



Navigating to 2050

A safe and sustainable maritime future

#NavigatingTo2050



Nigel Hare

Director of Navigational Requirements
Trinity House



Commissioners of
IRISH LIGHTS

Navigation
and Maritime
Services



TRINITY HOUSE

Offshore Wind Developments and Safe Navigation – Experience of the General Lighthouse Authorities

16 November 2022



TRINITY HOUSE

www.trinityhouse.co.uk





TRINITY HOUSE

- The role of the General Lighthouse Authorities (GLAs);
- What our responsibilities are with regard to offshore wind developments;
- A brief description of supporting guidance and recommendations;
- Some recent examples of marking and the importance of qualitative as well as quantitative traffic and risk analysis;
- GLA challenges and opportunities in the Offshore Renewable Energy Infrastructure licensing process;
- So what?

SOLAS Chapter 5 - Regulation 13

Establishment and operation of aids to navigation

Each contracting Government undertakes to provide, as it deems practical and necessary either individually, or in co-operation with, other Contracting SOLAS Chapter V – 1/7/02 Governments, **such aids to navigation as the volume of traffic justifies and the degree of risk requires.**

In order to obtain the greatest possible uniformity in aids to navigation, Contracting Governments undertake to take into account the international recommendations and guidelines when establishing such aids.



TRINITY HOUSE



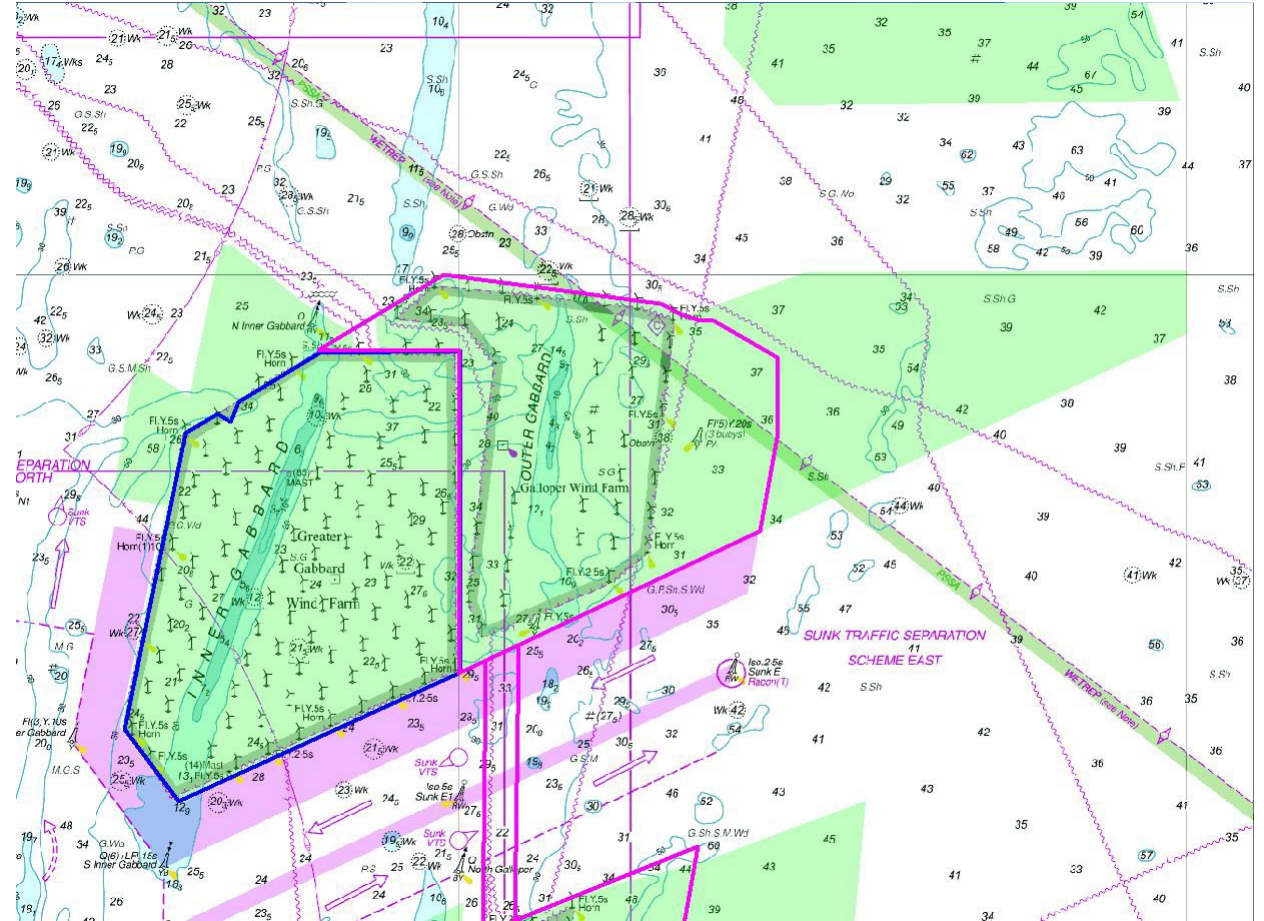
TRINITY HOUSE

Existing windfarms
are being extended
bringing new
challenges.

