

The Crown Estate Wave & Tidal Programme Future leasing – Industry engagement exercise

July 2012

In line with The Crown Estate's strategic objective to support growth of the emerging wave and tidal industry, we are seeking views from project developers, other companies in the industry and stakeholders about our future approach to leasing wave and tidal projects.

To provide a framework for this discussion, this document sets out a series of questions to which we would welcome responses. Written submissions are invited in letter form, e-mailed to waveandtidal@thecrownestate.co.uk.

This document was published on 26 July 2012 and the deadline for responses is 17:00, 21 September 2012.

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1 Introduction

Thank you for downloading this document on The Crown Estate's industry engagement exercise about future wave and tidal project leasing.

This section introduces The Crown Estate, the background and purpose of the exercise, explains how we would like responses to be made and what we will do with information provided.

1.1 About The Crown Estate

The Crown Estate is a diverse property business valued at more than £8 billion. We have been trusted to manage a wide range of properties across the UK, including urban, rural and marine assets.

The marine estate includes around half the beds of estuaries and tidal rivers in the UK, over half of the foreshore and almost the entire UK seabed out to the 12 nautical mile territorial limit. We also have the rights to grant leases for renewable energy, natural gas storage and carbon dioxide storage sites outside territorial waters and within the declared exclusive economic zone around the UK.

Our role is to commercially and sustainably manage these assets of national importance for the benefit of the nation. We take this responsibility seriously, engaging with partners, statutory authorities, local people and other bodies on a regular basis in order to facilitate the development of a world-class offshore energy capability, which is already bringing significant new inward investment, businesses and jobs to the UK.

We have been active in offshore wind energy for over a decade, conducting a series of leasing rounds to the effect of creating the world's largest offshore wind development programme. We have also been working on wave energy and tidal energy for several years, running the first commercial-scale wave and tidal stream leasing round in the Pentland Firth and Orkney waters, starting a second round for tidal stream in the Rathlin Island and Torr Head area, and leasing a number of other sites all around the UK for technology development and demonstration purposes.

Our strategic objectives in wave and tidal energy

Looking across the UK, our key objectives in wave and tidal energy are to:

- Support growth of the emerging industry;
- Attract significant investment to the sector; and
- Encourage major players to commit to development.

We do this by:

- Leasing seabed sites for projects;
- Working with the industry to support project development; and
- Advising on government policies that underpin industry growth.

For more details of our work in wave and tidal energy, see:
<http://www.thecrownestate.co.uk/energy/wave-and-tidal/>

1.2 About this exercise

Over the past three years, we have leased 37 wave and tidal sites around the UK, with a total potential capacity of approximately 1.8 GW. This is believed to be more than any other country, and the development pipeline is helping the UK to build and maintain a global lead in wave and tidal energy.

We wish to continue to help the emerging industry grow. With this in mind, we are now seeking input from project developers and other companies with interests in the industry about our future approach to leasing

wave and tidal projects. Other stakeholders are of course also welcome to respond, but the main aim of this exercise is to clarify the industry's requirements.

We anticipate that this input will help us to:

- Offer development rights to project developers in forms which are well suited to their needs, recognising these needs vary by different types of energy resource, generation technology, project objectives and other factors; and
- Help everyone involved in project development – including developers, government bodies, other stakeholders and The Crown Estate itself – to see development proceed in a manner which makes optimum use of the UK's wave and tidal energy resources.

We are running this exercise now in view of our current wave and tidal leasing processes coming to a close in autumn 2012.

1.3 Geographic locations for projects

This exercise covers the whole of the marine estate and the exclusive economic zone in which we have the right to grant leases (see above). This includes the majority of inshore tidal locations and offshore seabed around the coasts of England, Wales, Scotland and Northern Ireland¹.

We invite respondents to refer to any or all of these areas when answering the questions related to geographic locations.

Marine Planning

In the UK, a number of organisations have statutory responsibility for marine planning, including the Marine Management Organisation (MMO) in England and the governments of Wales, Scotland and Northern Ireland. These organisations are developing marine plans, and at present, this work is at various stages of completion.

The Crown Estate recommends that when considering future wave and tidal projects, including in context of this exercise, project developers consider the marine plans under development by these organisations, obtaining information from and liaising with the organisations as appropriate.

