Licensing offshore electricity transmission - a joint Ofgem/DTI consultation

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Target audience: Potential offshore transmission licensees, onshore electricity network businesses, offshore renewable generators, other interested parties

Overview:
In March 2006 the Government outlined the method of regulation for offshore electricity transmission to be implemented under the Energy Act 2004. The regulatory regime is being jointly developed by Ofgem and DTI. Regulation is being developed to allow electricity generated from offshore renewable sources - currently wind, but potentially wave, tidal and other renewable technologies in the future - to be transferred to customers via transmission connections to onshore networks. This document consults on two possible options for licensing transmission owner activities offshore and provides an update on other issues relevant to establishing the regulatory regime.

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Context

This document is an Ofgem and DTI consultation which forms part of the joint work of the two organisations on developing the regulation of offshore electricity networks. It follows on from the Government's decision in March 2006 to regulate offshore transmission activities through licensed price controls and Ofgem's document in April 2006 outlining the scope of work.

Offshore networks are important as they will transfer electricity from offshore renewable generating stations (such as wind farms and potentially other technologies that harness wave and tidal resources) to the onshore network. However, they are also potentially expensive, so Ofgem and DTI are seeking to ensure that these networks are developed as efficiently as possible to ensure all users of the system - both consumers and offshore generators - do not have to pay excessive charges.

Associated Documents

Regulatory Impact Assessment
Available at [www.dti.gov.uk](http://www.dti.gov.uk)

Great Britain Security and Quality of Supply Standard consultation
Will be available at [www.ofgem.gov.uk](http://www.ofgem.gov.uk) and [www.dti.gov.uk](http://www.dti.gov.uk)

DTI open letter and consultation on draft order for distribution class exemption
Will be available at [www.dti.gov.uk](http://www.dti.gov.uk)

Offshore electricity transmission - scoping document

Regulation of offshore electricity transmission - Government response to the joint DTI/Ofgem public consultation

Regulation of offshore electricity transmission - a joint consultation by DTI/Ofgem
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Summary

This is a joint consultation being undertaken by the Department of Trade and Industry and Ofgem. It forms part of an on-going process by the Government to establish the necessary regulatory framework for delivery of large amounts of offshore renewable electricity generation. The Government believes that electricity generated offshore from renewable sources such as wind has a key role to play in achieving its targets and goals for renewable energy. Ofgem will be responsible for regulating licensed companies that generate electricity in offshore waters and companies which provide transmission connections to link those generators to the onshore networks.

This paper sets out two options for licensing the transmission connections between generators located in offshore waters and onshore electricity networks.

One option for the connection of these generators is a non-exclusive system where an offshore transmission owner licence is granted to any party that can satisfy relevant application criteria. This system would allow these parties to compete with each other for the right to build, own and operate offshore transmission connections.

The second option is an exclusive system based on onshore transmission network arrangements, where a single transmission owner would be responsible for responding to connection requests from generators in a certain offshore geographical area.

Ofgem favours the first option as it believes this option will deliver offshore transmission connections in the most cost-efficient, timely and certain manner to consumers and generators.

The DTI does not wish to state a preference before it has considered responses to this consultation and assessed which option best delivers Government policy.

Responses to this consultation must be submitted by 8 January 2007. The Government will issue a response including a decision in early 2007.

Following this, and other additional consultations, the Secretary of State will make a final decision on the format for the licensing regime in 2008.

This paper also provides an update on other issues of interest to those concerned with the connection of offshore generation. It summarises additional work undertaken outside of this consultation and also outlines how changes to relevant licences and codes will be implemented.
1. Introduction and update

Questions
There are no questions in this chapter.

Aims of this consultation

1.1. This consultation document forms part of an ongoing process by the Government to establish the necessary regulatory framework for delivery of large amounts of offshore renewable electricity generation, which the Government believes has a key role to play in achieving its targets and goals for renewable energy.

