

A Prevailing Wind Advancing UK Offshore Wind Deployment



Contents

Foreword

1. Introduction / background
2. The decision
3. Enabling offshore wind deployment
4. Next steps



Foreword

The UK faces a significant challenge in delivering a secure, affordable low and zero carbon energy supply. On the path to reducing our carbon emissions by some 80% by 2050, we will see a transformation in the way we produce and use energy. In the short term, the UK must meet a legally binding target for 15% of our energy consumption to come from renewable sources by 2020. At the same time, we need to invest in a new generation of power stations to diversify our energy supply and replace older capacity coming offline and to address our increasing reliance on energy imports. In the longer term, we will need to go further to mitigate the threat of dangerous climate change and decarbonise our energy supply by 2050.

Offshore wind will play an important part in meeting our renewable energy and carbon emission targets and improving energy security by 2020 and afterwards, towards 2050. By increasing the amount of energy we get from renewable sources like offshore wind, we can also reduce our dependence on fossil fuels. The extra diversity that renewables bring to the UK's energy infrastructure can make a significant contribution to the Government's goal of ensuring reliable and secure energy supplies. The UK already leads the world in offshore wind deployment, but this vibrant new sector has the potential to deliver real UK economic benefits from both domestic deployment and exports of technology and energy. Offshore wind has the potential to provide the UK with an estimated up to 70,000 new jobs and £8bn in annual revenues. But these benefits will only be realised if the Government takes action: creating a stable, certain regulatory environment and providing support to investors in the current economic climate to stimulate innovation and infrastructure investments.

We are committed to maximising the contribution our offshore resource can make to climate change and energy objectives, but we recognise that this must be achieved in a sustainable way and that there are real impacts from this development which need to be considered carefully, such as effects on other users of the sea, the environment, and on electricity consumers. In December 2007, we announced a draft plan/programme for some 25GW of new offshore wind capacity, on top of existing plans for 8GW of offshore wind. Since then, the UK has, through the Offshore Energy Strategic Environmental Assessment (SEA) process, assessed the environmental implications and spatial

interactions of this draft plan/programme. We are now in a position to conclude that there are no overriding environmental considerations to prevent the achievement of our draft plan/programme for offshore wind, oil and gas, and gas storage, if mitigation measures are implemented to prevent, reduce and offset significant adverse effects.

In delivering our offshore wind ambitions, the right actions now can help minimise costs to the consumer and maximise the UK economic benefit, and ensure the most sustainable approach is taken which mitigates socio-economic and environmental effects. This document sets out our decision and the actions we consider are needed to ensure that our vision for offshore wind in UK waters can be achieved: creating an efficient, but robust planning process, underpinned by good evidence and understanding of the effects of offshore wind; delivering timely, reliable, and affordable access to electricity networks; providing adequate financial support to offshore wind now to bring forward innovations and investment that will bring down the costs of offshore wind in the medium term.

In light of the SEA process, consultation responses and other available information, today we have announced our decision to adopt this plan/programme for some 25GW of new offshore wind capacity in the UK Renewable Energy Zone and the territorial waters of England and Wales, up to 60m depth. The Crown Estate can now proceed with its leasing process, Round 3, with some spatial restrictions. Any proposals that come forward under Round 3 will be assessed by the relevant authority to ensure they are located in appropriate places. The deployment of offshore wind will depend on a range of factors, such as market take-up, trends in the UK's energy consumption, energy export potential, and addressing regulatory and supply chain constraints. This Government policy document on offshore wind sets out how the Government will act to help enable this plan/programme to be delivered.

Offshore wind is good for the environment, with huge potential for reducing carbon emissions; it is good for Britain's energy needs and good for the UK economy and jobs. The importance of the work set out here cannot be denied.

LORD PHILIP HUNT

MINISTER OF STATE FOR ENERGY AND CLIMATE CHANGE

24 JUNE 2009

1. Introduction

- 1.1. Today, the Government has announced the outcome of the Department of Energy and Climate Change (DECC) Offshore Energy Strategic Environmental Assessment (SEA) on a draft plan/programme for offshore wind leasing, oil and gas licensing and gas storage in hydrocarbon reservoirs, following a public consultation on the Environmental Report published on 26 January. This document explains the Government's decision in respect of the offshore wind element of the draft plan/programme, draws together the key on-going and planned work to enable large-scale deployment of offshore wind, and sets out next steps. It sits alongside two further documents published today, the Post Consultation Report (PCR)¹ summarising and responding to issues raised in consultation responses, and the Written Statement² laid in Parliament announcing the Government's decision. DECC has decided to adopt the plan/programme, subject to certain spatial restrictions. The offshore wind element of some 25GW of new offshore generating capacity by 2020 will play an important part in meeting our renewable energy and carbon emission targets by 2020 and 2050, and in improving energy security.
- 1.2. In Spring 2007, the UK agreed with other Member States an EU climate and energy package which signals the importance of an integrated and long term approach to tackling energy and climate change issues. That package includes a target for 20% of the EU's energy consumption from renewable sources by 2020. In November 2008, the UK adopted a target for 80% reduction in carbon emissions by 2050 and in December 2008 we agreed to a legally binding UK target of 15% of our energy consumption to come from renewable energy by 2020.
- 1.3. The Government is firmly committed to delivering at least 15% of the UK's energy needs from renewable sources by 2020. This is a key element of our response to the growing threat of serious climate change and to the need to provide secure, affordable, reliable and sustainable sources of energy into the future. We set out in our consultation on a draft UK Renewable Energy Strategy in June 2008³ the possible measures we would need to take to deliver this target, highlighting the critical role that offshore wind farms will need to play. We will publish our UK Renewable Energy Strategy this summer, setting out how we plan to meet the 2020 renewable energy target. The actual contribution made by offshore wind energy will depend on a range of factors, including market uptake, the relative cost of offshore wind compared to other options, the ability of other technologies to deliver, the

¹ <http://www.offshore-sea.org.uk> 'Offshore Energy SEA Post Consultation Report' (PCR) is available on SEA web site - <http://www.offshore-sea.org.uk>

² <http://www.decc.gov.uk> 'Offshore Energy SEA Written Statement to Parliament' is available on SEA web site - <http://www.offshore-sea.org.uk>

³ http://www.decc.gov.uk/en/content/cms/consultations/cons_res/cons_res.aspx 'UK Renewable Energy Strategy: consultation - Full Document' (URN 08/1009) is available at http://www.decc.gov.uk/en/content/cms/consultations/cons_res/cons_res.aspx

potential for energy exports to other countries and the need for increased renewables capacity beyond 2020. Looking beyond our climate change goals, offshore wind also needs to play a role in ensuring our energy security. To achieve a secure, affordable and low carbon energy supply in the years and decades ahead, we need an energy mix that is diverse both in terms of technologies and in terms of geographical sources of imported fuels, within a market-based framework that will deliver competitive prices.

- 1.4. Previous plans for up to 8GW of offshore wind in UK waters, under The Crown Estate's Round 1 and 2 competitions, dating back to 2001 and 2003, are inadequate to meet our needs and to meet growing market demand for new offshore wind development rights. Therefore the Government announced in the 2007 Energy White Paper⁴ that we would undertake an Offshore Energy Strategic Environmental Assessment (SEA) to assess the impact of a draft plan/programme to hold further rounds of offshore wind leasing, as well as offshore oil and gas licensing and gas storage, in UK waters. The draft plan/programme was considered in the context of overall UK energy supply policy and greenhouse gas emission reduction efforts. The main objectives are to enhance the UK economy, contribute to the achievement of carbon emission reductions and security of energy supply, but without compromising biodiversity and ecosystem function, the interests of nature and heritage conservation, human health or material assets and other users of the sea.
- 1.5. For offshore wind energy, the draft plan/programme proposed enabling further rounds of leasing in the UK Renewable Energy Zone (REZ) and the territorial waters of England and Wales, up to 60m depth, with the objective of achieving some 25GW of additional generation capacity by 2020. The offshore wind energy part of the draft plan/programme did not include the territorial waters of Scotland and Northern Ireland, which are being assessed by the respective Devolved Administrations.
- 1.6. We have completed the SEA in accordance with the *Environmental Assessment of Plans and Programmes Regulations 2004* (the SEA Regulations).⁵ In December 2007 we published a scoping document⁶ for consultation. In January 2009 we then published the SEA Environmental Report for public consultation.⁷ Today, alongside this policy document, we have published a PCR, summarising input from the consultation process, including DECC's responses to that input. These publications, along with the consultation responses, are available on SEA website.⁸

⁴ 'Meeting the Energy Challenge – A White Paper on Energy – May 2007' (URN 07/1006) <http://www.berr.gov.uk/whatwedo/energy/whitepaper/page39534.html>

⁵ Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations) <http://www.opsi.gov.uk/si/si2004/20041633.htm>

⁶ SEA Scoping Report' is available at http://www.offshore-sea.org.uk/consultations/Offshore_Energy_SEA/Offshore_Energy_SEA_Scoping.pdf

⁷ 'Offshore Energy SEA Environmental Report' is available at http://www.offshore-sea.org.uk/site/scripts/book_info.php?consultationID=16&bookID=11

⁸ 'Offshore Energy SEA Post Consultation Report' (PCR) and copies of Offshore Energy SEA Environmental Report Consultation Responses are available on SEA web site - <http://www.offshore-sea.org.uk>

- 1.7. Following the adoption of this plan/programme, The Crown Estate can now proceed with its offshore wind leasing process, Round 3, and other competitions if needed, to deliver the Government's plan/programme. The Crown Estate owns virtually the entire seabed out to the 12 nautical mile (nm) territorial limit, including the rights to explore and utilise the natural resources of the UK continental shelf (excluding oil, gas and coal). Therefore developers must seek permissions from The Crown Estate prior to placing any offshore structures on, or passing cables over the seabed and its foreshore. As well as owning the rights to explore and utilise waters up to 12nm, the Energy Act 2004 gave The Crown Estate rights to issue leases for development beyond the territorial limit within the REZ out to 200nm.
- 1.8. The Crown Estate Act 1961 states that, with regard to property and land, The Crown Estate must "maintain and enhance its value and the return obtained from it, but with due regard to the requirements of good management". To this end, The Crown Estate strategically manages the marine resource, balancing a range of development activities and environmental considerations alongside legislative compliance and stakeholder interests.
- 1.9. Recognising the constraints on timing to meet our 2020 target for renewable energy and the urgency of action to mitigate climate change, The Crown Estate and DECC are working closely to ensure that The Crown Estate's Round 3 leasing process can proceed in a timely, but robust manner. To this end, The Crown Estate has commenced work on preparing for negotiations under the Round 3 competition, which will proceed following our decision today to adopt the Offshore Energy plan/programme. The Crown Estate expects to award new development rights in the form of Zone Development Agreements (ZDAs) by the end of this year. The Crown Estate will complete Appropriate Assessment(s), if required, prior to these awards. Any development brought forward under the ZDAs will be subject to the usual planning and environmental licensing processes, through which the relevant authorities will consider whether proposed sites are appropriately located and should be consented.
- 1.10. However, to achieve the deployment of offshore wind on the scale envisaged in this plan/programme will require the Government and others to play an active role. This document sets out in Chapter 2 DECC's decision following the SEA process, in Chapter 3 the actions the Government considers are needed to deploy offshore wind on this scale, and in Chapter 4 the next steps that will be taken by the Government and others.

