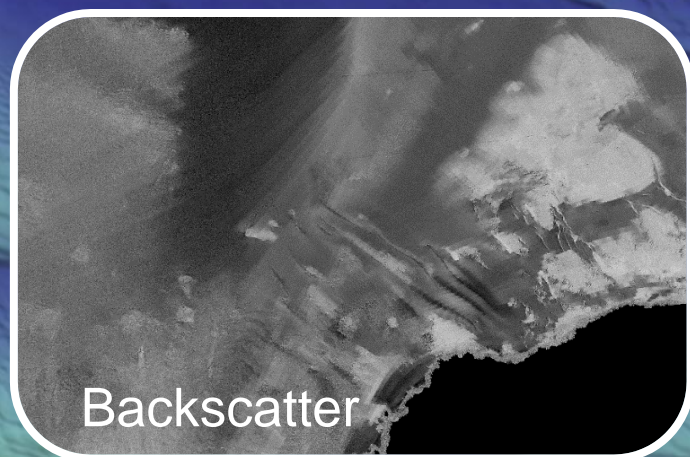
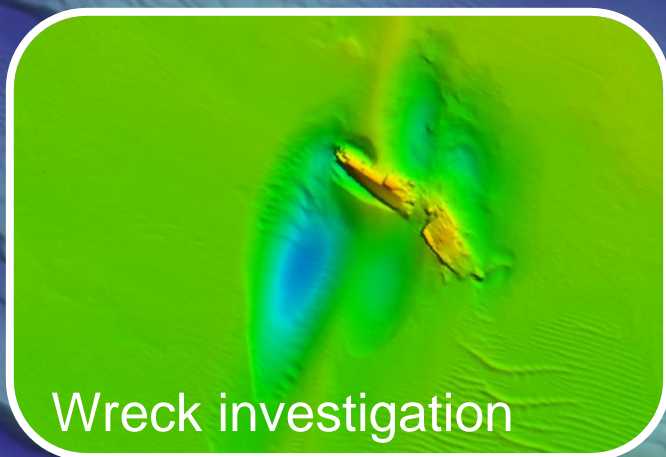
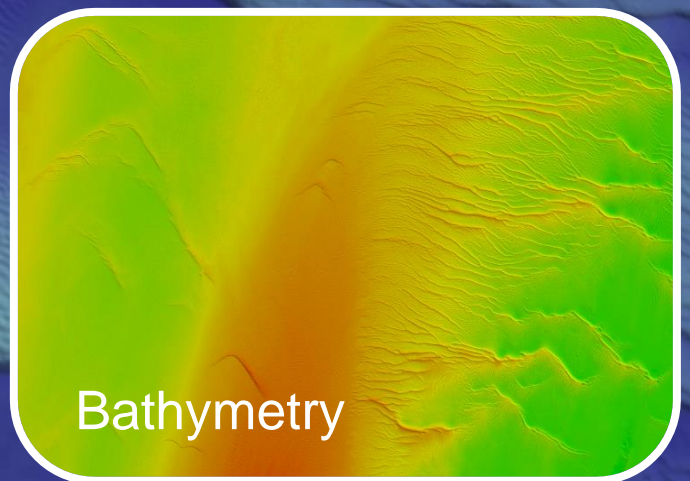
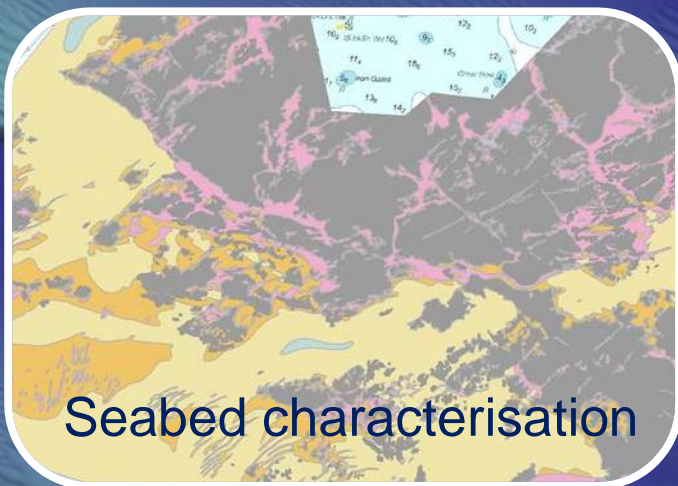


UK Civil Hydrography Programme 2021



Contents

Foreword	2
Introduction	3
Civil Hydrography Annual Seminar 2021	5
News from the CHP	6
Survey Vessels 2020/21	7
Collaboration & Partnerships	8
How the MCA Gathers Hydrographic Data	10
Propose a Survey	11
Survey Safety	12
Hydrographic Notes	13
Wreck Investigations	13
SS Richard Montgomery	14
Sharing Data with the MCA	15
Offshore Wind Energy & Shipping Safety	16
Guidelines for Offshore Renewal Energy Developers	16
MGN 543: Hydrography	17
Annex 1: CHP Surveys 2020/21	18
Annex 2: Planned CHP Surveys 2021/22	20
Annex 3: Indicative CHP Surveys 2022/23	23
Contacts	25

Foreword

I hope you and your teams are keeping safe and well throughout this ongoing and challenging period.

I am extremely proud to report that the management and delivery of the UK Civil Hydrography Programme, and collaborative surveys, has continued apace throughout the Covid-19 restrictions. Indeed, internationally, the CHP may be one of a very small number of such programmes that have continued to be operational throughout the pandemic. This is largely due to the flexibility, dedication and hard work of my Hydrography team, our colleagues at the UKHO, our collaboration partners, and our contractors who have complied with the changing with govt advice and rapidly introduced comprehensive policies to ensure survey operations continue whilst ensuring safety of all those involved.

During the last two years, and despite the pandemic, the programme of high priority surveys, collaborative surveys, analysis and reporting completed through the CHP has been larger than in previous years. We have maximised the periods of good weather and sea conditions, as well as the application of new technologies, such as unmanned surface vessels, often operating in challenging areas.

As the largest commissioner of civil hydrography and seabed mapping in UK home waters the MCA recognises its responsibility to lead initiatives to improve co-ordination and co-operation between funders of Government hydrography. In addition to undertaking collaborative surveys, further agreements have been established, expanding the MCA's portfolio of public-sector collaborations. These relationships are resulting in coordination of medium-term survey programmes, expansion of survey capability, and maximising efficient utilisation of public-funded survey assets and resources, to realise value for money.

I would like to acknowledge all those involved with the various elements of the CHP, whether on the vessels, on site, in the office or working from remote locations.

Andrew Colenutt

Head of Hydrography & Meteorology

Maritime & Coastguard Agency

Introduction

As an executive agency of the Department for Transport, the Maritime and Coastguard Agency (MCA) plays a key role in implementing and enforcing the Government's maritime safety and environmental protection strategies. We are committed to preventing loss of life, continuously improving maritime safety and protecting the marine environment. As ever, our mission remains: *safer lives, safer ships and cleaner seas*.

Within this remit, the MCA has overall responsibility for the UK's hydrographic obligations under the Safety of Life at Sea Convention (SOLAS) but works in close partnership with the UK Hydrographic Office (UKHO) to ensure these obligations are met.

The MCA manages a multi-million-pound budget to systematically survey the waters around the UK. This programme is known as the "Civil Hydrography Programme" (CHP). Under the CHP, commercial contracts are let to ensure accurate hydrographic information is gathered for updating the nation's nautical charts and publications.

The CHP prioritises areas of highest navigational safety risk and surveys and maps UK home waters - defined by the boundaries of the UK's Exclusive Economic Zone, an area in excess of 720,000km² - in order to keep our nation's nautical charts and publications current, safe and fit for purpose.