1.2. The Energy Act 2004 provides powers for the Secretary of State to put in place new regulatory arrangements for offshore electricity transmission. Once these arrangements are in place it will be for Ofgem to administer the operation, and if necessary the modification of, these regulatory arrangements so that they remain fit for purpose. The DTI and Ofgem are therefore undertaking this consultation jointly.

1.3. A key element of the regime is the licensing of offshore Transmission Owners (TOs). This consultation paper puts forward two models for the geographic scope of these licences and methods for allocating them.

1.4. One important area of work related to the regime is the application of the Great Britain Security and Quality of Supply Standard (GB SQSS) offshore. DTI and Ofgem will be jointly publishing a separate consultation on the recommendation of an industry group on the application of the GB SQSS offshore.

1.5. DTI is issuing an open letter concurrently with this document clarifying the regulatory position of high and low voltage connections offshore. DTI will also shortly publish a separate consultation on proposed regulatory arrangements for offshore distribution activities.

1 Future Offshore” published in November 2002 consulted on a strategic framework for the offshore wind industry. The Government’s 2003 Energy White Paper set out the UK’s four key energy policy goals and the target of 10% of electricity generated to come from renewable sources by 2010, with the longer-term aspiration for 20% of electricity generated. This was confirmed in the Energy Review report earlier this year, “the Energy Challenge”.
Consultation timescales

1.6. This consultation opened on 20 November 2006. Your views are invited by 8 January 2007.

1.7. A response can be submitted by letter or email to:

John Overton
Department of Trade and Industry
Bay 2107, 1 Victoria Street, London SW1H 0ET
Offshore.Transmission@dti.gsi.gov.uk

What happens next?

1.8. Following this consultation the Government will make a decision in early 2007 on the model for allocating offshore electricity TO licences. In taking this decision, it will consider which model best delivers Government policy (summarised in Appendix 2).

1.9. This is not the final consultation on the implementation of an offshore transmission regulatory regime, as further work on the price control and modifications to licences, codes and standards will need to be undertaken. Further interim consultations will be held on these issues before a decision is taken to implement the regime, including a full 12-week consultation on the final regulatory regime.

1.10. It is intended that the offshore electricity transmission regime will come into force in mid-2008, subject to the commencement of the relevant Energy Act 2004 provisions.

1.11. An update on progress on other work is provided in Appendices 3 and 4.

The Government’s approach to implementing offshore transmission regulation

1.12. Following public consultation, the Government announced in March 2006 that offshore transmission would be regulated through a licensed price control, broadly similar to onshore. The consultation paper, Regulatory Impact Assessment (RIA), Government response and related documents are available on the DTI website: www.dti.gov.uk

1.13. Since then a significant amount of work has been undertaken to deliver the offshore transmission regime, focusing on tackling many of the difficult policy and technical issues that lie below the Government's decision to regulate by means of licensed price control.

1.15. In May 2006 Ofgem and DTI set up the Offshore Transmission Expert Group (OTEG) to provide technical advice and information necessary to developing the detailed regime. Further details of OTEG are in appendix 3. Open workshops were held in April, July and September 2006.

1.16. In August 2006 the Energy Minister announced that National Grid Electricity Transmission’s (NGET) role as Great Britain System Operator (GBSO) will be extended offshore. NGET will be the system operator for both onshore and offshore parts of the transmission system. The relevant provisions of the Energy Act 2004 to implement this decision will be commenced at the appropriate time, but in the interim NGET is acting as offshore GBSO designate. Its role as GBSO designate will become more clearly defined once the decision on the geographic scope and method for allocating offshore electricity transmission licences is taken.

**Scope of future offshore transmission regime**

1.17. The scope of the proposed offshore transmission regime will cover any high voltage connection from an offshore generating station to the onshore GB grid (whether it is to an onshore distribution or transmission system). Offshore connections to the onshore network at 132kV or more will fall within the definition of 'high voltage line' when the amendment to that definition by the Energy Act 2004 comes into force. This is referred to in this document as "post-commencement". Until that time, connections in the offshore waters of England and Wales will fall within the definition of 'high voltage line' only where they are more than 132kV, with connections at 132kV falling within the definition of 'low voltage line'. Connections in the offshore waters of Scotland will fall within the definition of 'high voltage line' if they are 132kV or more.

