



UK Hydrographic
Office

SAIHC 17- 6.7 UK National Report

UNITED KINGDOM NATIONAL REPORT

to the

SOUTHERN AFRICAN AND ISLANDS
HYDROGRAPHIC COMMISSION (SAIHC)
17TH MEETING

3 - 4 February 2021
(Virtual Meeting)

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

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1. UK HYDROGRAPHIC OFFICE (UKHO)

UK Delivery of Hydrographic Services

1.1 The UK delivery of hydrographic services is described in the UK Generic National Report; it is worth highlighting, however, the close liaison which exists between UK's Hydrographic Office (UKHO) and UK's maritime administration Maritime & Coastguard Agency in providing a coordinated 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.¹

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 SAIHC 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.

2. REGIONAL ACTIVITY

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. Despite current restrictions as a result of COVID-19, the UKHO is continuing to plan and deliver Programme activity in several UK OTs through to 2021, as well as working with OTs to ensure their compliance with the Hydrographic elements of SOLAS.

2.2 The UK fulfils the Primary Charting Authority responsibilities of the following UK OTs within the SAIHC region: Ascension Island, St Helena and Tristan De Cunha.

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 fifth year and has seen recent completion of an airborne lidar survey in Bermuda which captured bathymetry data in Bermuda's coastal waters down to approximately 40m water depth.

Commonwealth Marines 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.

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, protect their environment and food security, and ultimately improve the livelihood of local communities. Despite entering its final year, UKHO continues to take a

¹. This will be updated in the course of 2021.

leading role in this programme with a series of capacity building training courses planned through to 2021. We are now in discussions regarding possible continuation of the programme.

Surveys and Capacity Building

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. 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 considered when prioritising the work of the Civil Hydrography Programme (CHP).

2.7 In total, UKHO survey operations under the OTSMP and CME programme have covered a combined area of nearly 20,000KM².

2.8 In February 2020, UKHO held a hydrographic governance workshop in South Africa. Fourteen representatives from a number of SAIHC nations attended, including Angola, Madagascar, Malawi, Mozambique, Namibia, South Africa, and the Seychelles. The workshop was designed to help raise knowledge of the need for and requirements of hydrographic governance.

2.9 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 SAIHC region.

2.10 Any requests for survey assistance from nations within the SAIHC 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).

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 SAIHC region.