The MCA makes extensive use of geographic information systems (GIS) to prioritise survey areas using a contemporary risk analysis methodology capable of reflecting the changing pressures of the maritime sector.

The hydrographic survey work commissioned for the CHP is undertaken by contractors, who

gather and report seabed data using their own personnel, equipment and vessels.

The CHP workscope is divided into the following streams:

- **Routine resurvey - navigationally critical shallow water areas with mobile seabed;**
- **Shallow water - predominantly 0 to 40m water depth; and**
- **Shallow to medium water - 0 to 200m water depth.**

This year saw the introduction of an additional contract, Supplementary Hydrographic Survey Services, which the MCA may utilise to maximise our involvement and input in collaborative opportunities, where the provision of hydrographic survey services or technical expertise may be required to support such initiatives.

To support the requirements of the CHP, the MCA specifies state-of-the-art survey technologies including high resolution multibeam echosounders (MBES) and Real-Time Kinematic (RTK) Global Positioning Systems (GPS) to ensure accurate high-quality hydrographic information is gathered. Additionally, more focused work includes high-resolution wreck investigations, water column data collection and seabed grab sampling.

Prior to final data being accepted from contractors, it passes through a rigorous quality assurance process at the UKHO's Bathymetry Scientific Analysis Group, where checks are made against items such as data density, interline consistency, geodetic parameters and tidal observations.

Once data has passed validation, it is archived to the UKHO's bathymetric database ready for inclusion in their nautical charting products.

The UKHO hosts the Marine Environment Data and Information Network (MEDIN) Data Archive Centre (DAC) for bathymetry data. Bathymetry data collected through the CHP are made freely available from <https://www.gov.uk/guidance/inspire-portal-and-medin-bathymetry-data-archive-centre>

The British Geological Survey hosts the MEDIN DAC for geology, geophysics and backscatter data. Backscatter data collected through the CHP are made freely available from <http://www.bgs.ac.uk/GeoIndex/offshore.htm>



Hydrography & Meteorology Team

The MCA Hydrography and Meteorology team has grown to manage and deliver the UK Marine Weather Service and Maritime Safety Information. The team comprises:

- **Andrew Colenutt** – Head of Hydrography and Meteorology
- **Paula English** – Hydrography Programme Lead
- **Aris Manou** – Hydrography Lead
- **Rebecca De Bono** – Hydrography and Meteorology Programmes Coordinator
- **Tammy Newey** – Maritime Safety Information (MSI) Programme and Policy Lead
- **Nel Clarke** – MSI Programme and Policy Officer

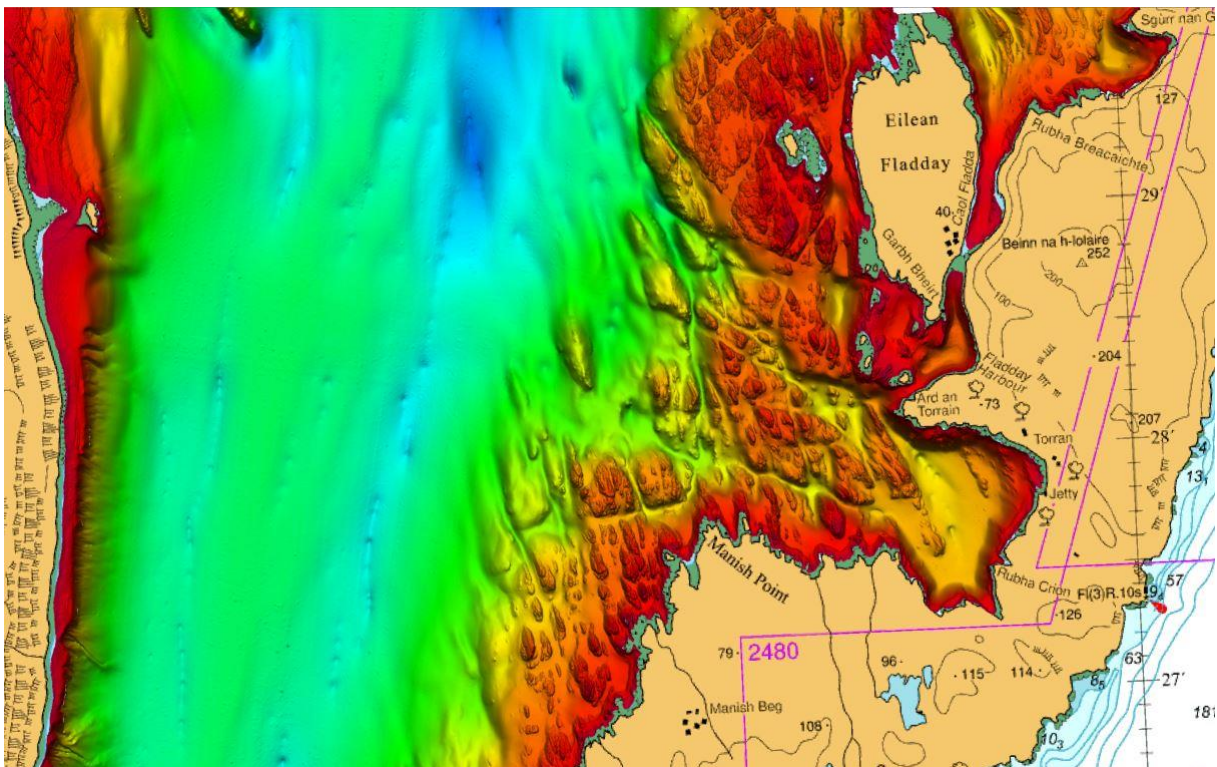
Civil Hydrography Annual Seminar 2021

The MCA convene the Civil Hydrography Annual Seminar (CHAS), which is the only Government-led marine event of its kind that opens its doors to the UK hydrographic survey and seabed mapping community. The primary aim of CHAS is to provide an open forum for Government and industry to come together to share their hydrographic data gathering and seabed mapping programmes for the forthcoming years to enable longer-term survey planning integration. The aims of CHAS are:

- **To provide an open forum for public sector organisations to come together to share data gathering programmes for the forthcoming years**
- **To encourage co-operative working and survey planning integration**
- **To realise the financial benefits of co-funding such work.**

As the largest commissioner of civil hydrography and seabed mapping in UK home waters the MCA recognises its responsibility to lead initiatives to improve co-ordination and co-operation between funders of Government hydrography.

The MCA advocate a coordinated and integrated approach to the longer-term survey planning, which hopefully will enable the hydrographic sector to manage funding streams more effectively, develop new partnerships and strengthen existing collaborations between stakeholders.



HI 1569 Sound of Raasay

News from the CHP

CHP Survey Contracts

The work scopes for 2021-23 have been awarded to the following marine survey contractors following a rigorous competitive tendering exercise:

Clinton Marine Survey: [CHP Lot 1 \(Shallow\)](#) & [CHP Lot 5 \(Supplementary Survey Services\)](#)

A-2-Sea Solutions: [CHP Lot 2 \(Shallow to Medium\)](#) & [CHP Lot 3 \(Routine Resurvey\)](#)

EGS International: [Lot 4 \(Receiver of Wreck, SS Richard Montgomery\)](#)

CHP 2020/21 surveys

Despite the pandemic and associated challenges, a substantial programme of high priority surveys, including collaborative surveys, analysis and reporting has been completed. We have maximised the periods of good weather and sea conditions, as well as the application of new technologies, such as unmanned surface vessels. In total, 27 CHP surveys have been conducted during 2020/21, covering approximately 5,821km² of seabed:

Lot 1: Shallow Water:

HI 1586 South of Isle of Wight

HI 1587 Bridlington to Spurn Head

HI 1678 Fowey to Eddystone Rocks

HI 1679 Eddystone Rocks to Bolt Head

HI 1682 Bass Rock to St Abb's Head

HI 1584 Northern Approach to Sunk TSS

HI 1683 Spurn Head to Withernsea (commissioned by the North East Regional Coastal Monitoring Programme, under the auspices of the CHP)