2. The Decision

- 2.1. Today, the Government has announced the Department of Energy and Climate Change's (DECC's) decision to adopt a plan/programme for Offshore Energy, encompassing some 25GW of offshore wind generation capacity, oil and gas licensing, and gas storage in hydrocarbon reservoirs. This decision is set out in the Written Statement laid in Parliament, published alongside a Post Consultation Report (PCR) and this policy document. Together, these fulfil the requirements of the SEA Directive.⁹
- 2.2. Following our adoption of this plan/programme, licensing and leasing processes can now be undertaken to award new development rights within the confines of this plan/programme. For oil and gas licensing and gas storage in hydrocarbon reservoirs, DECC as the licensing authority will launch a Round in due course. For offshore wind, The Crown Estate is the leasing authority and can now proceed with offshore wind leasing competition(s). The relevant licensing/leasing authority will undertake any Appropriate Assessment(s) prior to awarding licences or leases under the Rounds, if required following screening.
- 2.3. The offshore wind element of our plan/programme for Offshore Energy allows leasing within waters up to 60m water depth, in the UK Renewable Energy Zone and the territorial waters of England and Wales (referred to henceforth in this document as 'UK waters'). The Scottish Executive and Northern Ireland Executive are the competent authorities for conducting Strategic Environmental Assessments (SEAs) within their territorial waters. Both of these authorities are currently undertaking SEAs for the purposes of enabling offshore wind leasing in these areas.¹⁰
- 2.4. Within UK waters, the Government has decided that there should be spatial restrictions on offshore wind development in specific geographic areas, as indicated in the recommendations of the PCR. It should be noted that these spatial restrictions are issue and criteria based – including for example military Practise and Exercise Areas (PEXA) and airspace danger areas, and International Maritime Organization (IMO) routes – and as the boundaries and locations may change over time, the maps contained in the Environmental Report are indicative.
- 2.5. Proposed offshore wind development should be considered through the planning and environmental licensing processes by the relevant competent authority as to whether it is appropriately located. As set out in Chapter 1, there is a need for new renewable energy infrastructure to meet the Government's climate change mitigation and energy objectives. That need is sufficiently great and urgent that it should be

⁹ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment is available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0042:EN:HTML>

¹⁰ See www.scotland.gov.uk and http://www.northernireland.gov.uk/news/news-deti/news-deti-december-2008/news-deti-021208-northern-ireland_s-offshore.htm

given substantial weight in determining an application which contributes to meeting the Government's climate change mitigation and energy objectives.

- 2.6. The Government has decided that, in line with Recommendation 6 of the PCR, there is potential for capacity extensions to existing wind farm leases within UK waters. However, we agree that this will require careful, site-specific evaluation through the planning process, since significant new information on sensitivities and uses of these areas is now available.
- 2.7. The Government has decided that, in line with Recommendation 2 of the PCR, the coastal waters should not be considered an exclusion zone for future offshore wind development, but recognises that the delivery of the draft plan/programme of some 25GW will require significant development outside of coastal waters. We agree with the PCR conclusion that in coastal waters there are multiple receptors which are sensitive to offshore wind development, and note that this sensitivity is not uniform. The effects of offshore wind farms will vary on a case-by-case basis, according to the specific design of the site, its location and the setting of each proposed project. There will by their nature be significant impacts from offshore wind farms wherever they are located, but these may be positive impacts and, where they are adverse, they may be acceptable when weighed against the national need for new energy infrastructure. Adverse effects may be temporary or reversible, and in many cases they can be mitigated, or compensated for. We therefore do not consider that the potential effects identified in the Environmental Report or PCR justify a blanket exclusion area for offshore wind development. Instead, these effects should be assessed on a site-specific basis through the planning process, and mitigation measures considered, prior to a decision being made on whether proposals for individual sites are acceptable.
- 2.8. The remaining recommendations of the PCR relating to the offshore wind element of the plan/ programme are addressed in the following chapter, alongside details of how each of these will be taken forward.

3. Enabling offshore wind deployment

- 3.1. An important objective of this document is to draw together key on-going and planned work programmes that the Government considers vital to enable large-scale deployment of offshore wind. In order to deliver this step change in deployment, in a timely but sustainable way, it is crucial that confidence grows significantly amongst the wind industry, manufacturers, and wider stakeholders. Therefore, in this chapter, we outline the programme of strategic policy work underway and planned to deliver our offshore wind ambitions.
- 3.2. Following our SEA assessment and the consideration of the responses to the public consultation, we believe that in order to deliver the scale of capacity considered for some 25GW of offshore wind by 2020, we need to establish a programme of enabling strategies, including, but not limited to, ensuring:
- a smooth and effective planning process
 - the right level of financial support for offshore wind
 - the coordinated development of the on- and offshore electricity networks
 - stimulation of investment in Research, Development and Deployment (R&D&D) to improve reliability and reduce cost
 - stimulation of the expansion of the supply chain and associated infrastructure to increase capacity and maximise business benefits to the UK
 - a balance between a range of marine interests.
- 3.3. In the past, potential constraints have been resolved on an ad hoc, site-by-site basis for Round 1 and 2 projects. This has resulted in delays and uncertainty for all parties. In adopting a plan for expansion on this scale, it is important to strike a balance between policy objectives at the outset. The Government has agreed, and is committed to achieving a balance between its different priorities, balancing energy and climate change goals with conservation, fishing, navigation, aviation and other policies.
- 3.4. The Government will continue to work hard to explore potential solutions to spatial conflicts, and agree programmes of work to deliver the enabling policies in time for the next Round(s) of offshore wind. This will include working collaboratively with the Scottish Executive, Welsh Assembly Government and Northern Ireland Executive to enable deployment in their territorial waters and within the Scottish Renewable Energy Zone. Further details on specific areas of work are set out below.

Planning process

- 3.5. The Government accepts Recommendation 18 of the PCR that states, “*Siting and consenting processes for offshore wind farms must remain flexible to allow for technological innovation, including in mitigation measures*”.
- 3.6. A robust planning regime is vital to ensure that national, regional and local economic benefits, environmental and social objectives, and the interests of individuals, communities and society as a whole are all taken properly into account in reaching decisions about new developments. We are firmly committed to maintaining the democratic, participatory values of our planning system.
- 3.7. The Planning Act 2008 will streamline and improve the planning process for nationally significant infrastructure projects in England and Wales, including renewable energy proposals, by putting in place a single consents regime and an independent Infrastructure Planning Commission (IPC) to take decisions. In the case of offshore wind farms, “nationally significant” is defined as any proposals with the capacity to generate over 100MW of electricity in English and Welsh waters, including the adjacent areas of the Renewable Energy Zone.
- 3.8. The single regime will include Food and Environment Protection Act (FEPA) and Coast Protection Act (CPA) licencing in England. In Welsh waters, the Welsh Assembly Government will be responsible for issuing FEPA licences. In addition, the Scottish Executive and Northern Ireland Executive have their own planning systems in place and any developers should discuss potential applications with these authorities, as appropriate.
- 3.9. A suite of National Policy Statements (NPSs) for nationally significant energy infrastructure is being prepared to establish the case for nationally significant energy infrastructure development. These will set the policy framework for Infrastructure Planning Commission decisions in England and Wales. The IPC has to make planning decisions in accordance with the policy set out in the NPS, taking into account relevant domestic and European law, and adverse impacts. The Government will ensure that the NPS for renewables will take into account this policy document in respect of new nationally significant offshore wind farms.
- 3.10. The IPC will be a non-departmental public body, and as such will operate at arm’s length from Government, within the policy framework prescribed in the Planning Act, secondary legislation and the NPSs. The IPC will be chaired by Sir Michael Pitt and is expected to be established from October 2009, with an interim body being set up ahead of that. The IPC will move to Bristol as soon as suitable accommodation has been identified and made ready.
- 3.11. The Government intends that the IPC will be ready to take applications for nationally significant infrastructure proposals in 2010 and plans to “switch on” the new regime for the energy sector at that point. Applications for nationally significant infrastructure projects received before this would continue to be determined by the relevant

Secretary of State, as now, under s36 of the Electricity Act 1989. Once submitted applications will not be transferred to the IPC. After this, the IPC will be the decision-making body for energy consents, where the relevant NPS has been designated, or will be a recommending body (with the Secretary of State making the final decision) where the energy NPS has not been designated.