1.18. Under the Crown Estate’s Rounds 1 and 2 (R1 and R2) of offshore development, 29 generating stations have been granted site leases. There are four offshore wind farms currently built and operating. Three of the projects currently built and operating (North Hoyle, Scroby Sands and Kentish Flats) are connected to the onshore distribution system via 33kV cables. It is expected that a number of other planned R1 projects will also connect to shore at 33kV. These offshore connections are low voltage and along with any future projects connecting at low voltage, will not fall under the offshore transmission regime. A separate DTI consultation will shortly be published on the proposed regulation of offshore distribution².

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² This consultation will be available on the DTI website [www.dti.gov.uk](http://www.dti.gov.uk)
1.19. However, the fourth project constructed to date (Barrow) has a 132kV connection to shore. Post-commencement all 132kV offshore connections will be high voltage (defined as 132kV or more). Barrow, and any other projects with connections at 132kV or more, whatever their Round, will be high voltage connections and will fall under the offshore transmission regime.

1.20. It is expected that the connections to the onshore system of some of the R1 and all of the R2 projects will consist of high voltage cables (post-commencement). Tables 1.1 and 1.2 set out the anticipated status of each of these projects under the proposed offshore transmission regime, where cable voltages are known.

**Table 1.1: Round 1 connections to the onshore GB network**

<table>
<thead>
<tr>
<th>Generating Station</th>
<th>Output capacity</th>
<th>Connection voltage</th>
<th>Status</th>
<th>Post-commencement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrow</td>
<td>90 MW</td>
<td>132kV</td>
<td>Operating</td>
<td>Transmission</td>
</tr>
<tr>
<td>Kentish Flats</td>
<td>90 MW</td>
<td>33kV</td>
<td>Operating</td>
<td>Distribution</td>
</tr>
<tr>
<td>North Hoyle</td>
<td>60 MW</td>
<td>33kV</td>
<td>Operating</td>
<td>Distribution</td>
</tr>
<tr>
<td>Scroby Sands</td>
<td>60 MW</td>
<td>33kV</td>
<td>Operating</td>
<td>Distribution</td>
</tr>
<tr>
<td>Burbo Bank</td>
<td>90 MW</td>
<td>33kV</td>
<td>Under construction</td>
<td>Distribution</td>
</tr>
<tr>
<td>Robin Rigg</td>
<td>90 &amp; 90 MW</td>
<td>33kV</td>
<td>Tendering</td>
<td>Distribution</td>
</tr>
<tr>
<td>Lynn &amp; Inner Dowsing</td>
<td>97.2 &amp; 97.2 MW</td>
<td>36kV</td>
<td>Tendering</td>
<td>Distribution</td>
</tr>
<tr>
<td>Rhyl Flats</td>
<td>100 MW</td>
<td>132kV</td>
<td>Tendering</td>
<td>Transmission</td>
</tr>
<tr>
<td>Gunfleet Sands I</td>
<td>99 MW</td>
<td>132kV</td>
<td>Consented</td>
<td>Transmission</td>
</tr>
<tr>
<td>Cromer</td>
<td>100 MW</td>
<td>33kV</td>
<td>Consented</td>
<td>Distribution</td>
</tr>
<tr>
<td>Ormonde</td>
<td>90 &amp; 90 MW</td>
<td>132kV</td>
<td>Application being processed</td>
<td>Transmission</td>
</tr>
<tr>
<td>Teeside</td>
<td>60-90 MW</td>
<td>33kV</td>
<td>Application being processed</td>
<td>Distribution</td>
</tr>
<tr>
<td>Shell Flats</td>
<td>270 MW</td>
<td>132kV</td>
<td>Application being processed</td>
<td>Transmission</td>
</tr>
<tr>
<td>Scarweather Sands</td>
<td>60-108 MW</td>
<td>33kV</td>
<td>Application being processed</td>
<td>Distribution</td>
</tr>
</tbody>
</table>