Additional surveys (3 from Lot 1 brought forward from 2021/22 and 1 from Lot 2):

HI 1589 Eastern Harris

HI 1676 Western Approach to Aberporth

HI 1677 St David's Head to Strumble Head

HI 1680 Kilbrannon Sound

Lot 3: Routine Resurvey:

HI 1684 EA 3 Cockle Shoal Full area

HI 1685 EA 4 Caister Road Focused area

HI 1686 EA7 Cross Sands Full area

HI 1687 EA9 Holm Channel Full area

HI 1688 EA10 Approaches to Lowestoft Focused area

HI 1689 TE2a North SHipwash Full area

HI 1690 TE3a South Ship Head Full area

HI 1691 TE3a Sunk Focused area

HI 1692 TE5 Long Sand Head Full area

HI 1693 TE6 Black Deep Full area

HI 1698 TE2b South Shipwash

HI 1694 DWR C1, C2, C3 Tail of the Falls

HI 1695 DWR T Focused area

Additional surveys from Lot 2:

HI 1517 Lowestoft to Outer Gabbard

HI 1595 Mid-English Channel

HI 1511 North Channel TSS

Survey Vessels 2020/21



MV Northern Wind © Clinton Group



MV Lode © Clinton Group



XOcean © XOcean



SV Kaiku © MeriTaito Group



FPV Morven © A-2-Sea Group



Cerys Line © A-2-Sea Group

Collaboration & Partnerships

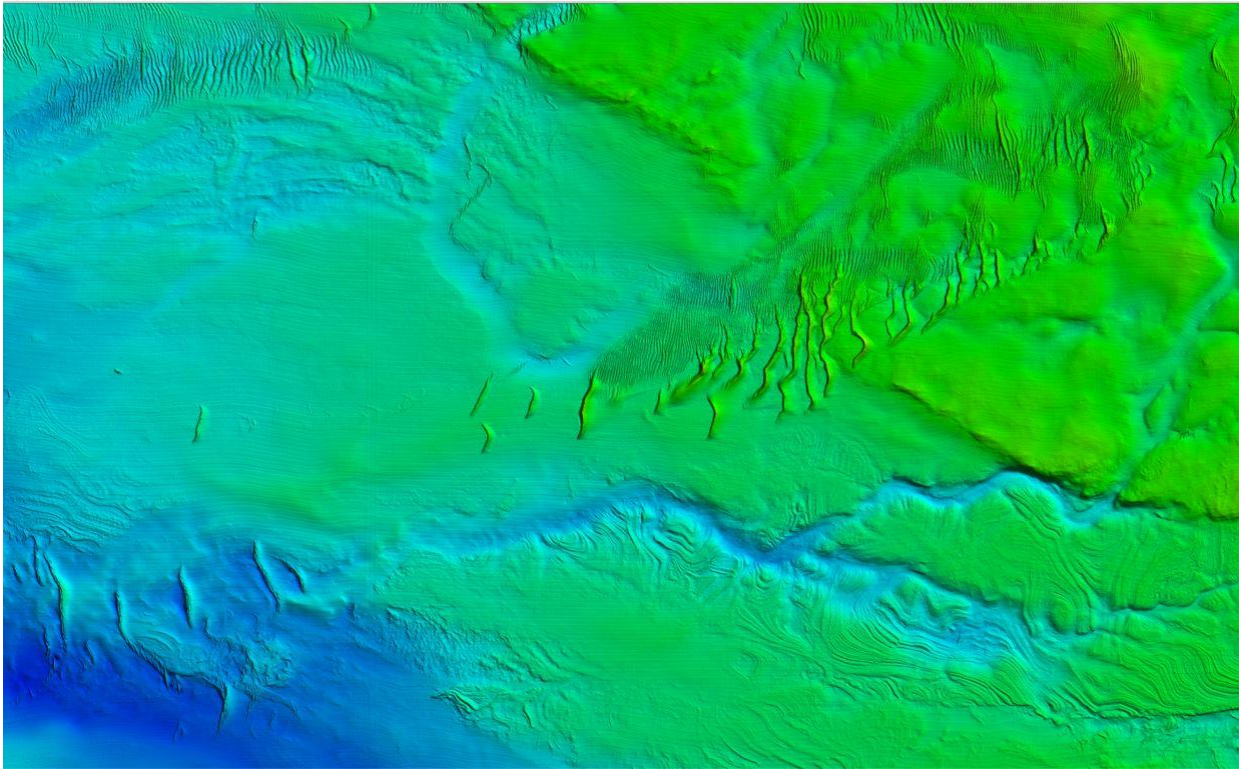
As the largest commissioner of civil hydrography and seabed mapping in UK home waters the MCA recognises its responsibility to lead initiatives to improve co-ordination and co-operation between funders of Government hydrography. The MCA are always exploring opportunities to collaborate with other organisations in order to further increase efficiencies under the gather once, use many times philosophy.

Within the hydrographic community, effective collaborations have been established between public sector organisations, government departments and with research and industry partners. Sharing medium-term survey programmes and working together through partnerships and MoUs has enabled survey capability to be taken forward within and between organisations whilst maximising the leverage of public-funded survey assets and resources.

A number of successful partnerships with the MCA have arisen out of CHAS - most notably, the National Network of Regional Coastal Monitoring Programmes (RCMPs) through close collaboration with the Channel Coastal Observatory (CCO). The Memorandum of Agreement to carry out nearshore bathymetric surveys of the English Coastline has signatories from the following Lead Authorities of the National Network of Regional Coastal Monitoring Programmes (RCMPs): New Forest District Council (Southeast RCMP); Teignbridge District Council (Southwest RCMP); the Metropolitan Borough of Sefton (Northwest RCMP); Scarborough Borough Council (Northeast RCMP); and East Riding of Yorkshire Council (ERYC RCMP).

In 2020/21, HI 1683 Spurn Head to Withernsea was commissioned by the North East RCMP. This survey was undertaken in partnership with the MCA under the auspices of the CHP. All data gathered are made freely available under the Open Government Licence; are collected using the UK CHP Survey Specification; and submitted under the CHP to additionally support the update of nautical charts and products by the UK Hydrographic Office.

The MCA have also undertaken surveys of HI 1592 Fishguard to Cardigan and HI 1562 Cardigan Bay North, in collaboration with the Welsh Coastal Monitoring Centre. This arrangement mirrors the MoA with the NNRCMP.



HI 1679 Eddystone Rocks to Bolt Head

In October 2020, a Memorandum of Understanding was established between MCA and Cefas (Centre for the Environment, Fisheries and Aquaculture Sciences). The MoU enables Cefas to undertake approved survey operations considered under the auspices of the MCA CHP and enable MCA to undertake additional survey operations funded by Cefas, using MCA contractor's via MCA's CHP contractual arrangements. This agreement will optimise public expenditure by sharing the costs of procurement of swath bathymetry surveys for areas of mutual interest, avoiding duplication of effort, realise opportunities for survey collaboration and planning, and makes data freely available from the MCA (via the UK Hydrographic Office (UKHO) Bathymetry INSPIRE Data Archive Centre and the British Geological Survey (BGS) Offshore GeoIndex Data Archive).

The MCA are currently exploring further opportunities to collaborate on hydrographic survey and seabed mapping with colleagues from the Department of Infrastructure, Isle of Man, and potential survey collaboration and maximizing use of CHP data with colleagues in the Environment Agency, Marine Scotland, NatureScot and Scottish Environmental Protection Agency.

How the MCA gathers hydrographic data

Hydrographic survey is the process of gathering a wide variety of data for the purpose of describing the seafloor. To ensure that data is collected to the highest possible quality for navigational charting, the MCA specify the following requirements.

