

Floating wind in the Celtic Sea

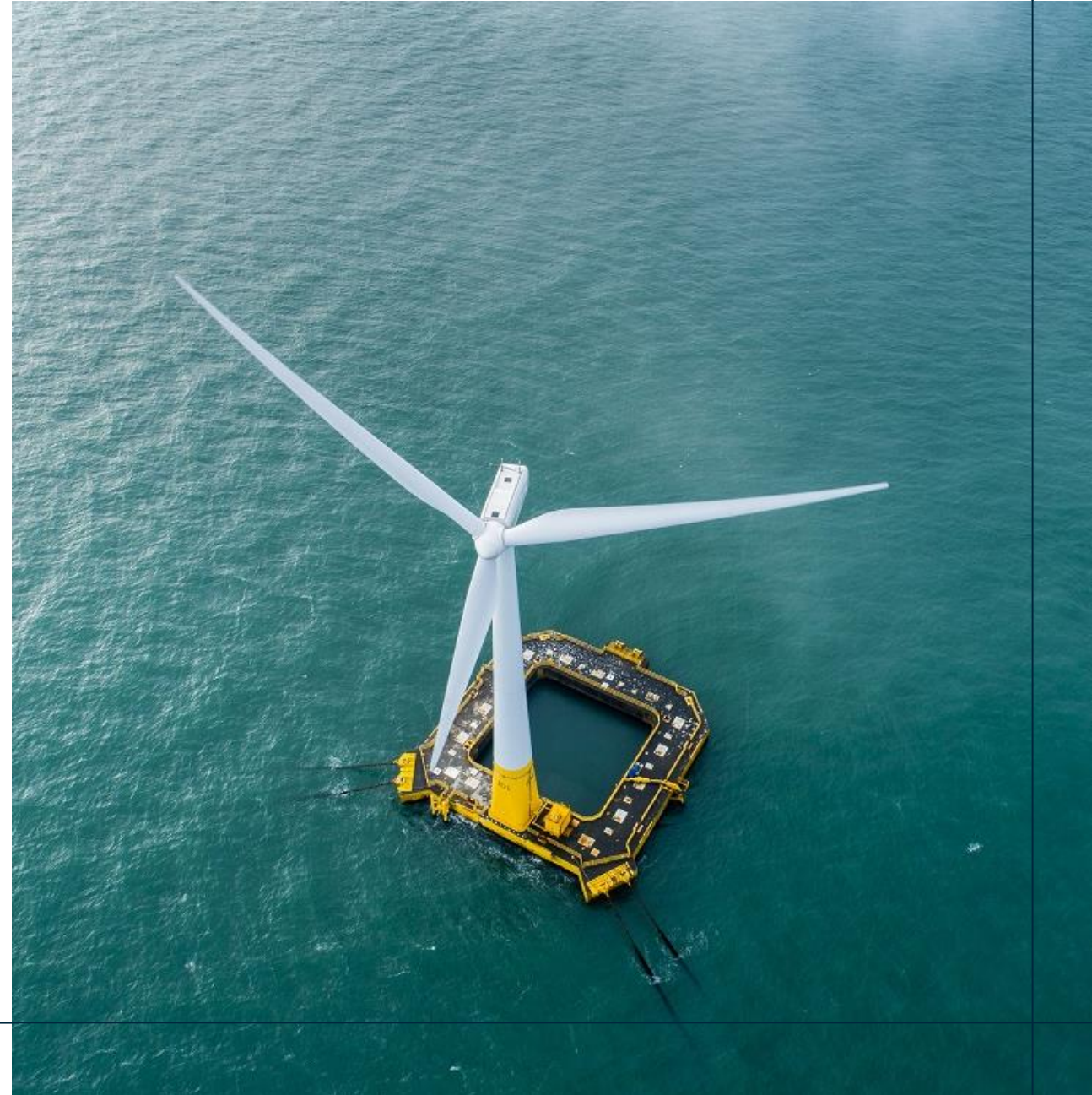
Engagement Event / July 2022

1. Image: BW Ideol & V.Joncheray

Welcome

The purpose of today's webinar is to:

- Provide information on our engagement to date
- Update on our approach and progress on the spatial design of Floating Wind in the Celtic Sea
- Share with you the initial Areas of Search and outline how we will be taking these forward and further refining these areas
- Provide further information on the forward timeline
- Opportunity for Q&A and feedback



Floating offshore wind and our engagement with you so far



Tim Stiven

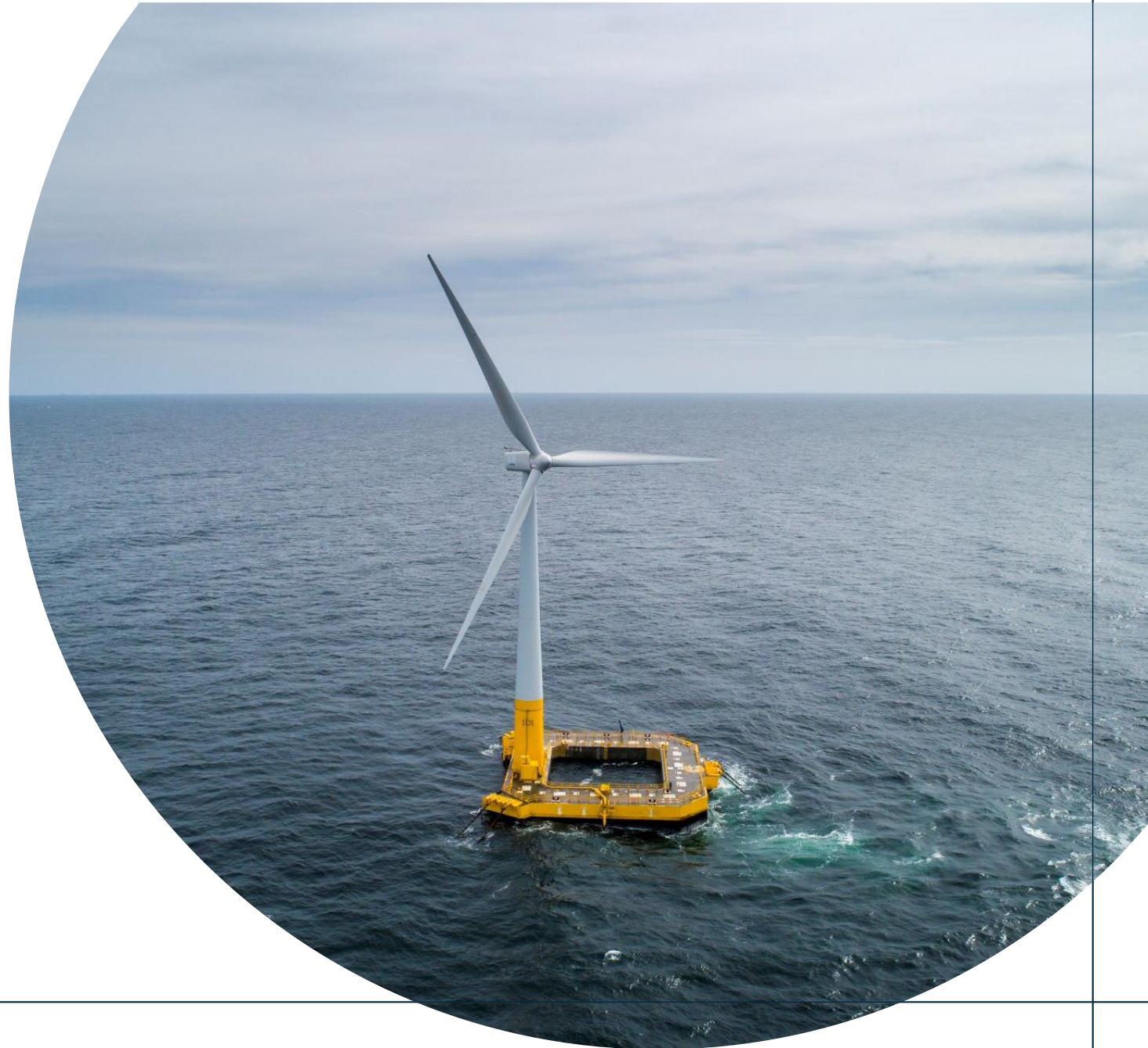
Senior Development Manager,
Marine



Our aims

Our aims for this floating wind leasing opportunity in the Celtic Sea are:

- **Unlock clean energy in new areas, in support of net zero**
- **Support the development of floating wind in the UK, including the cost-reduction of the technology**
- **Incentivise investment in critical enabling infrastructure**
- **Help create economic and social value, through new skills and regional jobs**
- **Balance the needs of the environment, other sea users, and communities onshore**



DEC 2020



INITIAL INVITATION FOR VIEWS

Invitation to market for views on how best to accelerate the development of floating wind in the UK

Input from **over 30** interested market participants across industry

Responses received confirmed strong capability and appetite for floating wind, and helped refine our proposition from 1GW to 4GW



DEC 2020 - NOV 2021



ONGOING INFORMAL ENGAGEMENT

Bilateral engagement with market and other marine stakeholders to shape plans and thinking