- 3.12. There will be a duty on developers to ensure that proposals are properly prepared and consulted on before they submit an application for nationally significant infrastructure projects. We believe that consultation is a critical part of the development process and should be undertaken with the public, relevant Local Authorities and key stakeholders with an interest in offshore wind farms, at the earliest opportunity during the development of projects.
- 3.13. In the interim period, for matters relating to offshore wind farm applications, we would recommend that developers liaise, as necessary, with DECC's offshore wind consents team – offshore.renewables@decc.gsi.gov.uk .
- 3.14. The Marine and Coastal Access Bill will establish a new strategic framework for the management, conservation and sustainable development of the whole UK marine area. It creates a new Marine Management Organisation (MMO) to be the UK Government's strategic delivery body in the marine area, charged with making a unique contribution to the sustainable development of the marine area. The MMO will have a headquarters in Tyneside as well as a series of small coastal offices.
- 3.15. The Bill also provides for a new system of strategic marine planning, beginning with a Marine Policy Statement (MPS) for the whole UK marine area. This brings together all our marine policies into one coherent document, and sets out our vision and objectives for contributing to the achievement of sustainable development in the UK marine area. Renewable energy, and meeting our international, European and domestic carbon reduction and climate change mitigation targets are key priorities for the UK, and will naturally be reflected in the MPS. New marine plans will then apply the policies in greater detail to specific areas of the sea, thereby making a direct link from UK-wide policy to spatial application and individual decisions. The Bill also introduces reforms to the present system of marine licensing, replacing the provisions of Part 2 of the Food and Environment Protection Act 1985 (FEPA) and Part 2 of the Coast Protection Act 1949 (CPA) with a new single Marine Act licence, as well as introducing reforms to the management of inshore and freshwater fisheries, providing a framework for establishing marine conservation zones and making provision for a new coastal access route around England.
- 3.16. The MMO will be responsible for preparing marine plans for the inshore and offshore waters adjacent to England. It will also determine applications for electricity generating infrastructure that does not exceed 100MW of generating capacity in English territorial waters and that part of the Renewable Energy Zone where Scottish Ministers do not have functions. Such applications, along with almost all "authorization and enforcement decisions" must be determined in accordance with

the MPS and marine plans.¹¹ In addition, the MMO will have a statutory role in providing advice to the IPC on all offshore wind farm applications above 100MW generating capacity, located in English territorial waters and the Renewable Energy Zone. The MMO will be responsible for monitoring compliance with consent conditions set by the IPC, and for any enforcement action that may be necessary on both Marine and Coastal Access Bill licences and IPC development consents at sea, except in Welsh territorial waters. The MMO and the IPC will need to work closely together and the Government will work hard to ensure that the relevant NPSs and the MPS are both clear and consistent.

- 3.17. The Devolved Administrations in Scotland and Northern Ireland are also working on these issues in the light of their responsibilities for planning nationally significant renewables infrastructure outside England and Wales. Scotland has brought forward its own Marine (Scotland) Bill, which is currently before the Scottish Parliament. The majority of the provisions of the Marine and Coastal Access Bill also extend to Wales, where Welsh Ministers will carry out the marine planning and licensing roles. The Government is working collaboratively with the Scottish, Welsh and Northern Irish Administrations in achieving our UK renewables target.

¹¹ The Infrastructure Planning Commission will take all its decisions in accordance with the relevant National Policy Statement(s), whilst having regard to the MPS and relevant marine plans.

Financial support

- 3.18. As with other emerging and close to market technologies, commercial deployment of offshore wind currently requires an incentive to bridge the gap between the wholesale electricity price and a project's levelised costs. This incentive makes deployment economically attractive, which in turn can unlock economies of scale and reduces costs over the medium to long term, while delivering value for money to consumers. Through the Renewables Obligation (RO) and Climate Change Levy, the Government has introduced mechanisms to provide developers with access to sufficient returns for most projects.
- 3.19. The Government recognises that the RO, as the main form of support for large scale renewable electricity, needs to provide stable and certain returns for investors over the lifetime of their projects. We are committed to removing the uncertainty presently created by the 2027 end-date for RO support, and the 20% limit on the proportion of their electricity suppliers could be required to source from renewables. In our consultation on a draft UK Renewable Energy Strategy published in June 2008 we noted that the RO would need to be further modified to enable the delivery of our new 15% renewable energy target for 2020, in terms of length, efficiency and targets. In November 2008, we announced in the Pre-Budget Report¹² that we will extend the RO to at least 2037, subject to consultation this summer and Parliamentary approval. Further possible measures to improve the efficiency of the RO will be set out in the UK's Renewable Energy Strategy this summer and will be consulted on in more detail as part of the Renewables Financial Incentives Consultation. We intend to introduce these changes through secondary legislation in time for April 2010.
- 3.20. The Government has also recognised the need to provide greater support to further-from-market technologies such as offshore wind, recognising the higher costs and risks they face. Banding of the RO was introduced in April 2009 and offshore wind was provided with additional support in the form of 1.5 ROCs/MWh. On 22 April 2009, we announced in the Budget statement¹³ that in light of evidence of rising offshore wind costs, we would conduct a review of the level of support offered for offshore wind under the RO. If the review (and subsequent consultation) confirms the evidence we have been provided with, we propose to provide even more incentive to offshore wind in the form of two Renewables Obligation Certificates (ROCs). Access to this additional support would, however, be for a time limited period and subject to a number of conditions. Given the timeframes for the completion of leasing competitions following this decision and the development process, we consider it likely that only currently planned offshore wind farms would qualify for any additional support that may be offered under these proposals. The scheduled review of the RO, concluding in 2013, will assess and make proposals for

¹² 'Pre-Budget Report 2008' is available at http://www.hm-treasury.gov.uk/prebud_pbr08_repindex.htm

¹³ 'Complete Budget 2009 Report' http://www.hm-treasury.gov.uk/bud_bud09_repindex.htm

the level of support provided to offshore wind going forward, taking into account the support which may be needed to deliver some 25GW of new offshore wind capacity.

- 3.21. Recent analysis of the costs of offshore wind in the Ernst & Young report published on 27 April 2009¹⁴ produced for DECC, and the October 2008 Carbon Trust report¹⁵ suggest that the offshore wind technology required to deliver the UK's offshore wind ambitions is commercially available or already in development. It is our view that the current increase in offshore wind costs is short term, and that the cost of offshore wind technology will reduce over time as the technology is industrialised, taking into account increasing competition in the supply chain, reducing risk due to technology developments and standardisation, and economies of scale. However, as noted by many respondents to our consultation on the Environmental Report, site selection will also play a critical role in bringing forward economic offshore wind development, which is likely to be situated in shallower, closer to shore areas. The scheduled RO banding review will take all these factors into consideration.

¹⁴ 'Cost of and financial support for offshore wind', April 2009 (URN 09D/534)
<http://www.berr.gov.uk/files/file51142.pdf>

¹⁵ 'Offshore wind power: big challenge, big opportunity' is available on The Carbon Trust web site at
<http://www.carbontrust.co.uk/publications/publicationdetail?productid=CTC743>

Infrastructure, Innovation and Supply Chain

- 3.22. As noted above, the expansion of offshore wind over the coming years has to be affordable and deliverable, providing value for money to the consumer as well as balancing the interests of other users of the marine environment. The Environmental Report recommended that despite spatial conflicts, there was scope for more than 25GW of new offshore wind capacity and noted that the biggest challenge to delivering some 25GW by 2020 is likely to be in expanding the supply chain capacity needed.
- 3.23. The Government is clear that in order to deliver this plan/programme, significant cost reductions and investment in offshore wind technology and the supply chain will be needed. Huge investment will be required from developers and companies throughout the supply chain, and these investments need to be brought forward. We recognise that the Government has a role to play in providing a stable regulatory environment and the certainty needed for industry to make these investments. We can also speed up this process by seed-funding the innovation and demonstration of next generation technology and key investments in infrastructure.
- 3.24. We know that the UK has the skills and capabilities to be at the forefront of opportunities opened up by the move towards a low carbon economy – many UK companies are already active in the offshore wind sector and this is set to grow. Offshore wind in particular presents a significant opportunity to secure thousands of green jobs. The Carbon Trust report¹⁶ estimates that up to 70,000 jobs could be created in meeting our 2020 targets. With the right support in place, we can grow our industry to become a world leader in offshore wind.
- 3.25. Whilst we believe the supply chain can grow at a sufficient rate, if certainty on market scale and timing is provided and regulatory barriers are addressed, we recognise that active policies are needed to encourage this investment to take place in the UK. In March 2009, the Government launched *Low Carbon Industrial Strategy: a Vision*¹⁷, setting out its commitment to industrial activism, and illustrating key policy drivers for the Low Carbon Industrial Strategy. The Budget 2009 indicated how the Government aims to fund this strategic vision with a package of measures including £405 million to help establish the UK as a market leader in renewables technology and advanced green manufacturing in the next two years. *Investing in a Low Carbon Britain*¹⁸, published following the budget, set out in broad terms how we intend to target the investment announced, to deliver support for key sectors such as offshore wind – where the UK has the potential to take a leading

¹⁶ ‘Offshore wind power: big challenge, big opportunity’ is available on The Carbon Trust web site at <http://www.carbontrust.co.uk/publications/publicationdetail?productid=CTC743>

¹⁷ ‘Low Carbon Industrial Strategy: A Vision’, March 2009 (URN 09/571) <http://www.berr.gov.uk/files/file50373.pdf>

¹⁸ ‘Manufacturing: New Challenges, New Opportunities’, September 2008, (URN 08/715) <http://www.berr.gov.uk/files/file47660.pdf>

global role and Government intervention can act as a catalyst. For offshore wind, this means an integrated approach to facilitating and investing in innovation and manufacturing, providing testing and demonstration facilities and support for new manufacturing capacity and port facilities. This extra spending will include support for close-to-market innovation, principally delivered through the Environmental Transformation Fund (ETF), as well as support to develop the UK supply chain, delivered through the Solutions for Business portfolio mechanisms. In summer 2009, we will set out in more detail how the Government will deliver the targeted strategic support that will be fundamental to help establish the offshore wind and marine energy sectors in the UK.