Standards

All surveys are conducted to the IHO Order 1a survey standard, as defined by the International Hydrographic Organisation (IHO) publication 'Standards for Hydrographic Surveys, Special Publication S44, Edition 5', with the exception of single-beam echosounder (SBES) check lines under the Routine Resurvey Programme.

Technical Requirements

Multibeam Echosounder (MBES)

- Multibeam bathymetry is collected during all CHP surveys.
- The MCA usually require 100% bathymetric coverage in all areas they survey.
- System detection capability is defined by IHO requirements. Contractors are required to detect objects whose size is greater than a cube measuring 2m³, in water depths of up to 40m, and a cube with sides equal to 10% of depth in deeper waters.
- A minimum of 9 soundings per minimum detectable object are required.
- Sound velocity measurements are routinely taken throughout the survey in order to position the soundings correctly.
- Contractors are often required to conduct tidal-stream observations at particular locations.

Quality Assurance

Data Quality Control

- In addition to QC procedures employed by CHP survey contractors, technical personnel from both the MCA and UKHO routinely visit contractors' vessels throughout survey operations to verify data quality.
- Prior to final survey data being accepted from contractors, it passes through a rigorous quality assurance process at the UKHO, where checks are made for items such as data density, inter-line consistency, geodetic parameters, tidal observations *etc.*
- Contractors are asked to provide error budgets prior to and after every survey so that the contribution of individual error sources are tightly defined. This ensures rigorous quality control of the final survey dataset.

Additional Measurements

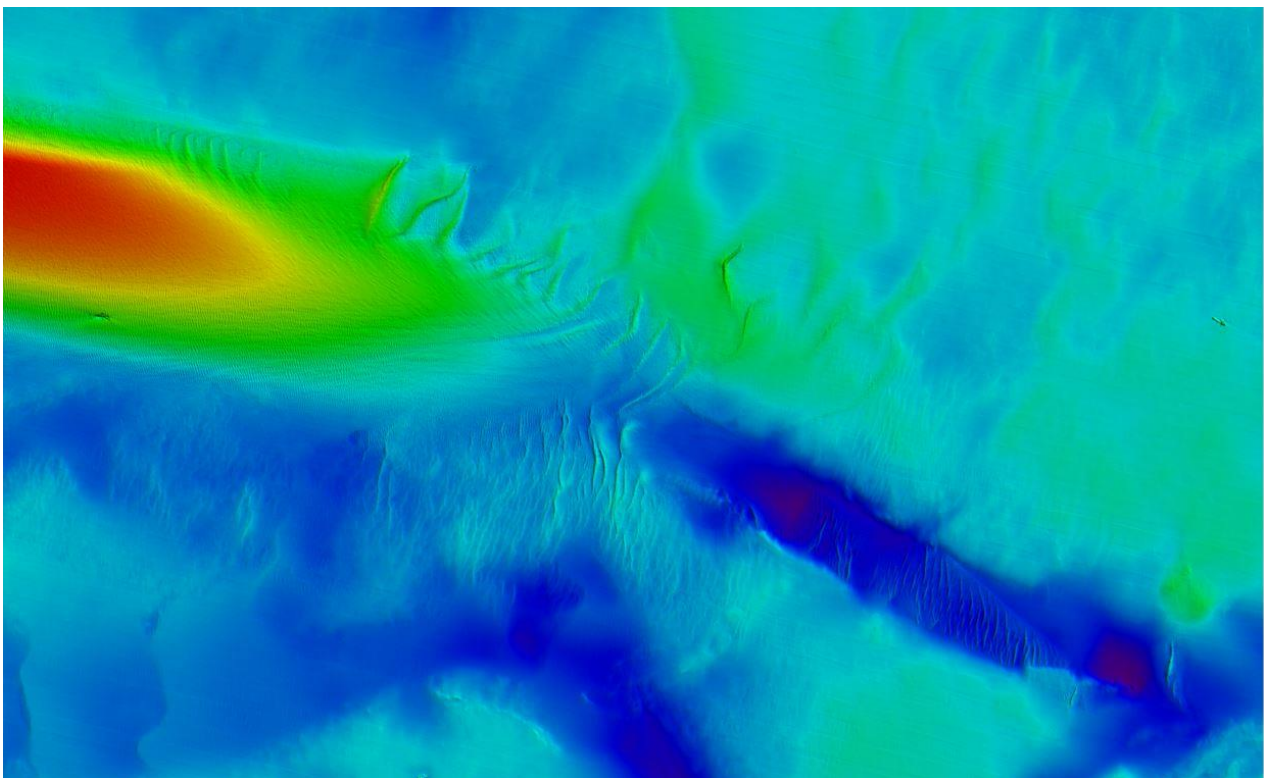
- Rigorous tidal reduction is required on all CHP surveys.
- Depths are reduced to Chart Datum (CD).
- Seabed grab samples are typically taken at 5km intervals to ground-truth multibeam backscatter observations.
- MBES water column data is collected over all found wrecks to support an assessment of their condition and ensure shoalest depth is found.

Propose a Survey

Should you know or be aware of any areas of UK seabed that require update to the nautical charts and publications that cover them, please let us know. The MCA assess CHP survey areas using a contemporary risk-based methodology, but we are keen to receive any information that can aid us in our responsibilities to the mariner and the safety of life at sea. E-mail your suggestions for hydrographic survey to: hydrography@mcga.gov.uk.

Typical indications of an area requiring re-survey are:

- Old underlying survey data (check using the "Source Data Diagram" on the latest chart).
- A change in traffic patterns (e.g. increases in cruise ship visits).
- An accident occurring due to inaccurate or incomplete survey data; or
- Changes to the seabed due to sandwave movement / channel migration.
- Offshore wind farm cumulative impacts on ship routing within the UK EEZ and abutting with neighbouring Member States, search and rescue planning, cross-border issues, future marine developments, etc.



HI 1673 Sheringham Shoal

Survey Safety

Much of the hydrographic work completed by the CHP is undertaken by contractors who are required to gather seabed data using their own personnel, and vessels owned or chartered by themselves. Acquired data is then submitted to both the MCA and UKHO.

- I. Any vessel undertaking work on behalf of the CHP must adhere to MCA safety and regulatory guidelines. MCA safety requirements include:
 - II. Contractors are always required to supply and adhere to a Safety Management Plan.
 - III. All offshore personnel are required to have a valid medical certificate to at least the ENG1 standard.
 - IV. All offshore personnel are required to have appropriate and valid safety training certification.
 - V. Every vessel that participates in CHP survey operations is subject to approval by the MCA (via MCA marine office inspection) prior to work starting. Repeat inspections are undertaken annually for the duration of MCA contracts.
- VI. Paris MoU. Should a vessel employed on the CHP develop a high ship risk profile (HRS), then the MCA reserves the right to remove said vessel from the contract until she meets 'standard' (SRS) or 'low' (LRS) risk criteria.
- VII. All vessels participating in CHP surveys are visited by an MCA or a UKHO contract overseer on a regular basis throughout the year. A report covering each visit is kept on file by the MCA HydroMet team. Visits are primarily intended to focus on the quality of survey procedures and deliverables, but also include an informal safety assessment. If significant safety concerns are raised, then the contract overseer is required to notify the local MCA marine office.

