Offshore Wind New Leasing Market Engagement Event
26th November 2018
Welcome

This presentation is provided for information purposes only. No party is entitled to rely on its contents. The Crown Estate makes no representation, assurance, undertaking or warranty and accepts no duty, reliability or responsibility in respect of the information in this presentation.

For the avoidance of doubt, please note that The Crown Estate's management duties in Scotland have been transferred to Scottish Government. The information contained within this presentation therefore relates to the potential leasing of new offshore wind projects in England, Wales and Northern Ireland only.
Aims of this event

• To update you on our plans for a potential new leasing round

• To share a summary of feedback received to date from market and statutory stakeholders

• To share our proposals for tender design

• To set out the engagement process and answer any questions
Introduction

Huub den Rooijen
Policy context

Yuen Cheung

BEIS
Priorities

- Tackling climate change
- Leaving the environment in a better state than when we inherited it
- Industrial Strategy
- Clean Growth
- Reliable, affordable energy for consumers
Offshore wind’s role

• Costs continue to fall
• Significant appetite to develop and invest in UK
• Offshore wind is now going global
• Becoming integral part of UK electricity system
• 6.2% of annual generation in 2017, over 10% by 2020
• 14GW by 2023
Offshore wind’s role

• Government providing long term certainty

• Next Contract for Difference auction start by end May 2019

• Then auctions every two years

• Depending on auction prices, could see 1-2GW of new offshore wind per annum in 2020s

• Industry says it could deliver 30GW installed by 2030
Offshore wind portfolio:
Context
Will Apps
The Crown Estate is an independent, commercial business created by Act of Parliament.

Net revenue profit: £329.4m (2017/18)

Capital value: £14.1bn (2017/18)
Policy & regulatory setting: offshore renewables

**Land rights**
- The Crown Estate (TCE) & Crown Estate Scotland (CES)
  - Leasing rounds
  - Statutory obligations
  - Stakeholder interests
  - Active management of seabed

**Consents to build and operate**
- Government
  - Planning authorities
  - Regional marine plans
  - Statutory advisors
- Ofgem
  - Generation licence

**Transmission**
- Ofgem / SO / OFTO
  - Developer/System Operator agree connection
  - Separate licence for offshore transmission
  - “Generator Build” model
  - OFTO tender round – now 25 year revenue

**Economic support**
- Government
  - Deliver energy policy objectives
  - Allocation for 15-year CfDs
  - AR3 by May 2019; every 2 years thereafter delivering 1-2 GW per annum in 2020s

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**Compete for sites**
- Private Sector / Developers / Investors

**Obtain consents & licences**

**Secure grid connection**

**Compete for contracts**
Statutory Obligations

• The Crown Estate is a Competent Authority under the Habitats Regulations*

• We must conduct a plan-level Habitats Regulations Assessment (HRA) for any leasing/licensing activity that constitutes a ‘plan’

• The plan-level HRA requires us to assess the impacts on Natura 2000 designated sites before full seabed rights can be awarded

• We also contribute to the marine planning process by working with the MMO (England), Welsh Government, and DAERA (Northern Ireland)

*Habitats Regulations:
- The Conservation of Habitats and Species Regulations 2017
- The Conservation of Offshore Marine Habitats and Species Regulations 2017
- Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland
The lifecycle of offshore wind leasing

- Decommissioning
- Continued operation (if viable)
- Lifetime extension or repowering
- Operation
- Pre-tender engagement
- Leasing process
- Consenting
- Procurement & Contracts for Difference tender
- Construction

Indicative time (years):
- Decommissioning: 1
- Continued operation: 2
- Lifetime extension or repowering: 5-20
- Operation: 25
- Lease: 5
- Procurement & Contracts for Difference tender: 1
- Consenting: 3
- Pre-tender engagement: 2
- Agreement for Lease: 1
Existing UK Portfolio

Key

- Projects located in Scotland and managed by Crown Estate Scotland (CES)

(1.0) = Numbers in brackets represent total UK pipeline, including Scotland, at each stage of development
## Key offshore leasing processes

<table>
<thead>
<tr>
<th>Jan 18</th>
<th>April</th>
<th>July</th>
<th>Oct</th>
<th>Jan 19</th>
<th>April</th>
<th>July</th>
<th>Oct</th>
<th>Q1 2020</th>
<th>Q2 2020</th>
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<tbody>
<tr>
<td><strong>Marine aggregates tender</strong></td>
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<td><strong>Offshore wind 2017 extensions</strong></td>
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<td><strong>New Offshore Wind Leasing</strong></td>
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### Outcomes of other leasing processes

Outcomes of other leasing processes will be known prior to Round 4 ITT submission deadline. Potential sites will be known earlier.

