

An aerial view of an offshore wind farm in the ocean. Several wind turbines are visible, extending into the distance. In the foreground, a red and white service vessel is moving across the water, leaving a white wake. The sky is clear and blue.

New Offshore Wind Leasing Market Information Event Thursday 18 July 2019



Welcome

The purpose of this engagement today is to provide an update on our proposals in light of market feedback received to date.

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 information in this presentation.

Our thinking, the content and the positions outlined in these slides and our presentation today remain subject to change.

Aims of today's event

- Set out proposed final leasing process design for Round 4, and the rationale for this
- Share details of refinements that have been made to the tender process, bidding rules and commercial assessment mechanism, based on your feedback
- Confirm other technical and commercial design changes
- Update you on our next steps and timeline



Today's speakers



Will Apps

Head of Energy
Development



Jonny Boston

Business Development
Manager and Programme
Manager for New Leasing



Helen Elphick

Senior Development
Manager



Ben Barton

Senior Commercial
Manager



Greg Tomlinson

Senior Marine Planning &
Consents Manager

New Offshore Wind Leasing

Introduction

Will Apps

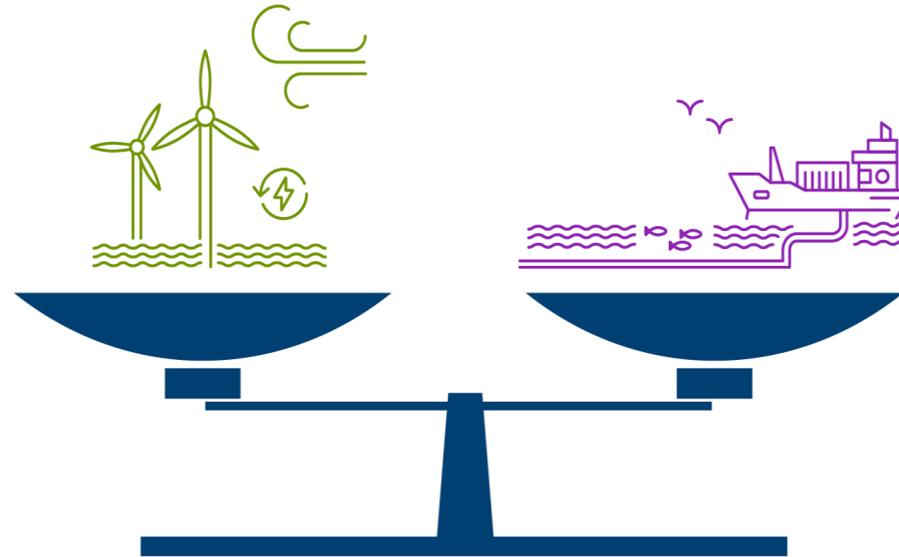
New Offshore Wind Leasing

Overview of process to date

Jonny Boston

New offshore wind leasing

New leasing is required to ensure a robust offshore wind portfolio for **2030 and beyond**, which helps the UK to achieve its **decarbonisation** and energy security objectives.



Successful delivery requires **careful consideration** of a busy seabed that already supports a wide range of other **seabed users**, as well as **social and environmental factors**.

Our objectives for new offshore wind leasing

Deliver a robust pipeline for low-cost offshore wind deployment

to meet industry and government appetite for new offshore wind capacity, supporting the UK's clean energy transition.

Offer an attractive, accessible and fair proposition to developers

at repeatable scale, contributing to the development of a competitive, resilient and innovative offshore wind market.

Balance the range of interests in the marine environment

supported by extensive engagement with stakeholders and the promotion of responsible, evidence-based site selection.

Make efficient use of the seabed

recognising its value as a national asset, now and for the long term.

Unlock the commercial value of the seabed

in line with our statutory obligations, securing best consideration over the long-term for the benefit of the public finances.

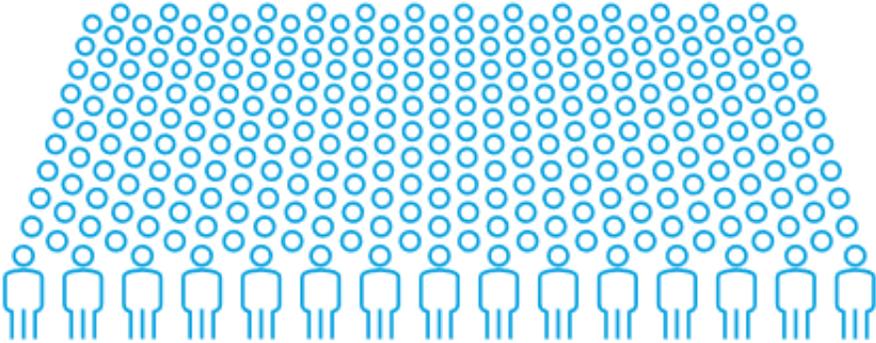
Our engagement journey so far

NOV 2017

The Crown Estate announced we would consider making new seabed rights available for offshore wind



294 delegates attended our four engagement events



Throughout our engagement process, we've engaged with over **15 government bodies** and **statutory organisations**, including:



As well as:

 **40+** market participants

 **20+** wider stakeholders

Our engagement journey so far

JUL 2018

Shared our initial proposal at our first workshop and event.

 30

statutory stakeholders attended our workshop

 344

6 government bodies and 7 statutory organisations submitted 344 points of feedback post-event

 101

delegates from market attended our event

 19

developers submitted feedback post-event

 Refined the seabed regions:
5 proposed to be included
4 under consideration

 Extended to $\leq 60\text{M}$ water depth

NOV 2018

Shared our refined proposal at our second round of events.

 30

technical stakeholders attended

 16

organisations submitted feedback post-event

 129

delegates from market attended

 17

developers submitted feedback post-event

 Increased to $\sim 7\text{GW}$ capacity

 Progressed design of the tender process

Common themes from your feedback in November

Broad support for PQQ approach with appetite for further details / minor changes

Concerns from some about biddable option fees in light of international precedents

Support for increasing lease lengths to more than 50 years

Appetite for fewer milestones and/or project-specific dates

Appetite to decrease minimum power density, and increase project separation distance

Request for further clarity around future leasing rounds i.e. beyond Round 4

Refinements already undertaken following your feedback

Progressing more detailed drafting of PQQ criteria

Concerns from some about biddable option fees in light of international precedents