FEB 2022



MARINE STAKEHOLDER WORKSHOP

Online workshop to explain how spatial design approach responded to stakeholder feedback

The workshop was attended by **over 70** individuals from c.30 organisations

Explored data weightings which directly informed the way we have used data in our spatial modelling, which resulted in the Areas of Search



NOV - DEC 2021



SPATIAL DESIGN AND DATA QUESTIONNAIRES

Questionnaires issued to **over 150** stakeholders requesting:

Input on spatial design from marine and market stakeholders

Datasets to support spatial modelling and flag any risks to existing seabed users and interests



FEB - JUNE 2022



ENGAGEMENT TO INFORM SPATIAL AND TENDER DESIGN

Informal engagement to refine spatial modelling work and identify other significant factors, including the environment, navigation, fisheries, aviation, and defence



MAY - JUNE 2022



PRE-CONSENT SURVEYS ENGAGEMENT

Over 50 developers invited to share their views on datasets, methods, standards, and areas of focus that will accelerate delivery as much as possible



JULY 2022 - AUTUMN 2022



ENGAGEMENT TO INFORM DEFINITION OF PROJECT DEVELOPMENT AREAS

Targeted engagement undertaken to further understand project risks, refine Areas of Search and inform the definition of Project Development Areas



JULY 2022



AREAS OF SEARCH

Establishes areas of seabed that will be taken forward into plan-level Habitats Regulations Assessment (HRA) and grid infrastructure



Our approach to spatial design – a recap

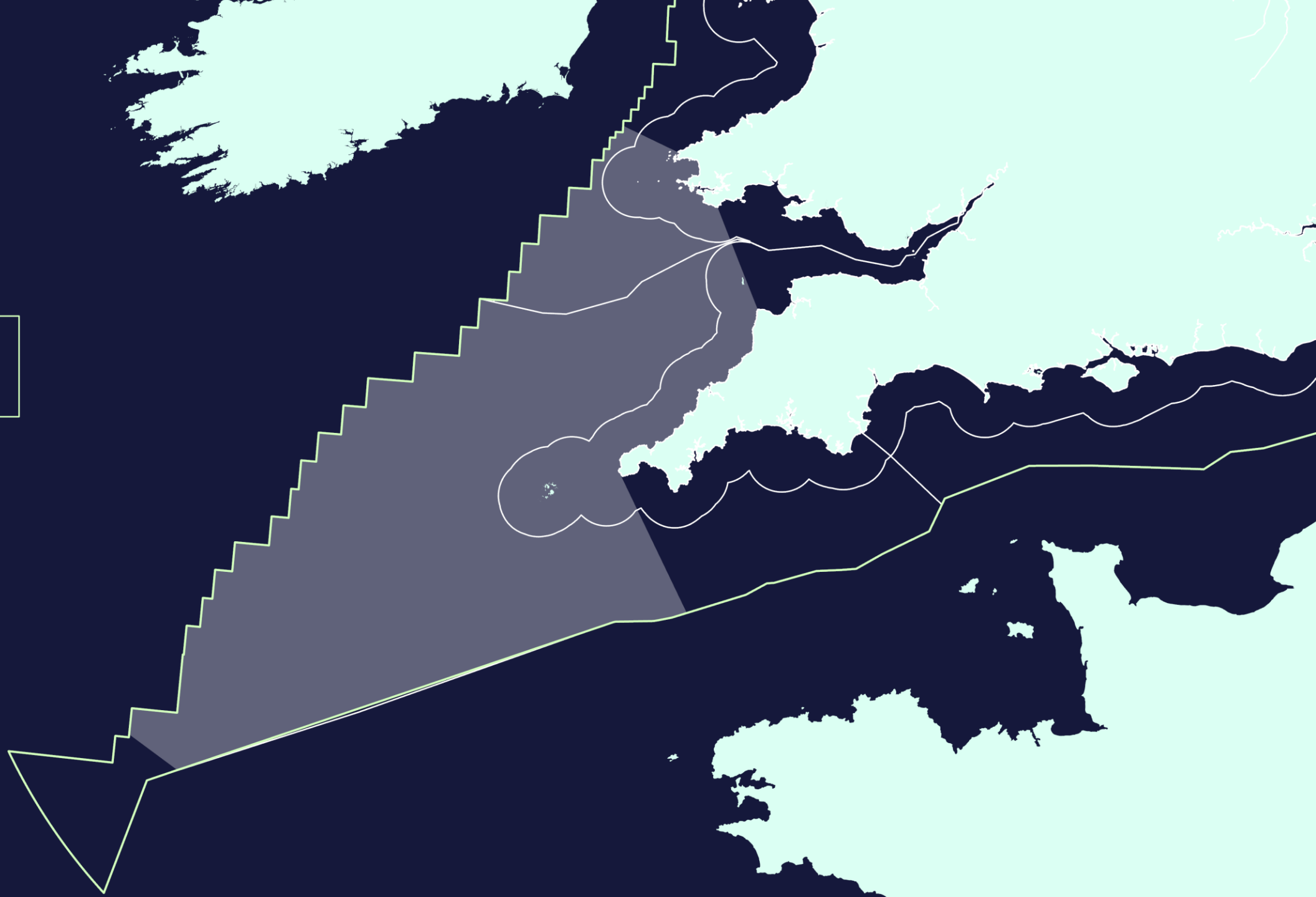
Spatial modelling



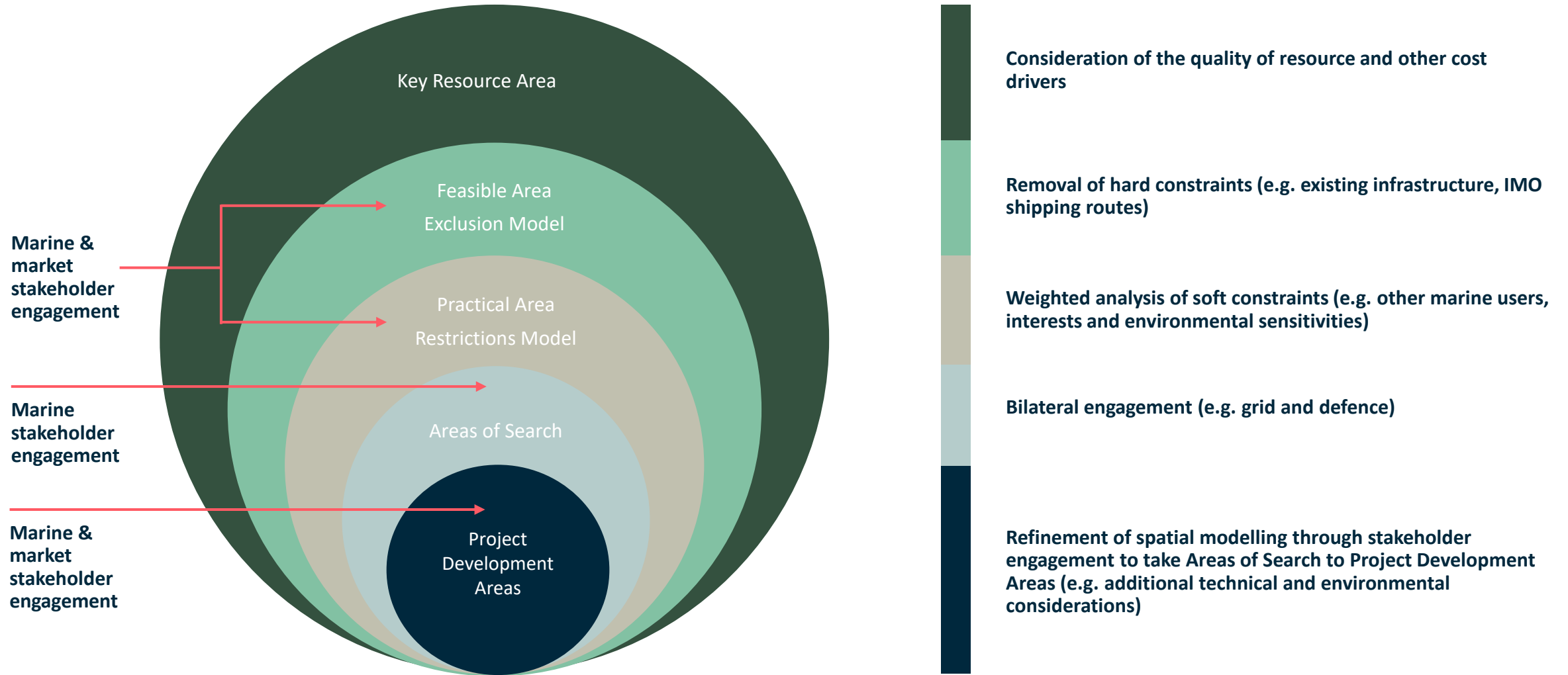
Michelle Moore

Senior Spatial Marine Planning
Manager





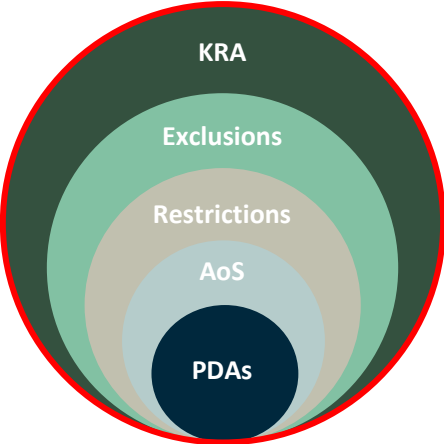
Spatial opportunity



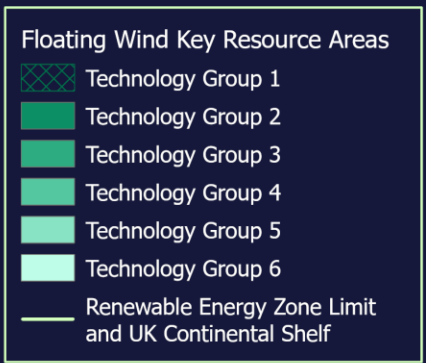
Key Resource Area

Broad Horizons Report:

<https://www.marinedataexchange.co.uk/details/2117/2020-everoze-characterisation-of-key-resource-areas-for-offshore-wind-a-report-for-the-crown-estate/summary>

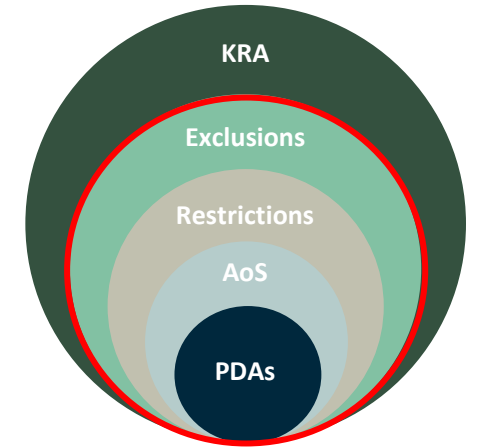


	minimum depth for semi-submersibles 50m	maximum practical requirement in UK waters 250m	minimum depth for semi-submersibles 50m	maximum practical requirement in UK waters 250m
TG: Technology Group	Depth range Substructures to withstand... <14m Hs50		Depth range Substructures to withstand... >14m Hs50	
Conventional anchoring	TG-1: Conventional anchoring, moderate sea-state For sediments greater than 20m thick		TG-2: Conventional anchoring, onerous sea-state For sediments greater than 20m thick	
Complex anchoring	TG-3: Complex anchoring, moderate sea-state For sediments 5-20m thick		TG-4: Complex anchoring, onerous sea-state For sediments 5-20m thick	
Rock-socket piles	TG-5: Rock-socket piles, moderate sea-state For sediments less than 5m thick		TG-6: Rock-socket piles, onerous sea-state For sediments less than 5m thick	



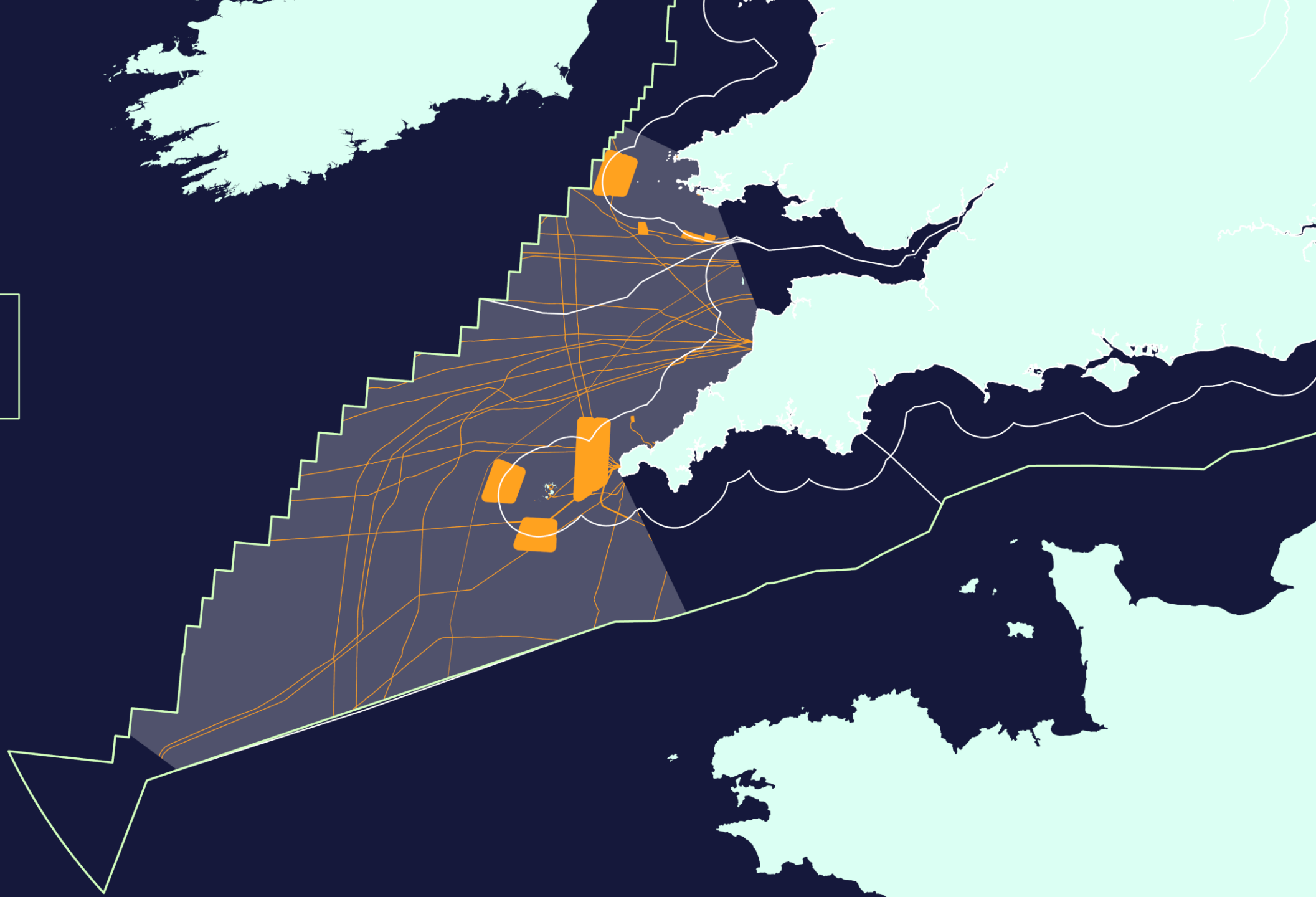
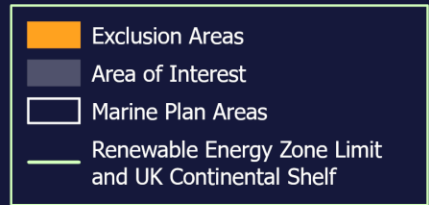
Exclusion Model

Hard constraint: Data inputs relating to activities and receptors that currently preclude floating offshore wind development



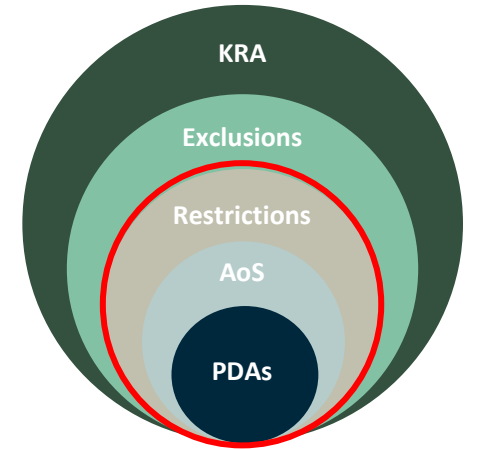
Reasons for exclusion:

1. Existing infrastructure in place that would preclude development
2. Safety reasons would inhibit development
3. Existing rights have been granted over the seabed which preclude development