1.4 Timing of project development, construction and operation

The exercise is intended to help us plan our leasing activities for the coming three years: 2013, 2014 and 2015. However, due to the lead time in project development and likely periods for project construction and operation, these activities may have a bearing on the work of developers and other parties over longer timescales into the future.

As such, it is appropriate to consider:

- How the activities we undertake will have a bearing on the future work of others; and in relation to this
- How our activities could enable industry growth in short, medium and long term.

We ask respondents to consider these points when preparing responses concerning timing.

¹ For avoidance of doubt, it does not include seabed areas around the Channel Islands or around the Isle of Man, which are administered by other organisations in these places.

1.5 Forms of seabed rights and leasing processes

Generally when we provide seabed rights for a wave and tidal stream project, it is in a two stage process, involving:

- An agreement for lease, which precedes a lease, and gives a developer exclusive access to a seabed area for purposes including physically surveying the site, collecting resource and environmental data and preparing an application(s) for statutory consent(s). The exclusivity gives comfort to the developer to commit the resources necessary to undertake these activities. Agreements for lease generally do not allow permanent installations on the seabed;
- A lease, contingent on the developer obtaining all necessary statutory consents, which allows the developer to construct and operate a project, including permanent installations.

To date, we have awarded various types of agreement for lease and lease for projects of different sizes, purposes and intended service lives, including:

- Managed test facilities, for testing and demonstrating single devices or arrays of devices;
- Single prototype device installations, for engineering testing over a number of months or years; and
- Multiple device installations, for commercial generation assets, generally constructed in phases and operated for longer periods.

The Crown Estate offers these rights on a competitive basis. In recent years, we have run:

- A leasing round for demonstration and commercial scale projects in the Pentland Firth and Orkney waters (Scottish waters), as a one-off competition², for sites in a defined geographic area, a strategic area, in territorial waters. We are currently running a second leasing round in the Rathlin Island and Torr Head strategic area (Northern Ireland waters); and
- A leasing process featuring multiple, recurring application windows, for relatively small commercial and demonstration scale projects, at sites in territorial waters except strategic areas. This exception has been deliberate, to manage risks of: additional schemes having negative impacts on existing projects; and prime resources being used sub-optimally by a scatter of small projects, which might preclude larger projects in future.

In general, we have found that these forms of rights, lease types and leasing processes have met market needs to date. We have already made a number of changes, based on feedback from developers and our own experience. However, we are open to views about further improvements.

We request that respondents refer to the existing forms of seabed rights and leasing processes to date when answering related questions.

1.6 How to participate in the exercise

If your organisation would like to participate in the engagement exercise, please:

- Consider the questions in the following section of this document; and
- Respond in letter form (in English), answering the questions in the order they are set out.

Letters should be e-mailed in PDF or Word format to waveandtidal@thecrownestate.co.uk. Hardcopies are not required.

The deadline for responses is 17:00 on 21 September 2012. Receipt will be acknowledged by return e-mail.

² Extended to re-tender one particular site, the Inner Sound.

1.7 How we will use the information provided

We will use the information provided as part of this engagement exercise to inform our strategy for future wave and tidal leasing across the UK.

Due to the likelihood that answers to the questions refer to commercial matters, The Crown Estate will treat all submissions as commercial in confidence and will deal with that information accordingly. However, please note that we may share our overall findings of the exercise with parts of government and other key stakeholders.

You should also be aware that The Crown Estate is subject to certain statutory obligations which, under certain circumstances, may require information to be disclosed to a requesting party. The Crown Estate will, where possible, seek to engage with you if any such disclosure is requested.

For avoidance of doubt, the engagement exercise is not a leasing competition and is unrelated to leasing activities that are underway. Whether companies participate or not in the exercise will have no bearing on The Crown Estate's decisions to award development rights now or in future.

2 Questions

This section lists the questions for the exercise. The questions refer exclusively to wave and tidal projects on seabed forming part of The Crown Estate.

Please be specific in your answers. While it is not necessary to answer all questions, the more information you provide, the better we will be able to understand your organisation's views.

2.1 Background information

- Q1. Tell us about your organisation. What type of organisation is it, and if not a project developer, what is its relationship to organisations which develop wave or tidal projects? It would be helpful if you could also give the following details: country in which based, type of organisation (e.g. limited company), number of years established, annual turnover (if applicable) and total number of employees.
- Q2. Why is your organisation interested in wave and tidal projects?
- Q3. In what other areas of the renewables industry is your organisation involved?
- Q4. Does your organisation currently hold rights for a wave or tidal project(s) in UK waters or elsewhere? For any projects outside the UK, please provide a brief summary.