Hydrographic Notes

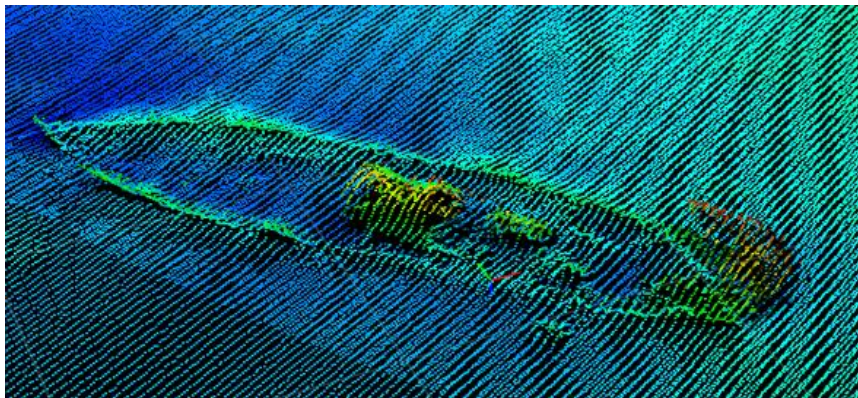
Reports of any newly discovered dangers to surface or sub-surface navigation are passed immediately by the CHP contractors to the MCA and UKHO using the H102 Hydrographic Note form.

The nature of the CHP means that H-Notes are regularly sent in. This information is then immediately passed on to the mariner.

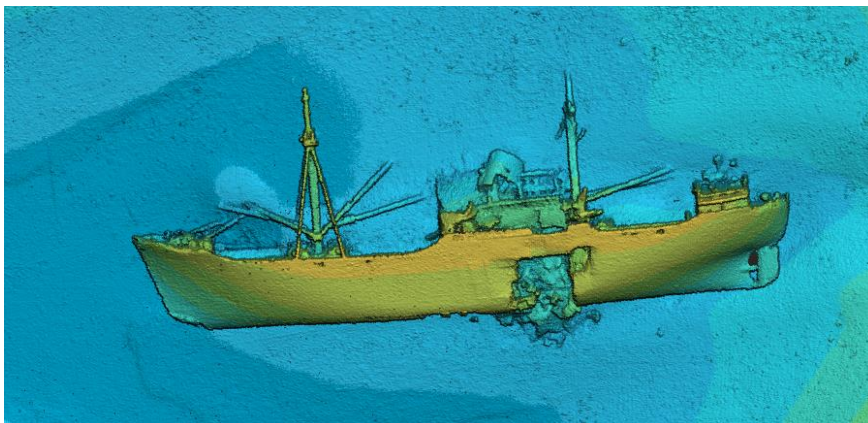
During survey operations in 2020/21 151 H Notes were submitted.

Wreck Investigations

All wrecks found in a CHP survey are investigated with additional lines and detailed bathymetry and water column data. Sitting proud of the seabed, wrecks and other man-made obstructions often form the critical depth in each area of seabed. It is therefore crucial we have confidence that the shoalest point on these obstructions are found so the mariner can navigate safely.



Uncharted wreck from HI 1591 St Abb's Head to Farne Islands



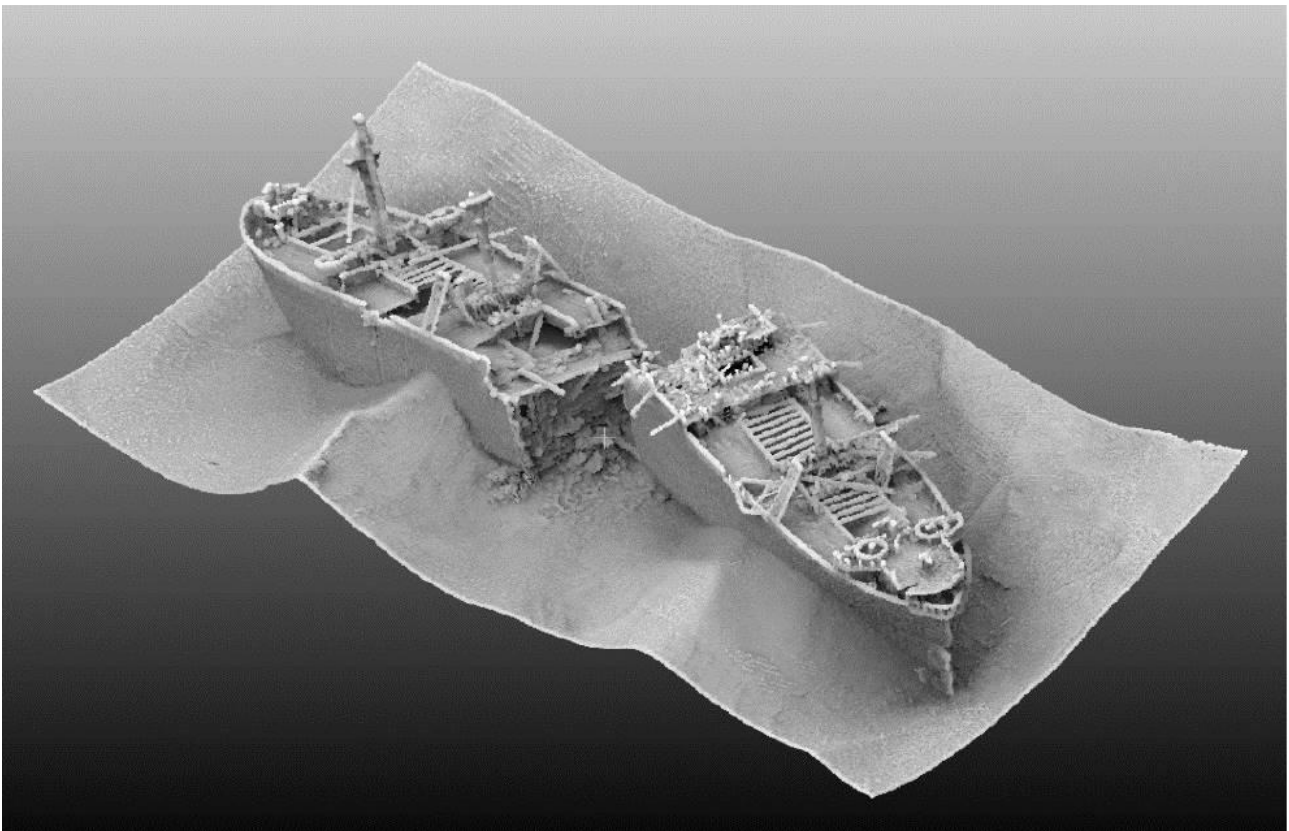
HI 1589 Eastern Harris. Wreck of the steamship Stassa

SS Richard Montgomery

The SS Richard Montgomery was an American Liberty ship that went aground in the Thames Estuary in August 1944 with a cargo of munitions. The wreck lies adjacent to the Medway Approach Channel and the wreck is designated as a dangerous wreck under section 2 of the Protection of Wrecks Act 1973. The Maritime and Coastguard Agency has responsibility through the Receiver of Wreck for monitoring the condition of the wreck and regular surveys of the wreck are undertaken.

From October 2019 the survey schedule for the SS Richard Montgomery has been expanded to provide two surveys a year - a focused snapshot survey and a full survey taking place at six-month intervals. The focused snapshot survey area includes the wreck and the seabed area immediately adjacent to the wreck. The full survey encompasses the wreck, the prohibited area around the wreck, the surrounding seabed area and a section of the dredged shipping channel to the south of the wreck.

The MCA has extended the contract of EGS, the nominated contractor, to 2023. The snapshot survey scheduled for March 2020 was unfortunately cancelled due to Covid-19. However, a full survey was undertaken in August/September 2020, which showed only minor change in the condition of the wreck since the previous 2019 survey. The results suggest that the wreck condition remains stable. The next snapshot survey is scheduled for April 2021.



SS Richard Montgomery, September 2020 © crown copyright.

Sharing Data with the MCA

If you are considering performing a hydrographic survey and are willing to share your data with us, we can pass it on to the UK Hydrographic Office to help them compile new or updated nautical charts and so help improve safety for mariners.

Your survey does not need to be carried out to full charting standards to be of use. Even without a full search for dangers, a modern survey can improve on our knowledge of the seabed. There will be no legal liability on you for the way that the data is used. However, data which fully complies with all aspects of IHO Order 1a would be ideal.