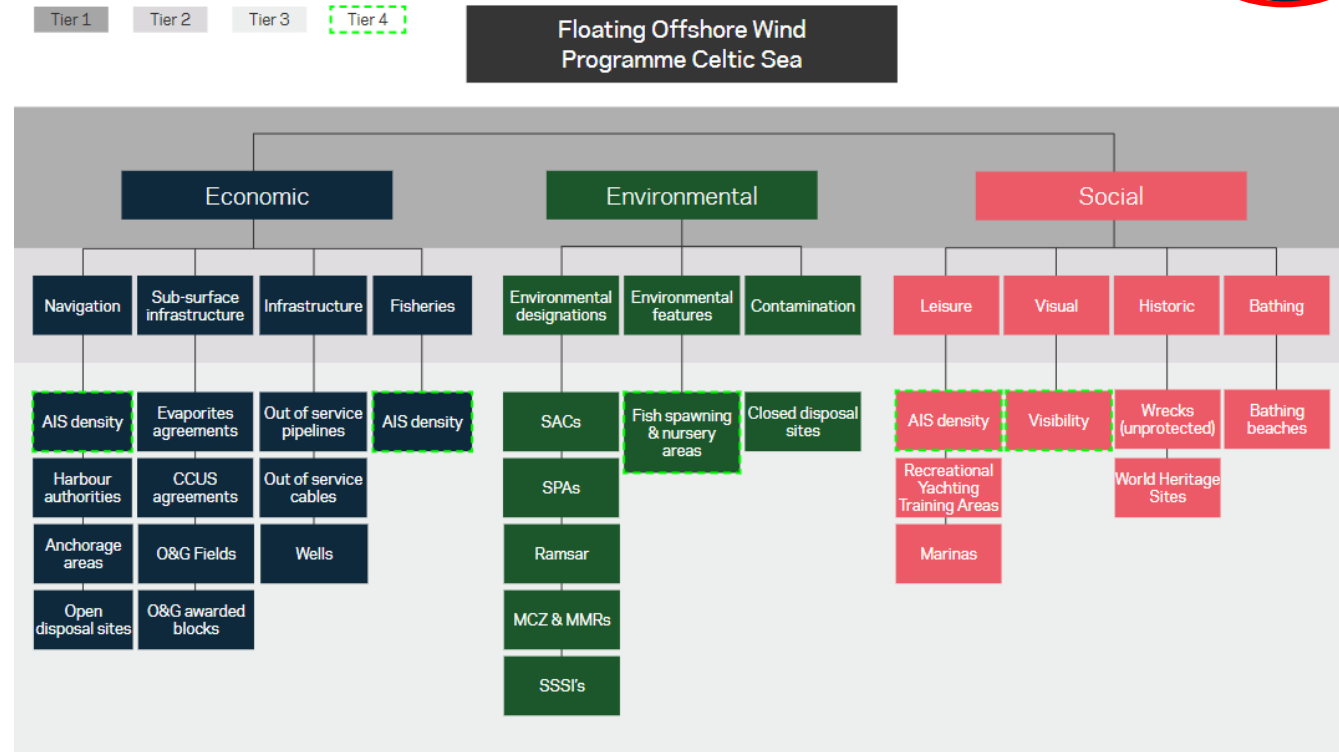
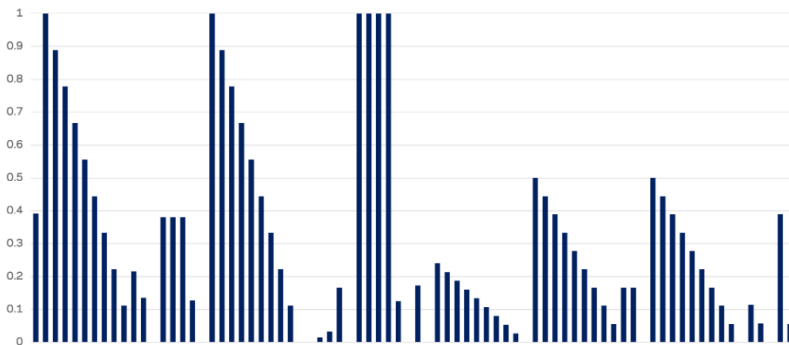


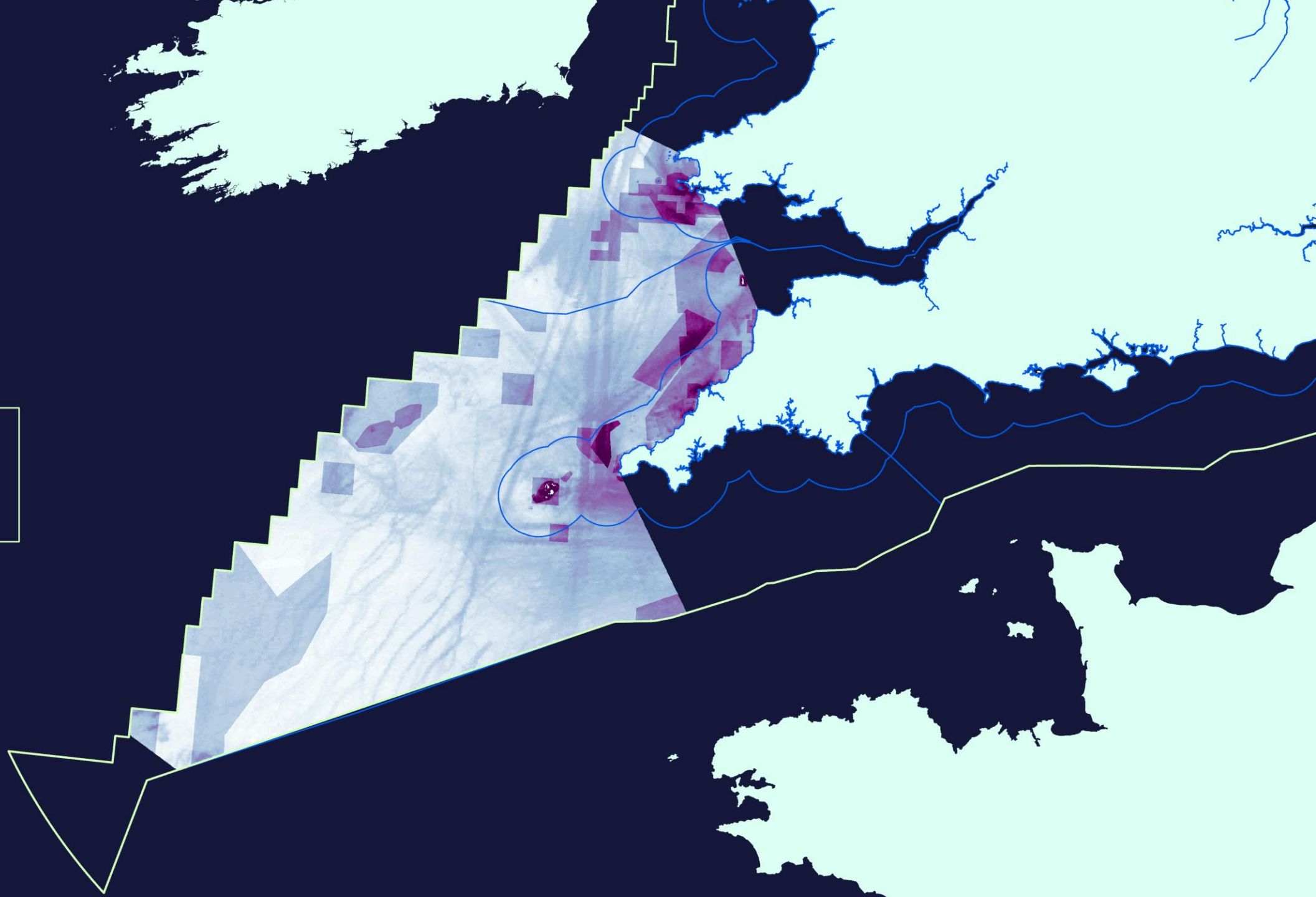
Restriction Model

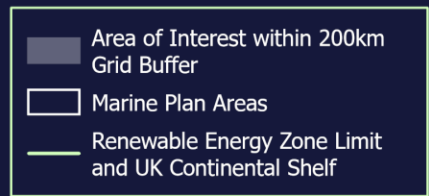
Soft constraint: Data on activities and sensitivities that may provide varying levels of constraint on the development of floating offshore wind, but not necessarily preclude development