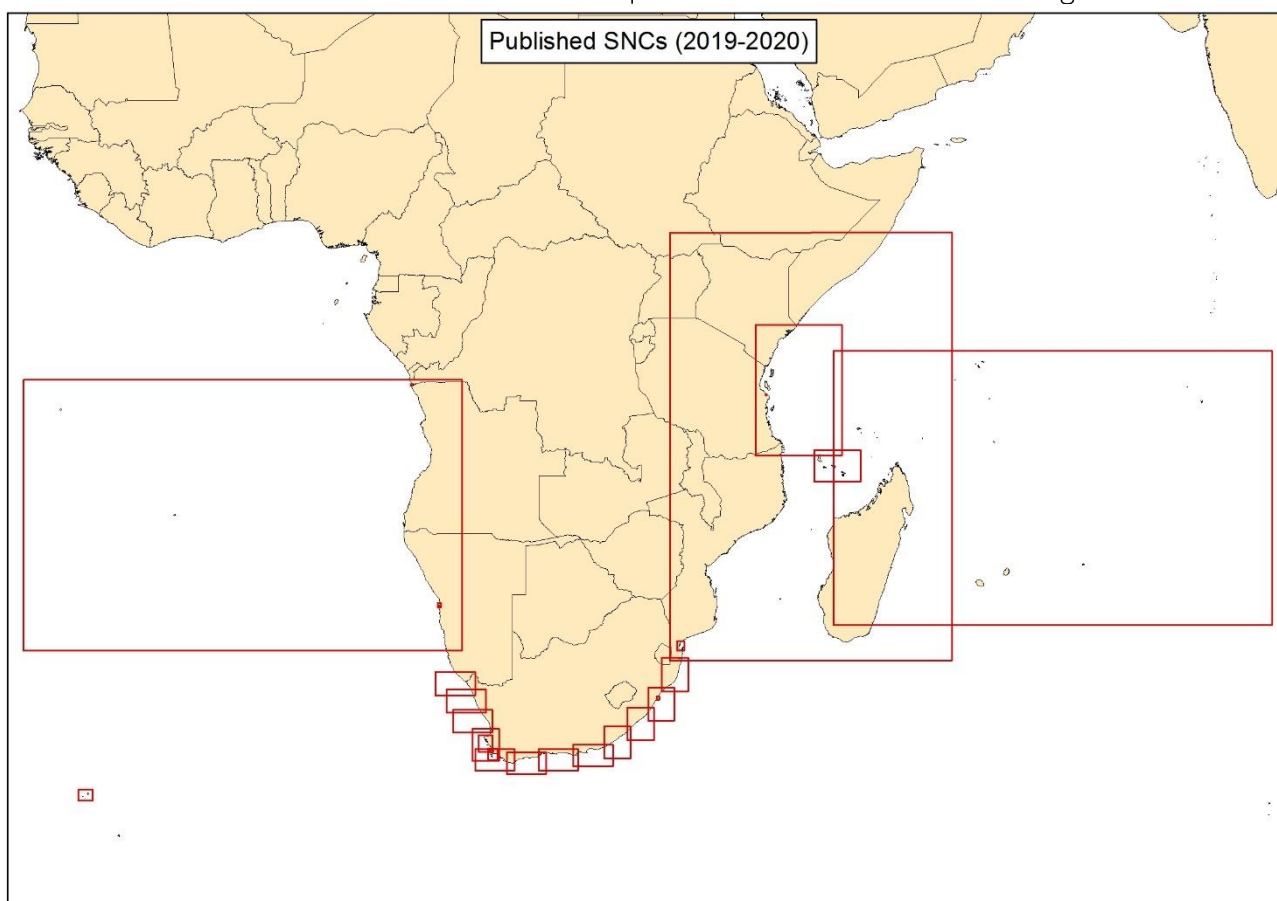
Paper Charts

3.2 Information on UK's chart portfolio is provided on the ADMIRALTY website. There have been 25 new editions of SNCs and 1 new ENC cell (GB4A0644_ED1_001 at Maputo) published since Sept 2019. There have been 5 independent withdrawals. The following charts have been published since the last SAIHC meeting as New Charts or full New Editions:

GB Chart Number	INT Chart Number	Title	Published
4159	7540	Great Fish Point to Mbashe Point	12/11/2020
4171	7560	Port Shepstone to Tugela River	12/11/2020
4170	7561	Approaches to Durban	12/11/2020
2078	2650	Port Nolloth to Island Point	12/11/2020
3870	2640	Chamais Bay to Port Nolloth	12/11/2020

GB Chart Number	INT Chart Number	Title	Published
4151	2670	Cape Deseada to Table Bay	05/11/2020
4150	-	Table Bay to Valsbaai	05/11/2020
4153	7510	Cape Agulhas to Cape St Blaize	05/11/2020
4148	2681	Approaches to Table Bay	15/10/2020
4163	7550	Mbashe Point to Port Shepstone	15/10/2020
4156	7530	Cape St Francis to Great Fish Point	15/10/2020
4148	2681	Murrays Bay Harbour	15/10/2020
4203	203	Ascension Island and Luanda to Walvis Bay	08/10/2020
4172	7570	Tugela River to Ponta do Ouro	01/10/2020
4155	7520	Cape St Blaize to Cape St Francis	24/09/2020
4141	2660	Island Point to Cape Deseada	24/09/2020
4152	2680	Table Bay to Cape Agulhas	24/09/2020
4146	-	Cape Columbine to Table Bay	24/09/2020
2949	7056	Mtwara to Lamu	09/07/2020
4701	701	Maputo to Muqdisho	09/07/2020
4702	702	Chagos Archipelago to Madagascar	09/07/2020
1769	2655	Tristan da Cunha Group	09/04/2020
659	2513	Approaches to Soyo	20/02/2020
3895	7710	Archipel des Comores (Comoros)	20/02/2020
4137	2612	Walvis Bay Harbour	13/02/2020
4138	2613	Approaches to Walvis Bay	13/02/2020
693	7692	Dar es Salaam	07/11/2019
644	7581	Baia de Maputo	26/09/2019

New Chart and full New Editions published since last SAIHC meeting.