The MCA are always happy to give help and advice on hydrographic data gathering requirements in order to increase the usefulness of hydrographic survey data. Ideally bathymetry data would be rendered and delivered in digital form, with:

- **Data in one of the following formats: CARIS Project Directory, Qimera Project Directory, or Generic Sensor Format.**
 - **Spurious data cleaned from the final, delivered, dataset with rejected soundings included, but flagged as deleted.**
 - **Details of the method used for data-cleaning.**
 - **Digital data as full density (i.e. prior to any gridding or binning being applied), though if gridded datasets have been created then please include these too.**
 - **The soundings reduced using observed tides (not predicted tides from Tide Tables).**
 - **Depths referenced to Chart Datum for the area.**
- A report of the survey that describes how the data was gathered and processed would be of use, especially if it includes:
- **A list of the equipment and software used;**
 - **How positioning equipment was set up, calibrated and used;**
 - **How the echo-sounder transducer was set up and levelled, together with all sensor offsets;**
 - **Details of the horizontal datum to which the positions are referred (or the grid, if appropriate);**
 - **How tides were measured, how the tide pole or tide gauge was levelled and how depths were reduced to chart datum.**

Offshore Wind Energy & Shipping Safety

With the increased growth of offshore windfarm developments in the North Sea, the countries around the North Sea need and want to co-operate on where wind farms are sited, especially those proposed near the borders of the EEZ.

Strengthening the existing relationships between the various Member States has resulted in greater focus to:

- better co-ordinate planning and development of offshore and onshore electricity grid expansion to facilitate the expansion of offshore wind;
- collaborate on maritime spatial planning;
- develop an integrated approach to assessing cumulative impacts on navigation; and
- comment on proposed policies on surveying in and around windfarms, for navigation safety and meeting SOLAS obligations.

These areas of mutual interest will continue to be discussed and advanced at the North Sea Hydrographic Commission Resurvey Working Group and the forum for Offshore Wind Energy and Shipping Safety in the North Sea.

Guidelines for Offshore Renewable Energy Developers

The MCA has issued guidelines which are intended to aid developers when submitting development consent applications that impact upon hydrography. These guidelines should be read in conjunction with Marine Guidance Note (MGN) 543, which is currently being revised and the new version, to be published in March/April 2021, will have a new MGN number. They are/will be available on the MCA pages on gov.uk.

The MGN 543 guidance note highlights issues that need to be taken into consideration when assessing the impact on navigational safety and emergency response (search and rescue,

salvage and towing, and counter pollution) caused by offshore renewable energy installation developments. It applies to proposals in United Kingdom internal waters, Territorial Sea and Exclusive Economic Zone.

All hydrographic surveys should provide full seafloor coverage that meets the requirements of the IHO Order 1a survey standard. Particular attention should be given to horizontal and vertical sounding accuracy, together with target detection requirements. It is requested that all data and reports are passed to the MCA for forwarding to the UKHO for the update of the UK's nautical charts and publications.

MGN 543: Hydrography

In order to establish a baseline, confirm the safe navigable depth, monitor seabed mobility and to identify underwater hazards, detailed and accurate hydrographic surveys are required of the development at the following stages:

- Pre-construction: the proposed generating assets area shall be undertaken as part of the licence and/or consent application. The survey shall include all proposed cable route(s).
- Post-construction: Cable route(s).
- Post-decommissioning of all or part of the development: the installed generating assets area and cable route(s).

The development may result in an alteration to maritime traffic patterns as vessels seek alternative passage around the installed generating assets area. Where this is the case, it may be considered necessary that a hydrographic survey of these alternate passages and their immediate environs be undertaken. MCA can provide guidance here if required.

Where shipping corridors are formed within or adjacent to the consented generating assets area, the requirement for hydrographic surveys shall be referred to the MCA and undertaken on a case-by-case basis. All hydrographic surveys listed above should fulfil the requirements of the MCA's 'Hydrography Guidelines for Offshore Renewable Energy Developers'.

Where to Deliver

On completion of each survey, the bathymetric data and associated report of survey should be delivered to the MCA.

The MCA is responsible for collecting and supplying data to the UKHO to update nautical charts and publications for the purposes of navigation safety.

The commercial sensitivity of your data will always be respected.

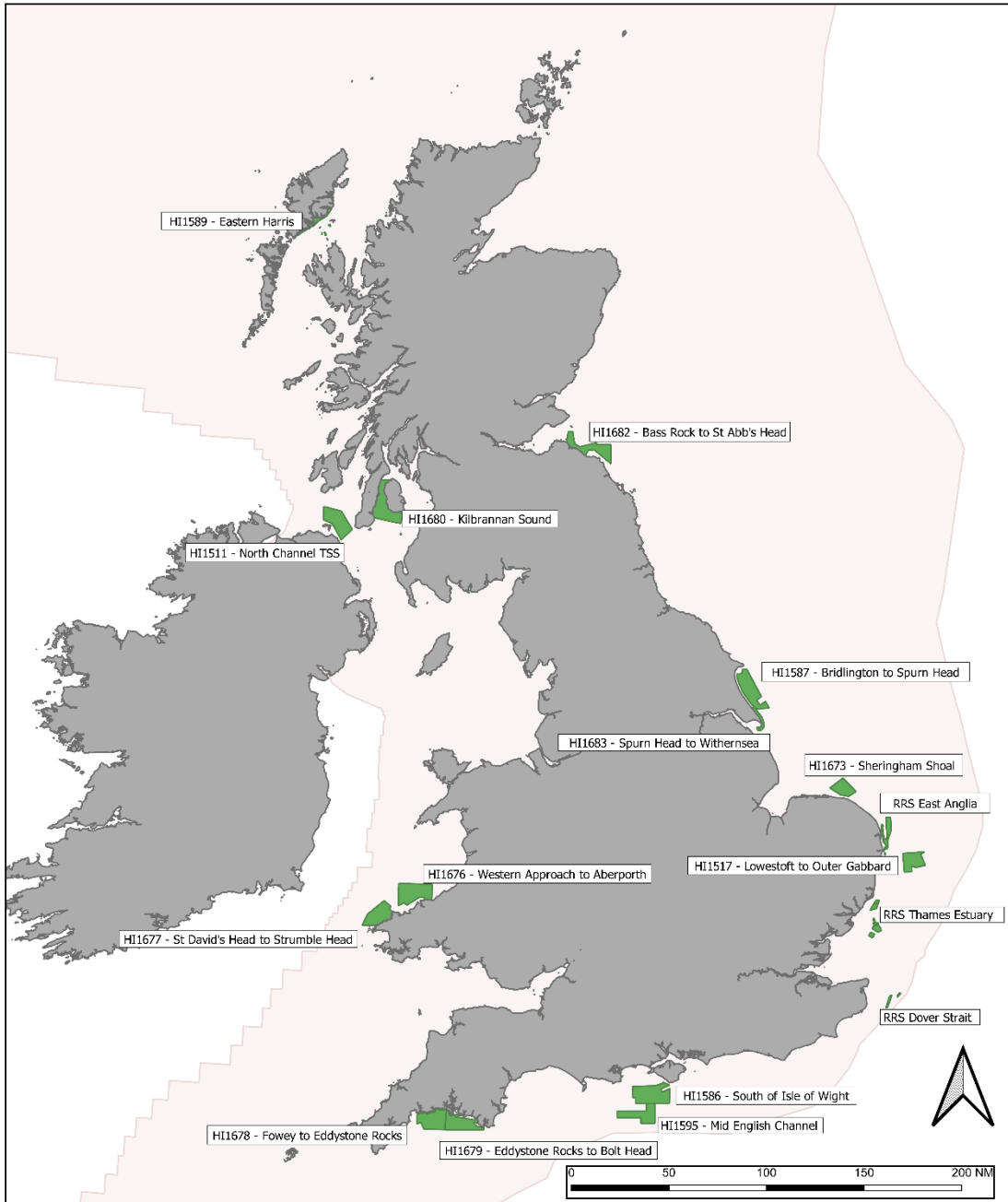
Developers are reminded of the requirement to report significant changes in depths from charted depths that become a navigation hazard to UKHO so Navigational Warnings and Notice to Mariners can be issued, if necessary.