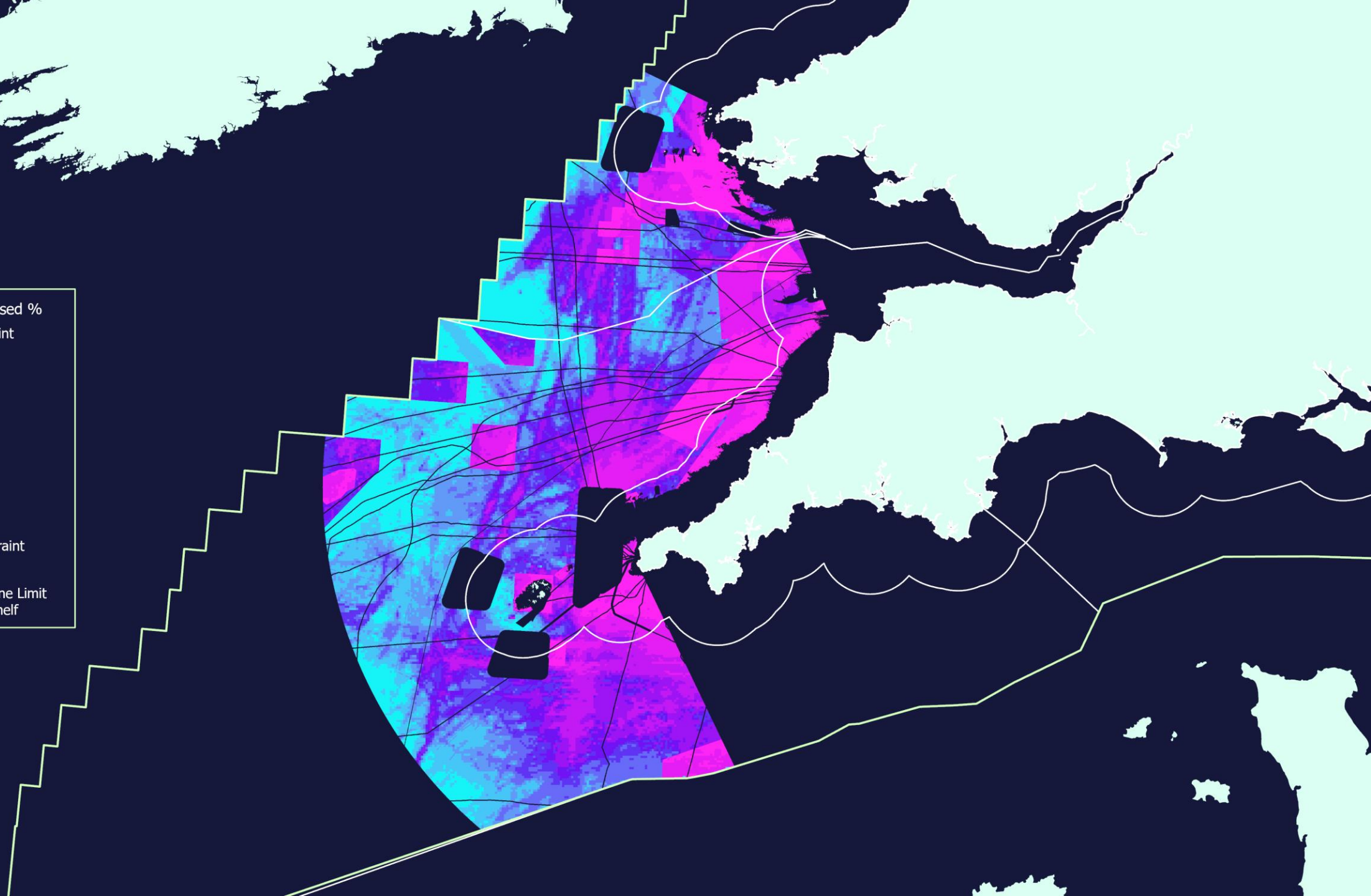


- Marine Resource System (MaRS) tool
- Analytical Hierarchy Process (AHP)
- Pairwise comparisons process ran in the February workshop











Areas of Search



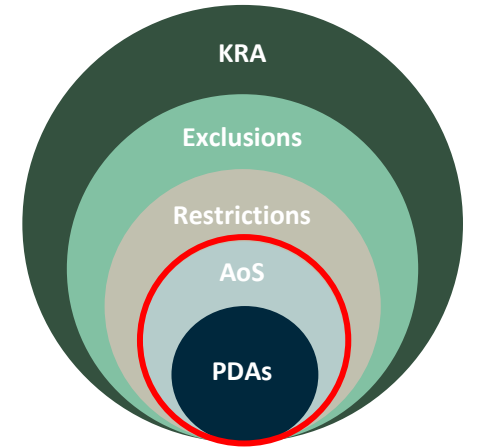
Joe Smithyman

Marine Resources Manager



Areas of Search Identification

Using spatial outputs to drive bilateral engagement on Areas of Search with a wide range of stakeholders across a range of industries, user groups and activities