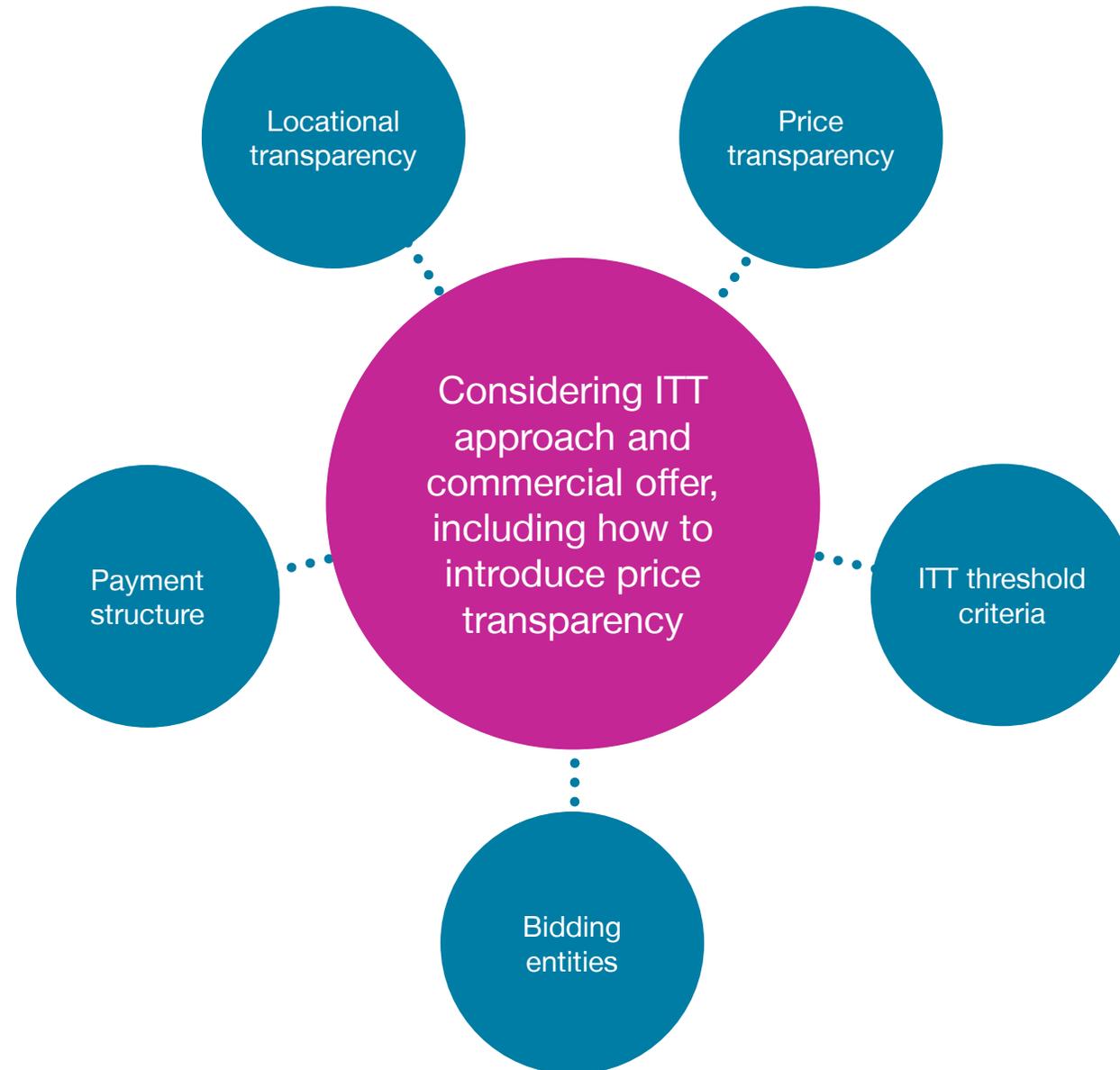
Confirming an extension of Round 4 lease terms to 60 years

Considering reducing the number of project milestones

Proposing changes to the required power density scale, and an increase to project separation distance

Considering our approach to leasing beyond Round 4, in light of the Sector Deal

Further refinements following your feedback – key focus for today



New Offshore Wind Leasing

Leasing process design

Jonny Boston

Recap - overview of our 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 price for the project proposed by bidder
- The award of agreements for lease will be subject to the outcome of our plan-level Habitats Regulations Assessment (HRA)





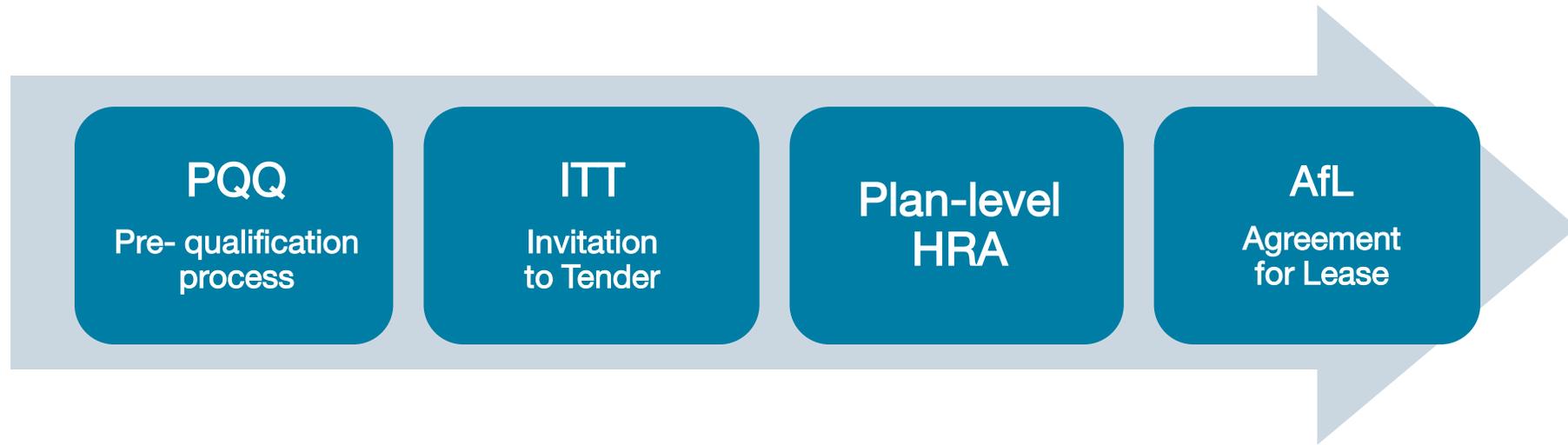
An attractive, fair and accessible proposition

- In light of high levels interest from a mature sector, we continue to believe Option Fee value remains the fairest way to differentiate between compliant bids
- This approach is key in terms of meeting our objective of a fair and accessible proposition
- In response to your feedback, and to improve attractiveness of the offer, we intend to make changes in the following areas:
 1. Bidding process within the ITT
 2. Option Fee payment structure
 3. Commercial assessment mechanism
- Some of these changes have had consequential impacts on other parts of the process, which we will cover today

Changes to our commercial offer & tender process

Tender approach	Previous position	Updated position
Bidding process	Single round of sealed bids	Multi-cycle bidding process
Option Fee payment	Upfront Option Fee payment, with a 10-year upfront commitment	Annual payments, with a 3-year commitment
Commercial assessment mechanism	Option Fee: £/MW bid for the entire 10-year period	Option Fee: £/MW/year bid
Consortium bidding rules	Participation in multiple consortia	Company can bid individually or within one consortium