Please send your data and reports to:

Head of Hydrography & Meteorology
UK Technical Services Navigation
Maritime & Coastguard Agency
Bay 2/25, Spring Place
105 Commercial Road
Southampton, SO15 1EG

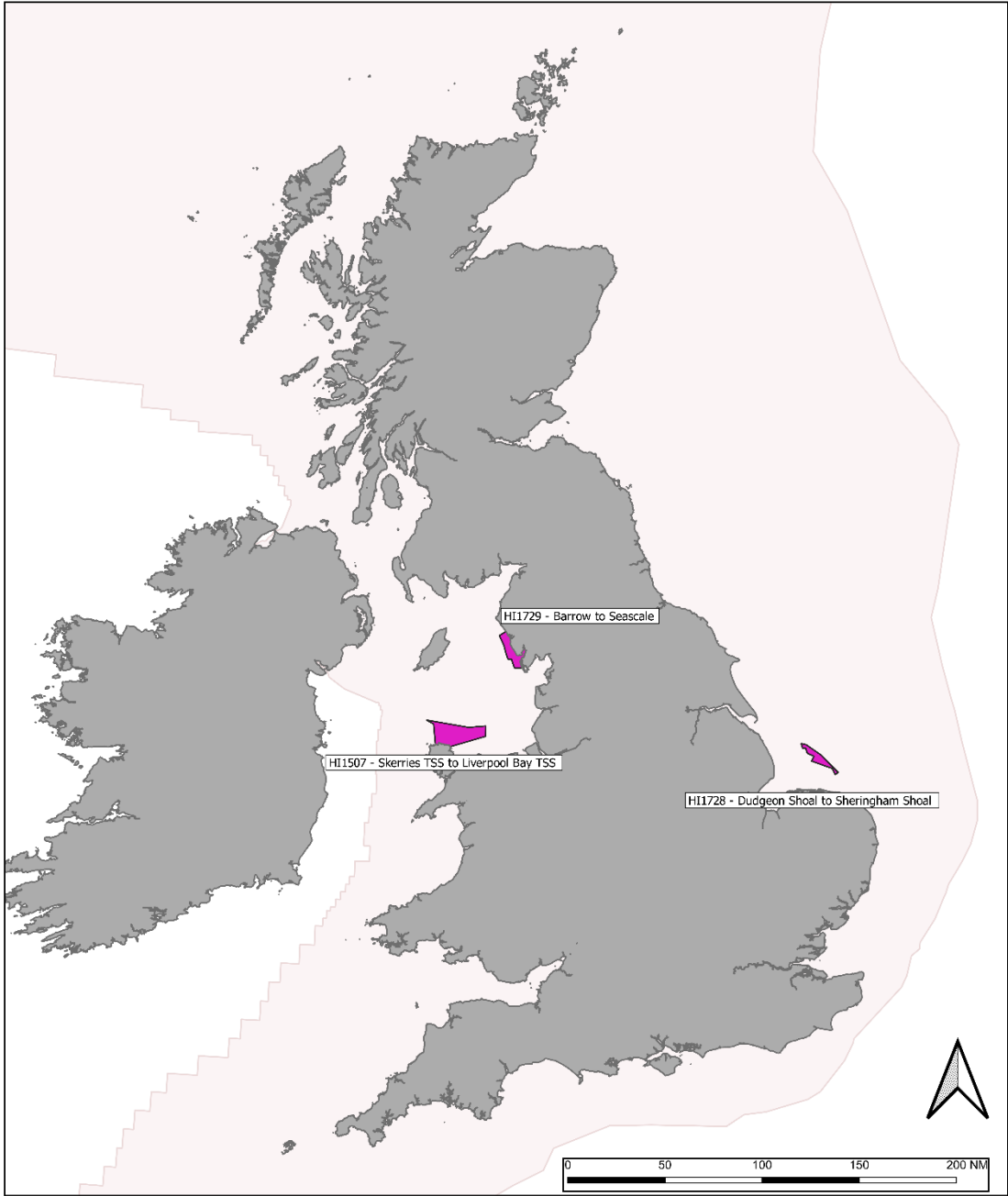
If you require any further assistance with the above guidelines, please contact the MCA at: hydrography@mca.gov.uk