**Table 1.2: Round 2 connections to the onshore GB network**

<table>
<thead>
<tr>
<th>Generating Station</th>
<th>Output capacity</th>
<th>Connection voltage</th>
<th>Status</th>
<th>Post-commencement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Gabbard</td>
<td>500 MW</td>
<td>≥132kV</td>
<td>Application being processed</td>
<td>Transmission</td>
</tr>
</tbody>
</table>
1.21. Additional illustrative maps of these projects are provided in Appendix 5.

1.22. By mid-2008, when it is anticipated the regime will go live, some wind farms are likely to have made progress on developing their own grid connections. The new regime will need to take into account what will have been already built, under construction, or in pre-construction by the time the regime comes into force. This issue is addressed further in chapter 3.

**Long term potential**

1.23. The Government has not announced plans for a further competitive round for sites for offshore wind farms. However, the recent Energy Review report made it clear that the Government wants to see the offshore renewables industry expand and
it is consulting separately on proposals to provide additional support for less mature and emerging technologies through adjustments to the Renewables Obligation, the main support mechanism.\(^3\)

1.24. The Government is also supporting the development of wave and tidal technologies that have the potential in the long term to enable Great Britain to exploit those significant energy resources off our coast. Wave and tidal devices may be subject to the regime described in this document, but are more likely to have lower capacity outputs and will tend, at least in the early stages, to connect via low voltage cables.

\(^3\) A copy of this consultation can be found at [www.dti.gov.uk/consultations/page34162.html](http://www.dti.gov.uk/consultations/page34162.html)
2. Regulatory options

**Chapter Summary**

This chapter puts forward for consultation two broad options for licensing transmission owner activities offshore. It describes the criteria under which options and possible approaches under them have been assessed. It outlines the approach that would be taken under each option and gives reasons why DTI and Ofgem do not feel it is appropriate to pursue three alternative approaches that have been identified.

**Questions**

**Question 1:** Which option do you favour and what are your reasons for doing so? Do you have any views on any aspect of our intended approach under each option?

**Question 2:** Do you think that the approaches which have been ruled out should be considered further and are there any other options or approaches that should be considered?

**Question 3:** Should anything further have been taken into account in assessing the options?

**Options for consultation**

2.1. Ofgem and DTI are putting forward for consultation two broad options for licensing TO activities offshore. The two options are:

- **Option 1** A non-exclusive licensing approach broadly based on the way in which new-build networks such as Independent Distribution Network Operators (IDNOs) and Independent Gas Transporters (IGTs) are licensed. This approach would see multiple non-exclusive licences issued for the offshore area, with licensees free to compete with each other for the right to build, own and operate offshore transmission assets.

- **Option 2** An exclusive licensing approach based on onshore transmission network arrangements whereby a single TO would be exclusively responsible for a defined geographic area.

2.2. There are a number of potential ways that each option could be implemented. From this range of alternatives, the approaches we are minded to take are the ones that we feel will best meet our criteria of consistency with Government policy, the principal objective and statutory duties of the Secretary of State and the Authority under Part 1 of the Electricity Act 1989 (and certain provisions of the Energy Act 2004), the Government's rationale for the licensed price control approach and are capable of enduring and are practicable.
The approach we are minded to take under the non-exclusive option is a "common tender" approach which would see tenders from competing TOs for the right to build, own and operate defined transmission assets assessed by a third party.

The approach we are minded to take under the exclusive option is a "multi zone" approach which would see a number of regional monopoly TO areas established and the related licences awarded by means of a competitive process.

2.3. We are ruling out other approaches. We will therefore not be considering further three alternative approaches that have been identified as we do not believe they are the optimal approaches to meet our criteria. We outline these approaches and our reasons for ruling them out later in this chapter.

2.4. We would welcome respondents' views on which option they favour and their reasons for doing so. We would also welcome views on our intended approach under each option.