The following charts are scheduled for publication in the next six months:

GB Chart Number	INT Chart Number	Title
4180	7052	Durban to Inhambane
2930	7580	Jesser Point to Boa Pax

The following charts are scheduled for independent withdrawal in the next six months:

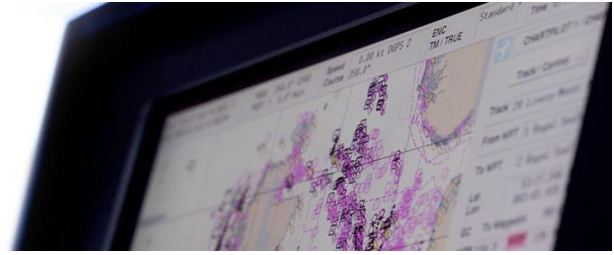
GB Chart Number	INT Chart Number	Title	Withdrawn
650	-	Quelimane	10/09/2020
647	7666	Pemba (Porto Amelia)	10/09/2020
649	-	Approaches to Nacala	16/07/2020
2758	-	Porto da Beira	16/07/2020
1003	-	Approaches to Porto da Beira	16/07/2020

The following ENC's have been cancelled:

ENC GB353210 was replaced by ENC IN32527M which was issued by INHO on the 8th Nov 2019

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 SAIHC region.



ENCs

3.4 Within the SAIHC region, the UKHO has released a total of 104 ENC cells. The breakdown by usage band is shown in the table below:

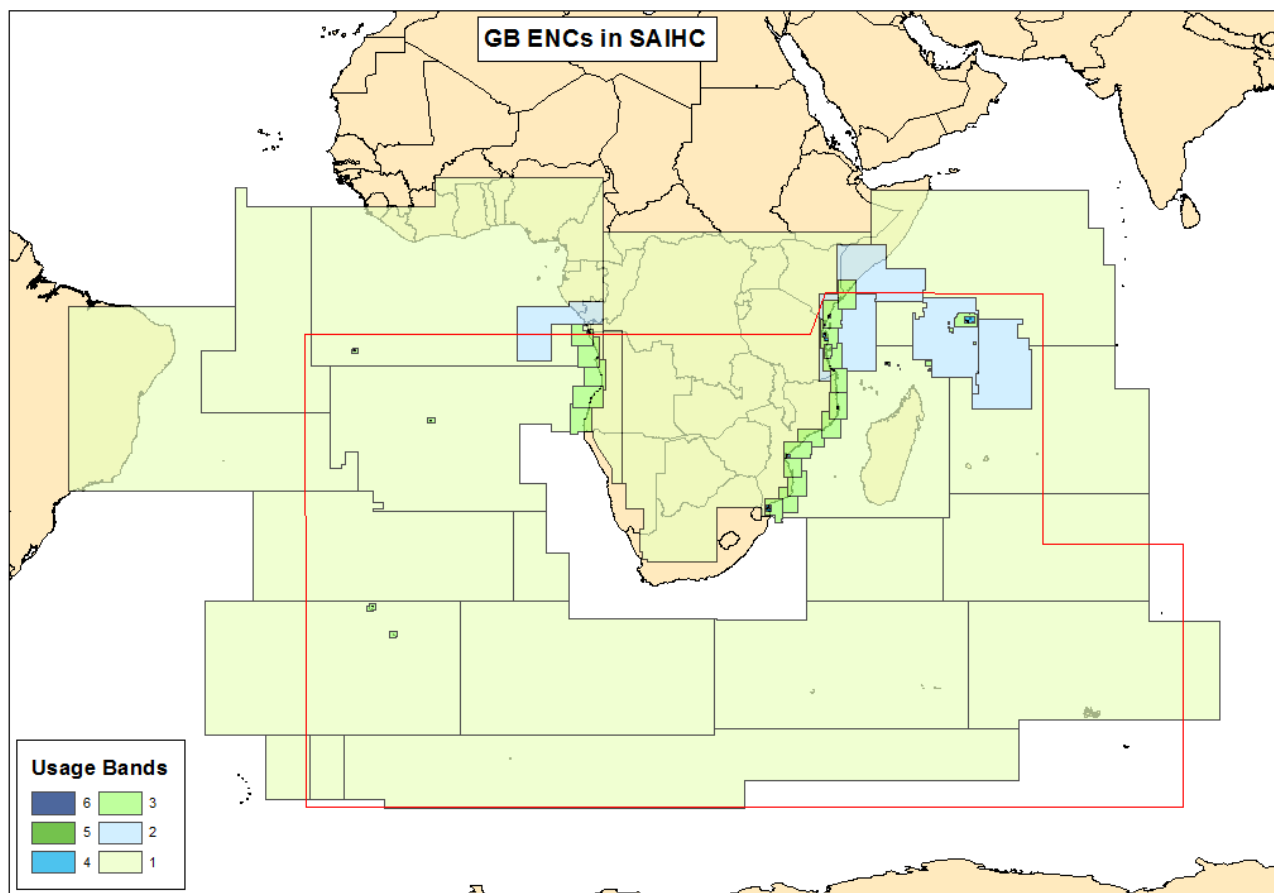
SAIHC Region Released Cells		
ENC Usage Band	Number of GB ENC's	Comment
Overview	18	
General	5	
Coastal	29	
Approach	33	
Harbour	16	
Berthing	3	
Total number of released ENCs	104	