- **Tender process**
- **Engagement**
- **Assessment**
- **HRA Activities**
- **Process design**

Timings are illustrative.
Offshore wind processes

The Crown Estate
Seabed Leasing Rounds (England, Wales, Northern Ireland)

BEIS/National Grid
Contract for Difference Allocation Rounds

OFGEM
OFTO Tender Rounds

2019  2020  2021  2022  2023  2024  2025  2026  2027  2028

Future leasing rounds to ensure portfolio meets market and policy demand

AR every 2 years (using £557 million budget)\(^1\)

Tenders to facilitate OFTO disposals

2017 Extensions

AR-3

LR-4

TR-6

\(^1\) Energy Minister announcement 23 July 2018

Confirmed activity
Intention confirmed
Offshore wind portfolio: Strategic priorities
Will Apps
Key strategic issues to be addressed by the sector

Environmental & Cumulative Impact

Innovation & Development of Floating wind

Supply Chain

© https://www.carbontrust.com/offshore-wind/orip/birds/
Image Credit: @pwesten1
Innovation: Test & Demonstration Opportunity

• We provide an on-going opportunity to access the seabed for the testing and demonstration of emerging offshore wind technologies in English, Welsh and Northern Irish waters - including floating wind

• Open to projects up to 100MW capacity with a maximum of ten generation units using technologies which have not previously been deployed commercially

• Full details of how to apply are on our website
Our current focus areas include:

- Providing a dedicated leasing process for pre-commercial test and demonstration projects
- Identifying potential resource areas for future opportunities (e.g. hybrid projects and floating wind farm)
- Working collaboratively on key research priorities (e.g. ORE Catapult, Carbon Trust and the Oil & Gas Authority)
- Offering flexibility within our commercial agreements for innovation (e.g. hybrid components and/or demonstration of new technologies within the primary project)
Strategic initiatives

• Projects to address strategic challenges to future offshore wind deployment

• Projects to further understanding of the seabed

• Data – transparency and availability of performance and environmental data

• Further consideration of how to enable seabed access for innovation in parallel with Round 4
Approach to new leasing
Market feedback
Jonny Boston
The engagement journey so far

- **November 2017**: Announcement by The Crown Estate that we are considering potential new leasing

- **February 2018**: Update provided to Offshore Wind Industry Council and on our website

- **July 2018**: Engagement with market and statutory stakeholders

- **Spring 2019**: Further engagement with market and wider stakeholders

- **November 2018**: Potential launch

- **2020**: Potential award of rights

Timings are subject to change and will be confirmed in due course.
Context: Previous major leasing rounds

- Blyth - (4 MW)
- Round 1 - (1 GW)
- Round 2 - (7 GW)
- Round 3 - (24 GW)
- Round 4 - (7 GW)

Core Energy Technology

Timeline:
- 2000: 2MW
- 2003: 3MW
- 2005: 5MW
- 2010: 9MW
- 2020: 12+MW

Steps:
- Demonstration
- Commercialisation
- Industrialisation
## Proposed Round 4 – different from Round 3

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<thead>
<tr>
<th></th>
<th>Round 3</th>
<th>Proposed Round 4</th>
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<tbody>
<tr>
<td><strong>Scale</strong></td>
<td>Very large scale to enable transformation and industrialisation of the sector</td>
<td>At least 7GW enabled: repeatable scale enabling sustainable growth</td>
</tr>
<tr>
<td><strong>Type of rights awarded</strong></td>
<td>Zonal approach: zone exclusivity agreements awarded, enabling multiple project agreements to be created during 10 year period and developed over time</td>
<td>Project approach: individual project agreements awarded, to go straight into development (planning consent)</td>
</tr>
<tr>
<td><strong>Spatial boundaries of rights awarded</strong></td>
<td>The Crown Estate identified zone boundaries, and developers bid for zonal rights through the Round 3 ITT process – successful applicants selected through detailed competence assessment</td>
<td>Developers identify and propose individual projects into the Round 4 tender process – successful applicants selected through a process we will set out today</td>
</tr>
</tbody>
</table>
Key principles for Round 4

- Balance a range of interests
- Repeatable scale
- Share our data & analysis
- Fair & transparent process
- Balance our role with that of the market
- Responsible leasing

Refine and validate our proposals through extensive pre-tender engagement
Common themes from market feedback

- Support for proposed leasing model (developers identifying preferred sites within regions of seabed)
- Support for The Crown Estate sharing its data and analysis to help inform developers’ selection of sites
- Appetite for at least 6GW of new seabed rights
- Many advocating a flexible approach to the timing of subsequent leasing rounds
- Appetite for as many regions to be available as possible
- Support for a leasing round focussed on fixed foundation offshore wind, but stating fixed foundation wind viable in water depths > 50 metres.
- Interest in being able to accommodate innovation including hybrid projects
- A mix of views on maximum project size
- Interest in being able to bid in more than one entity
Updates to our proposals since summer 2018