The views of the Gas and Electricity Markets Authority and the Secretary of State

2.5. The Gas and Electricity Markets Authority (the Authority) has considered the issue and concluded that it has a clear preference for the non-exclusive licensing option (option 1). It believes that the approach designed under this option will deliver offshore transmission connections in the most cost-efficient, timely and certain manner to consumers and generators.

2.6. The Secretary of State does not wish to state a preference before he has considered responses to this consultation and assessed which option best delivers Government policy.

How we identified two broad options

Scoping document

2.7. The Energy Act 2004 provides powers for the Secretary of State to introduce a regulatory regime for offshore electricity transmission. In March 2006 the Government announced that offshore electricity transmission would be regulated through a licensed price control regime. The Ofgem scoping document (April 2006) set out four possible options for the geographic scope of licences and four possible options for the allocation of licences.

2.8. The four main options outlined in the Ofgem scoping document to define the geographic scope of offshore transmission licences were:

- a limited point to point basis between each generating station and the shore;
specific offshore areas covering multiple generating stations, for example “bundles” of generating stations located geographically close to each other or defined areas such as the strategic areas in which the R2 wind farms are located; the whole offshore area; or extensions to the current transmission areas to include adjacent offshore areas.

2.9. The four options for the allocation of offshore transmission licences were:

- operate a tender process and allocate licences to the parties which best meet set criteria;
- adopt a similar approach to that of the licensing arrangements for onshore IDNOs: in this case, grant multiple licences for offshore areas and allow licensees to compete in the building of offshore networks;
- grant licences on a point to point basis for each generating station to whichever party applies for the relevant licence first; and
- provisionally grant licences on a point to point or defined area basis to the first applicant in each case, but allow competitors to express interest within a fixed time period and then operate a tender process if any come forward.

2.10. Taking these theoretical options outlined in the scoping document as a starting point, we worked towards developing two broad practical options for consultation.

Factors considered

2.11. Having identified the theoretical options in the scoping document, we looked in further detail at practical implementation issues to develop suitable options for consultation. In particular we considered how the particular conditions offshore would affect the design of a price control and in practical terms the kind of assets that would be subject to a price control.

2.12. In considering the form of price control offshore we took into account the differing nature of the offshore environment compared to onshore. Key differences include:

- there is no existing transmission infrastructure offshore, no regulatory regime, and no incumbent licensees;
- offshore generation projects currently being developed will use an intermittent generation source;
- there are no demand customers offshore;
- compared with onshore, there is greater engineering and commercial uncertainty offshore; and
- capital expenditure will initially be 100% customer driven.

2.13. In considering practical implementation issues, DTI commissioned a study by the Centre for Distributed Generation and Sustainable Electrical Energy (CDGSEE). As part of this study, viable connection options for current offshore generation projects were developed applying the proposed minimum security requirements for
offshore electricity transmission networks that have been developed by OTEG's GB SQSS sub group. OTEG's GB SQSS sub group's recommendation will be the subject of a separate Ofgem/DTI consultation. A summary report for the CDGSEE study work will be published separately on the DTI website.

2.14. In summary, the conclusions of the CDGSEE study are that:

- for the optimum economic and technical connection options for most of the current offshore generation projects are radial connections to an onshore system (majority at 132kV and above); and
- there is limited opportunity for adjacent offshore generation developments to share connections to the onshore system.

**Options identified**

2.15. Taking into account these factors, we concluded that conceptually there are two broad options for licensing TO activities offshore - non-exclusive or exclusive offshore licences.

**How possible approaches under the two broad options have been assessed**

2.16. Under these two broad options, we identified five possible approaches - two under the non-exclusive option and three under the exclusive option. In deciding on which of these approaches to put forward for consultation we considered the approaches against consistency with Government policy, the principal objective and statutory duties of the Secretary of State and the Authority under Part 1 of the Electricity Act 1989 (and certain provisions of the Energy Act 2004), the Government's rationale for the licensed price control approach and are capable of enduring and are practicable.