ENC totals by usage band as produced by UKHO

The tables below show revisions to GB ENC coverage for the SAIHC region during 2019/20. The subsequent diagram illustrates the current coverage of GB ENCs within the SAIHC Region.

New Cells Sep 2019 – Dec/Jan 2020	Week No.
GB4A0644	38/19

Cancelled Cells Sep 2019 – Dec/Jan 2020	Week No.	Replacements
GB300678	WK14/20	
GB353210	WK49/19	IN32527M



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).

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).

4. PUBLICATIONS

Paper Publications



4.1 The Admiralty Publications in the SAIHC region are as follows:

- NP77 ADMIRALTY List of Lights and Fog Signals Vol. D Eastern Atlantic Ocean, Western Indian Ocean, Arabian & Red Seas
- NP203 ADMIRALTY Tide Tables (ATT) Volume 3, Indian Ocean
- NP281 (1) ADMIRALTY List of Radio Signals Maritime Radio Stations Europe, Africa and Asia

- NP282 ADMIRALTY List of Radio Signals Volume 2 Radio Aids to Navigation, Satellite Navigation Systems, Differential GPS (DGPS) Legal Time, Radio Time Signals and Electronic Position Fixing Systems
- NP283(1) ADMIRALTY List of Radio Signals Volume 3 Part 1 Maritime Safety Information Services. Europe, Africa and Asia (excluding the Far East)
- NP284 ADMIRALTY List of Radio Signals: Volume 4, Meteorological Observation Stations
- NP285 ADMIRALTY List of Radio Signals: Volume 5, Global Maritime Distress and Safety System
- NP286(8) ADMIRALTY List of Radio Signals: Volume 6 – Part 8, Pilot Services, Vessel Traffic Services and Port Operations
- NP1 ADMIRALTY Sailing Directions Africa Pilot Vol 1
- NP2 ADMIRALTY Sailing Directions Africa Pilot Vol 2
- NP3 ADMIRALTY Sailing Directions Africa Pilot Vol 3
- NP39 ADMIRALTY Sailing Directions South Indian Ocean Pilot

New editions published since last SAIHC Sep 2019:

NP 77 – Published 03/09/20
 NP 203 -21 Published 06/08/20
 NP 281 (1) Published 05/11/20
 NP 282 (1) & (2) Published 26/03/20
 NP 283 (1) Published 03/12/20
 NP 284 Published 27/02/2020
 NP 285 Published 22/10/20
 NP 286 (8) Published 02/04/20
 NP 1 Published 10/12/20
 NP 39 Published 24/09/20

New editions to be published 2021

NP 77 – Expected publication date 10/06/21
 NP 203-22 Expected publication date 15/07/21
 NP 281 (1) Expected publication date 21/10/21
 NP 282 (1) & (2) Expected publication date 18/03/21
 NP 283 (1) Expected publication date 02/12/21
 NP 284 Expected publication date 28/01/21
 NP 285 Expected publication date 01/07/21
 NP 286 (8) Expected publication date 01/04/21

New editions to be published 2022

NP 2 Date to be confirmed

These publications are all maintained on a continuous revision cycle and new editions are either published annually or Sailing Directions 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). 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 SAIHC region is for its UK Overseas Territories - namely St Helena, Ascension and Tristan da Cunha, along with those Commonwealth of Nations countries where the United Kingdom is the producer of primary charting, including Kenya, Seychelles and Tanzania.

5.2 UK maintains close liaison with the co-ordinators for NAVAREA VII (South Africa - which covers most of the SAIHC area) and NAVAREA VIII (India - which covers a small part of the area to the NE and East). Meteorological Information and Navigational Warnings are promulgated on SafetyNET through Inmarsat; coastal warnings are broadcast on NAVTEX from stations at Walvis Bay, Cape Town, Port Elizabeth, Durban, Cape Columbine, Mauritius and Mahe. Walvis Bay NAVTEX, which has been out-of-service since February 2011, remains temporarily suspended. Coastal warnings are also available on SafetyNET for the areas around Mayotte, Reunion, and the Kerguelen Islands.