- Capacity likely to be increased to 7GW, in light of strong market appetite

- Future rounds considered in light of energy policy, market demand and stakeholder views

- Refinement of regions, balancing market & stakeholder views

- Extend the regions included in the leasing offer out to 60m depth – though our data & analysis remains focused on the ‘Favourable’ resource area

- Maximum project size unchanged at 1.5GW but introduce minimum of 300MW

- Ability to participate in different bidding entities in different locations – more on this later
Statutory stakeholder feedback
Region refinement
Mark Hazelton
Technical resource area

• ‘Favourable’ technical resource area for fixed foundation offshore wind is defined by water depths 5-50m and good accessibility (>80%@2.5m Hs)

• ‘Limited’ and ‘Marginal’ technical resource areas are deeper (50-60m) or have a more severe wave climate
Regional approach to tender proposed

18 potential regions identified

‘Favourable’ resource area – Divided into regions
Characterisation areas are the less constrained parts of each region as determined by GIS model, & have an enhanced evidence base applied.

Statutory stakeholders generally emphasised the high levels of constraint outside Characterisation Areas.
Summary of statutory stakeholder feedback

344 individual points of written feedback from 10 organisations such as:

- Natural England
- Historic England
- Joint Nature Conservation Committee
- North Western IFCA
- Trinity House
- Defence Infrastructure Organisation

Bilateral contributions from many others including:

- Marine Management Organisation
- Llywodraeth Cymru Welsh Government
- Department for the Economy
- Department for Business, Energy & Industrial Strategy
How we are responding to statutory stakeholder feedback

**Updates to documents**

The majority of feedback related specifically to documents / reports

Documents remain ‘draft’ works in progress

**Signposting**

Signpost other policies and information within the methodology and characterisation documents

**Additional projects**

Including:

- Sensitive Habitats to cabling
- Update of Marine Protected Area (MPA) sensitivity work
- Ornithology project
- Oil and Gas decommissioning data
- Visibility model

Ready by start of the tender process
Balancing market and stakeholder feedback

Regions have been categorised as follows:

1. **Excluded**: regions not taken forward as part of Round 4

2. **Remaining**:
   2a. **Propose to include**: region included at this stage and likely to be offered in the tender process
   2b. **Under consideration**: region included at this stage but awaiting evidence through additional projects being commissioned and wider stakeholder feedback before we reach our decision
Constraints that have determined the exclusion of regions so far:

**Defence**

DIO feedback

Certain practice and exercise areas have been removed as hard constraints.

**Visual Sensitivity**

Visual sensitivity

Region excluded in circumstances where the majority of the Characterisation Area lies within 13km from shore.

**Navigation**

Navigation

Region excluded where the majority of the Characterisation Area overlaps with shipping density of over 1,000 ships per year.
Regions initially identified

Regions
1 Durham Coast
2 Dogger Bank
3 Yorkshire Coast
4 The Wash
5 Southern North Sea
6 East Anglia
7 Thames Approaches
8 Kent Coast
9 South East
10 West of Isle of Wight
11 South West
12 Bristol Channel (English)
13 Bristol Channel (Welsh)
14 Cardigan Bay
15 Anglesey
16 North Wales
17 Irish Sea
18 Northern Ireland
Regions refinement

Regions excluded
1 Durham Coast
7 Thames Approaches
8 Kent Coast
10 West of Isle of Wight
11 South West
12 Bristol Channel (English)
13 Bristol Channel (Welsh)
14 Cardigan Bay
18 Northern Ireland

Regions remaining
2 Dogger Bank
3 Yorkshire Coast
4 The Wash
5 Southern North Sea
6 East Anglia
9 South East
15 Anglesey
16 North Wales
17 Irish Sea
Region refinement continues

Regions remaining

Propose to include:
2 Dogger Bank
5 Southern North Sea
6 East Anglia
16 North Wales
17 Irish Sea

Under further consideration:
3 Yorkshire Coast
4 The Wash
9 South East
15 Anglesey
Remaining regions out to 60 metres

Regions remaining

Propose to include:
2 Dogger Bank
5 Southern North Sea
6 East Anglia
16 North Wales
17 Irish Sea

Under further consideration:
3 Yorkshire Coast
4 The Wash
9 South East
15 Anglesey

60m water depth
Characterisation areas within the remaining regions

Regions remaining

Propose to include:
2 Dogger Bank
5 Southern North Sea
6 East Anglia
16 North Wales
17 Irish Sea

Under further consideration:
3 Yorkshire Coast
4 The Wash
9 South East
15 Anglesey

Characterisation area
Remaining regions to 60m depth
# Deliverables of the analysis