Leasing design: stages of the tender process – initially proposed



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

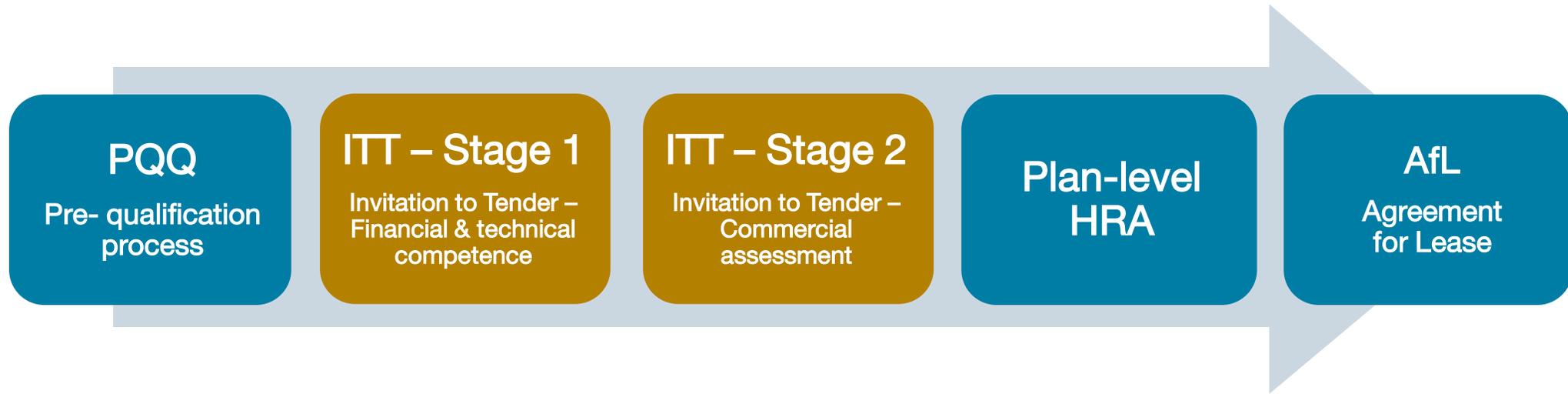
Responsibility of The Crown Estate

The Crown Estate undertakes plan-level HRA to assess the impacts on Natura 2000 designated sites

Bilateral commitment

Provision of seabed rights

Leasing design: stages of the tender process – updated



Bidding entities identified

Assessment of previous:

1. Financial performance
2. Technical experience

Bidders propose projects

Forward looking assessment of:

1. Project definition
2. Site selection
3. Schedule
4. HSE competence
5. Financial competence

Sequential bidding cycles

Bidders bid pre-qualified projects

Rights awarded based on highest option fee value, subject to the bidding rules

Responsibility of The Crown Estate

The Crown Estate undertakes plan-level HRA to assess the impacts on Natura 2000 designated sites

Bilateral commitment

Provision of seabed rights



Benefits of our revised proposals

Multi-cycle bidding process

- Retains price as a fair and objective final determinant
- Improves price and locational transparency
- Enables developers to make informed decisions, thus enabling a robust pipeline and efficient seabed use

Annual Option Fee payments

- Sharing of risk
- Flexibility for Bidders

Simplified consortium rules

- Protects the integrity of the process

Our 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 have a number of other statutory obligations for example under the Marine and Coastal Access Act 2009 and Wildlife and Countryside Act 1989

*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



New Offshore Wind Leasing

Overview of ITT Stage 2

Ben Barton

Leasing design: stages of the tender process

PQQ

Pre-qualification process

ITT – Stage 1

Invitation to Tender – Financial and technical competence

ITT – Stage 2

Invitation to Tender – Commercial assessment

Plan-level HRA

AfL

Agreement for Lease

Bidding entities identified

Assessment of previous:

1. Financial performance
2. Technical experience

Bidders propose projects

Forward looking assessment of:

1. Project definition
2. Site selection
3. Schedule
4. HSE competence
5. Financial competence

Sequential bidding cycles

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The Crown Estate undertakes plan-level HRA to assess the impacts on Natura 2000 designated sites

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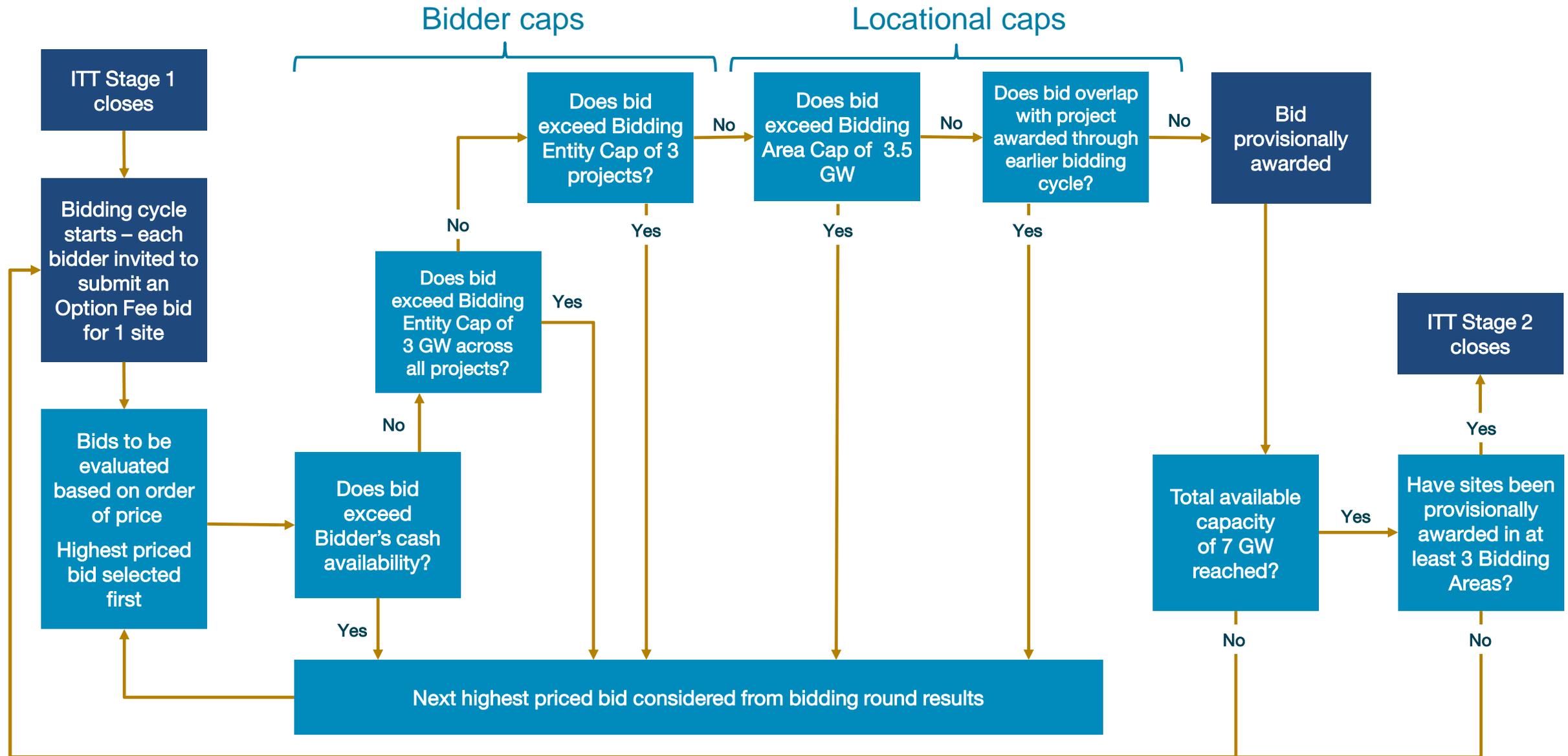
Provision of seabed rights