Areas of Search

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5

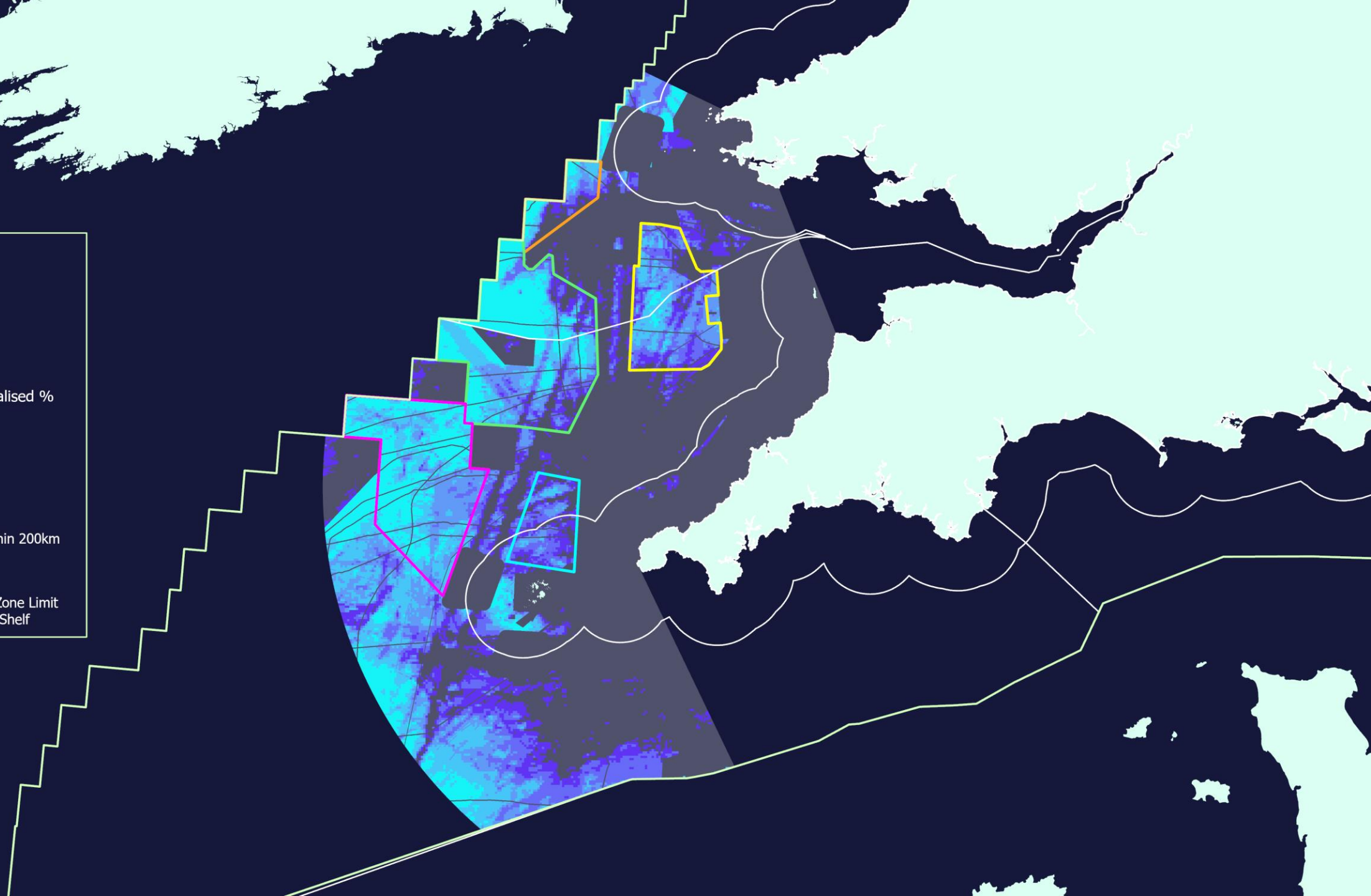
Constraint Class - Normalised %

- ≤10
- ≤20
- ≤30
- ≤40
- ≤50

Area of Interest within 200km Grid Buffer

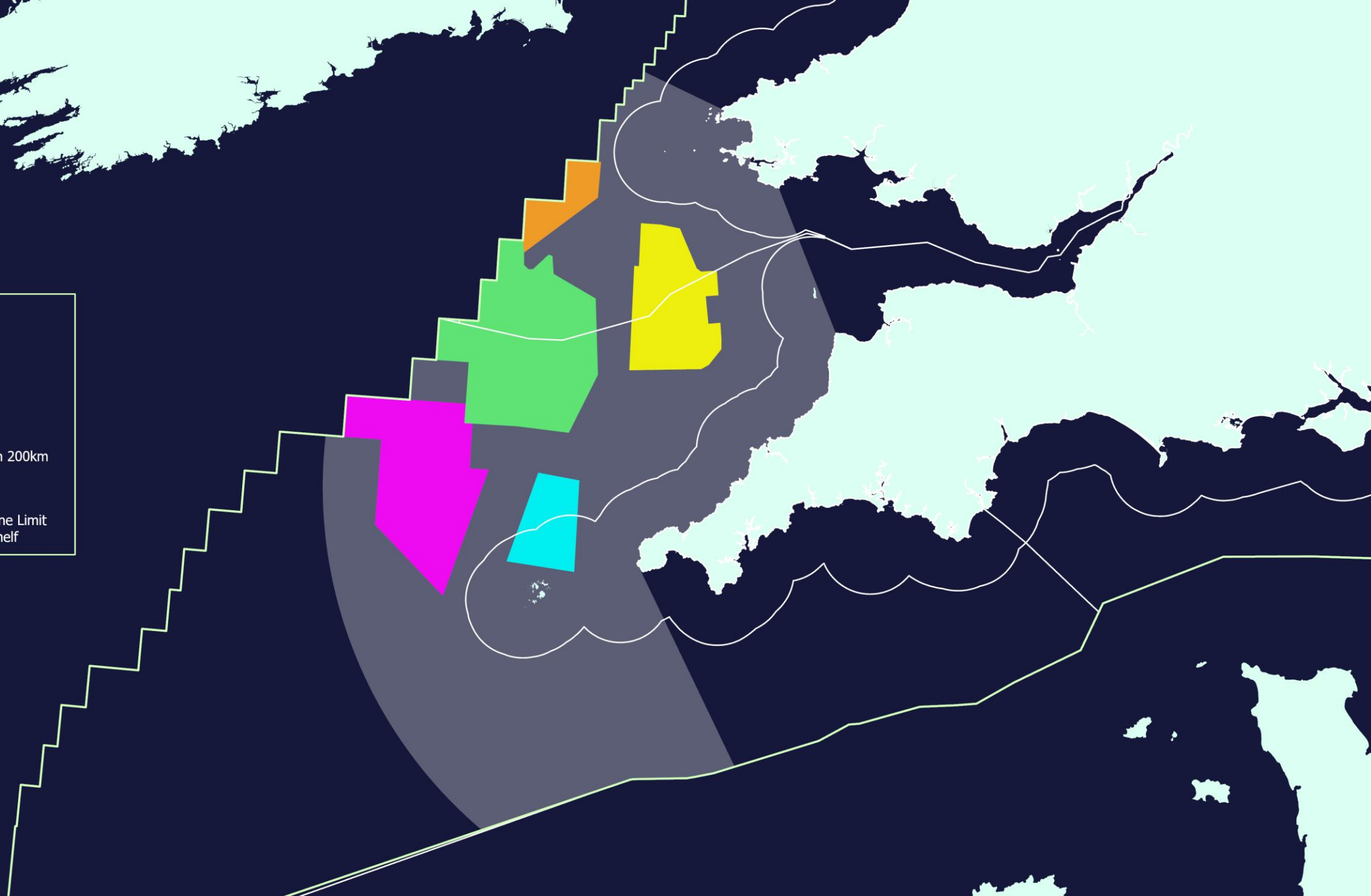
Marine Plan Areas

Renewable Energy Zone Limit and UK Continental Shelf



Areas of Search

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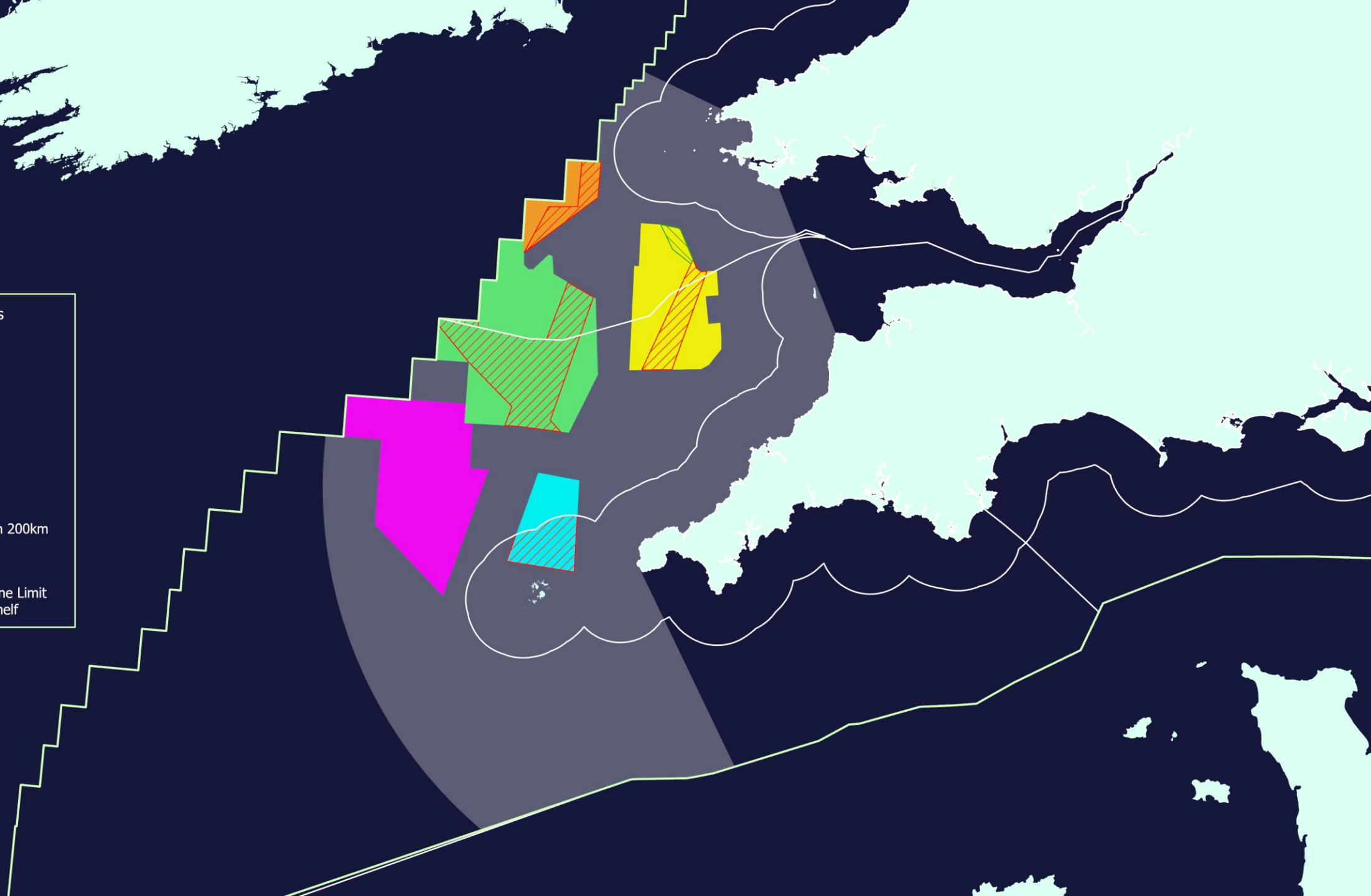


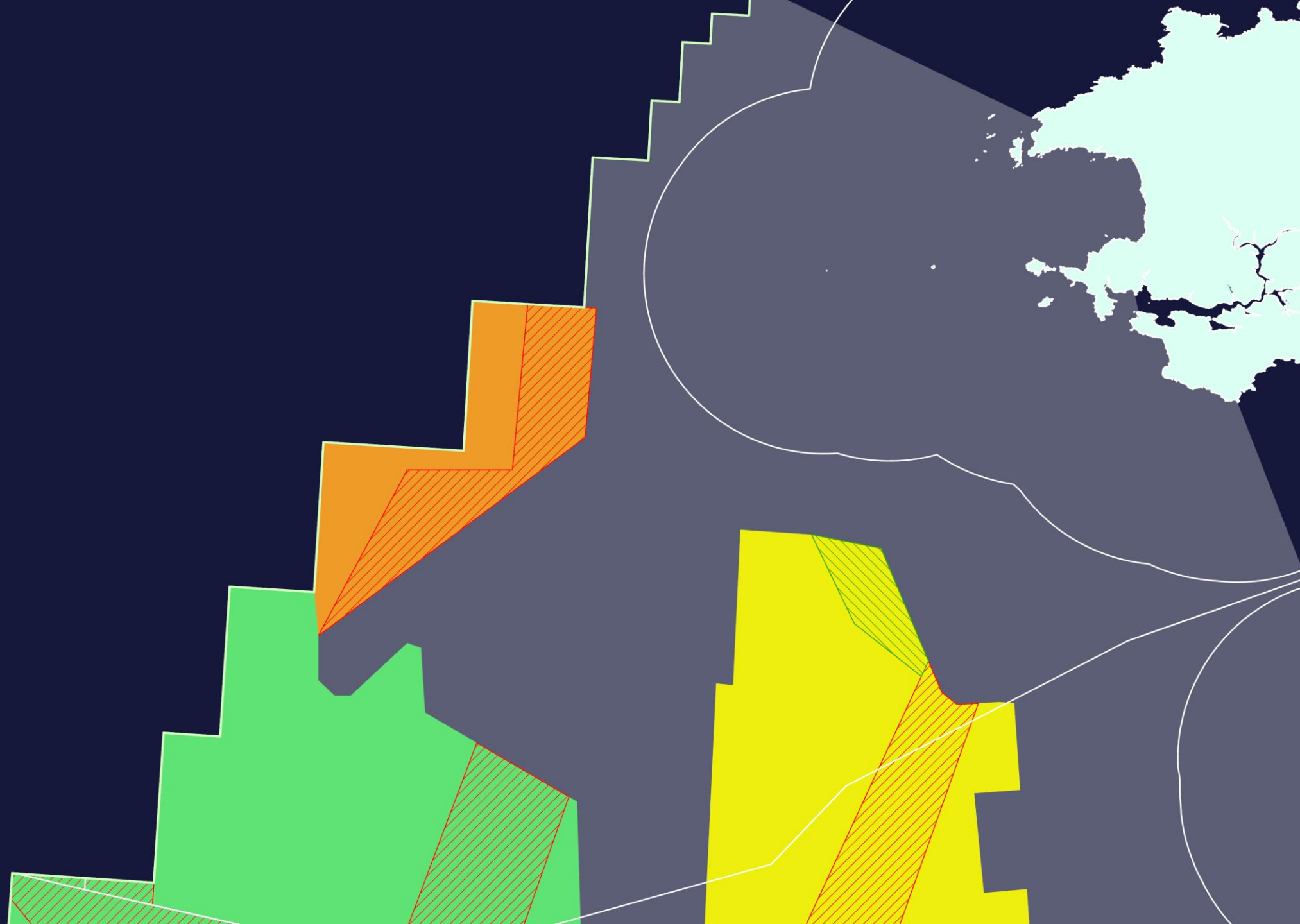
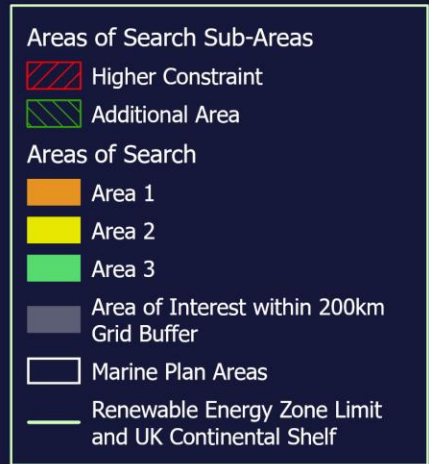
Areas of Search Sub-Areas