<table>
<thead>
<tr>
<th>Document</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methodology report</td>
<td>Describing the analysis to define characterisation areas and associated report</td>
</tr>
<tr>
<td>Characterisation Area report (x9)</td>
<td>Characterisation area reports for regions being taken forward in round 4</td>
</tr>
<tr>
<td>Interim Region Refinement report</td>
<td>Method of refining regions, including annex of excluded region characterisation area reports</td>
</tr>
<tr>
<td>Interim Summary Stakeholder Feedback report</td>
<td>Feedback from stakeholders including high level clarification</td>
</tr>
<tr>
<td>Shape files</td>
<td>Various GIS data defining Regions, characterisation areas and other data used in the analysis process including constraint model output</td>
</tr>
</tbody>
</table>

*Download reports and shape files*
Refinement and engagement continues

- Initial assessment concluded - nine seabed regions identified that will not be included in Round 4

- Nine regions remain at this stage, of which five are minded to be included in any tender – the other four are under consideration

- We are building our evidence base to continue refining regions, including commissioning additional work – final decision on regions to be taken forward prior to launch

- In parallel, we are preparing for Plan-level HRA

- Summary feedback from stakeholders will be provided in bidder information packs to help inform site identification work
Summary of our Updated proposals
Jonny Boston
Round 4: updated proposals

7GW

Developer-led site selection

Sharing our data

60m max depth

Flexible approach to future rounds
Bidders would be able to propose projects anywhere in available regions – noting the more significant constraints characterisation areas.

Regions excluded for Round 4 are not precluded for future rounds.

Final decision on which regions are included is due prior to launch.
Summary

• Constructive engagement to date from both market and statutory stakeholders – thank you
• This has enabled us to refine proposals and focus on key areas of concern
• Our next phase of engagement is focussed on the approach to the tender process itself
• Final decisions on our proposals will be taken after this second phase of engagement
Tender process design: Strategic approach

Jonny Boston
Welcome back

The content of and positions outlined in the following slides and our presentation today reflect our current thinking and are provided for information only.

The Crown Estate makes no representations in respect of and accepts no duty, liability or responsibility for the content of them.

The purpose of this engagement today is for you to have a further opportunity to feedback on our current thinking.

Our thinking and the content of and the positions outlined in these slides and our presentation today may change in light of further feedback from you and stakeholders and as our thoughts and positions continue to mature.
Principles and priorities

Fair & transparent process

Balance our role with that of the market

Responsible leasing

Tender process priorities
1. Objective and streamlined criteria
2. Enable new entrants to participate
3. Credible and capable bidders
4. Statutory obligations
Strategic approach

Pre-qualification driven by financial strength and technical competence of bidders

Main tender assessment of project (ITT) submissions driven by:

1. Compliance with key tests:
   a. Tender parameters
   b. Financial & technical assessment
   c. Capacity limits (geographical and bidder)

2. Option fee proposed by bidder

Plan-level HRA will need to be undertaken prior to entering into agreements for lease
Leasing Design – Key Stages

This shows the various stages of the tender process

**PQQ**
Pre-qualification process

**ITT**
Invitation to Tender

**Plan level HRA**
Plan level Habitats Regulations Assessment

**AfL**
Agreement for Lease

---

**Bidding entities identified**
Assessment of previous:
1. Financial performance
2. Technical experience

**Bids submitted for projects**
Forwards looking:
1. Project definition and location
2. Threshold Financial and Technical competence
3. Commercial assessment

**Responsibility of The Crown Estate**
Bidders provide project design information to inform assessment

**Bilateral commitment**
Provision of seabed rights
Indicative tender process timeline

Q2 2019
- Launch: Formal launch notice
- Pre-Qualification: Bidders Info Day
- Invitation to Tender: ITT opens

Q3 2019
- Pre-Qualification: PQQ deadline
- Invitation to Tender: ITT deadline

Q4 2019
- Invitation to Tender: Projects announced

Q1 2020
- Invitation to Tender: Projects announced

Q2 2020
- Plan-level HRA: Screening reports
- Plan-level HRA: Report to Inform Appropriate Assessment (RIAA)

Q3 2020
- Contract finalised: Plan-level HRA concluded

Q4 2020
- PQQ deadline: AfL awarded

Supporting HRA projects
- Bidders Info Day
- PQQ opens
- ITT opens
- Projects announced

Plan-level HRA
- Screening reports
- Report to Inform Appropriate Assessment (RIAA)
- Site summary reports

All timings are subject to change and will be confirmed in due course.
Tender process design:
Applicant & PQQ criteria

Ben Barton
Helen Elphick
Leasing Design – Key Stages: PQQ

This section describes requirements for bidding entities that want to participate in the leasing process, in terms of corporate structures and PQQ requirements.