- 3.26. In the Manufacturing Strategy¹⁹, published in September 2008, we announced our intention to create an Office for Renewable Energy Deployment (ORED), which will work to facilitate this investment in offshore wind technology, associated infrastructure such as ports and the expansion of the offshore wind supply chain.
- 3.27. The Government has committed to fund investment in offshore wind technology across the innovation spectrum:
- The Energy Technologies Institute's Offshore Wind programme has launched a £40m programme covering design and demonstration of novel offshore systems, improvements to existing technologies, and support for studies on other issues critical to deployment.
 - The Carbon Trust Offshore Wind Accelerator competition, worth up to £30m over the next five years, aims to cut the overall cost of offshore wind energy by 10% or more through a combination of wind farm cost reductions and performance improvements.
 - DECC provides capital grants for the demonstration of new offshore wind technologies, and recently launched a new £10m scheme (under the Environmental Transformation Fund) to support the demonstration of next generation technology for offshore wind.
- 3.28. In February 2009 DECC published an independent report into the capacity of UK ports²⁰ to meet the demands of future offshore wind expansion to achieve EU 2020 renewable energy targets and beyond, and to attract inward investment from overseas turbine manufacturers and component suppliers. The report indicates that there is plenty of potential port capacity in the UK, both in terms of location and land availability, but investment in infrastructure will be required. UK ports have started to realise the potential opportunities in this sector, and shown interest in investment. Further work is required to identify suitable port facilities for future manufacturing and assess development issues and constraints. We launched a UK Ports

¹⁹ 'UK Ports for the Offshore Wind Industry: Time to Act', February 2009, (URN 09/511X)
<http://www.berr.gov.uk/files/file49871.pdf>

²⁰ 'UK Ports for the Offshore Wind Industry: Time to Act', February 2009, (URN 09/511X)
<http://www.berr.gov.uk/files/file49871.pdf>

Prospectus²¹ in May 2009 to promote UK ports to the offshore wind industry, and will conduct detailed assessments of individual ports with potential for manufacturing or construction, and work with port owners, Regional Development Agencies, Welsh Assembly Government, Scottish Development International, investors, developers and regulators to facilitate the investment required.

- 3.29. Vessels will continue to be a pinch point in the supply chain in the short term. Looking forward, discussions with the sector suggest that there is significant interest and commitment amongst a number of offshore wind developers and vessel operators to invest in the construction and operation of additional and larger vessels dedicated to the installation of offshore wind farms.
- 3.30. The UK already has a number of companies active in the offshore wind supply chain and this is growing. We will help UK companies active in component manufacture in the wind supply chain to expand and improve their competitiveness.
- 3.31. The UK is well placed to help meet many of the bottlenecks in the offshore wind supply chain, such as gearboxes, generators, blades, electrical and control systems. The Government is committed to helping these companies transition into the offshore wind sector.
- 3.32. We will continue to work with UK Trade and Investment, the Welsh Assembly Government, Scottish Executive, Scottish Enterprise, Scottish Development International and Regional Development Agencies to champion inward investment, promoting the UK as a base for investing in all levels of the supply chain. We will continue working to get global wind turbine manufacturers to enter the offshore wind market and invest in manufacturing and R&D sites in the UK, in partnership with RDA grant support for inward investment where appropriate, technology grants and skills/training packages.
- 3.33. Offshore wind, and the wider move to a low carbon economy, will require workers with a foundation of core technical skills, topped up with the knowledge and competence to work with new renewable technologies. The lack of workers with the right skills is a serious potential constraint on the deployment of renewable energy in the UK. Without the right training pathways into these jobs, employers may seek to import skilled labour from overseas. However, this approach has risks as we expect international demand for these skills to be high, leading to pressure on wages and costs, with attendant slowing of the rate of deployment.
- 3.34. For this reason, DECC will work to maximise the opportunities for UK workers to train for skilled jobs in renewable energy. To this aim, we will work with the sector skills councils and employers to assist with the shift to a low carbon technology focus. In particular, we are working with the Sector Skills Council Energy and Utility Skills, and employers, to complete the business plan for the National Skills Academy for Power and then to assist in developing the Academy for launch early in 2010. This will provide a key focus for developing the electrical skills needed to link the

²¹ UK Offshore Wind Ports Prospectus, May 2009 (URN 09D/562)
<http://www.berr.gov.uk/files/file51407.pdf>

new wind generation into the transmission system. We will also continue to work with the British Wind Energy Association to develop a strategic approach to skills and training for the sector. DECC will also help to bring key stakeholders together to plan strategically and support the employer engagement necessary to develop effective training pathways into the new jobs.

Grid

- 3.35. Electricity networks transport electricity from the point of generation to the point of use. Obtaining a timely grid connection – and thus access to the electricity market to sell the power generated – is a key enabler for ensuring that UK wind resources are utilised.
- 3.36. DECC and Ofgem have put in place a new framework to cover the offshore grid connections for the developers of offshore wind farms. DECC and Ofgem are also working to accelerate construction of new onshore transmission infrastructure and reforming access rules so that all generators – including offshore renewables developers – can gain access to the grid in a timely manner.
- 3.37. The following paragraphs set out the actions the Government is taking to address key grid related issues and outlines future work planned.
- 3.38. The Government is introducing a new regulatory regime for offshore electricity transmission to facilitate the grid connection of the significant amounts of offshore renewable generation the UK is planning. Earlier this month, the Government and Ofgem published a joint statement setting out the final details of this new regime.
- 3.39. We are extending the principles behind regulation of the onshore grid to offshore. However, the licensing of offshore electricity transmission will be through competitive tenders to be run by Ofgem. This will allow more parties to compete for the opportunity to build the offshore grid including existing transmission companies, and new entrants. The competitive tender process will set a twenty-year regulated revenue stream for the new offshore grid companies (OFTOs). This should attract lower cost investment into the building of this new grid and deliver cheaper and more timely connections. This will benefit offshore generators and consumers.
- 3.40. Ofgem will commence running the tenders this summer to appoint new OFTOs, with the first tender opening on 24 June 2009.
- 3.41. To ensure the appropriate coordination of the grid the Government has extended National Grid's role as system operator offshore. In its new role as National Electricity Transmission System Operator (NETSO), National Grid will produce an "Offshore Development Information Statement" and has started to work with The Crown Estate to ensure the appropriate information is available for that Statement. DECC, Ofgem, The Crown Estate, and NETSO will continue to work with industry to deliver a coordinated grid.
- 3.42. In the longer term, as the offshore grid is built out, it may make economic sense and be technically feasible to connect UK offshore wind farms with projects in other European countries' waters. The UK Government is in discussion with the European Commission, EU Member States and other stakeholders on the development of these ideas for a larger 'supergrid' connecting a number of renewables projects and energy markets.

- 3.43. The Transmission Access Review (TAR)²², published in June 2008, set out a number of measures that DECC (then BERR) and Ofgem identified could remove, or significantly reduce, the hurdles to timely connection that all forms of new generation currently face.
- 3.44. On 8 May, Ofgem announced a temporary relaxation of industry rules to allow much faster connection for of wind and low carbon generation. This initially means that 450MW of renewables in Scotland can connect as soon as they are ready. This is an interim solution to speed up connections while more enduring reforms are introduced.
- 3.45. DECC and Ofgem also refocused the Electricity Networks Steering Group (ENSG) to provide a high level forum to bring together key electricity network stakeholders to support the Government in meeting our long-term energy challenges. The Group is chaired jointly by DECC and Ofgem.
- 3.46. The ENSG published in March 2009 its report “Our Electricity Transmission Network: A Vision for 2020”²³, which set out potential transmission network solutions consistent with 15% of the UK’s energy coming from renewable sources by 2020. The report’s findings included the need to accommodate significant amounts of offshore wind on the onshore system. ENSG concluded there is the potential for an estimated £4.7bn of new investment needed to deliver the reinforcements identified. The immediate priority is to provide certainty that essential (relatively low cost) design and pre-consenting work can be urgently progressed by NGET and the Scottish network companies. Ofgem has approved up to £43m needed to begin pre-construction work on the projects in the ENSG report.
- 3.47. Ofgem has also been developing proposals to create a more flexible regulatory regime for the transmission companies to encourage them to take the anticipatory approach to investment that will be needed to facilitate the timely connection of new renewable generation. The initial consultation on these new proposals was issued in December 2008 and a new enhanced investment incentives regime is expected to be finalised by winter this year.

²² ‘Transmission Access Review: Final Report’, July 2008 (URN 08/1020)
<http://www.berr.gov.uk/files/file46774.pdf>

²³ ‘Our Electricity Transmission Network: A Vision for 2020 A Report by the Electricity Networks Strategy Group’, March 2009 http://www.ensg.gov.uk/assets/1696-01-ensg_vision2020.pdf

Marine Environment

- 3.48. The Government recognises that there are a number of significant effects on the marine environment brought about by the construction and operation of offshore wind farms. These have been considered at a strategic level throughout the SEA process. The PCR concluded that there were no overriding environmental considerations to prevent the achievement of the plan/programme, albeit that there would need to be mitigations, and made several recommendations related specifically to the marine environment.
- 3.49. A balance needs to be struck between achieving our climate change mitigation and our conservation goals, both of which are legally binding and important objectives to meet and sourced in EU legislation. We must deliver these goals in a sustainable way. This SEA process has highlighted that when appropriately sited, offshore wind farms can result in a net benefit to the environment, at the local and national levels. The key to this issue is to clarify understanding of the impacts of our plan/programme and the projects that will follow, and agree the standards and information that are needed as an evidence base for our assessments of these impacts.
- 3.50. The assessment undertaken for this SEA process is by its nature strategic. The effects of offshore wind farms on the marine environment will need to be considered again in more detail first (in the case of Round 3) through the zonal assessment process proposed by The Crown Estate, and subsequently through EIAs and the statutory planning process at the project level, with the appropriate screening, scoping and consultation carried out at each stage.
- 3.51. The ecological and biodiversity effects of offshore wind farms will vary on a case by case basis, depending on the specific design, location and sensitivity of habitats and species which may be affected. Where possible, we would expect developers to have considered prior to planning consent application how to conserve and enhance the ecology and biodiversity on or around their proposed site.
- 3.52. This section of the document sets out some of the work that is already ongoing or planned to ensure as smooth a transition as possible is made from the strategic to project level assessment of these impacts, to ensure that the recommendations of the PCR can be met.
- 3.53. Alongside this work, but not specific to offshore renewable energy, DECC and DEFRA have also jointly set up a cross government project board to deliver strategic solutions to environmental issues that are encountered at the project level, during the consenting process for renewable energy projects. The board, which is jointly chaired by DECC and DEFRA, brings together representatives from the main consenting bodies (including Devolved Administrations) and statutory consultees. The board is developing a work programme, the measures from which will contribute to the UK's National Action Plans to the European Commission from 2010.