ITT Stage 2: overview

- Multi-cycle bidding process - with one site awarded Preferred Bidder status in each bidding cycle
- In each bidding cycle, Bidders will be invited to put forward one of their project sites and associated Option Fee price (in £/MW/year)
- The site with the highest Option Fee, subject to the bidding rules, will be awarded
- Daily bidding cycles will continue until the 7 GW capacity target is reached and sites awarded in at least 3 bidding areas
- When each bidding cycle ends the following information regarding the successful bid will be disclosed to all participating Bidders:
 - a) Option Fee price in £/MW/year;
 - b) Project capacity (in MW); and
 - c) Map and GIS coordinates.
- Bidders' identities will not be disclosed between bidding cycles

ITT Stage 2: decision tree



Bidders' cash availability

- Bidders' maximum cash availability will be assessed at ITT Stage 1 using the information provided by the Bidder
- During the bidding cycles, a project which is being assessed for award must be tested against the Bidder's available cash
- Project funding requirements are calculated as follows:
 - a) 3 years of Option Fee payments; plus,
 - b) Development costs of the project over a 3 year period
- Provided the project funding requirement does not exceed the Bidder's available cash, the project will proceed through the decision tree
- If the Bidder's available cash is exceeded, the project will not be awarded
- When a Bidder has been awarded a project, its available cash level for further bidding cycles is reduced by the funding requirements of the awarded project(s)

Maximum level of
cash available
(assessed at ITT Stage 1)

PROJECT 2

Project funding requirement =
3 years development costs
(submitted at ITT Stage 1)
+ 3 years Option Fee
(submitted at ITT Stage 2)

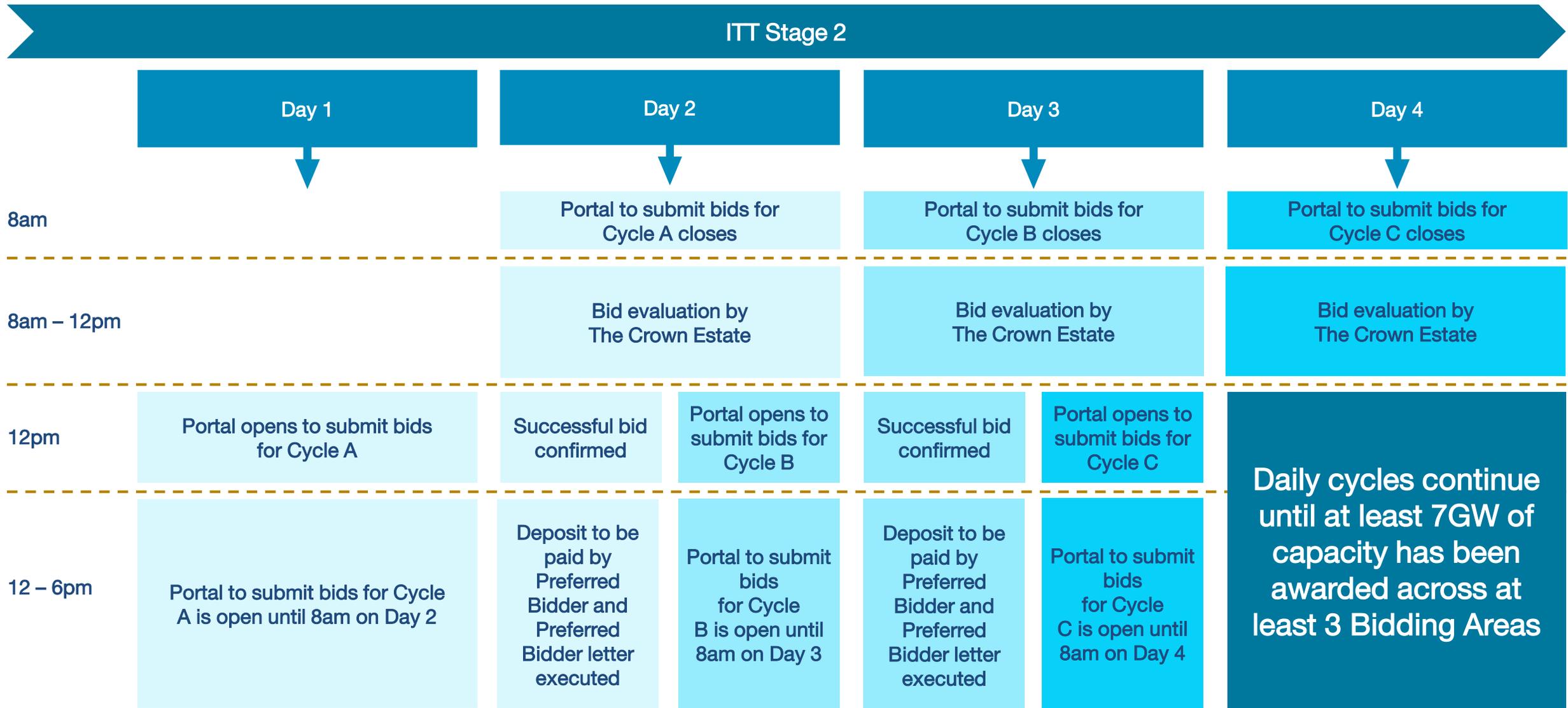
PROJECT 1



ITT Stage 2: next steps for successful Bidders

- On award, the successful Bidder will:
 - Pay a deposit (1 year of Option Fee payment)
 - Enter into a Preferred Bidder Letter
- The Preferred Bidder Letter will:
 - a) Require the Bidder to enter into the AfL unless the site is excluded as a result of the plan-level HRA
 - b) Provide exclusivity for offshore wind over the site and a 5km buffer until entry into the AfL
 - c) Mirror the terms of the AfL for Change of Control and replacement of a Development Services Provider (DSP) (where relevant)