- Higher Constraint
- Additional Area

Areas of Search

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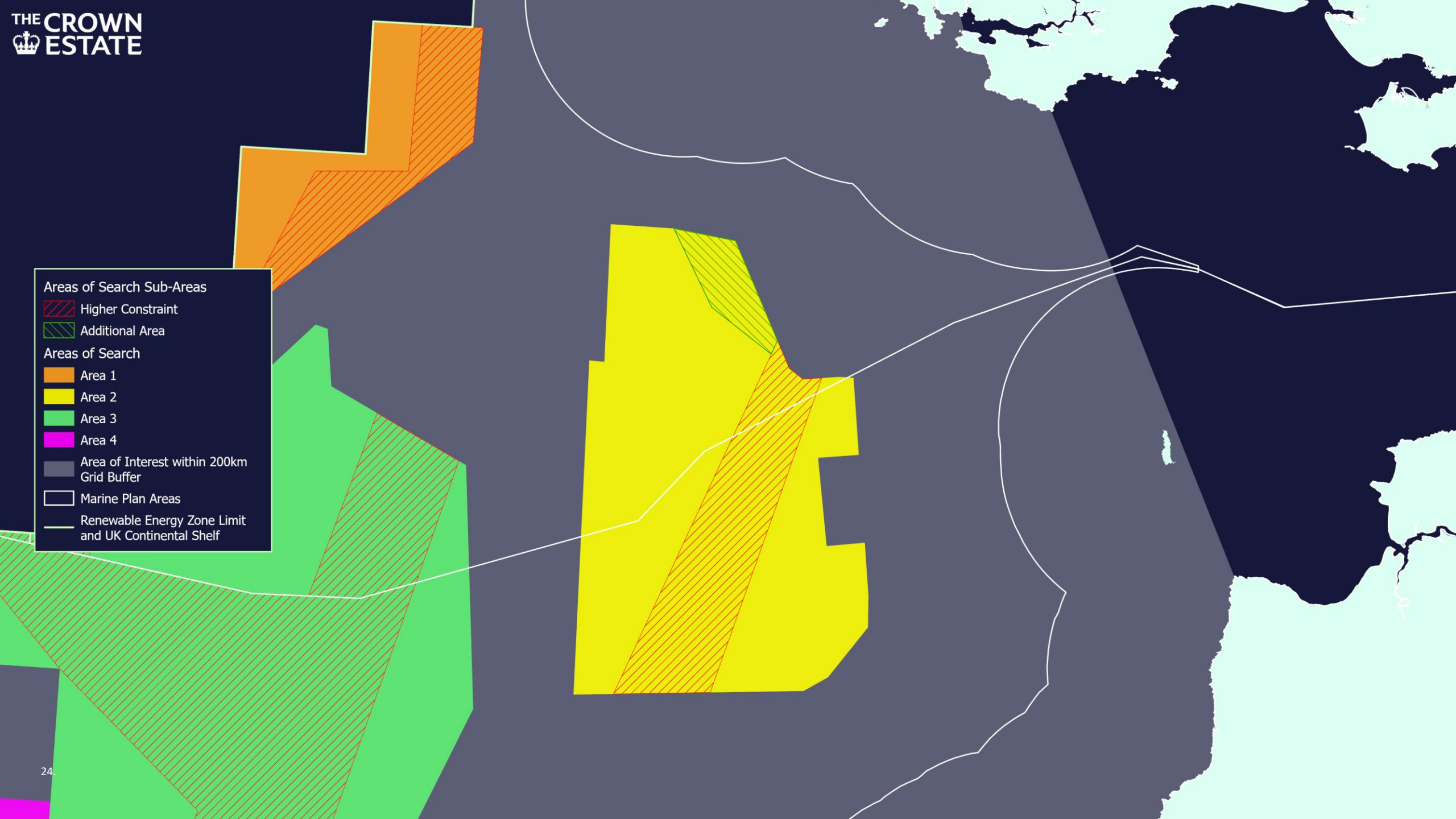


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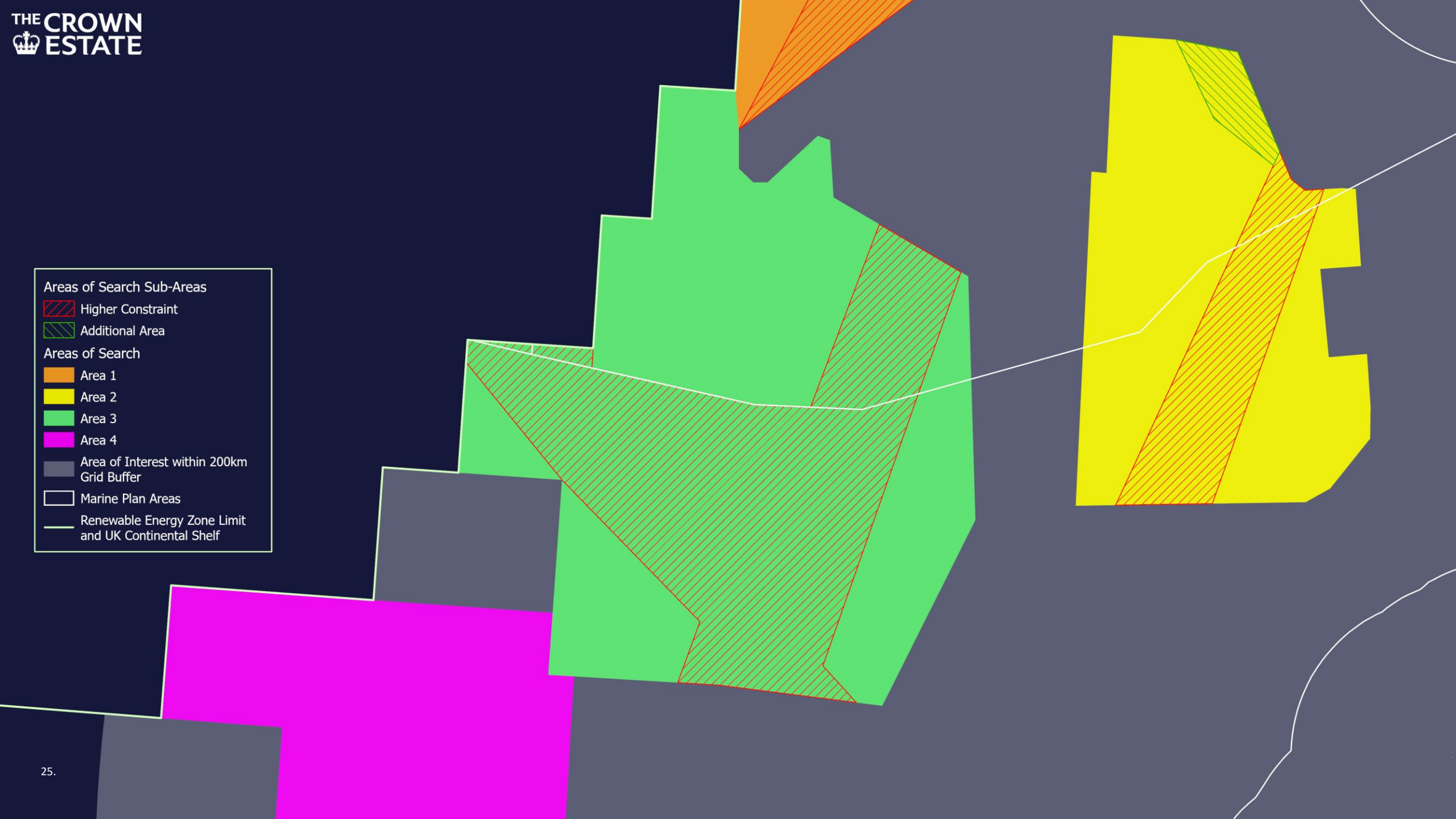