Ecology and Biodiversity, Physical Environment and Cultural Heritage

- 3.54. The Government accepts Recommendation 1 of the PCR that states, *“developments should not ... (a) result in a significant deterioration in biodiversity status and the quality of habitats and landscape and (f) result in significant detriment to tourism, recreation and quality of life”*
- 3.55. It is clear from many of the recommendations in the Environmental Report and modified recommendations in the PCR that it will be crucial for there to be clear and consistent guidance available to developers about their responsibilities for data gathering under the licensing and legislative regimes and agreement with the statutory agencies on what levels of data are required and standards and methodologies that are suitable. Our experiences from Rounds 1 and 2 and the responses to the recent consultation have underlined the importance of such guidance being made available early in the process to ensure that all parties are working with a common understanding of requirements.
- 3.56. To this end, DECC and the Marine and Fisheries Agency (MFA) have commissioned the Centre for Environment, Fisheries & Aquaculture Science (CEFAS) and the environmental statutory advisers to work together to produce comprehensive guidance on this issue. When completed, this will provide a single agreed source of the information needed by the developers and will facilitate a consistent understanding on the scope of both EIAs and project-level Appropriate Assessments. This guidance will be ready by the end of 2009, in time for the successful bidders to begin work ahead of their Round 3 consent applications.
- 3.57. In addition, CLG is consulting on guidance for applicants to the IPC on consultation best practice which will enable developers to take a consistent approach.
- 3.58. We note recommendation 19 of the PCR proposes that *“...DECC and others in Government should encourage the adoption of consistent guidance across the UK on the implementation of Habitats Directive requirements, for example disturbance of European Protected Species (annex IV species)”* and will consider further how to take this forward.
- 3.59. The process of conducting the SEA and compiling the Environmental Report has itself made a valuable contribution to expanding our understanding of the effects of development on the marine environment. This was recognised by many of the consultation respondents, who commented positively on the breadth and depth of the report and its annexes. However, we recognise that data and research gaps remain and there are still areas where the information base is limited and needs enhancing.
- 3.60. We acknowledge the suggestions made in recommendations 12-16 of the PCR and are grateful for the additional areas identified by respondents to the consultation. We will consider these, and the research coordination undertaken through the Research Advisory Group, augmented by discussions at the Offshore Renewable Energy and Environmental Forum (OREEF), the Fishing Liaison with Offshore Wind and Wet

Renewables Forum (FLOWW), the Nautical Offshore Renewable Liaison Group (NOREL), COWRIE, the relevant BWEA working groups, the Scottish Marine Energy Spatial Planning Group (MESPG) and the Welsh Marine Renewable Energy Strategy Framework steering group, in order to inform our work programme going forward.

- 3.61. We are aware that work on some of the areas identified may already be underway. However, DECC, in partnership with other relevant Departments and The Crown Estate, intend to set up a few small, focussed groups to oversee the implementation of a programme of research projects to help fill these and other identified gaps. It is envisaged that the function of these groups will be to identify and prioritise the research required in each area, drawing on external expertise as necessary and appropriate.
- 3.62. To achieve the UK's climate change mitigation strategy and meet our renewable energy targets, time is of the essence. While as noted above, offshore wind is a relatively new technology being deployed, many of the technologies which are used, such as foundations, have a long history of use in the offshore environment. The Government agrees with the recommendation of the PCR that on the whole, a risk-based approach should be adopted for offshore wind deployment in the UK, but that in certain circumstances, a precautionary approach will need to be adopted. For example, the Government accepts Recommendation 8 of the PCR, which proposed *"unless suitable evidence indicates otherwise, avoidance (for the present) of areas known to be of key importance to waterbird and marine mammal populations, including breeding colonies, foraging areas and other areas essential to the survival of populations"*.
- 3.63. It should be noted that to date it has been possible to consent offshore wind farms which co-locate with ecologically sensitive areas in the Outer Thames, Greater Wash and Liverpool Bay. We consider that efficient communication with regulators about wind farm locations and turbine layout is key to achieving co-existence. It is also vital that clear guidance is available for developers on European sites, their conservation objectives and the evidence on which they are designated.
- 3.64. The Government will take forward and coordinate work to ensure lessons are learned from what will be a decade of experience of operational offshore wind farms in time for the consenting of Round 3 wind farms and beyond. Some of this work is already underway, through this SEA exercise as well as individual initiatives. For example, DEFRA is currently undertaking a review of the monitoring results generated under FEPA licences for existing installations to ensure that the scope of EIAs for Round 3 remain concise. Furthermore, COWRIE is developing guidance on ornithological Cumulative Impact Assessment to bolster processes methods and techniques for assessing the increasing number of operational wind farms together with those under construction, consented and in planning. We consider that this work will enable a more risk-based approach to continue to be taken in future.
- 3.65. We note that Recommendations 10 and 11 of the PCR suggest the creation of web-based fora to *"facilitate the exchange of information [to enable] cross-industry coordination of what noisy activities are planned, where and when, to facilitate the*

assessment of cumulative effects and implementation of temporal/spatial mitigation actions [...] with suitable links to all parts of the UK and to adjacent states". DECC will work together with The Crown Estate, other Government Departments and external stakeholders to consider how best to take these PCR recommendations forward. We believe that the zonal approach being proposed to the future licensing of offshore wind farms will help coordination of development activity in a sensible and sensitive manner, both within and between proposed zones.

- 3.66. The Government accepts Recommendation 17 of the PCR that states, *"To minimise habitat change and to ensure areas developed as a result of the current draft plan/programme are left fit for previous or other uses after decommissioning, the volumes of rock used in cable armouring, foundation scour protection and pipeline protection must be minimised and there should be active promotion of alternative protection methods through the consenting process".* The Government and relevant Statutory Advisors will continue to work closely on such issues.
- 3.67. The Government notes Recommendation 4 of the PCR that states, *"Efforts are (or will be) underway to identify offshore Marine Conservation Zones/Marine Protected Areas e.g. under the Marine Strategy Framework Directive, OSPAR and the Marine and Coastal Access Bill (and the Marine Bills of Scotland and Northern Ireland). Where offshore wind developments are proposed and do not conflict with the conservation objectives of MCZs, preference should be given to locating wind farms in such areas to mitigate potential spatial conflict with other users."*
- 3.68. We also note Recommendation 5 of the PCR that states, *"Similarly, as part of the Natura 2000 initiative, further offshore SACs and extensions to SPAs are being identified. Such sites are not intended or treated as strict no-go areas for other activities. However, a number have been mooted in areas with significant potential for offshore wind farm development. Wind farm and other developers should be aware that SAC/SPA designation may, subject to the conclusions of any appropriate assessment, preclude development or necessitate suitable mitigation measures so as to avoid adverse effects on a designated site or species."*
- 3.69. Likewise, we note Recommendation 9 of the PCR, which states: *"For areas (zones and blocks) which contain good examples of habitats/species on the Habitats Directive Annexes, developers should be made aware that a precautionary approach will be taken and some areas with relevant interests may either not be leased/licenced until adequate information is available, or be subject to strict controls on potential activities in the field. Similarly, developers should note that the relevant competent authority will conduct Appropriate Assessments/screenings to consider the potential of proposed leasing/licensing and subsequent activities to affect site integrity."*
- 3.70. We also note Recommendation 20 of the PCR, which states: *"In areas of cold water coral reefs and other vulnerable habitats and species, physically damaging activities such as rig anchoring and discharges of drilling wastes (from hydrocarbon or renewable energy related activities) should, prior to decisions on activity consenting, be subject to detailed assessment so that appropriate mitigation can be identified and agreed for example no anchoring and zero discharge."*

- 3.71. Under the European Habitats Directive 92/43/EEC²⁴ and Wild Birds Directive 79/409/EEC²⁵, the UK is obliged to designate Special Areas of Conservation (SAC) and Special Protection Areas (SPA) respectively. These sites form a European network known as the Natura 2000 network which consists of both terrestrial and marine sites. The designation of Natura 2000 sites can only be based on scientific evidence and European case law rules that socio-economic impacts cannot be taken into account in the designation process.
- 3.72. Any development that may have a significant effect on a European site, either individually or in combination with other plans and projects, such as the construction of wind farms, is subject to an assessment procedure (called Appropriate Assessment) under Article 6 of the Habitats Directive. The Habitats Directive is transposed and implemented in the UK by the Conservation (Natural Habitats, &c) Regulations 1994 (as amended)²⁶ and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007²⁷. In the event of a negative assessment and in the absence of alternative solutions, a development may be carried out for imperative reasons of overriding public interest, as long as compensatory measures are put in place to ensure the overall coherence of the Natura 2000 network is protected.
- 3.73. The Government's view is that the designation of an area as Natura 2000 site does not necessarily restrict the construction or operation of wind farms in or near that area – and that if sensitively developed, offshore wind farms can make a net benefit contribution to the Natura 2000 network by mitigating the effects of climate change. We recognise the importance for early clarity on the Natura 2000 sites and their respective conservation objectives in order for developers to be able to make a reasonable assessment of development potential. We therefore commit to the timely completion of the designation process, on the basis of sound evidence. The Government will have completed the designation of Natura 2000 sites by 2012.
- 3.74. The Marine and Coastal Access Bill, which was introduced to Parliament in December 2008, proposes new site designation and protection measures, based on the designation of Marine Conservation Zones (MCZs). MCZs together with European marine sites will form the main components of an ecologically coherent MPA network. This network will help to recover and protect the richness of our marine wildlife and environment.
- 3.75. Providing it does not conflict with achieving an ecologically coherent network, it will be desirable to avoid designating MCZs that would be incompatible with ongoing or planned socio-economic activities. The weight to be attached to socio-economic interests will depend on a number of factors, and will need to be considered in the

²⁴ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm

²⁵ Council Directive 79/409/EEC on the conservation of wild birds, commonly referred to as the Birds Directive http://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

²⁶ Statutory Instrument 1994 No. 2716, The Conservation (Natural Habitats, &c.) Regulations 1994 http://www.opsi.gov.uk/si/si1994/uksi_19942716_en_1.htm

²⁷ Statutory Instruments 2007 No. 1842, Wildlife, The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 http://www.opsi.gov.uk/si/si2007/uksi_20071842_en_1

light of the particular circumstances that apply in each area. Where practical it would be preferable to choose areas that already have a degree of protection for other purposes, such as an exclusion zone around offshore wind turbines.