Bidding entities identified
Assessment of previous:
1. Financial performance
2. Technical experience

Bids submitted for projects
Forwards looking:
1. Project definition and location
2. Threshold Financial and Technical competence
3. Commercial assessment

Responsibility of The Crown Estate
Bidders provide project design information to inform assessment

Bilateral commitment
Provision of seabed rights

PQQ
Pre-qualification process

ITT
Invitation to Tender

Plan-level HRA
Plan-level Habitats Regulations Assessment

AfL
Agreement for Lease
Bidding Entities and Consortia

- Bidders may bid as a single legal entity or in a consortium of legal entities.

- The Crown Estate will ultimately enter into an Agreement for Lease with a single legal entity of which any consortium members are expected to be the shareholders.

- A legal entity or legal entities belonging to the same company group may join different consortia in different bidding areas but may not participate in more than one bidding entity in the same bidding area.

- Bidders may nominate a third party expert to help them satisfy certain technical criteria. They would not need to be a shareholder but would need to be retained during the consenting period.
Pre-qualification criteria – Financial: Headlines

• The PQQ financial criteria are designed to ensure that a bidder is financially credible and capable

• We are not proposing a blanket requirement for specified credit ratings

• Instead, we propose to assess three simple metrics which tell us about a bidder’s financial ability to deliver a project to consent

• The proposed metrics at PQQ stage are sized for the delivery of a minimum project size 300MW

• Further tests will be applied at ITT, appropriate to the size of project(s) being bid for
## Pre-qualification criteria – Financial: Proposed metrics

<table>
<thead>
<tr>
<th>Net Assets</th>
<th>Turnover</th>
<th>Cash</th>
</tr>
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<tbody>
<tr>
<td>• Difference between total assets and total liabilities</td>
<td>• From large infrastructure projects, measured over 3 years</td>
<td>• £45 million minimum cash, cash equivalents or committed undrawn credit facilities from qualifying banks</td>
</tr>
<tr>
<td>• £70 million minimum</td>
<td>• £600 million average per annum</td>
<td>• From most recent audited accounts</td>
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<td>• From most recent audited accounts</td>
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</table>

Net Assets:
- Difference between total assets and total liabilities
- £70 million minimum
- From most recent audited accounts

Turnover:
- From large infrastructure projects, measured over 3 years
- £600 million average per annum

Cash:
- £45 million minimum cash, cash equivalents or committed undrawn credit facilities from qualifying banks
- From most recent audited accounts
Pre-qualification criteria – Financial: Consortia

- Consortium members must in aggregate meet the financial criteria on a weighted average basis, proportionate to their proposed share of the project they are bidding for.

- Individual consortium members will **not** be required to meet pro-rata threshold amounts, as set out below.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Actual data per audited accounts</th>
<th>Pro-rata values</th>
<th>Total</th>
<th>Total required</th>
<th>Score</th>
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</thead>
<tbody>
<tr>
<td>Net assets</td>
<td>£500m</td>
<td>£250m</td>
<td>£340m</td>
<td>£70m</td>
<td>Pass</td>
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<td>£100m</td>
<td>£30m</td>
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<td>£300m</td>
<td>£60m</td>
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<tr>
<td>Turnover</td>
<td>£1,000m</td>
<td>£500m</td>
<td>£660m</td>
<td>£600m</td>
<td>Pass</td>
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<td>£200m</td>
<td>£60m</td>
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<td>£500m</td>
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<td>Cash</td>
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<td>£10m</td>
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<td>£40m</td>
<td>£8m</td>
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Pre-qualification criteria – Technical: Headlines

The proposed PQQ technical criteria are designed to ensure that the bidder has the technical capability and experience to develop offshore wind projects:

• The criteria look at the bidder’s track record of key development-phase components

• They could be satisfied through equivalent transferable experience from other relevant sectors or by direct past experience of offshore wind development

• Evidence of past experience can be provided by different members of a consortium as we recognise different members may have different strengths and play different roles
**Pre-qualification criteria – Technical: Management experience**

<table>
<thead>
<tr>
<th>Project Management</th>
<th>HSE Management</th>
<th>HSE Regulatory Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can be satisfied by any Principal Shareholder</td>
<td>Can be satisfied by any Principal Shareholder</td>
<td>Applies to all consortium members</td>
</tr>
<tr>
<td>• Direct experience of project managing expenditure ≥ £25m for a commercial project in any sector</td>
<td>• Signed and up-to-date Health and Safety and Environmental (or integrated HSE) policy</td>
<td>• Details of any regulatory action taken in past three years (including improvement notices, prohibition notices or prosecutions)</td>
</tr>
<tr>
<td>• Can be a development or construction phase budget but not research &amp; development</td>
<td>• Details of existing or planned Management System(s) (certified under OHSAS 18001 and ISO 14001/EMAS, or equivalent standards) that can be applied to the project</td>
<td>• If action has been taken, mitigations must be in place to prevent recurrence</td>
</tr>
</tbody>
</table>

