

UNITED KINGDOM NATIONAL REPORT

to the

16th NORTH INDIAN OCEAN HYDROGRAPHIC COMMISSION (NIOHC) CONFERENCE

Chittagong, Bangladesh 14-16 March 2016

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 benefits which derive from the close liaison which exists between UK's hydrographic office (UKHO) and UK's maritime administration (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



1.3 Details of the UKHO's organization 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.

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 Any requests for survey assistance from nations within the NIOHC region will be assessed within the UK MoD, with advice from UKHO. UKHO can also contribute to project management of hydrographic surveys, and has a post dedicated to the phased development of new international survey activity and capability. It acts as the initial point of contact for UKHO

involvement in direct overseas surveying schemes, including British Overseas Territories and Regional Hydrographic Commission initiatives. Further information can be obtained from Mr. Sam Harper (samuel.harper@ukho.gov.uk).

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

GB Chart Number	INT Chart	Title	Published
573	7402	Approaches to Chennai	21-May-15
2069	7397	Point Calimere To Chennai	21-May-15
569	-	Approaches to Krishnapatnam	04-Jun-15
1488	7344	Approaches to Port Pipavav	04-Jun-15
2623	-	Mumbai Docks	04-Jun-15
801	7143	Plans in the Gulf of Aqaba	02-Jul-15
4070	70	Indian Ocean Southern Part	27-Aug-15
4072	72	Indian Ocean Western Part	27-Aug-15
732	7426	Pussur River and Approaches	12-Nov-15
3492	7129	Approaches to Port Sudan	21-Jan-16
81	-	Sawakin to Ras Qassar	18-Feb-16

Table 1

3.3 Charts scheduled for publication in the next six months.

NE 569		Approaches to Krishnapatnam
NC 571	(INT 7402)	Approaches to Chennai
NE 1488	(INT 7344)	Approaches to Pipavav
NC 2069	(INT 7397)	Point Calimere to Chennai
NE 2623		Mumbai Docks
NE 675		Harbours and Anchorages on the Coast of Sudan

3.4 Charts scheduled for independent withdrawal in the next six months

233	(INT 7141)	Suez Canal (Qanat as Suways)
3214	(INT 7140)	Bur el Suweis (Port of Suez)

Digital Charts



- 3.5 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.
- 3.6 Within the NIOHC region, the UKHO has released a total of 127 ENC cells; the breakdown by usage band is shown in the table 2; the limits of the ENC's are shown with figures 1-5.

NIOHC Region Released Cells		
ENC Usage Band	Number of GB ENCs	
Overview	6	
General	15	
Coastal	33	
Approach	40	
Harbour	33	
Total number of released		
ENCs	127	