ITT Stage 2: bidding cycles

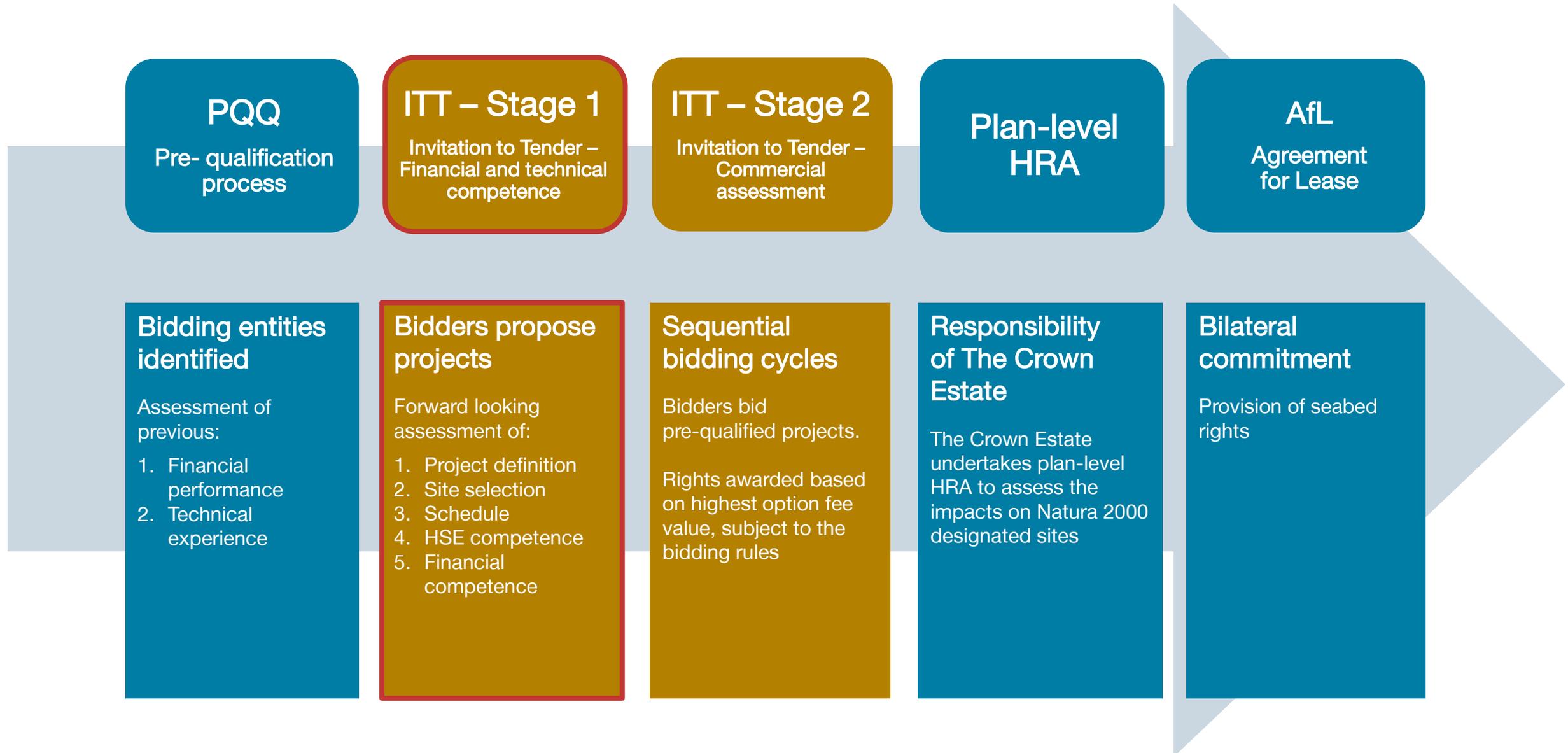


New Offshore Wind Leasing

ITT Stage 1 & technical design changes

Helen Elphick

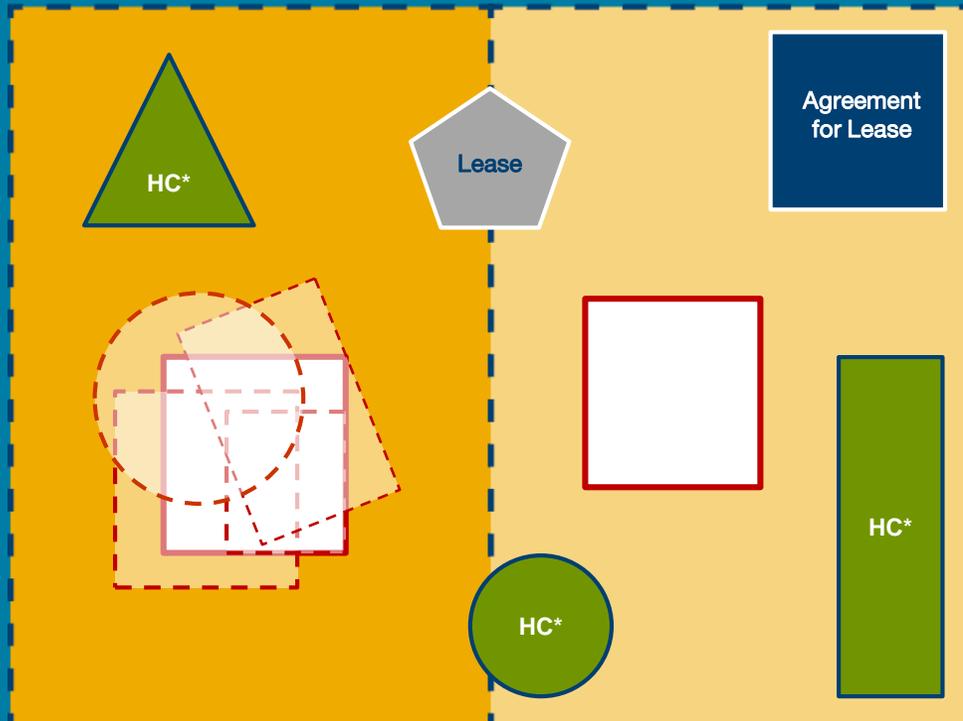
Leasing design: stages of the tender process



ITT Stage 1: Primary and Variant projects

Bidders will be able to propose up to 5 Primary Project Sites across the open Bidding Areas. Each Primary Project site may have up to 4 Variant Project Site options.

At least 50% of each Variant Project Site must overlap with the Primary Project Site.



* HC – Hard constraints

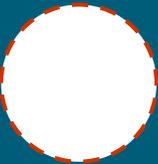
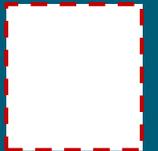
Primary Project Site:

Each Bidder may propose up to 5 Primary Project Sites. This is an “anchor” project site around which all variants have to be defined.



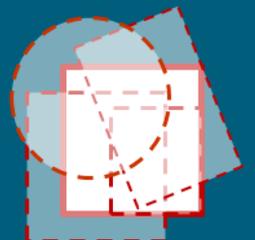
Variant Project Site:

Up to 4 Variant Project Sites can be proposed for each Primary Project Site. No variant can have a greater capacity or spatial area than the Primary Project Site but they may have less capacity or spatial area, subject to the other locational rules. At least 50% of each Variant Project Site must overlap with the Primary Project Site.