* Several of the technical PQQ criteria can be passed by any bidder group member who is proposed to be a ‘Principal Shareholder’ (i.e. an entity that owns 10% or more of a company’s voting shares.).
## Pre-qualification criteria – Technical: Project development experience

### Grid Connection
Can be satisfied by any Principal Shareholder

- Signed grid connection construction agreement for a grid connected power project ≥ 50 MW

### Consent
Can be satisfied by any Principal Shareholder

- Owner / Largest Shareholder of a Major Infrastructure Project at the point of consent submission and award
- Consent awarded in last 10 years

### Environmental
Can be satisfied by any Principal Shareholder and/or a Development Services Provider

- Managed a full EIA process* and submitted an Environmental Statement (ES) in last 10 years for:
  a) Wind energy project ≥ 50 MW; and
  b) Offshore Infrastructure or Extraction project

* If EIA covers only one project type, the applicant must have discharged EIA conditions and managed post-consent monitoring for the other for at least 2 years within the last 6 years.
Tender process design: ITT & Tender parameters

Helen Elphick
Leasing Design – Key Stages: ITT & Plan-Level HRA

This section describes how the ITT stage would work – including the financial and technical competence assessment, commercial assessment, potential tender parameters and plan-level HRA

PQQ
Pre-qualification process

ITT
Invitation to Tender

Plan level HRA
Plan level Habitats Regulations Assessment

AfL
Agreement for Lease

Bidding entities identified
Assessment of previous:
1. Financial performance
2. Technical experience

Bids submitted for projects
Forwards looking:
1. Project definition and location
2. Threshold Financial and Technical competence
3. Commercial assessment

Responsibility of The Crown Estate
Bidders provide project design information to inform assessment

Bilateral commitment
Provision of seabed rights
Invitation to Tender: Outline approach
We are developing ITT criteria within the context of the following proposed assessment framework

**Project Definition & Location**
- Capacity
- Coordinates
- Density
- Compliance with locational rules
- Project type (stand-alone / hybrid, OFTO / Generator Build)

**Financial & Technical Competence**
- Financial metrics will test the bidder’s ability to deliver project
- Technical competence assessed against threshold criteria

**Commercial Assessment**
- Bids ranked from highest to lowest in order of option fee value, measured in £/MW
- Total option fee, followed by option fee per km² used to differentiate between equal, compliant bids
- Enough projects identified in line with geographic and bidder capacity limits to reach 7GW

Project must comply with tender parameters
Reviewed against threshold criteria – pass / fail evaluation
Successful bids are taken forward into plan-level HRA

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20181126 OSW New Leasing Market Engagement
Plan-level Habitats Regulations Assessment (Plan-level HRA)

- Bidders will be asked to provide information about their proposed projects to inform the assessment (e.g. turbine sizes, offshore platforms, offshore cable corridor, landfall location, installation methodologies)

- We acknowledge that at this stage in project planning much of this information may be unknown or provisional

- If the plan as a whole has an Adverse Effect on Integrity of European Sites we may have to propose mitigation measures regarding the scale, characteristics and location of projects, or groups of projects, within the plan to avoid significant effect

- By taking HRA considerations into account and providing as much information as possible when proposing project location(s) bidders can help to achieve a successful outcome
Tender Parameters: Bidding areas & capacity

Bidding Areas:
Neighbouring open regions would be grouped to form a bidding area

The example shows which regions might be grouped into bidding areas if all nine regions were open

Proposed capacity limits:
We are seeking to identify sufficient projects to reach 7GW in total

No more than 50% of the total capacity would be awarded in any bidding area

A corporate group may not be awarded an interest (of any kind or size) in project(s) totalling more than 3GW

Number of bids:
We are considering allowing each bidder to submit up to 20 unique bids in each bidding area

Bidding areas and capacity limits would be confirmed in due course
Tender Parameters: Project definition

Minimum Density:
3MW/km² at Agreement for lease
Minimum density will be required to increase at lease entry according to project capacity
We are proposing a graduated scale of minimum densities that ranges from 5MW/km² for projects of 1.5GW, up to 8MW/km² for projects under 500MW

Capacity:
Must be an integer in the range 300 – 1500 MW

Phasing:
Must be a single-phase consent submission
At lease entry the project can be phased into individual leases to reflect the construction programme

Project Boundaries:
Only the Agreement for Lease boundary is required as part of the bid
The project must be a single, coherent shape that makes efficient use of seabed.
Tender Parameters – Location: Regions and Characterisation Areas

Proposed rule 1: Projects can straddle regions that are within the same bidding area

Proposed rule 2: At least 75% of the project must be within the outer boundary of the open regions, and all boundaries must be within The Crown Estate’s jurisdiction

Key
- **Project**: The outer boundary of a project (defined on the next slide)
- **Region**: A numbered Region including the Characterisation Area that sits within it

Important Disclaimer: The images and diagrams within this section of the presentation are not to scale and are intended to illustrate the tender concepts only.
Proposed rule 3: Projects must avoid ‘hard constraints’ and will need to agree appropriate separation distances through the consenting process.