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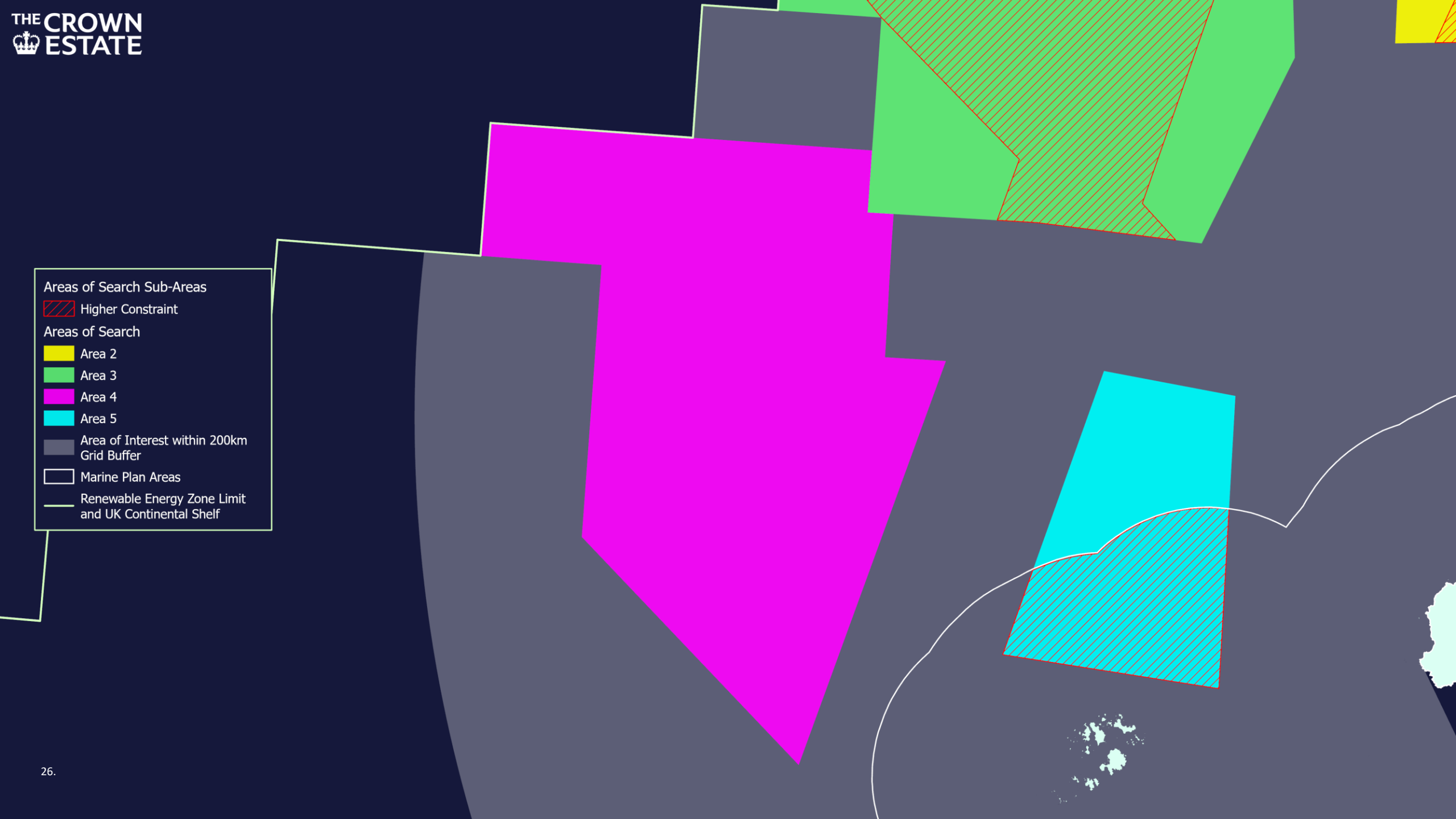
Areas of Search

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Area of Interest within 200km Grid Buffer

Marine Plan Areas

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Areas of Search Sub-Areas

 Higher Constraint

Areas of Search

 Area 3

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 Area 5

 Area of Interest within 200km
Grid Buffer

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Habitats Regulations Assessment



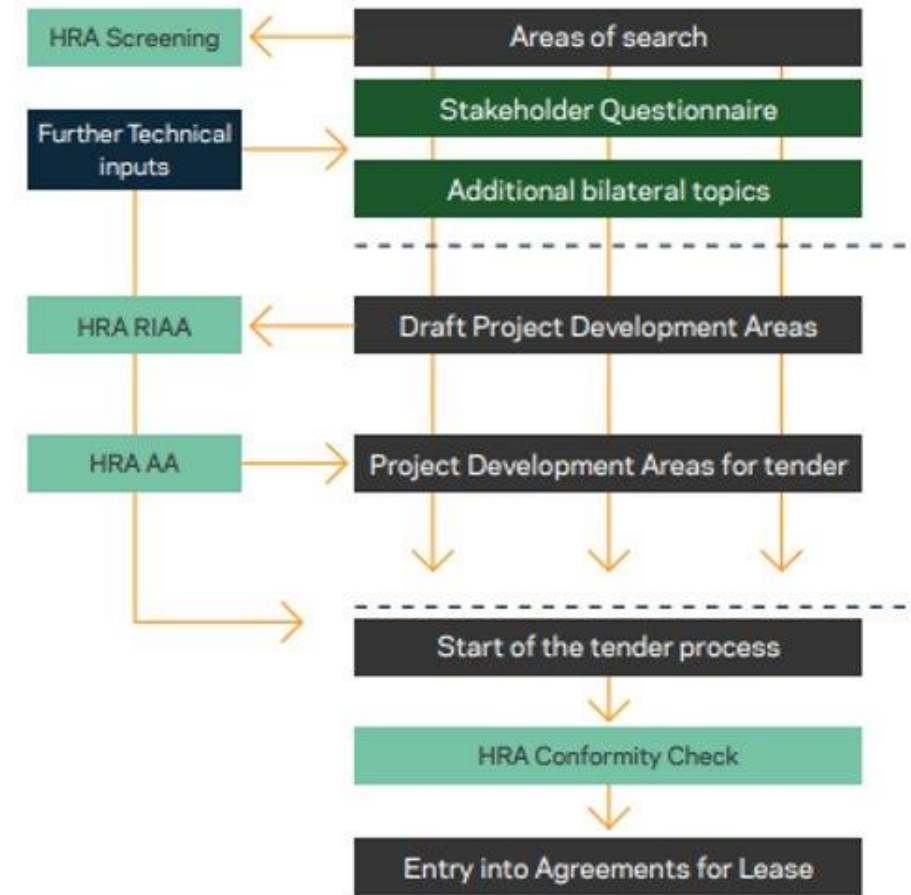
Sion Roberts

Marine Consents Manager



Spatial Design and HRA Approach

- The Crown Estate is a Competent Authority under the Habitats Regulations*
- We therefore conduct a plan-level Habitats Regulations Assessment (HRA) for any leasing/licensing activity that constitutes a 'plan'
- This will assess the plan's impact on protected sites before seabed rights can be awarded
- HRA will take place before tender commences
- A conformity assessment will be required after the conclusion of the tender to ensure the conclusions of HRA remain valid when Agreements for Lease are entered into
- We will also undertake a Marine Conservation Zones (MCZ) assessment in line with our obligations under the Marine and Coastal Access Act 2009 to consider the potential impact of our leasing plans on MCZs



*Habitats Regulations:- The Conservation of Habitats and Species Regulations 2017 (as amended), The Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended)

Next steps



Tim Stiven

Senior Development Manager,
Marine



Next steps: we want to hear from you

**Any information on
further risks that we
should consider**

**Any additional data
or evidence to
support further
refinement**

**Continuing targeted
bilateral engagement**

Next steps: Engaging, identifying areas for development, and tendering



Further information

We know that sharing information with one another, providing regular updates and publishing key reports is what will help us achieve our collective ambitions for this region.

The Crown Estate's website has a wealth of resources and information available:

- [February 2022 workshop outputs](#)
- [Offshore Wind Environment Change Programme](#)
- [Latest press releases](#)
- [Draft site selection methodology](#)
- [Areas of Search story map](#)
- [Areas of Search data viewer](#)
- [Open data portal](#)

The presentations from today's webinar will also be made available on The Crown Estate's dedicated floating offshore wind page: thecrownestate.co.uk/floatingwind



Close

Thank you for your participation.

If you have any questions, please contact us at:

offshorestakeholder@thecrownestate.co.uk

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