Landscape, Seascape and Visual effects

- 3.76. The coastline and seascape of the UK are important for many reasons. They are a crucial element of our nation's sense of identity and culture. They are an economic asset which attracts visitors for holidays and recreation, and a valued resource which contributes to the quality of life of people living near the coast. Coastal landscapes and seascapes are host many important plant and animal species and habitats. Where there is scientific evidence highlighting the need to protect species and habitats, such areas are often recognised through statutory nature conservation designation. The environmental aspects of the coastline are covered in the 'Marine Environment' section.
- 3.77. As such, it is important that offshore wind farms should be developed in harmony with the landscape and the needs of other users of the seascape resource. Such consideration can best be given through the assessment of three principle considerations of the likely effects of wind turbines on the UK coast: the limit of visual perception from the coast (i.e. are the turbines visible from the coast and what influences their visibility), the individual characteristics of the coast which affect its capacity to absorb a development and how people perceive and interact with the seascape.
- 3.78. The Government recognises that decisions on the location and project design of offshore wind farms will reflect a wide range of factors including seabed topography, environmental receptors such as birds, and navigational safety issues (for example lighting effects will need to be considered). However, the Government considers that developers should also assess seascape and visual impact of their offshore wind farm projects, often referred to as a 'Seascape and Visual Impact Assessment (SVIA), as part of their Environmental Impact Assessments (EIAs).
- 3.79. Landscape/seascape effects will naturally vary on a case-by-case basis, according to the specific design, location and setting of a proposed project. In particular, the landscape/seascape effects will depend on the existing character of the local landscape, its current quality, how highly it is valued and its capacity to accommodate change. There will, by their nature, be significant effects from offshore wind farms within sight of the coast, but where they are negative these may be acceptable, temporary or reversible, and there may also be positive effects. The Government has therefore concluded that there should not be a blanket spatial restriction on offshore wind farm development within sight of the coast (typically 12nm for 3-5MW turbines), but that these should be assessed on a site-specific basis through the EIA and planning process, and mitigation measures considered.
- 3.80. The sensitivity of a seascape is fundamental in informing how far wind farms should be sited offshore as well as to the assessment of significance of effect in SVIAs.

Factors such as complexity of coastline, wildness, areas identified as Heritage Coasts or designated as National Parks or AONBs in England and Wales and NSAs in Scotland, as well as other characteristics are important. In practice it is difficult to be precise about generic buffer distances from a seascape perspective because effects change depending on the size of the wind farm, the viewpoint, the viewer, and weather conditions.

- 3.81. Regarding how people perceive and interact with the seascape, many of the factors influencing the perceived aesthetic (landscape) quality are relative and subjective concepts which are bound by any given individual's attitude, perceptions, and knowledge about wind farm development, or indeed environmental and sustainability issues more generally. The inherent quality or naturalness of some landscapes are valued more than others, as recognised in statutory designations and the landscape 'value' methodology in landscape/ seascape studies.
- 3.82. The planning process will, therefore, need to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, are such as to outweigh the benefits of the project.
- 3.83. With these considerations in mind, the Government accepts Recommendation 2 of the PCR that states, "*.....Detailed site-specific information gathering and stakeholder consultation is required before the acceptability of specific major Round 3 or subsequent wind farm projects close to the coast can be assessed*". To assist in this process, the Government will work closely with The Crown Estate, developers, Statutory Advisors and other interested parties throughout the designing, planning, construction and subsequent stages, as necessary.

Other Users of the Sea

- 3.84. The Government accepts Recommendation 1 of the PCR, which states, *“The draft plan/programme for an additional 25GW of offshore wind farm (OWF) generation capacity will require wind farm development on a massive scale (cf. the spatial footprint of existing and potential offshore hydrocarbon installations). Formal marine spatial planning proposals are under consideration in Parliament, which would give coastal regulators and communities further opportunities to have a say in the way the marine environment is managed, in addition to the existing routes for consultation as part of the development consent process. In advance of such a system being in place for the UK, the leasing and consenting of OWFs must ensure the minimisation of disruption, economic loss and safety risks to other users of the sea and the UK as a whole.”*
- 3.85. In terms of specific other users of the sea, various actions are under way or will be required in future, as set out below.

Aviation Radar and Defence

- 3.86. The Environmental Report and PCR noted that offshore wind farms can have significant effects on the capabilities of civilian and military aviation and surveillance radar in the UK. There are also potential spatial conflicts with other military interests including training and exercise areas, danger zones, military sonar areas, tactical training areas, and important sea routes.
- 3.87. The PCR recommended that to deliver this plan/programme, *“developments should not ... (d) interfere with civilian aviation operation necessary to ensure aviation safety, efficiency and capacity, including radar systems, unless the impacts from offshore wind farms can be mitigated, deemed acceptable, are temporary or can be reversed or (e) jeopardise national security for example through interference with radar systems or unacceptable impact on training areas unless the impacts from offshore wind farms can be appropriately mitigated or are deemed acceptable.”*
- 3.88. We recognise the potential conflicts between our national security, aviation safety, efficiency and capacity and renewable energy objectives. The Government has concluded that given the evidence of available mitigation solutions and the stage of development of new solutions, it is hoped that the effects from offshore wind farms can be mitigated or deemed acceptable in order to achieve this plan/programme without the need for spatial restrictions. However, it should be borne in mind that due to the importance of military activities within Practice and Exercise Areas (PEXA) or airspace danger areas it may be more difficult to accept turbines in/around those areas. Also, it may not be possible to position turbines near magnetic and acoustic ranging facilities which may not always be inside a danger area boundary.

- 3.89. We consider that the most appropriate route to minimising conflict is through consultation at the zonal and site-specific level. At this level, it will be necessary to assess whether the proposals would interfere with civilian and military aviation and surveillance, including radar systems, or reductions in training areas which cannot be mitigated and would potentially jeopardise national security or aviation safety, efficiency and capacity. These Government objectives will need to be balanced against the need to mitigate climate change and ensure our energy security.
- 3.90. Those involved in addressing wind energy and aviation conflicts will need to do so in a positive, co-operative and informed manner. Whilst the aims and interests of respective parties must be protected, a realistic and pragmatic approach is essential for resolving any conflicts between the Government's energy and transport policies and military interests. The Government is committed to supporting this approach and in June 2008, a Memorandum of Understanding²⁸ was signed between BERR (now DECC), DfT, MoD, CAA, NERL, and the BWEA on behalf of the wind industry, committing all parties to deliver a joint HMG/Industry Aviation Plan to resolve these issues. There are a number of technological mitigation measures currently being explored under this Aviation Plan aimed specifically at addressing radar interference caused by wind farms. These include measures such as the use of radar absorbing materials in turbine manufacture, infill radar, and modifications to radars to enable them to process better the effects of wind turbines.
- 3.91. To help speed up the development of these solutions, DECC will continue to manage the delivery of the Aviation Plan and has committed to co-fund the development of these solutions, together with funding from other Government Departments, The Crown Estate, and the wind industry, where possible and appropriate.
- 3.92. We will also work with The Crown Estate, IPC, applicants and aviation and defence stakeholders to facilitate scoping discussions and provide increased access to relevant information and guidance on how to minimise the potential conflicts arising during the site selection and planning processes.

Commercial Fisheries

- 3.93. The Government recognises that large scale offshore wind development may have effects to some extent on the ability of fishermen undertake certain operations, such as trawling, in the vicinity of the wind farm and have access to fishing grounds. The effect may be exacerbated in areas of sea where there are a number of consented or proposed wind farm developments, and the impact may be temporary during the construction of the wind farm or permanent for the duration of the wind farm life. The Government remains of the view that the determination of any compensation levels is for the commercial parties to agree between themselves.

²⁸ 'Memorandum of understanding: aviation radar and wind turbines (mitigation issues)' June 2008, (URN 08/989) <http://www.berr.gov.uk/files/file46583.pdf>

- 3.94. There may also be effects on fisheries themselves from the construction or operation of offshore wind farms. Such an effect is assessed through the FEPA licensing process, currently undertaken by the Marine and Fisheries Agency, Welsh Assembly Government or Scottish Executive as appropriate, as well as by DECC or the Scottish Executive through the s36 planning process. It is important for robust baseline data and studies to have been collected and conducted as part of the site specific assessment, as set out in the EIA guidelines.
- 3.95. The PCR recommended that “*developments should not...1(c).. occupy recognised important fishing grounds in coastal or offshore areas (where this would prevent or significantly impede sustainable fisheries)*”. We have noted the view of some respondents to the consultation that when appropriately sited, offshore wind farms may result in a net benefit to the environment, at the local and national levels. However, it is also noted that we can expect there to be local, site-specific effects on other users of the sea, such as commercial fisheries, and mitigation measures must be considered accordingly at this level.
- 3.96. The Government accepts Recommendation 1(c) of the PCR, and considers that a balance between the different interests can be achieved. We recognise that clarity will be needed on what constitutes “*recognised important fishing grounds*”, as well as additional research and data collection both generically and at the site-specific level. Requirements for mitigation will need to be proportionate and reflect the potential medium- and long-term potential benefits to commercial fisheries.
- 3.97. We consider that comprehensive consultation with commercial fisheries stakeholders will be essential, at the zone level where appropriate, and at the site-specific level as part of the scoping and planning application process. Where proposed sites under this plan/programme are brought forward further from the UK coastline, trans-boundary issues will be an important consideration, as noted in both domestic and international responses to the SEA consultation. Developers must consult as appropriate, establishing clear stakeholder relations with ‘local’ fishermen (i.e. those operating in or near the area proposed for development) and relevant representative bodies. They should ensure engagement from the initial planning and scoping stage, throughout the planning process as well as the construction and operation and de-commissioning stages of a project. It will be important that fishermen and their representative bodies actively engage with developers from an early stage. Following this strategic-level assessment, DECC will continue to work with The Crown Estate and relevant developers to facilitate consultation with fisheries stakeholders, where appropriate.
- 3.98. The PCR noted that data on larger vessels is available from AIS, but recommended that two specific gaps in the information base in relation to fishing should be addressed: information on the “*finer scale distribution of fishing effort, gears and catches for smaller vessels (<15m)*”, and information on the “*effects of wind farms on fishing activity in and immediately adjacent to constructed wind farms*”. We note this recommendation of the PCR and these gaps will be considered in taking forward our research programme discussed above, along with other suggestions for further research relevant to effects on fish stocks. We recognise that smaller vessels constitute a large proportion of fishing activity in UK waters and that there is existing

evidence that certain types of fishing activity *can* be displaced by offshore wind farms. However, fishing may be possible depending on site layout and distance between turbines, and anecdotal evidence suggests that the presence of wind turbines may give rise to new opportunities for potting.