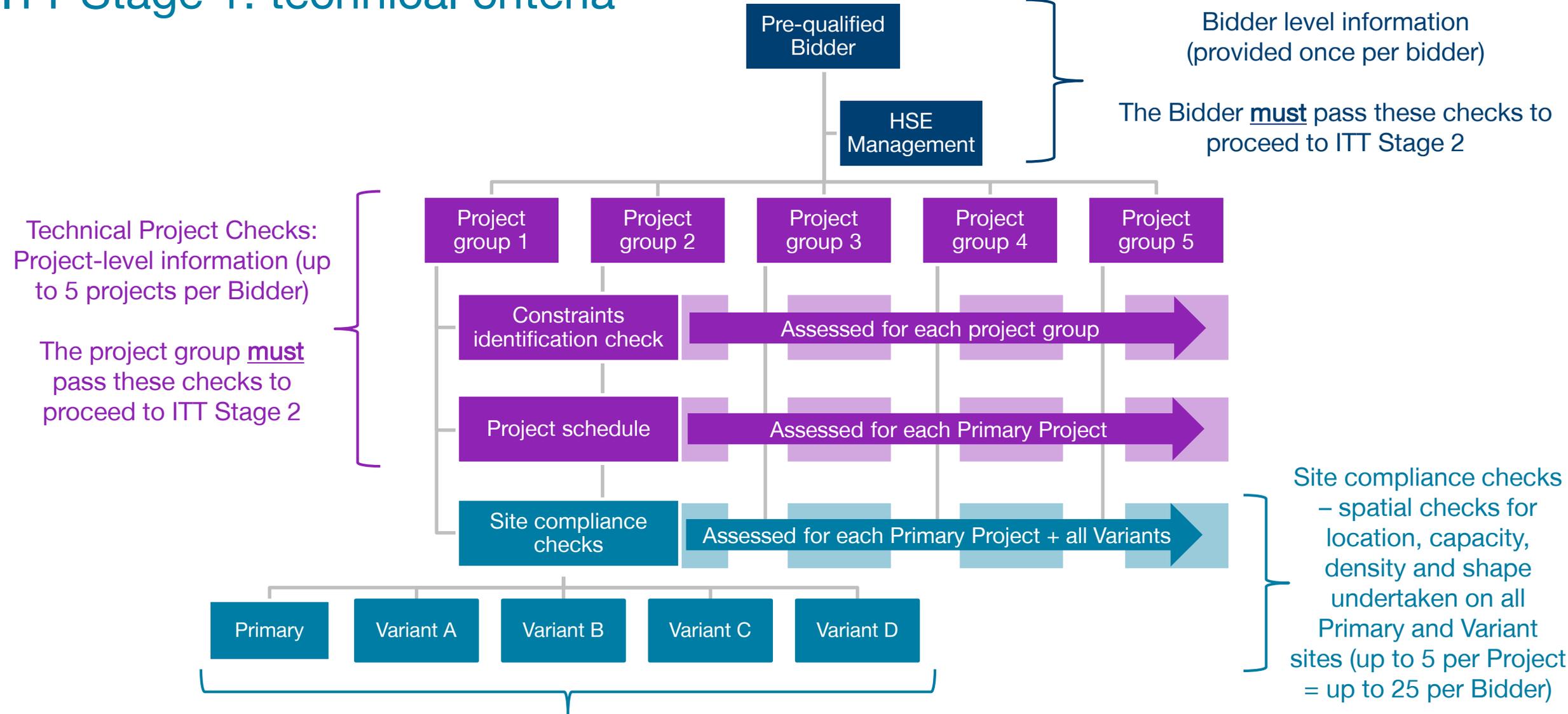


Aggregated bid area (project group):

The outer boundary of a Primary Project Site and its related Variant Project Sites, which is used for the purpose of the constraints identification check

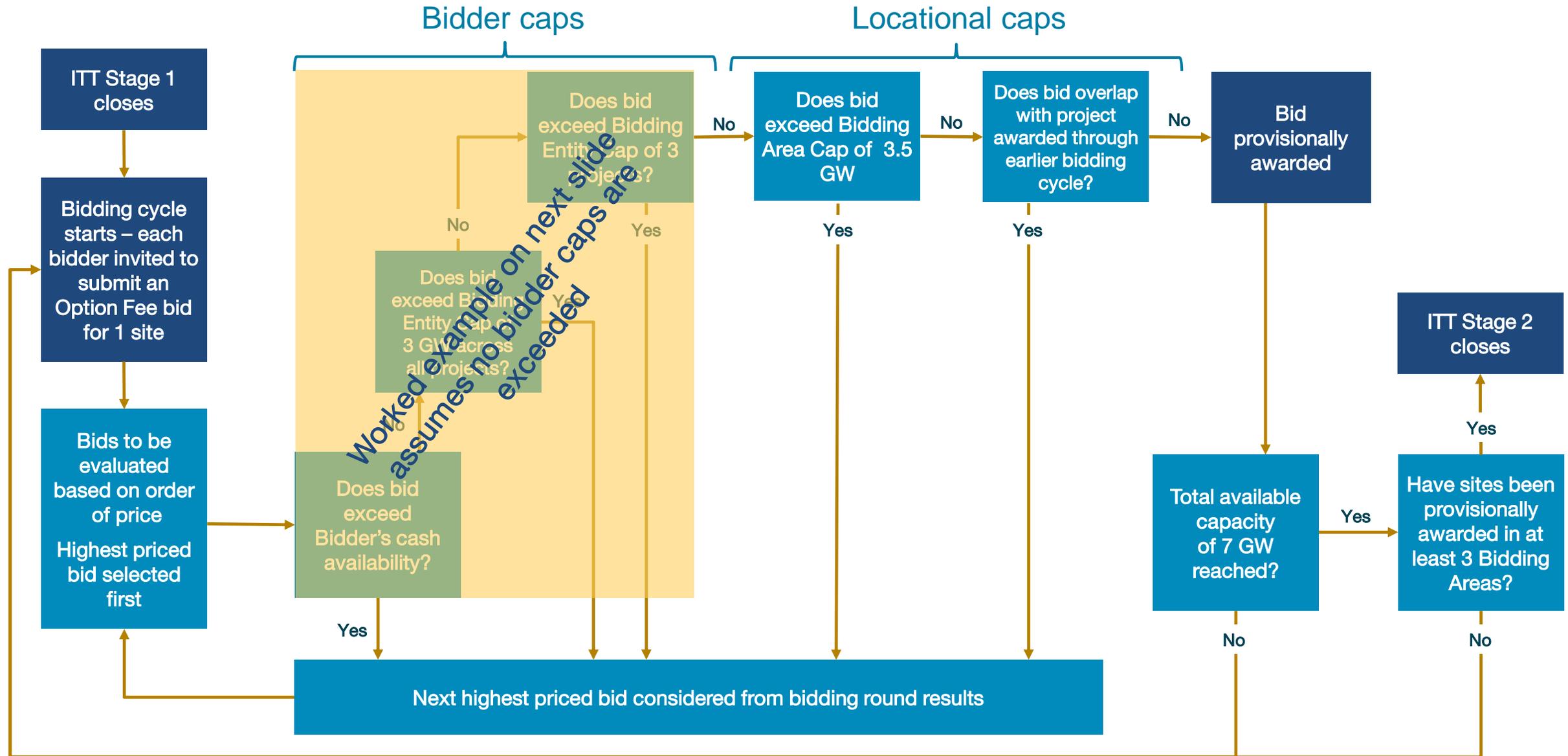


ITT Stage 1: technical criteria



The Primary Project site **must** pass for the project group to proceed to ITT Stage 2. If one or more Variant Project site fails then the Primary Project site can still proceed to ITT Stage 2 with any Variants that pass