Green shading is the
area for lease
proposed by The
Crown Estate.

Source The Crown Estate

www.trinityhouse.co.uk





TRINITY HOUSE



www.trinityhouse.co.uk



TRINITY HOUSE



Maritime &
Coastguard
Agency

MARINE GUIDANCE NOTE

MGN 654 (M+F)

Safety of Navigation: Offshore Renewable Energy Installations (OREIs) - Guidance on UK Navigational Practice, Safety and Emergency Response.

Notice to Other UK Government Departments, Offshore Renewable Energy Developers, Offshore Transmission Owners, Port Authorities, Ship owners, Masters, Ships' Officers, Fishermen and Recreational Sailors.

This notice replaces Marine Guidance Note 543 and should be read in conjunction with the following MCA documents:

- Marine Guidance Note 372 "Offshore Renewable Energy Installations (OREIs) - Guidance to Mariners operating in the vicinity of UK OREIs", and
- "Methodology for Assessing the Marine Navigational Safety Risks & Emergency Response of Offshore Renewable Energy Installations".

Note: References contained in this document can be accessed via the MCA website at www.gov.uk/guidance/offshore-renewable-energy-installations-impact-on-shipping

Other useful websites include:

- www.gov.uk/beis
- www.thecrownestate.co.uk
- www.crownestatescotland.com
- www.crownestate.gov.uk
- www.legislation.gov.uk
- www.gov.uk/mmo
- www.gov.scot/marine-and-fisheries/
- <https://naturalresourceswales.gov.uk>
- www.daera-ni.gov.uk
- <https://infrastructure.planninginspectorate.gov.uk>
- www.un.org/depts/los
- www.kis-orca.eu
- www.iala-aism.org



IALA GUIDELINE

G1162 THE MARKING OF OFFSHORE MAN-MADE STRUCTURES

Edition 1.1

December 2021

urn:mrn:iala:pub:g1162:ed1.1

20, rue des Glaceries - 75003 Paris (France)
Tél. +33 (0)1 53 23 70 01 - contact@iaa-ism.org
www.iaa-ism.org
International Association of Marine Aids to Navigation and Light House Authorities
Association Internationale de Signalisation Maritime