5.3 GMDSS. There is a limited MSI broadcast within the SAIHC region with only Seychelles, Mauritius, South Africa and Namibia having established GMDSS or WWWNS facilities. Whilst the International SafetyNET service has been in existence for many years, expansion of NAVTEX services are required, particularly to cover the area of the Mozambique Channel.

5.4 Notices to Mariners. Assistance with promulgating Notices to Mariners and other paper and electronic chart correcting material should also be encouraged through co-operation with other hydrographic offices in the region if required. 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 Ascension Island, St Helena and Tristan da Cunha within the SAIHC area. The latest status is correctly depicted within C-55.

6.2 The UK has also provided assistance to update C-55 entries to other countries, including Kenya,

Seychelles, and Tanzania, where the UKHO is the producer of 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, 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. The UK will continue to contribute resources to both CBSC initiatives and to providing bilateral assistance.

7.2 The UKHO has a post dedicated to International Training and Capacity Building. Its key aims are to ensure that capacity building is properly considered in the UKHO activity and that the UKHO's capacity building activities are fully coordinated. It acts as the initial point of contact for the UKHO involvement in IHO capacity building activities, including UK involvement in regional hydrographic commission initiatives and IHO CBSC activities.

Cartographic Training provided by UKHO

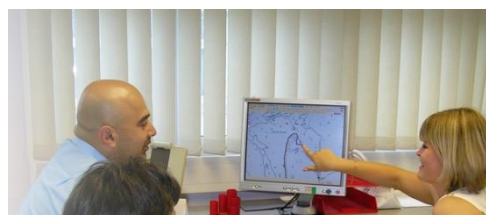
7.3 The UKHO provides two annual CAT B accredited nautical cartography training opportunities to FGHO students. These are the IHO-NF GEOMAC course which is funded by the Nippon Foundation and the newly established UKHO course. Applications for the Nippon Foundation course are by responding to the IHO Circular Letter on the subject (this year it was CL09 /2020). The UKHO invites participants to its version of the course as part of bilateral arrangements.



Due to ongoing COVID-19 pandemic the UKHO have postponed the Nippon Foundation funded course scheduled to begin September 2020 and aim to resume the course later in 2021.

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 Commander Fleet Operational Training - Hydrography, Meteorology and Oceanography

7.5 Nationally and internationally certified courses delivered by Commander Fleet Operational Training in Plymouth, are described in the UK Generic National Report.

8. OCEANOGRAPHIC ACTIVITIES

8.1 The UK participates on the IOC-IHO Guiding Committee for GEBCO, to support GEBCO's aim to provide the most authoritative, publicly available Bathymetric data sets for the world's oceans.

8.2 The UKHO participates on the IHO Tides, Water Levels and Surface Currents Working Group (TWCWG). Part of the WG activities involve Member States activities and experiences with long term [permanent] 'National' Tide Gauge Networks.

The UKHO is not directly tasked with owning and operating these at the UK national level – this is the remit of the National Tidal and Sea Level Facility (NTSLF, www.ntsfl.org) operated by the UK Environment Agency.

8.3 Further details are 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 and is currently establishing a UK Geospatial Strategy which is likely to form the foundation of a NSDI soon. The Commission is currently supporting several collaborative projects being undertaken by the UKHO which all 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 Para 11.5 of this document as well as most of the MSDI Working Groups within the Regional Hydrographic Commissions for which the UKHO has membership of. The UKHO represents the UK on the UNGGIM Working Group on Marine Geospatial Information and has recently agreed to lead UK input into the UNGGIM-Americas Caribbean Geospatial Development Initiative (CARIGEO).

We are actively working at creating a domain with the appropriate standards to support national and international MSDIs, a good example 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 several 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, which may be extended across the Geospatial Commission in due course subject to circumstances.

The UKHO is currently collaborating with one of its Primary Charting Authorities to develop an MSDI Data Management Solution on their behalf, to aid in making geospatial data more widely discoverable, accessible and usable. It is hoped this will be made available to a select group of user within the PCA for use by the end of November, and lessons learnt will directly inform further MSDI Professional Services available from the UKHO.

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 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; and
- Increasing the range of data which is ingested.