ITT Stage 2: decision tree



ITT Stage 2: spatial illustration

Bidding area 1: Closed

Consent required from first awarded project to build within 5km

Cycle A
1000 MW

Cycle G
1000 MW



Cycle F
1500 MW

Bidding area 2: Closed

3.5 GW Bidding area capacity limit reached

Cycle E
400 MW

Cycle D
600 MW

400 MW

Not awarded due to overlap

Cycle B
1500 MW

Cycle C
1000 MW

Bidding area 3

One additional project awarded to ensure at least 7 GW awarded in at least 3 bidding areas

Cycle H
1500 MW

Bidding area 4

Cycle	Bidding area 1	Bidding area 2	Bidding area 3	Bidding area 4
A	1000			
B		1500		
C		1000		
D		600		
E		400		
F	1500			
G	1000			
H			1500	
I				
J				
SUB TOTAL	3500	3500	1500	
TOTAL	8500			

Technical design changes

Tender parameter	Previous position	Updated position
Minimum Project Size	300 MW in all bidding areas	600 MW in Dogger Bank 400 MW in all other bidding areas
Buffers to existing wind farms	7.5km buffer to existing projects	Round 4 projects can be awarded up to the boundary of a project from an earlier bidding cycle, but consent from the first project will be required if the proposed Lease boundary is within 5km of it.
Project design information	Information can be provided at the start of the plan-level HRA	Project design information will need to be provided at ITT Stage 1. Additional scientific evidence to inform the plan-level HRA can be provided later.
Milestones	Agreements for Lease contain a small number of milestones (less than 5) with consistent, but generous dates.	We are proposing two milestones within Round 4 agreements: <u>Milestone 1:</u> Development activity commences within 18 months of AfL entry, evidenced by: <ul style="list-style-type: none"> a) Geophysical surveys commenced; OR b) Ornithological surveys commenced; OR c) EIA Scoping Report submitted <u>Milestone 2:</u> Consent application for offshore wind farm and export cable route submitted within 5 years of AfL entry.

Technical design changes

Tender parameter	Previous position	Updated position
Operational excellence	Not specified	<p>Through our Round 4 agreements we will continue to work with our customers and partners to improve performance and extend whole system lifespans, by:</p> <ul style="list-style-type: none"> a) Requiring participation in systems for benchmarking the performance and reliability of operational offshore wind farms (e.g. SPARTA or equivalent initiative); b) Seeking adoption of recognised asset management standards (e.g. ISO 55000) for projects in Lease; c) Considering new requirements relating to the design life and maintenance of offshore transmission infrastructure within our agreements
Innovation	Hybrid projects and new technologies can participate on an equal basis	<p>No change to position on hybrid projects.</p> <p>We propose to offer a <u>rental discount for the demonstration of new technologies</u> within our Round 4 agreements. We are proposing a 50% rental discount on up to 10% of the project capacity for the first 5 years of operations for projects with a qualifying innovation.</p>

Role of Development Services Provider (DSP)

- A DSP is an **organisation** that provides technical support to a Bidder who lacks sufficient relevant EIA experience to pass the PQQ criteria alone
- Where required, a DSP would need to be contracted at the point of PQQ submission to undertake development activities on behalf of the Bidder
- Evidence of the named DSP's **organisational experience** would need to be provided as part of the PQQ submission
- Assuming the Bidder is successful at PQQ, the same DSP would need to **contribute to the ITT Stage 1** submission. The DSP's involvement at ITT Stage 2 will be up to the Bidder
- Where required, a **DSP** would need to be retained until consent award but there will be a mechanism in the Preferred Bidder Letter and AfL to allow them to be **substituted for another organisation** with the required PQQ pre-consent environmental expertise



New Offshore Wind Leasing

Additional commercial design changes

Ben Barton

Bidding entities

- Bidders may propose a variety of corporate structures to participate in Round 4
- However, a consequence of adopting a multi-cycle process at ITT Stage 2 is that any corporate group may only be part of one bidding entity, either on its own or within a consortium
- For each project, we will enter into an AfL with one of the following:
 - An individual company
 - A incorporated joint venture (IJV) of which any consortium members must be the shareholders; or,
 - An unincorporated joint venture (UJV) in which the consortium members are participants
- A joint venture does not have to be contractually formed prior to the bidding process, but its ultimate setup and structure must be presented as part of the PQQ submission and it must be contractually formed prior to signing the AfL

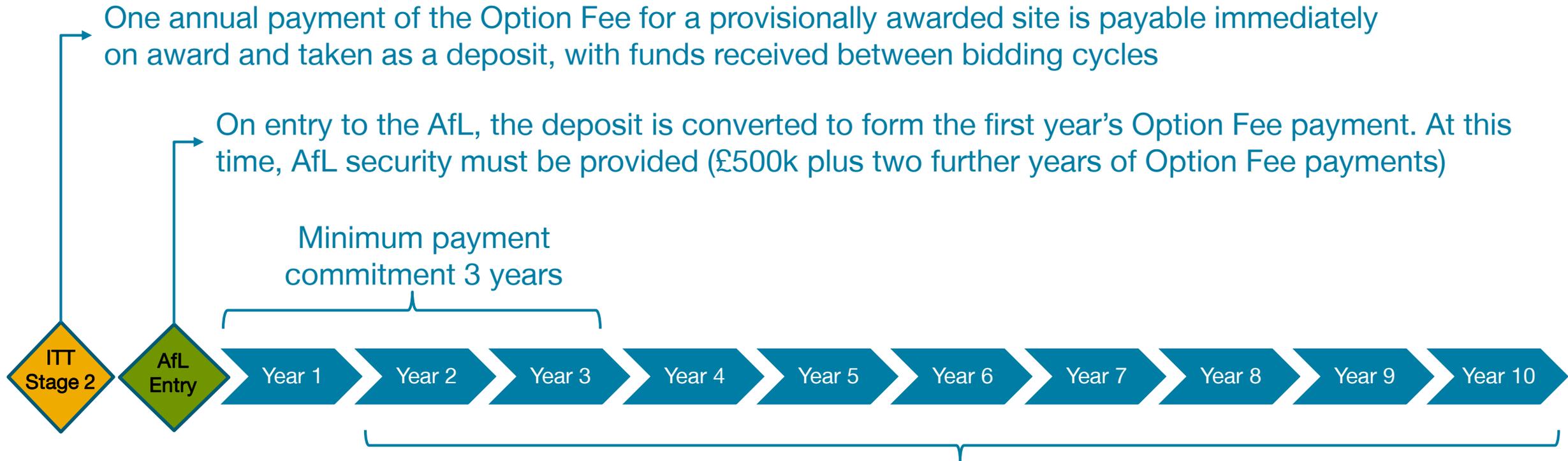




Option Fee structures

- We will award 10 year options through the Round 4 process, giving exclusive access to the sea bed for wind energy development
- To reduce the up-front capital requirement for developers, Option Fees will be payable on an annual basis subject to an initial 3 year commitment
- To reduce financial risk for developers and ensure that payments only apply where projects are progressing, the developer may exit from year 3, subject to providing advance notice

Option Fee payment structure



From the start of year 2 and thereafter, annual Option Fee payments must be made. Ongoing AfL security reduces to £500k plus one year of Option Fee payment