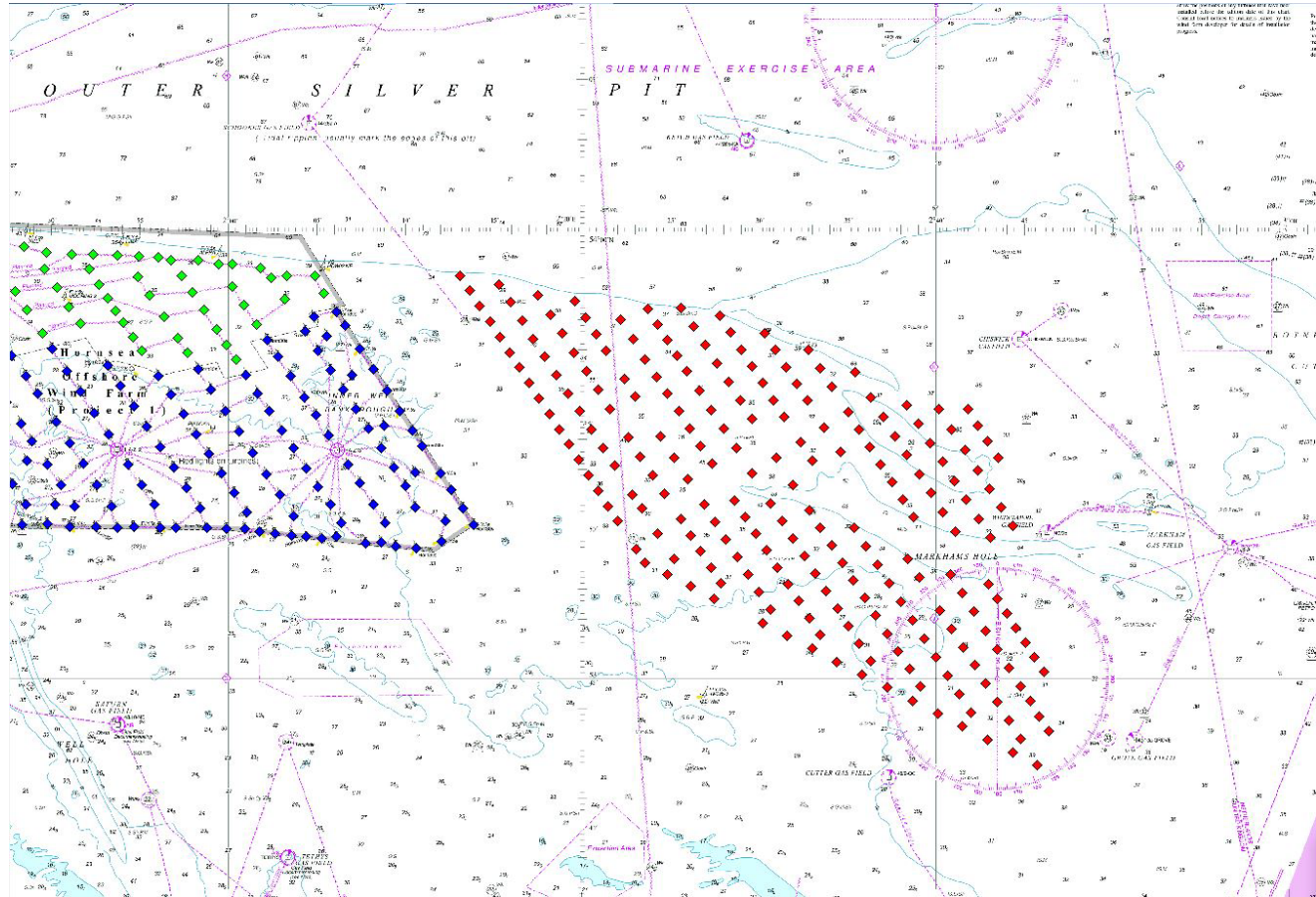
TRINITY HOUSE

Green and blue diamonds are completed windfarms.

Red diamonds are a proposed windfarm which will be built in the near future.

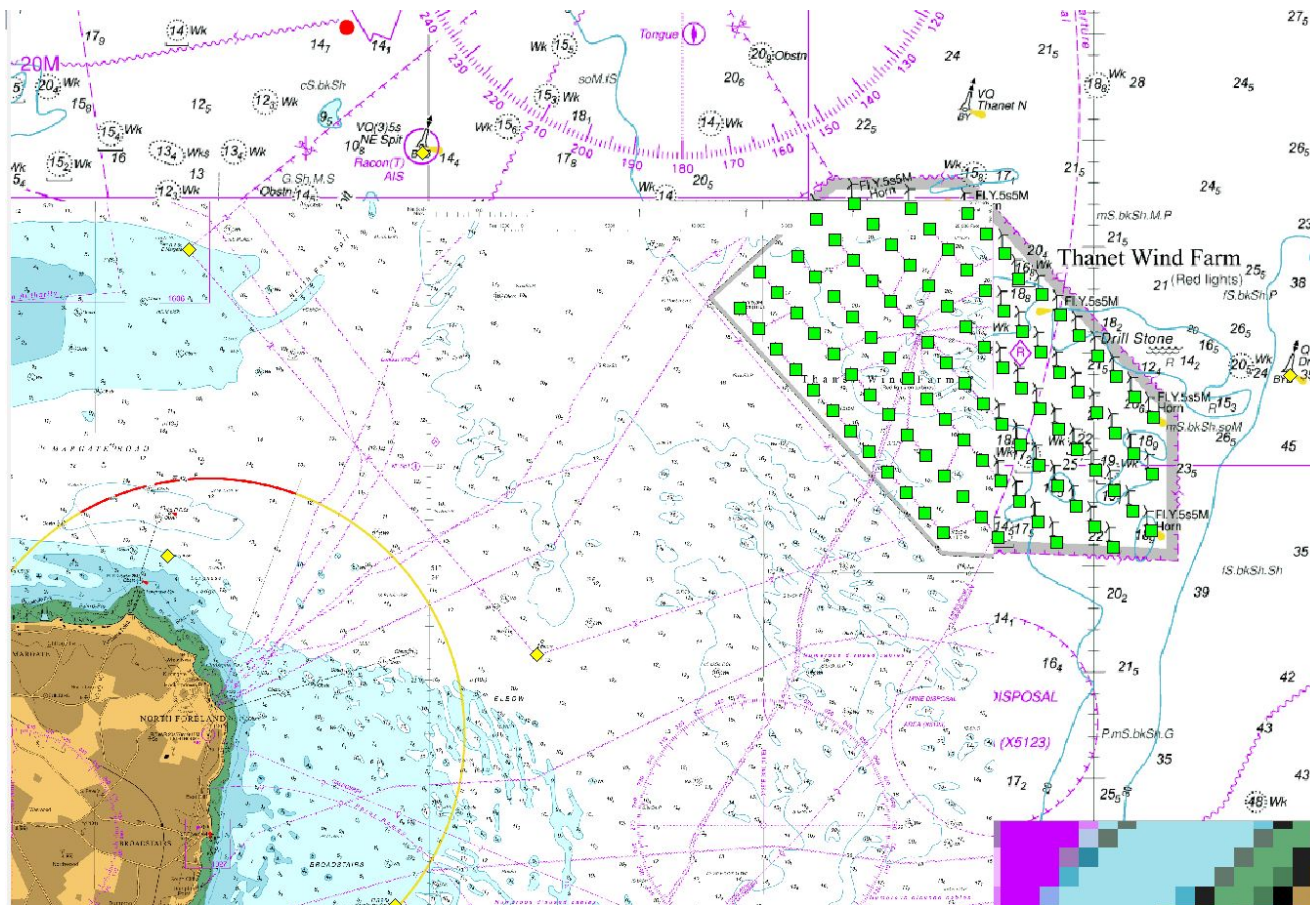
The channel between the windfarms complies with MCA guidelines