10. INNOVATION

10.1 The UKHO has launched its new ADMIRALTY Marine Innovation Programme, spearheaded by the UKHO's Research, Design and Innovation team. The programme will give innovators and start-ups a chance to develop new solutions that solve some of the world's most pressing challenges when it comes to our oceans. The launch of this Programme follows extensive research commissioned by the UKHO into the Blue Economy, which is estimated to be worth \$3.2 trillion by the year 2030.

10.2 Successful innovation programme participants will develop their own solutions for these areas, using ADMIRALTY data sets that range from seabed composition samples and bathymetric profiles of the seafloor, to tidal and navigational information. Entrants to some challenges will also work alongside leading experts in research, design and development at the UKHO, with winners receiving an opportunity to launch their products into some of the world's fastest growing marine sectors.

10.3 The themes for this year's Programme are as follows:

- Unlocking Autonomous Vessel Navigation;
- Transforming Maritime Risk & Insurance;
- Identifying Suitable Areas for Offshore Renewable Energy; and
- Open Innovation in Blue Carbon Sequestration Areas.

11. OTHER ACTIVITIES

UK Celebrations for World Hydrography Day (WHD)

11.1 The UKHO has celebrated World Hydrography Day and the theme of "Enabling Autonomous Technologies" with an Autonomous film uploaded to IHO and social media platforms. Due to COVID-19, the UKHO will be hosting a virtual ADMIRALTY Blue Data Conference 2021 with a close link to WHD covering the future of navigation.

Broader UK Government Work

11.2 The UK Member State, consisting of the UK, the Overseas Territories and Crown Dependencies, will be audited in 2021 (postponed from late 2020 by the IMO due to COVID-19 travel restrictions) against the IMO Instrument Implementation Code's (IIIC) and Mandatory IMO Member State Audit Scheme (MIMSAS). 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.

11.3 The Commonwealth Litter Programme (CLiP), is led by the UK through the Centre for Environment Fisheries and Aquaculture Science (Cefas). Funded by the UK Department for Environment, Food and Rural Affairs, 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 encompasses the following five pillars:

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

11.4 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 few the UK's Caribbean and South Atlantic Overseas Territories.

11.5 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.

For the SAIHC region, Tristan da Cunha, St Helena and Ascension Island are UK OTs in scope of the Blue Belt Programme. The main focus has been working with local government to improve marine management and using technologies such as near real-time analysis of satellite data for targeted enforcement of illegal, unreported and unregulated (IUU) fishing.

UKHO supported the Blue Belt Programme with the development and implementation of Recommended Areas to Be Avoided (ATBAs) around the Tristan da Cunha Group. The areas are designed to protect the islands from the ocean-going traffic between South America and Southern Africa.

11.6 Southern African Hydrographic Governance Workshop

UK secured wider funding from Her Majesty's Government (HMG) to support regional South African Marine Economies Programme. This enabled funding for Angola, Madagascar, Malawi, Mozambique, Namibia, South Africa and Seychelles to attend a five-day "Hydrographic Governance Workshop", held in Pretoria, February 2020.

A significant objective of this workshop was the development of a Hydrographic Governance Implementation Plan, of which MSDI forms a key part.

Photo I below shows the delegates and training team.



Photo 1 – Hydrographic Governance Workshop”, Pretoria, February 2020.

The UKHO’s International Activities

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

International Hydrographic Organization - HSSC		Chair/Vice Chair	Member
HSSC	Hydrographic Services and Standards Committee		x
DQWG	Data Quality Working Group		x
ENCWG	ENC Standards Maintenance Working Group	x	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
ABLOS	Advisory Board on the Law of the Sea		x
International Hydrographic Organization - IRCC		Chair/Vice Chair	Member
IRCC	Inter-Regional Coordination Committee		x
CBSC	Capacity Building Sub-Committee		x
CSBWG	Crowd-sourced Bathymetry Working Group		x
MSDIWG	Marine Spatial Data Infrastructure Working Group		x
WENDWG	Worldwide ENC Database Working Group		x
WWNWS	Worldwide Navigational Warning Service		x
GEBCO	General Bathymetric Chart of the Oceans		x
HCA	Hydrographic Commission on Antarctica		x
MACHC	Meso American and Caribbean Sea Hydrographic Commission	x	x
MBSHC	Mediterranean and Black Seas Hydrographic Commission		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
International Maritime Organization		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	Navarea I member states meeting		x
ISO	International Standards Organisation		x
OGC	Open Geospatial Consortium		x
UNGGIM WGMGI	UNGGIM Working Group on Marine Geospatial Information		x
CARIGEO	Caribbean Geospatial Development Initiative		x

12. CONCLUSION

12.1 UK continues its strong commitment to the Southern African and Islands region, through Chairmanship of SAIHC. Furthermore, we continue our primary charting activity and efforts in developing regional hydrographic self-sufficiency through capacity building measures and more recently the delivery of the Southern African and Islands governance workshop funded by UK government. Outside of this specific programme, UK continues to explore wider funding opportunities to benefit the Mariner and Marine User.