If the developer enters into the Lease earlier than year 10 of the option period, then no further annual instalments of the Option Fee are payable by the developer

Other commercial design changes

Tender parameter	Previous position	Updated position
Refunds	Not specified	The Option Fee deposit will only be refunded if we terminate the Preferred Bidder Letter. No refund or discount to the Option Fee deposit will be given under any other circumstance, including as a consequence of the plan-level HRA or in the event of changes to other activities on the seabed
Application Fees	Application Fee proposed to be charged to enter the process	No Application Fee will be charged
PQQ Turnover Test	Requirement of £600 million per annum average over 3 years from large infrastructure projects	Requirement of £600 million per annum average over 3 years (full turnover, any activity type)

New Offshore Wind Leasing

Summary, timeline and next steps

Jonny Boston



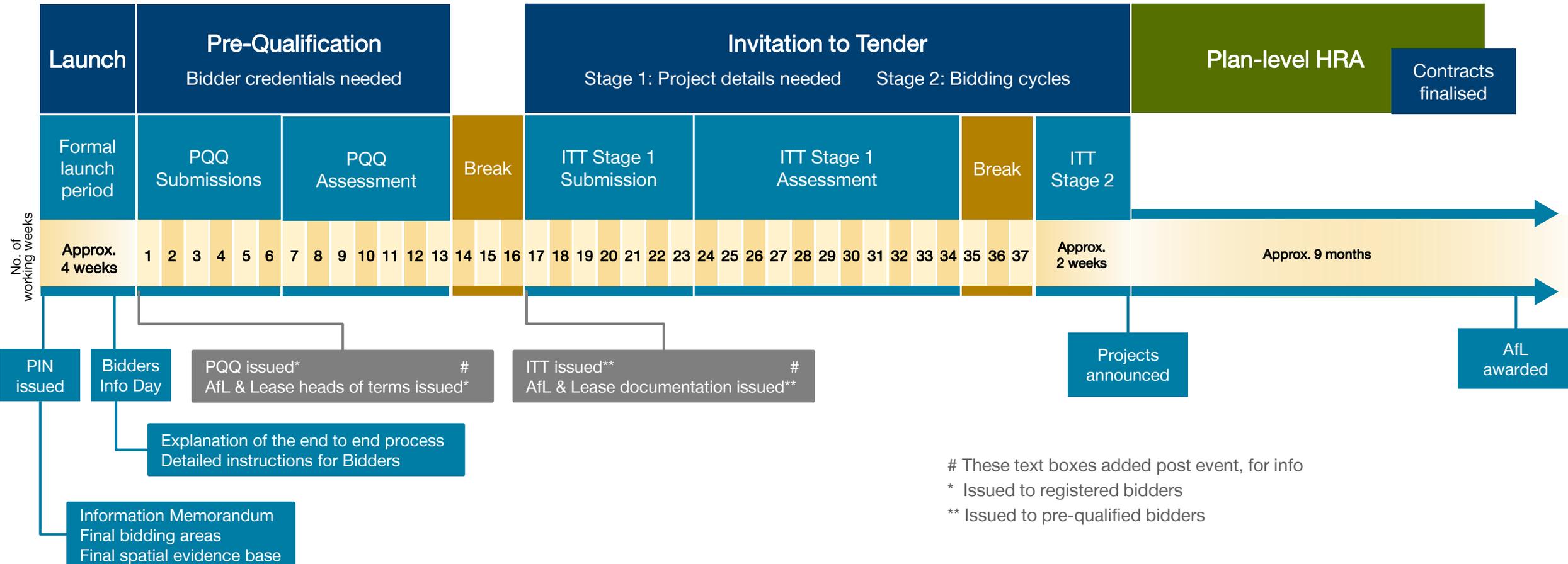
Summary

- In light of feedback, today we have set out a range of updates to our proposals
- These now reflect our intended design for Leasing Round 4 and will inform our final preparations
- We believe that the updates and changes will all contribute to achieving the objectives for Leasing Round 4
- Thank you for your engagement in the process

Summary of how key updates help achieve the objectives for Round 4

	Commercial updates					Technical updates				
	Multi-cycle bidding process	Annual option fee payments	Simpler consortium rules	Removal of application fees	Amended PQQ turnover test	Min. project size & buffers	Approach to ITT technical assessment	Reduced number of milestones	Operational excellence	Innovation
Deliver a robust pipeline for low-cost offshore wind deployment	✓	✓	✓				✓		✓	✓
Offer an attractive, accessible and fair proposition to developers	✓	✓	✓	✓	✓		✓	✓		✓
Balance the range of interests in the marine environment						✓	✓			
Make efficient use of the seabed	✓					✓	✓		✓	✓
Unlock the commercial value of the seabed	✓	✓								✓

Full tender process timeline



All timings are subject to change and will be confirmed in due course

Materials available at launch

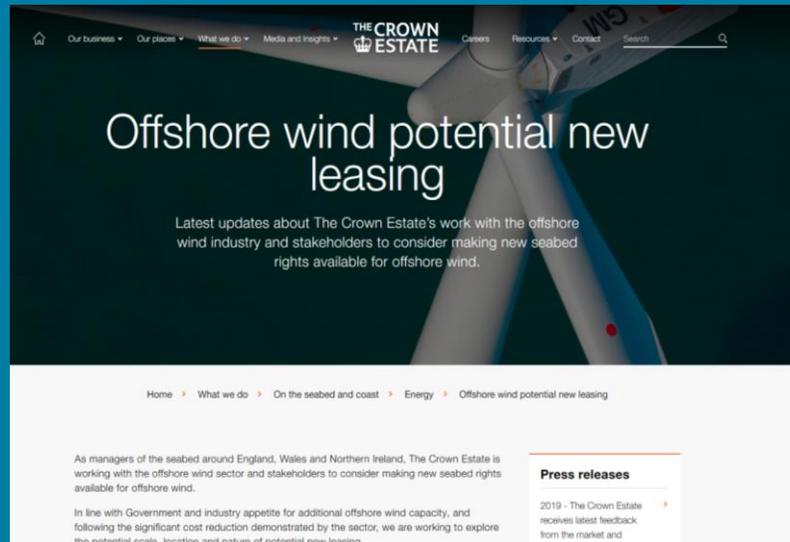


Document	Description
Information Memorandum	Commercial summary document setting out the background to Round 4, explaining how the process will work in practice and setting out key terms of the AfL and Lease
Methodology Report	Describing the analysis to define characterisation areas and associated report
Region Refinement Report	Method of refining regions, including annex of excluded region characterisation area reports
Characterisation Area Reports – x18	Characterisation area reports for regions being taken forward in Round 4, noting that reports for regions not being taken forward will be annexed to the Region Refinement Report
Summary Stakeholder Feedback Report	Feedback from stakeholders through the process
Shape Files	Various GIS data defining Bidding Areas, Regions, Characterisation Areas and other data used in the analysis process including constraint model output

Next steps and further information

- Round 4 launch proposed later in 2019
- For more information and to register for updates please visit our website: www.thecrownestate.co.uk

Search: “potential new leasing”



- Or email us at offshorestakeholder@thecrownestate.co.uk



Thank you