Navigation and Shipping

- 3.99. The PCR recommended that “developments should not ... (b) impinge on major commercial navigation routes, significantly increase collision risk or cause appreciably longer transit times”. The Government agrees with the conclusion of the Environmental Report that a balance can be reached to enable some 25GW of offshore wind by 2020 whilst ensuring the minimisation of disruption, economic loss and safety risks to other users of the sea and the UK as a whole. We recognise that large scale offshore wind development has the potential to interfere with navigation safety, and this needs to be assessed carefully prior to determining development consent for individual sites. Such effects include those caused by the siting of the wind farm, development of generating stations, possible extinguishment of navigation rights, the granting of safety zones and approval of decommissioning schemes. Careful assessment also needs to be made of the cumulative effect when future sites are consented or likely to be consented.
- 3.100. Key to achieving this balance, we highly recommend that developers of offshore wind farms pro-actively establish effective stakeholder engagement with all interested parties in the navigation sector, at appropriate stages, from initial planning and scoping, throughout the planning process as well as during the construction and operation and de-commissioning stages of a project. We also believe that pro-active engagement with other sea users should be a multi-way relationship, meaning that other sea users, such as developers of non-wind related offshore structures (wave and tidal, oil and gas, LNG terminals, cables and pipelines) should also ensure that they engage with offshore wind developers, so as to enable all offshore users to find solutions and co-exist.
- 3.101. DECC and DfT have an established a Nautical and Offshore Renewables Energy Liaison Group (NOREL) that provides a valuable forum for the Government and representatives from the renewables, shipping and ports industries to discuss matters of mutual interest related to navigational safety.
- 3.102. At a project level, the planning process is structured in such a way that any individual or organisation has an opportunity to give their views on each application, before a decision is taken on whether or not to grant development consent orders for the development.
- 3.103. Rights of navigation derive from both national and international law. There is a common law right of navigation over all navigable tidal waters. In public international law, foreign ships have the right of innocent passage through the UK’s territorial waters. Beyond the 12 nautical mile (nm) limit of UK territorial seas, shipping has the freedom of navigation. At the same time, under international law, the UK is able to

construct wind farms and other installations or structures to produce energy in the REZ. Development consent cannot be granted where installations would be likely to interfere with "recognised sea lanes essential to international navigation". In extreme circumstances, minor modifications or comprehensive restructuring of traffic activity might be possible. This would require national endorsement and international agreement and, if taken forward, could take between eighteen months and several years of negotiation, with no assurances of success.

- 3.104. In addition to the shipping lanes that are covered by law, the Government believes that a common sense approach should also be employed with regard to other shipping routes. For example, weather permitting, vessels usually tend to transit point to point routes between ports (both national and international). Many of these routes are essential to the shipping and ports industry and their contribution to the UK economy; care should be taken not to have a negative effect on such routes.
- 3.105. A range of information on navigation and shipping was used as part of the SEA assessment, including four weeks of Automated Identification System (AIS) data. We recommend that this data should be used as one of the inputs to help inform developers in their decision making on where to site their wind farms to negate or minimise and mitigate any effects on navigational safety, particularly in approaches to ports and on routes essential to both national and international trade.
- 3.106. The AIS data was a useful contribution to the SEA, and maps have since been made available on the Maritime Database. Whilst the AIS data used in the SEA is an important strand of information for a national level, careful consideration should be given as to how the AIS data is used/ interpreted at a regional scale. It is important to note that the AIS maps can be used at different scales and interrogated at different spatial levels. Another limitation to consider when using the AIS maps is that only commercial vessels of more than 300 gross tons are required to carry such equipment, and vessels below that size, for example the majority of recreational craft, are not currently required to carry AIS transponders. We also recommend that, as the AIS maps only show routes taken during an individual four week study, additional surveys are undertaken and consideration given to the type, size, cargoes and manoeuvrability of vessels, as well as the prevailing weather and how that affects ship routes in the vicinity of potential offshore wind farms. Additional consideration should be given if routes are shown to be used by oil tankers, gas carriers, chemical tankers or container ships, many of which carry dangerous goods. Similarly, lifeline ferries are strategically important to many island communities and should not be expected to suffer any significant negative effect as a result of wind farm siting.
- 3.107. As well as navigation routes, shipping also has need of safe havens during inclement weather and has long established embarkation and disembarkation points for pilots and anchoring areas.
- 3.108. The Government will continue to explore ways of improving availability of data on vessels further from shore, in particular the extent of AIS coverage across Europe, as presently the AIS data coverage typically only extends 30nm from shore.

- 3.109. In addition to commercial shipping, the UK also has a keen recreational boating community. The Royal Yachting Association Atlas of Recreational Boating (2008)²⁹ may be another useful data source used to identify recreational routes, sailing and racing areas. It is recognised that recreational craft try to avoid shipping (coastal and international) routes so developers are encouraged to give consideration, where appropriate, to various mitigation measures, such as buffer areas to allow space for recreational users, outside of commercial shipping routes.
- 3.110. Alongside the consideration of the location and routes of shipping and recreational communities, consideration of the safety of navigation is a fundamental issue that must be addressed carefully during the planning process for offshore wind farms. The scale of the potential effect on navigation should be assessed as part of the Environmental Impact Assessment (EIA), and the Navigational Risk Assessment (NRA) which the developer submits as part of their application for development consents.
- 3.111. This assessment should involve:
- a survey of vessels in the vicinity of the proposed wind farm;
 - a full navigation risk assessment of the likely impact of the wind farm on navigation in the immediate area of the wind farm (MGN 371³⁰, consideration of MGN 372³¹ and the DTI/DfT/MCA Guidance on the assessment of the impact of Offshore Wind Farms)³²; and
 - a cumulative impact assessment in relation to other wind farms and any other planned developments.
- 3.112. It is clear from the Environmental Report that it will be crucial for there to be clear and consistent guidance available to developers about their responsibilities for data gathering under the licensing and legislative regimes and agreement with the statutory agencies on what levels of data are required and standards and methodologies that are suitable. Our experiences from Rounds 1 and 2, and the responses to the recent consultation, have underlined the importance of such guidance being made available early in the process to ensure that all parties are working with a common understanding of requirements.
- 3.113. To this end, DECC has agreed to facilitate a review and updating of the 'Methodology for Assessing the Marine Navigational Safety Risks of Offshore wind

²⁹ 'UK Atlas of Recreational Boating', Royal Yachting Association, 2009
<http://www.rya.org.uk/KnowledgeBase/environment/Pages/boatingatlas.aspx>

³⁰ MGN 371 (M+F) : Offshore Renewable Energy Installations (OREIs) - Guidance on UK Navigational Practice, Safety and Emergency Response Issues, <http://www.mcga.gov.uk/c4mca/mgn371.pdf>

³¹ MGN 372 (M+F) : Offshore Renewable Energy Installations (OREIs): Guidance to Mariners Operating in the Vicinity of UK OREIs, <http://www.mcga.gov.uk/c4mca/mgn372.pdf>

³² 'Guidance on the assessment of the impact of offshore windfarms: methodology for assessing the marine navigational safety risks of offshore windfarms.' (URN 05/1948), December 2005.
<http://www.berr.gov.uk/files/file22888.pdf>

farm' guidance (2005) to ensure that it contains the latest information and expertise. The updated guidance document will be ready by the end of 2009, in time for the successful bidders to begin work ahead of their Round 3 consent applications.

- 3.114. DECC, DfT, the Maritime and Coastguard Agency (MCA) and Trinity House are committed to engaging with developers at the earliest opportunity to offer advice, where possible, on potential locations and mitigation options for wind farms. We also recommend that developers consult the Marine Guidance Notes, produced by the Maritime and Coastguard Agency, carefully when designing, considering mitigation measures and maintaining their wind farms. For example, the MCA advises that individual turbines should be a certain minimum height above sea level and numbered, and for the installation to be able to be shut down automatically to assist the search and rescue services in the event of an emergency, as part of their Emergency Response and Co-operation Plan (ERCoP).
- 3.115. DECC, DfT and MCA will continue to work with all parties to ensure we learn lessons from existing wind farms, as well as trying to increase the information and knowledge base on issues such as Search and Rescue (SAR). Where appropriate, the MCA may also consider the need for special routing measures to safeguard shipping in the vicinity of the installation.
- 3.116. The relevant general lighthouse authority can stipulate how the installation should be lit and marked as a general navigation safety measure. This will include any requirement for foghorns and marker buoys. DECC and DfT will continue to work with Trinity House, the Civil Aviation Authority (CAA), turbine manufacturers and developers to ensure that the safety of all sea users remains of paramount importance when designing, constructing and operating offshore wind farms.
- 3.117. While the installation is under construction, operation, during periods of maintenance and decommissioning, the developer is required to issue information and warnings through notices to mariners and other appropriate media. DECC can exercise provisions for safety zones to be placed around renewable energy installations or structures to protect them and passing shipping from collision and damage, if considered appropriate based on developer's submissions.
- 3.118. We consider in the vast majority of circumstances that mitigation measures can be found to negate or enable the reduction of effects on the navigation to an acceptable level. For example, ensuring the site location is suitable and does not impinge on major shipping routes, consideration of the layout of the turbines to mitigate any effect, right through to ensuring that the appropriate lighting and marking are employed on turbines.
- 3.119. However, we accept that a balance is needed between renewables policy for enabling new offshore wind farms alongside existing shipping policies that ensure safe navigation and right of passage. In exceptional circumstances, economic losses and increased transit times resulting from the diversion of navigation around wind farms may arise. In these circumstances, those adversely affected could be the owners or operators of ships and ports, their associated service businesses, passengers and navigation agencies. The appropriate decision maker will need to

take account of what mitigation measures may have been agreed between the applicant and affected parties on a case-by-case basis, to determine whether the adverse effects and mitigation measures are deemed acceptable, with due regard to the relevant National Policy Statements. In light of this, the Government is continuing to work on developing some best practice guidance on this issue.