Table 2

NIOHC GB Overview Usage Band

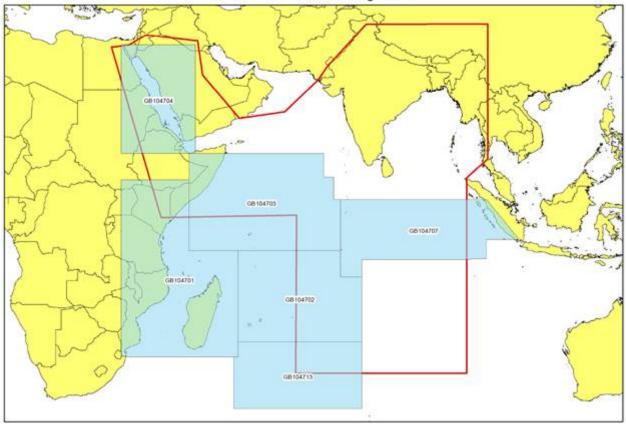


Figure 1

NIOHC GB General Usage Band

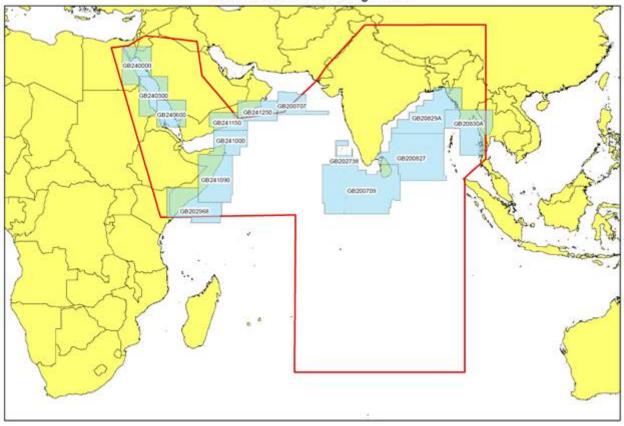


Figure 2
NIOHC GB Coastal Usage Band

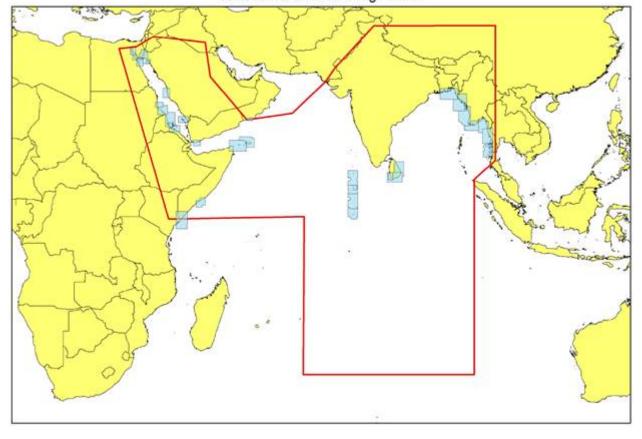


Figure 3



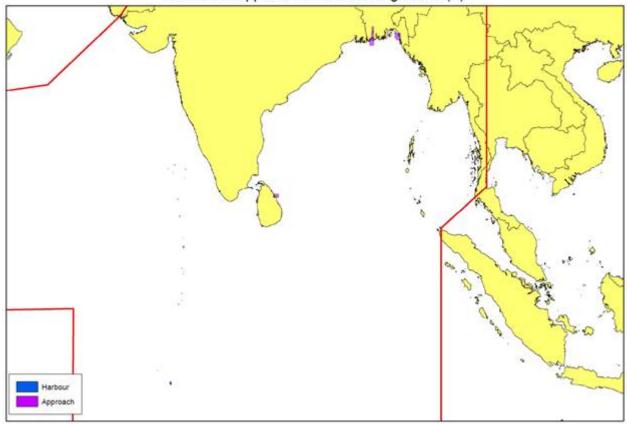


Figure 4
NIOHC GB Approach & Harbour Usage Band (W)

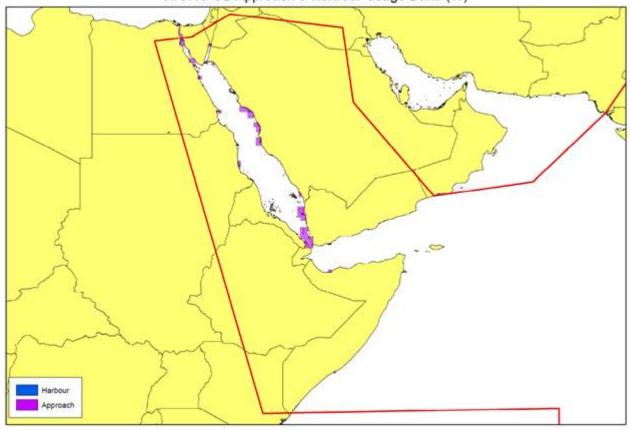


Figure 5

ENC Distribution

- 3.8 The UKHO, along with other European hydrographic offices, was a founder member of the IC-ENC RENC. IC-ENC (International Centre for ENCs) concentrates its efforts on the validation and consistency of ENC data and leaves the marketing of ENCs to the shipping industry to its value-added resellers and chart agents. Additional details can be found on the IC-ENC website (www.ic-enc.org).
- 3.9 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 website (www.ukho.gov.uk)