Proposed rule 4: Projects must be at least 5km from other windfarms unless the bidder has the current owner’s written agreement.

Key:
- **Existing infrastructure (e.g. aggregate licences, oil and gas platforms, marked navigational routes, MOD firing ranges, etc)**
- **Project:** The outer boundary of a project
- **Other windfarm agreements for lease or leases**
Tender Parameters – Location: Overlapping bids

As bidders can identify their own sites within bidding area, we anticipate that some bids would overlap. We are considering the following approach to overlapping bids and further guidance would be provided at the start of the leasing round.

**Proposed rule 5:** Bids from the same bidding entity may overlap with one another but if they do, they would need to be differentiated by their commercial values.

Where projects from different bidders directly overlap, the project with the highest option fee value would be awarded.

**Directly overlapping:**
Where any part of the project boundary overlaps with the project boundary of another bid.

**Proximate projects:**
The default minimum separation distance between projects at Lease is 5km. If any part of the project boundary is less than 5km from another bid, a mechanism will be applied to preserve the 5km separation unless both parties agree otherwise.
Agreements for Lease and Related Documents

Key terms

Ben Barton
Leasing Design – Key Stages: Agreement for lease

This section describes the key legal agreements which would be entered into at the end of the process.

**Bidding entities identified**
Assessment of previous:
1. Financial performance
2. Technical experience

**Bids submitted for projects**
Forwards looking:
1. Project definition and location
2. Threshold Financial and Technical competence
3. Commercial assessment

**Responsibility of The Crown Estate**
Bidders provide project design information to inform assessment

**Bilateral commitment**
Provision of seabed rights

**PQQ**
Pre-qualification process

**ITT**
Invitation to Tender

**Plan level HRA**
Plan level Habitats Regulations Assessment

**AfL**
Agreement for Lease
Overview of property documentation

The tender process would culminate in the following documents:

- Agreement for lease (wind farm)
- Form of lease (wind farm)
- Form of agreement for lease (transmission)
- Form of lease (transmission)
- Security documents where required

- At this stage we are focusing on AfL and lease for the wind farm

- Key terms in relation to other documents would be provided at PQQ, & full documents to pre-qualified bidders
Agreement for lease (AfL)

Principal agreement under which seabed rights are awarded following the tender process

Key features

• Provides the option to take a seabed lease, or leases, once consent has been obtained

• Overall 10 year option period from the start of the AfL to expiry – by which point any lease(s) would need to be entered into

• Provides rights to carry out surveys and install instruments

• Contains an obligation to apply for consent by a milestone date and may also contain other milestones prior to this – milestones and associated deadlines would be determined by The Crown Estate and set out prior to ITT

• The consortium may incorporate a new project company or form an unincorporated joint venture to sign the AfL, subject to provision of financial security

• Ownership of the counterparty to the AfL needs to reflect that of the bidding entity defined at ITT
### Agreement for lease – key terms

<table>
<thead>
<tr>
<th>Parameter</th>
<th>The Crown Estate Position (What)</th>
<th>Reasoning (Why)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option Period</strong></td>
<td>10 years</td>
<td>To allow sufficient time for consenting and CfD auctions</td>
</tr>
<tr>
<td><strong>Milestones</strong></td>
<td>Up to 5 pre-consent milestones including consent application</td>
<td>To maintain delivery of the project to an agreed timeline</td>
</tr>
<tr>
<td><strong>Power density at lease</strong></td>
<td>Minimum power densities will scale with project size</td>
<td>To optimise use of the seabed</td>
</tr>
<tr>
<td><strong>Buffer zone</strong></td>
<td>5km around AfL boundary, unless the counterparty agrees otherwise</td>
<td>To provide certainty around the closest proximity of future projects</td>
</tr>
<tr>
<td><strong>Flexibility on capacity</strong></td>
<td>Reduction of up to 25% by lease</td>
<td>To allow for flexibility resulting from the CfD process</td>
</tr>
<tr>
<td>Parameter</td>
<td>The Crown Estate Position (What)</td>
<td>Reasoning (Why)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Phasing</strong></td>
<td>Multiple leases can be granted from a single AfL (each phase subject to minimum density requirement)</td>
<td>To allow flexibility around project construction and CFDs</td>
</tr>
<tr>
<td><strong>OFTO cable routeing</strong></td>
<td>Counterparty required to apply for a transmission AfL by a deadline, subject to TCE approval of the cable route</td>
<td>To ensure approval of the cable route in a timely manner and to optimise use of the seabed</td>
</tr>
<tr>
<td><strong>Change of ownership / control</strong></td>
<td>During the period prior to consent, this would only be possible at The Crown Estate discretion. Ongoing compliance with PQQ &amp; ITT criteria would be required</td>
<td>To preserve the counterparty’s obligation to obtain consent. Any agreement of changes preserves the technical and financial requirements of the PQQ and ITT</td>
</tr>
<tr>
<td><strong>Security</strong></td>
<td>Security provider to comply with ITT financial criteria where a counterparty has insufficient covenant strength</td>
<td>To ensure the obligations of the AfL can be met as per the ITT financial criteria</td>
</tr>
</tbody>
</table>
Form of lease