www.trinityhouse.co.uk





Thanet Windfarm

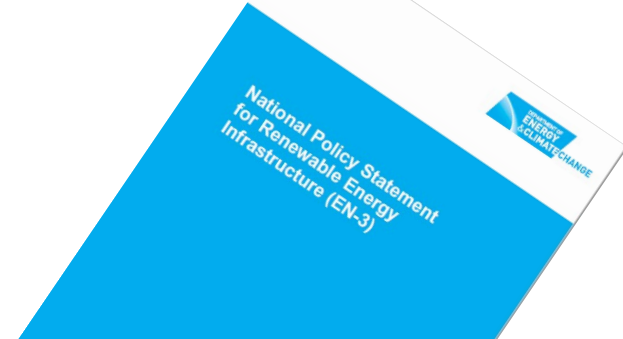




TRINITY HOUSE

Challenges have included:

- The GLAs operating under numerous legislative regimes with governments adopting different processes for consent and licencing;
- The GLAs working mostly to guidelines that can be interpreted in many ways;
- Differing approaches and varying levels of resource for the management of offshore development from different government departments;
- There is no legal definition under UNCLOS for “Shipping Route” or “International Shipping Lane” yet these terms are regularly used in the windfarm planning process.





TRINITY HOUSE

Opportunities have included:

- We have developed close working relationships with the Marine Management Organisation, the Department for Business, Energy and Industrial Strategy, the Maritime and Coastguard Agency, The Crown Estates, the UK Chamber of Shipping, the UK Hydrographic Office and organisations representing leisure users.
- We have been able to establish standard conditions for Development Consent Orders and Deemed Marine Licences in England.
- Crown Estates have been supportive in assisting us with the enforcement of availability and AtoN maintenance as the lessor for the sites;
- The GLAs are Programme Steering Group Members of the Crown Estate's Offshore Wind and Evidence Change Programme.

Standard Navigation Conditions

- Conducting inspections and providing notifications for work such as notices to mariners.
- Providing pre-construction plans and documents including an AtoN management plan.
- Consulting the relevant MGNs including 654 OREI “Guidance on UK Navigational Practice, Safety and Emergency Response Issues”.
- Keeping Trinity House and the MMO informed of progress with the development.
- Providing reports to Trinity House of the availability of Aids to Navigation once in place.
- Painting structures as required by Trinity House.



TRINITY HOUSE

So What?

- Early engagement with the GLAs and relevant regulatory body will help with understanding, in particular, the qualitative assessment of the risk to shipping from windfarms.
- Across the Governments there are varying regulations associated with offshore licensing, so early engagement with your respective GLA could help with an understanding of what is likely to be required from an AtoN perspective.
- There is much guidance in the licencing process which leads to varying interpretations of what is required and, again, early interaction with the relevant GLA is recommended.
- There is no one size fits all solution for the safe marking of windfarms. Each case requires its own detailed assessment.
- Standard navigation conditions have been adopted in England are helping to ease the licensing process. These are available for neighbouring jurisdictions.



TRINITY HOUSE

www.trinityhouse.co.uk

General Lighthouse Authorities

The United Kingdom and Ireland

2040: Navigating the Future

The General Lighthouse Authorities Strategy
has been undertaken by:

Irish Lights | Northern Lighthouse Board | Trinity House



Commissioners of
IRISH LIGHTS | Navigation
and Maritime
Services



Northern
Lighthouse
Board



TRINITY HOUSE





Navigating to 2050

A safe and sustainable maritime future

#NavigatingTo2050



Nigel Hare

Director of Navigational Requirements
Trinity House



Commissioners of
IRISH LIGHTS

Navigation
and Maritime
Services