper Charts				
Paper charts with depths in meters (%)			100	
Paper charts referenced to a satellite datum (%)			100	
Status of surveys	Adequate (%)	Resurvey (%)	No survey (%)	
0-200m	0	0	100	
> 200m	2	0	98	

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

National MSI Self-Assessment

Country: United Kingdom - British Indian Ocean Territory (BIOT)*Organization:* United Kingdom Hydrographic Office

1. Maritime area

N/A

2. Operational Points of Contact for the National Coordinator

INSTITUTION	TELEPHONE	FACSIMILE	EMAIL
HQ British Forces	+246 370 3500	+246 370 3943	

3. GMDSS Master Plan

GMDSS Master Plan up to date

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

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

No MSI broadcasts for some time. Any MSI in the area is sent to UKHO for assessment and then forwarded to NAVAREA VIII with recommendations for SafetyNET broadcast as a Navigational Warning.