4. PUBLICATIONS





4.1 The Admiralty Sailing Directions in the NIOHC region is as follows:

NP3 Africa Pilot Vol 3

NP21 Bay of Bengal Pilot

NP38 West Coast of India Pilot

NP64 Red Sea and Gulf of Aden Pilot

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

Digital Publications



- 4.3 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.
- 4.4 The UKHO has produces e-Nautical Publications (e-NPs) which are the digital version of Admiralty paper Nautical Publications. The e-NPs are subscription based pdf style e-books that are updatable by Notices to Mariners.
- 4.5 The Admiralty digital catalogue may be downloaded free from the UKHO website (www.ukho.gov.uk); it includes details of all paper and digital charts and publications and is updated weekly. It is a useful tool to check on the ENC coverage within the region and to show the latest edition dates of both charts and publications.

5. MARITIME SAFETY INFORMATION



- 5.1 The UK's principal responsibility within the NIOHC region is for its Overseas Territory of British Indian Ocean Territory (BIOT), which is an almost exclusively military facility. Therefore any MSI broadcast is to meet military needs rather than those of the GMDSS. 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 Assistance in 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.
- 5.4 The current Admiralty weekly Notices to Mariners are supplemented by daily updates and are available on UKHO website.

6. C-55 (previously known as S-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; this entry is up to date. We have incorporated the additional breakdown of chart coverage (percentage of metric and WGS84 charts) as requested in IHO Circular Letter 102/2008.
- 6.2 UK has also provided assistance to update C-55 entries to other countries, where the UKHO retains the primary charting responsibility, 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 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 MBES Processing courses for Bangladesh and Sri Lanka (both delivered by CARIS) together with an Introductory course on MBES operations in conjunction with the IIC Academy in Visakhapatnam, India
- 7.3 UKHO has a post dedicated to 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 capacity building activities, including UK involvement in regional hydrographic commission initiatives and IHO Capacity Building Sub Committee activities. Further information can be obtained from Mr Jeff Bryant (jeff.bryant@ukho.gov.uk).



7.4 A general description of training provided by UKHO is included in the UK Generic National Report. Further details of the training opportunities offered by the UKHO can be found on the UKHO website.

Regional Achievements

7.5 The UKHO has provided cartographic training to candidates from Bangladesh, Egypt, Myanmar, Oman, Pakistan, Sri Lanka & Thailand under the Nippon Foundation CAT B programme; Seychelles under an IMO course and Bangladesh, Mauritius, Oman and Sri Lanka under IHO Nautical Cartography - Module 1 programme.



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

World Hydrography day

9.1 The UKHO celebrated World Hydrography Day 2015 in conjunction with The Institute of Marine Engineering, Science and Technology event "Oceans of Knowledge: Realising the Benefits of Ocean Information" at the Royal Institution, London, followed by an evening reception hosted by Mr John Humphrey (Chief Executive, UKHO) and Rear Admiral Tim Lowe (National Hydrographer, UKHO).



9.2 Our World Hydrography Day guests, including Robert Ward, President of the IHO, were invited from across the maritime sector to an event exploring the economic, safety and environmental benefits of improved observation and prediction of our oceans and seas, which

inevitably increased awareness of the vital role that hydrography plays in everyone's life.