Principal agreement providing seabed rights for construction and operation of the project

Key features:

- Lease term proposed to be **60 years** to enable two project lifecycles if required
- Contains a requirement to build the project against set milestones
- The Crown Estate charges rental at 2% of project revenue, subject to a minimum rent
- The AfL counterparty would be expected to sign the lease, subject to provision of financial security
# Lease – key terms

<table>
<thead>
<tr>
<th>Parameter</th>
<th>The Crown Estate Position (What)</th>
<th>Reasoning (Why)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lease term</strong></td>
<td>Proposed to be 60 years</td>
<td>To allow for two project life cycles and decommissioning</td>
</tr>
<tr>
<td><strong>Rent</strong></td>
<td>Pre-generation rent set at 1/10th of option fee, per annum</td>
<td>Rental consideration for use of the seabed, based on all revenue streams for the project</td>
</tr>
<tr>
<td></td>
<td>Generation rent 2% of gross project turnover</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum rental level to be confirmed</td>
<td></td>
</tr>
<tr>
<td><strong>Break rights</strong></td>
<td>Restriction on counterparty break for 25 years post-works completion, 3 year rolling break permitted thereafter</td>
<td>To require commitment from the counterparty for a full life-cycle operation, with flexibility thereafter</td>
</tr>
<tr>
<td><strong>Buffer zone</strong></td>
<td>5km around lease boundary, unless the tenant agrees otherwise</td>
<td>To provide certainty around the closest proximity of future projects</td>
</tr>
</tbody>
</table>
## Lease – key terms

<table>
<thead>
<tr>
<th>Parameter</th>
<th>The Crown Estate Position (What)</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Milestones</strong></td>
<td>Milestones for project construction and generation start</td>
<td>To maintain delivery of the project to an agreed timeline</td>
</tr>
<tr>
<td><strong>Change of control &amp; ownership</strong></td>
<td>Change of control permitted up to certain thresholds without The Crown Estate consent</td>
<td>To allow project divestment during the term of the lease</td>
</tr>
<tr>
<td><strong>Security</strong></td>
<td>Security to be provided where the counterparty has limited covenant strength</td>
<td>To ensure the obligations of the lease can be met</td>
</tr>
<tr>
<td><strong>Decommissioning</strong></td>
<td>Decommissioning to be agreed with BEIS under the Energy Act 2004 where applicable</td>
<td>To ensure effective project decommissioning in compliance with legislation</td>
</tr>
</tbody>
</table>
**Property documents timeline**

- **Enter wind farm AfL**
  - Wind farm agreement for lease is signed at the end of the Round 4 leasing process

- **Surveys and consenting**
  - Transmission agreement for lease is signed following application and approval of the cable corridor by The Crown Estate

- **Construction**
  - Option is exercised and the transmission lease is entered following the award of consent
  - Option is exercised and the transmission lease is entered following the award of consent (expected to be at the same time as the wind farm lease)

- **Operation**
  - Assuming generator build, the transmission lease is assigned to the appointed OFTO once construction is complete

**Agreement for lease** – 10 years maximum  |  **Lease** – 60 years
Summary & next steps
Jonny Boston
Summary

• Work continues to design a new leasing round, and we are grateful for your feedback

• Our vision is to design and run a process that is fair, transparent and that balances a range of different interests

• We have received constructive feedback on our initial proposals and welcome feedback to shape our refined proposals

• We have made our draft constraint analysis available – final version would be published alongside stakeholder feedback by the start of a new leasing process

• We will finalise our proposals in light of engagement feedback from both market and stakeholders
Stay informed

Offshore wind potential new leasing

Latest updates about The Crown Estate’s work with the offshore wind industry and stakeholders to consider making new seabed rights available for offshore wind.

Update as of 31 October 2018

On Monday 26 November 2018 The Crown Estate will be holding a second market engagement event for our potential new offshore wind leasing round. The session is targeted at potential leasing process participants, including potential newcomers to the market. We will

Press releases

2018 - The Crown Estate

To stay informed please visit our website: thecrownestate.co.uk/potentialnewleasing
Join our mailing list at: offshorestakeholder@thecrownestate.co.uk
Thank you