Oil and Gas and other Offshore Industries

- 3.120. With the scale of development proposed, we can expect Round 3 and other future offshore wind development to occur in areas where the oil and gas industries are also active. It has to be anticipated that there will be a degree of spatial overlap between proposed or potential offshore wind development and existing or potential oil and gas installations or future carbon storage proposals. The PCR recommended that *"In areas of prospective interest to multiple energy technologies (including renewable energies, petroleum production, gas storage and in future storage of carbon dioxide) DECC and [The Crown Estate] should seek to coordinate licensing and leasing decisions, taking account of the potential for some uses to coexist, so as to minimise potential conflicts of use."* The Government accepts this recommendation of the PCR and DECC will take further action to coordinate relevant activities, including providing, where practical, for overlapping or sequentially ordered uses of any particular location for differing purposes, so as to facilitate the fullest exploitation of the resources of the offshore space.
- 3.121. The Crown Estate wind farm leases provide that the Secretary of State for Energy and Climate Change can ask The Crown Estate to determine an Agreement for Lease or part of it with an offshore wind developer, to allow the site or part of it to be used for oil and gas works. While these are balanced by giving the Secretary of State a power, when deciding on petroleum development consents, to have regard to the interests of potential wind farm development, the Government recognises the uncertainty that the existence of these powers creates for offshore wind developers in areas of UK waters where there is significant hydrocarbon development or decommissioning activity. DECC is therefore working with the industries concerned to develop guidance on the approach which the Secretary of State would adopt to the use of these powers. The intention is that the Secretary of State would expect to use these powers to consent to petroleum development, or request the determination of any lease or part of a lease, only where agreement had been reached between the relevant parties on all relevant issues (or if necessary, these issues had been determined by an adjudicator). To provide clarity to developers and enable them to take forward their projects, this guidance will set out the central principles which the Department thinks right to resolve such situations in a way which gives full weight to the existing commitments of the affected parties, and minimises the costs of the adjustments necessary.
- 3.122. Currently, CAA guidance indicates that there should be a six nautical mile exclusion zone around offshore oil and gas installations to minimise the potential impact on the ability to conduct some helicopter operations, separate to the automatic 500m safety zone around each offshore installation. These exclusion zones are a key element of

their safety case as an evacuation measure. This distance is, however, considered a precautionary measure and the actual distance required for helicopter access for specific installations will depend on a range of factors, including the site design and prevailing approach routes to the installation. DECC considers that there is the potential for individual safety cases to be reviewed and for smaller exclusion zones to be agreed between the relevant operator, the Health and Safety Executive (HSE), CAA and DECC, whilst still ensuring safe helicopter access. This approach has been proven through the consenting of Round 2 offshore wind farms; however, to date this has been done on an ad hoc basis. Given the scale of development envisaged under this plan/programme, a more cohesive approach is likely to be beneficial for all parties involved.

- 3.123. DECC therefore intends to facilitate discussion between relevant oil and gas operators, the CAA and the HSE and where relevant offshore wind developers and The Crown Estate, with a view to streamlining and if possible standardising the approach to review of safety cases in respect of the necessary exclusion zones for helicopters.
- 3.124. The Government recognises that there are other industries which currently receive leases for use of the sea bed, such as aggregates, and looking ahead, activities such as marine renewables and storage of carbon dioxide. As licensing authority for petroleum production, gas storage and carbon storage, and some aspects of offshore renewables, DECC will apply a similar approach to seeking to coordinate with The Crown Estate on leasing and licensing decisions, where appropriate.

4. Next Steps

- 4.1. Today the Government has published its decision to adopt its plan/programme for Offshore Energy. This decision, set out in the Written Statement to Parliament and Chapter 2 of this document, along with the publication of a Post Consultation Report (PCR), fulfil the requirements of the SEA Directive.³³ Following the Government's adoption of this plan/programme, licensing and leasing processes can be undertaken to award new development rights within the confines of this plan/programme.
- 4.2. As noted in the Written Statement to Parliament, the Department of Energy and Climate Change (DECC) will launch further Rounds of oil and gas licensing and gas storage at a later date, and Appropriate Assessments will be undertaken prior to the award of new licence blocks, where needed.
- 4.3. The Crown Estate is the competent body for offshore wind leasing and is now in a position to proceed with leasing in UK waters. The Government does not have a formal role in this commercial process. However, as explained in Chapter 2, the Government will have a formal role in determining whether sites proposed for development following the leasing process are located in appropriate places. These planning decisions will be taken by the relevant competent authority under the Electricity Act 1989, Planning Act 2000 and Transport and Works Act 1992, as well as through environmental licensing. The Government is also committed to delivering this plan/programme and to taking forward the range of actions set out in Chapter 3 to enable and actively facilitate the delivery of offshore wind in UK waters.
- 4.4. The Crown Estate has already commenced work to prepare for the award of new leasing of offshore wind. It proposes to do so through a Round 3 competition as well as potential further competitions, and has put forward nine indicative zones for development. In September 2008, The Crown Estate invited companies and consortia to register to bid into a competitive negotiation process by December 2008 and to submit bids by March 2009. Following today's announcement, The Crown Estate is now in a position to take a view on these indicative zones in light of the SEA process, the Government's decision and additional information now available from other sources, and to take forward the negotiation process. The Crown Estate expects to award the Zone Development Agreements (ZDAs) by the end of 2009. It will also announce any further competitions to be held under the auspices of this plan/programme.

³³ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment is available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0042:EN:HTML>

- 4.5. The award of ZDAs amounts to a plan/project within the meaning of the Offshore Marine Regulations 2007. Subject to the outcome of screening, The Crown Estate will undertake Appropriate Assessment(s) before awarding the ZDAs. The Government agrees with this approach, which is consistent with our approach to screening for and if needed undertaking Appropriate Assessment(s) prior to the award of licences for oil and gas blocks.
- 4.6. As part of the leasing process, The Crown Estate will have identified zones for development and have received more detailed information about what offshore wind generating capacity is being proposed for such areas, its timing and scale. Although the level of detail available will not equate to that for a site-specific development consent, we nevertheless believe that there will be sufficient information available to The Crown Estate that will enable a meaningful Appropriate Assessment to be undertaken where necessary.
- 4.7. In addition, following the finalisation of the locations of the Round 3 zones, the Government recognises that it also has a key role, as a facilitator, in relation to trans-boundary issues with affected parties, on a range of issues such as grid, navigation, aviation, fishing and the marine environment.
- 4.8. DECC will work closely with the Scottish Executive and Northern Ireland Executive to ensure consistency between the UK Offshore Energy SEA and their territorial waters SEAs, as well as sharing data and information where appropriate. In February 2009, The Crown Estate announced the granting of 10 "exclusivity agreements" for the development of offshore wind farms within Scottish Territorial Waters, with the potential to generate more than 6GW of offshore wind power. Development within those waters will be subject to the Scottish Executive's SEA.
- 4.9. Looking ahead, DECC will continue its rolling SEA programme for offshore energy, including its research programme and data collection to facilitate future assessments if and when they are required.
- 4.10. As noted above, the Government, and DECC in particular, will have a continuing role to play in facilitating policy interventions necessary to help deliver the offshore wind element of our plan/programme. In September 2008, the Government announced in the Manufacturing Strategy its intention to create an Office for Renewable Energy Deployment (ORED) to help deliver the eight-fold increase in the use of renewable energy by 2020. The Office, part of DECC, will seek to speed up the deployment of established renewable energy technologies to meet our targets and facilitate investment in renewable energy and the supply chain to maximise the economic opportunity presented the UK renewables target. ORED will have a key role to play in coordinating the work across Government set out in Chapter 3. ORED, with The Crown Estate, has a cross-Departmental Offshore Wind Delivery Board to develop and oversee this work.
- 4.11. The Government will also take forward the policy interventions set out in Chapter 3 – many of which will benefit wider offshore renewables deployment. The Renewable Energy Strategy, to be published later this summer, will set out the wider measures

to be adopted in order to deploy renewables in the UK to meet our 15% renewable energy (electricity, heat and transport) target by 2020.

Annex A - Relevant web links

This Annex contains a list of web links that interested stakeholders may find useful. Please note that the list is not exhaustive.

DECC website

<http://www.decc.gov.uk/>

Strategic Environmental Assessment (SEA) website

<http://www.offshore-sea.org.uk/site/index.php>

Offshore Energy SEA Post Consultation Report and Compilation of Responses

http://www.offshore-sea.org.uk/site/scripts/book_info.php?consultationID=16&bookID=12

Offshore Energy SEA Environmental Report - Non-technical Summary

http://www.offshore-sea.org.uk/consultations/Offshore_Energy_SEA/OES_Non_Technical_Summary.pdf

Offshore Energy SEA Environmental Report

http://www.offshore-sea.org.uk/consultations/Offshore_Energy_SEA/OES_Environmental_Report.pdf

Technical Reports

- **OES Acoustic Monitoring of Whales.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=237

- **OES Archaeology.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=240

- **OES Grey Seals.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=239

- **OES National Grid.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=238

- **OES Non Avian Species.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=264

- **OES Seabirds and Marine Mammals 1.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=232

- **OES Seabirds and Marine Mammals 2.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=233

- **OES Seabirds and Marine Mammals 3.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=234

- **OES Seabirds and Marine Mammals 4.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=235

- **OES Seabirds and Marine Mammals 5.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=236

- **OES Seascape Study.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=263

Supporting SEA documents

- **UK Offshore Energy SEA Scoping.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=217

- **UK Offshore Energy SEA Scoping Compilation.**

http://www.offshore-sea.org.uk/site/scripts/consultation_download_info.php?downloadID=218