12.2 In recognition of the importance of MSDI, UKHO has continued to take this work forward through the SAIHC MSDI working group. This group has recognised the strategic priority work of Seabed 2030, which has been incorporated into the forthcoming plenary session.

12.3 As with other regional commissions, there is an ongoing challenge to maintain strong communication links in the face of COVID-19 pandemic. To mitigate this UKHO has continued to forge links through a variety of digital communication platforms with some great success. This included the virtual hosting of the SAIHC working groups (ICCWG and MSDIWG September 2020).

12.4 The provision of adequate ENC coverage, in support of the IMO carriage requirement for ECDIS, presented a challenge in the SAIHC region as well as other regions. Good progress continues to be made to improve the availability and quality of suitable ENC coverage along with digital publications to support the digital bridge. UKHO has supported ICCWG to propose regional ENC scheme options

12.5 Noting the increasing demand and the IHO direction to enable the maximum and widest use of Hydrographic maritime and marine information and data, the UKHO is continuing the journey into looking at how it can meet this demand as part of its efforts to development its Marine Geospatial Information credentials.

Taunton, January 2021

UKHO POINTS OF CONTACT

UKHO Website: GOV.uk/UKHO

The general UKHO address is:

United Kingdom 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.gov.uk
Telephone: +44 (0) 1823 484444

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International Capacity Building Manager
Telephone: +44 (0) 1823 483335
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For bilateral arrangements and other international partnering matters within the SAIHC region, please contact:

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For charting matters in the SAIHC region, please contact:

For Seychelles and Mauritius:

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For South and East Africa (Namibia, South Africa, Mozambique, Tanzania, Kenya):

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Geographical Technical Manager

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For West Africa (Angola):

Miss Cathy Tunks,

Geographical Technical Manager

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

Email: SDImpactAnalysis@ukho.gov.uk

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

Country information / Informations sur le pays/ Información sobre el país	
-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 Colour)
-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) UNITED KINGDOM HYDROGRAPHIC OFFICE	
Contact information/ Informations de contact / Información de contacto	
-National Hydrographer or equivalent -Directeur du service hydrographique ou équivalent -Director del Servicio Hidrográfico o equivalente	National Hydrographer & Acting Chief Executive 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
Other point(s) of contact - Autre(s) point(s) de contact - Otros punto(s) de contacto	Director of Data Acquisition RAdm Rhett Hatcher Tel: + 44 (0) 1823 484444 E-mail: IBTE@UKHO.gov.uk
-Web site -site web -sitio web	http://www.gov.uk
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 (NPI 31) or the UKHO web site: http://www.gov.uk/UKHO

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: Derek.rae531@mod.gov.uk *		
Other point(s) of contact -Autre(s) point(s) de contact -Otros punto(s) de contacto	Postal address: Navy Command Headquarters, Leach Building, Whale Island, Portsmouth, Hampshire, PO2 8BY, 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, Navy Command Headquarters, Leach Building, Whale Island, Portsmouth, Hampshire, PO2 8BY, United Kingdom of Great Britain and Northern Ireland		
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
HMS MAGPIE (H130)	37	2018	12
Other information of interest -Autres informations utiles -Otra información de interés	<p>HM personnel are also borne in other RN vessels. Capt(HM) directs all hydrographic, meteorological and oceanographic support to the fleet.</p> <p>The programme for Civil hydrography in UK waters is managed by the Maritime & Coastguard Agency and is outsourced to the commercial sector.</p> <p>Training in hydrographic surveying and meteorology is provided for naval personnel by the Commander Fleet Operational Training - Hydrography, Meteorology and Oceanography</p> <p>HMS DRAKE HM Naval Base Devonport PLYMOUTH Devon PL2 2BG</p> <p>Details of courses are available at: www.mod.uk/DefenceInternet/AboutDefence/Whatwedo/TrainingandExercises/IDT/IDTRN</p>		