- 9.3 Julian Brazier MP, Parliamentary Under Secretary of State and Minister for Reserves, presented the annual Alexander Dalrymple award to this year's winner, Rear Admiral Patricio Carrasco, Director of the Hydrographic and Oceanographic Service of the Chilean Navy (SHOA). The award is a symbol of recognition for outstanding dedication and contribution to hydrography and, as such, is an extremely prestigious award in this sector. It takes its name from Alexander Dalrymple who established the Hydrographic Office in 1795 and is regarded as a leading figure in the history of the development of hydrography.
- 9.4 The 2016 UK World Hydrography celebrations will be held across the country under the theme of Hydrography the key to well-managed seas and waterways as an outreach programme and will culminate in an event in London.

British Overseas Territories (BOTs)

9.5 UK undertakes Primary charting of the British Indian Ocean Territory with the NIOHC region; the UKHO has begun a programme of work to review the status of hydrography within the British Overseas Territories (BOT), and continues to highlight the importance and utility, both locally and within UK government, of Hydrography and the wider blue economy within the context of the BOTs. This has involved raising awareness of the importance of hydrography as well as seeking opportunities to collaborate with regional projects. In addition, the UKHO has supported the use of Royal Navy assets to supplement survey activity in the region. The UKHO has been working with the UK Foreign and Commonwealth Office to conduct an audit of data collected under the Marine Scientific Research licensing programme; the intention is that where bathymetric data has been collected but not supplied to the UKHO, this will be requested and assessed for charting action

Satellite Derived Bathymetry (SDB)

9.6 Following the 2014 trial of Satellite Derived Bathymetry (SDB) conducted in Antigua, the UKHO published our first chart (GB 2066) containing data collected using this technique. Whilst this was only made possible because the 'ground truth' reference data collected as part of the trial, it allowed the uncertainties to be quantified; it does mark a step change for the UKHO and the way that unconventional data gathering techniques are used.

International

9.7 Due to its technical expertise, primary charting responsibilities and BOTs the UK is represented at the following groups:

Inte	rnational Hydrographic Organisation	Chair/Vice Chair	Member
ABLOS	Advisory Board on Law of the Sea	х	Х
CSBWG	Crowd-sourced Bathymetry Working Group		Х
DPSWG	Data Protection Scheme Working Group	х	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		Х
	Committee		
MSDIWG	Marine Spatial Data Infrastructure Working		Х
	Group		
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		Х
	Group		
WENDWG	Worldwide ENC Database Working Group	х	Х
WWNWS	Worldwide Navigational Warning Service		Х

Inte	ernational Hydrographic Organisation	Chair/Vice Chair	Member
HCA	Hydrographic Commission on Antarctica		Х
MACHC	Meso American and Caribbean Sea		Х
	Hydrographic Commission		
MBSHC	Mediterranean and Black Seas Hydrographic		Х
	Commission		
NIOHC	North Indian Ocean Hydrographic		Х
	Commission		
NSHC	North Sea Hydrographic Commission		Х
RSAHC	ROPME Sea Area Hydrographic Commission		Х
SAIHC	Southern Africa and Islands Hydrographic		Х
	Commission		
SWPHC	South-West Pacific Hydrographic		Х
	Commission		
International Maritime Organisation		Chair/Vice Chair	Member
NCSR	Navigation, Communication, Search and		Х
	Rescue		
NAVTEX	NAVTXT Coordination panel	х	Х
DRWG	Document Review Working Group of		Х
	NAVTXT		
Internation	nal Association of Marine Aids to Navigation	Chair/Vice	Member
	and Lighthouse Authorities	Chair	
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

- 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, through its primary charting 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 new charts and new editions.
- 10.5 The provision of adequate ENC coverage, in support of the IMO carriage requirement for ECDIS that comes progressively into force from 2012, presents a significant challenge globally; the NIOHC is progressing ENC coverage.
- 10.6 With a diverse range of shipping interests in the Region, improving the effective distribution of hydrographic publications and updates remains paramount.

Taunton, February 2016

UKHO POINTS OF CONTACT

UKHO Website: www.ukho.gov.uk

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

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For all matters related to charting and hydrographic data in the NIOHC region, please contact:

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