Annex 1: CHP Surveys 2020/21

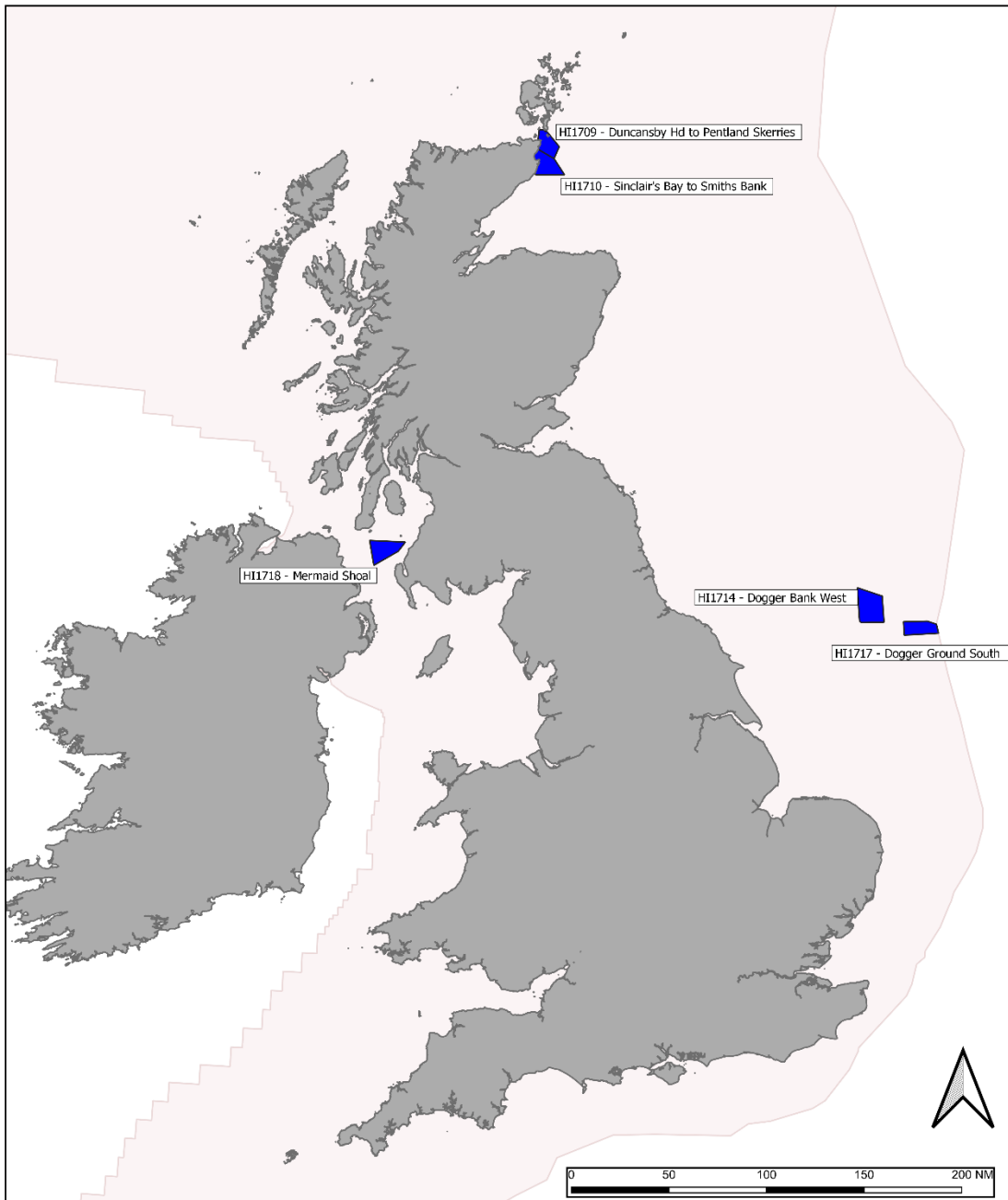


CIVIL HYDROGRAPHY PROGRAMME 2020/21		
	LEGEND 2020/21 CHP AREAS British Isles	 Maritime & Coastguard Agency
	<p>NOT TO BE USED FOR NAVIGATION</p> <p>© Crown Copyright 2020. All rights reserved. Graphic may only reproduced in full.</p>	DRAWING Projection: WGS1984 World Mecator Originator: AM Date: 01 Mar 2021 Document Reference: CHP 54

Annex 2: Planned CHP Surveys 2021/22



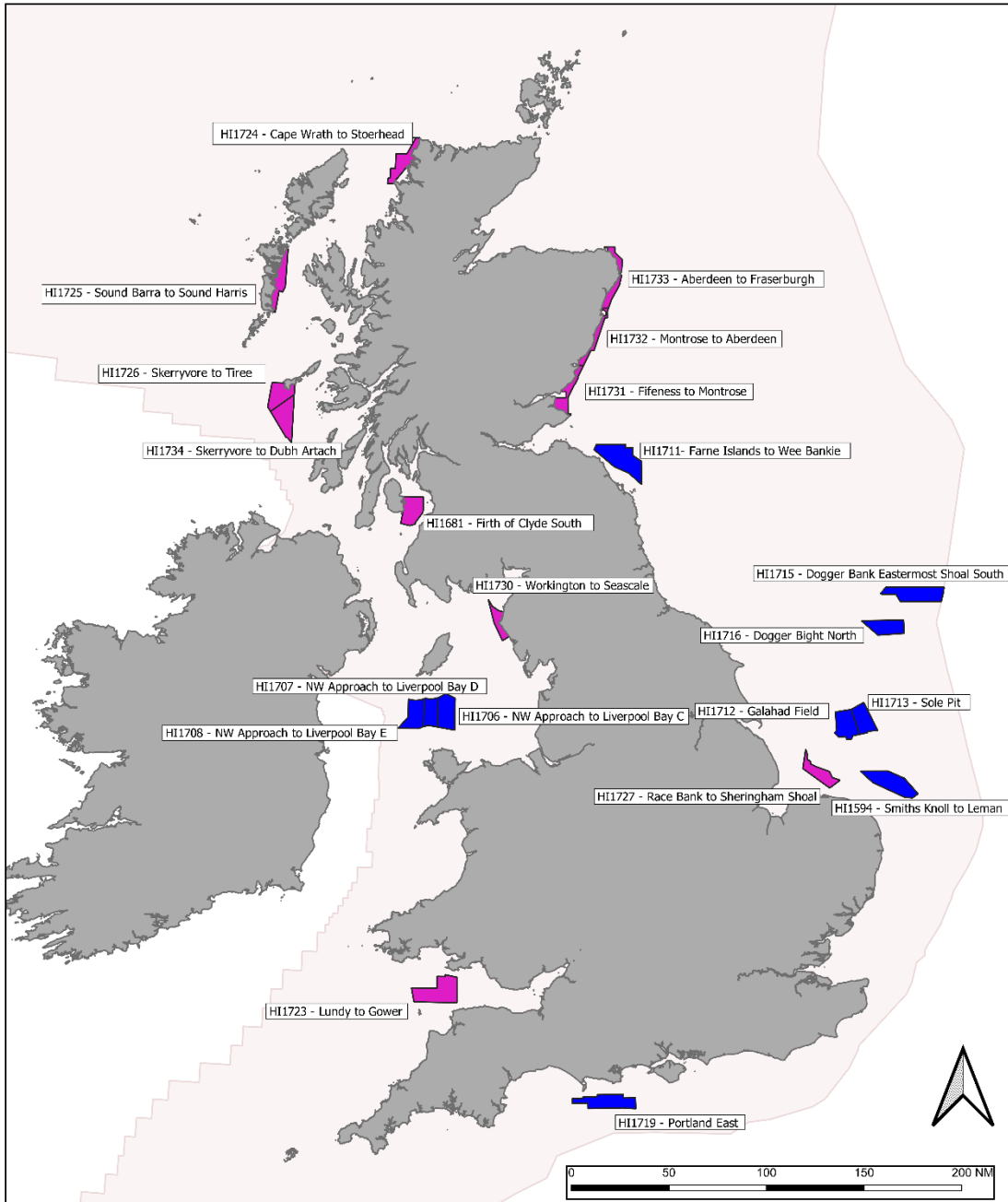
CIVIL HYDROGRAPHY PROGRAMME 2021/22 (Shallow)		
	<p>LEGEND</p> <ul style="list-style-type: none"> British Isles 2021-22 Shallow Areas Awarded EEZ Area 	<p>Maritime & Coastguard Agency</p>
	<p>NOT TO BE USED FOR NAVIGATION © Crown Copyright 2021. All rights reserved. Graphic may only reproduced in full.</p>	



CIVIL HYDROGRAPHY PROGRAMME 2021/22 (Medium)		
	LEGEND <ul style="list-style-type: none"> British Isles 2021-22 Medium Areas Awarded EEZ Area 	 Maritime & Coastguard Agency
	<p><small>NOT TO BE USED FOR NAVIGATION</small></p> <p><small>© Crown Copyright 2021. All rights reserved. Graphic may only reproduced in full.</small></p>	DRAWING Projection: WGS1984 World Mecator Originator: AM Date: 01 Mar 2021 Document Reference: CHP 56

Annex 3: Indicative CHP Surveys 2022/23

The following graphic shows the high priority areas that are under consideration for either taking forward in 2022/23 or subsequent years, or may be brought forward to the current year, depending on available MCA budget, collaboration opportunities and survey capacity.



CIVIL HYDROGRAPHY PROGRAMME 2022/23 (Shallow & Medium)		
	LEGEND ■ British Isles ■ 2022-23 Shallow Indicative Areas ■ 2022-23 Medium Indicative Areas ■ EEZ Area	 Maritime & Coastguard Agency
	<p>NOT TO BE USED FOR NAVIGATION © Crown Copyright 2021. All rights reserved. Graphic may only be reproduced in full.</p>	

Contacts

Maritime and Coastguard Agency
Spring Place
105 Commercial Road
Southampton
SO15 1EG

Tel: 020 3817 2000
Web: www.gov.uk/mca

Hydrography and Meteorology Team

Tel: 020 381 72674	Andrew Colenutt, Head of Hydrography & Meteorology
020 381 72428	Paula English, Hydrography Programme Lead
020 381 72489	Aris Manou, Hydrography Lead
020 381 72244	Rebecca De Bono, Hydrography & Meteorology Programmes Co-ordinator
020 381 72431	Tammy Newey, MSI Programme and Policy Lead
020 381 72183	Nel Clarke, MSI Programme and Policy Officer

E-mail: hydrography@mcga.gov.uk
CHP_MCA@mcga.gov.uk
MSI_MCA@mcga.gov.uk

Use of Admiralty charts contained within are © Crown copyright and/or database rights. Reproduced by permission of the Controller of Her Majesty's Stationary Office and the UK Hydrographic Office (www.ukho.gov.uk).



**Maritime &
Coastguard
Agency**