Input to the IHO Publication C-55 (Status of Hydrographic Surveying and Charting Worldwide)
Country: United Kingdom of Great Britain and Northern Ireland – Ascension Island

C-55 Summary for:				Comments on Charts:
Country:	United Kingdom of Great Britain and Northern Ireland			
Country Iso Code:	UK			
Country SubCode:				
INT Region:	H			
Country/Depend:	Ascension Island			
Last updated:	07/08/2020			
Provided by:	UK			
Chart coverage	Passage (%)	Coastal (%)	Port (%)	Comments on Surveys:
INT	100	100	100	
RNC	100	100	100	
ENC	100	100	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	82	10	8	
> 200m	28	6	66	

MSI	Y/N	Comments on MSI:
Local warning	Y	Local Authority responsibility – no requirement to promulgate internationally
Coastal warning	N	
Nav warning	Y	Via NAVAREA VII Coordinator, South Africa and SafetyNET
Port warning	Y	Through UKHO
GMDSS	Y/N	Comments on GMDSS:
Master Plan	N	
Area A1	N	
Area A2	N	
Area A3	N	
NAVTEX	N	
SafetyNet	N	Via NAVAREA VII Coordinator, South Africa

Input to the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*)
Country: United Kingdom of Great Britain and Northern Ireland – St Helena

C-55 Summary for:				Comments on Charts:
Country:	United Kingdom of Great Britain and Northern Ireland			
Country Iso Code:	UK			
Country SubCode:				
INT Region:	H			
Country/Depend:	St Helena			
Last updated:	14/12/2020			
Provided by:	UK			
Chart coverage	Passage (%)	Coastal (%)	Port (%)	Comments on Surveys:
INT	100	100	100	
RNC	100	100	100	
ENC	100	100	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	56	28	16	
> 200m	21	25	54	

MSI	Y/N	Comments on MSI:
Local warning	Y	Local Authority responsibility – no requirement to promulgate internationally
Coastal warning	N	
Nav warning	Y	Via NAVAREA VII Coordinator, South Africa and SafetyNET
Port warning	Y	Through UKHO
GMDSS	Y/N	Comments on GMDSS:
Master Plan	N	
Area A1	N	
Area A2	N	
Area A3	N	
NAVTEX	N	
SafetyNet	N	Via NAVAREA VII Coordinator, South Africa

C-55 Summary for:				Comments on Charts:
Country:	United Kingdom of Great Britain and Northern Ireland			
Country Iso Code:	UK			
Country SubCode:				
INT Region:	H			
Country/Depend:	Tristan da Cunha			
Last updated:	05/11/2020			
Provided by:	UK			
Chart coverage	Passage (%)	Coastal (%)	Port (%)	Comments on Surveys: Large areas of kelp preclude inshore survey. Tristan da Cunha - navigationally significant shoal depths from surveys conducted in 2017 have been promulgated by NMs. Gough Island - inadequately surveyed 0m and deeper, however there only limited landing places and is uninhabited except for the personnel of a South African weather station.
INT	100	100	100	
RNC	100	100	100	
ENC	100	100	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	30	50	20	
> 200m	16	44	40	

MSI	Y/N	Comments on MSI:
Local warning	Y	Local Authority responsibility – no requirement to promulgate internationally
Coastal warning	N	
Nav warning	Y	Via NAVAREA VII Coordinator, South Africa and SafetyNET
Port warning	Y	Through UKHO
GMDSS	Y/N	Comments on GMDSS:
Master Plan	N	
Area A1	N	
Area A2	N	
Area A3	N	
NAVTEX	N	
SafetyNet	N	Via NAVAREA VII Coordinator, South Africa

National MSI Self-Assessment

Country: United Kingdom – Ascension Island
 Organization: United Kingdom Hydrographic Office

Country: United Kingdom – St Helena
 Organization: United Kingdom Hydrographic Office

Country: United Kingdom – Tristan da Cunha & Gough Islands
 Organization: United Kingdom Hydrographic Office

1. Maritime area:
 N/A

2. Operational Points of Contact for the National Coordinator

INSTITUTION	TELEPHONE	FACSIMILE	EMAIL
NAVAREA I Coordinator	+44(0)1823 353448	+44(0)1823 322352	navwarnings@ukho.gov.uk

3. GMDSS Master Plan:

Not in GMDSS Master Plan

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:
 N/A

11. Summary:

Any MSI in the area may be sent to UKHO for assessment and then forwarded to NAVAREA VII with recommendations for SafetyNET broadcast as a Navigational Warning.