2.2 Your organisation's development plans

- Q5. What are your organisation's plans to develop, construct and/or operate wave and tidal projects in UK waters? Please reproduce and complete the following table for all existing and conceived schemes.
- Under type of project, please indicate wave, tidal stream, tidal range or other.
 - An example of project purpose is 'to demonstrate first array of devices'.
 - Please state the total installed (nameplate generator) capacity of the project, in megawatts.
 - Under geographic location, please indicate the country and region of the UK.
 - The dates may be actual (already achieved) or planned (for the future) up to 2050.

Type of project	Purpose of project	Installed capacity	Geographic location	Distance from shore and water depth	Date development commenced	Date consented	Date installed and operating
<i>etc.</i>							

- Q6. What are your organisation's main criteria for prospecting sites?
- Q7. Given these criteria, what are the most promising places to develop projects at present?
- Q8. What factors external to your organisation may adversely affect your development plans?
- Q9. What are the implications of these factors for the locations and timings of your projects? How do these implications affect your organisation's appetite for, and commitment to, the projects versus other opportunities?

2.3 *The Crown Estate's approach*

- Q10. How should The Crown Estate choose where to lease project sites?
- Q11. How should The Crown Estate choose when to lease project sites?
- Q12. In the short term, should The Crown Estate lease sites only in a certain place(s)? If so, where and why?
- Q13. Should The Crown Estate 'reserve' areas of seabed to lease later, in the longer term? If so, which areas?; and when, or under what circumstances, should leasing commence?
- Q14. Should the way in which The Crown Estate leases sites, or the terms under which we provide rights, vary by geographic location (beyond legal requirements appropriate to certain jurisdictions)? If so, why and how?
- Q15. Should The Crown Estate lease sites through one-off competitions, recurring application windows, some other process(es) or a combination of approaches? Should the approaches vary according to types and sizes of projects, and if so, how?

2.4 *Site definition and local interests*

- Q16. How should developers and The Crown Estate manage the spatial definition (geographic location and coverage) of projects, before and after rights are awarded?
- Q17. In the first instance, should The Crown Estate award rights for an 'area of search' for a single project, a 'zone' within which multiple projects may be developed, or some other spatial concept? If another concept, please explain.
- Q18. Later, after coordinates have been contractually agreed, should The Crown Estate allow the locations of 'areas of search', 'zones' or projects to be changed? If so, under what circumstances and to what extent?
- Q19. Should The Crown Estate generally apply criteria to limit the sizes of 'areas of search', 'zones' or projects? If so, what criteria?
- Q20. Given the possibilities of resource interactions, cumulative environmental impacts and other effects, how should the interests of one developer progressing a wave or tidal project be balanced with the interests of another developer pursuing a nearby or adjacent project, be that another wave or tidal scheme or a project of a different kind (e.g. offshore wind)?
- Q21. When developing sites, how does your organisation work with nearby or adjacent developers?
- Q22. Considering the relationships The Crown Estate has with multiple developers, should we help to manage risks of one project affecting another? If so, how (e.g. restricting how close new sites may be located to pre-existing rights)?
- Q23. How does your organisation work with other stakeholders when prospecting and developing projects?
- Q24. How should The Crown Estate work with stakeholders to support project development?

2.5 Seabed rights and lease terms

- Q25. Through the seabed rights which The Crown Estate provides, how could we make it easier for developers to develop, construct and operate projects?
- Q26. If you hold rights from The Crown Estate for a UK wave or tidal project(s), which amongst our existing lease terms do you find least compatible with your organisation's business or development plans?
- Q27. Which of our existing terms do you find most helpful?
- Q28. Given these observations, what changes or additions do you suggest to our terms when we offer new seabed rights in future?

2.6 Wider perspectives

- Q29. How well matched are the seabed rights we provide, and the processes by which we provide them, to statutory consents and other legal and commercial requirements for UK projects?
- Q30. Are there good practices in site leasing, or equivalent provision of development rights, in other countries which The Crown Estate should consider adopting? What are they?
- Q31. Overall, in our approach to leasing sites, how should The Crown Estate balance long-term opportunities for wave and tidal projects with short-term requirements of the emerging industry?
- Q32. We would welcome any other suggestions about how the Crown Estate could best provide seabed rights for wave and tidal projects.