2.17. Following this assessment we identified one approach under each option that we wish to consult on. These are the approaches that we feel will best meet our criteria. In addition to the two approaches on which we are consulting, which are outlined in paragraph 2.2, we are ruling out the following three approaches:

- a non-exclusive approach whereby the generator, rather than a third party, selects the transmission owner (the "generator tender" approach);
- an exclusive approach whereby one licensee is appointed transmission owner for the entire offshore area (the "one zone" approach); and
- an exclusive approach which would see the licences of the three existing onshore transmission licensees extended to cover adjacent offshore areas (the "extension" approach).

2.18. **We would welcome respondents' views on whether the approaches which have been ruled out should be considered further and whether there are any other options or approaches that should have been considered. We**
would also welcome views on whether anything further should have been taken into account in assessing the options.

Principal objective and statutory duties

2.19. The Secretary of State and the Authority are guided by their principal objective and statutory duties in carrying out functions under Part 1 of the Electricity Act 1989 and certain provisions of the Energy Act 2004. The principal objective is to protect the interests of consumers where appropriate by promoting effective competition. A summary of the Authority’s powers and duties is set out in Appendix 6. Each of the five approaches was considered against this objective and these duties.

2.20. Ofgem believe that of the five approaches, the common tender approach under the non-exclusive option best satisfies its principal objective. Under this approach a number of offshore TOs will compete for the right to build, own and operate offshore transmission connections. Ofgem believe that this approach best promotes effective competition and that effective competition is appropriate in this case in order to best protect the interests of consumers.

2.21. Ofgem believe that the five approaches equally satisfy many of its statutory duties. For example, the duty to carry out functions in a manner best calculated to contribute to the achievement of sustainable development and to secure a diverse and viable long-term energy supply. However, Ofgem believe that the common tender approach under the non-exclusive option would better satisfy its duty to carry out functions in a manner best calculated to promote efficiency and economy by licensees by introducing competition for the right to build, own and operate transmission connections. Ofgem also believe that this approach better satisfies its duty to have regard to the principles of better regulation through taking a more light-handed approach to the regulation of offshore electricity transmission activities.

2.22. In making a decision on the detailed regulatory model, the Secretary of State will, amongst other things, be guided by his principal objective and general duties set out in the Electricity Act 1989 and certain provisions of the Energy Act 2004. The Secretary of State does not wish to state which of the two approaches put forward for consultation he considers to best meets his range of objectives, set out in Appendix 2, before he has considered responses to this consultation.

Government’s rationale for price controls and Government policy

2.23. The Government outlined in March 2006 a number of reasons why it wished to pursue a regulated price control approach to offshore transmission. These included:

- ensuring consistency with the regulatory arrangements onshore;
- providing a financial benefit to offshore developers by spreading the costs they face to connect to the onshore electricity system through annual transmission charges recovered over a number of years;
- sharing the responsibility for developing the offshore transmission network with the GBSO and TO; and
- providing additional environmental benefits, as it will help to ensure a co-ordinated approach to the development of the offshore network, which will reduce unnecessary duplication of transmission assets.

2.24. Ofgem and DTI believe that the two approaches put forward for consultation under the two options would better meet the criteria of being consistent with the Government's rationale for price controls than any of the three approaches that have been ruled out.

2.25. In deciding on the scope of TO licences and the method for their allocation, the Government will seek to balance the costs and benefits of each option, which will include assessing them against the following objectives (in no particular order of priority):

- contributing to 2010 target (speed of implementation and ability to provide certainty to industry);
- delivery of significant amounts of offshore wind (overall attractiveness of the regime to offshore developers and TOs);
- creation of an enduring regime that will enable connection of marine renewables beyond R1 and R2 offshore wind;
- ensuring reliability and security of supply;
- consistency with the onshore regime where possible, taking into account the differing nature of offshore conditions;
- minimising environmental impact through ability to co-ordinate construction of assets;
- keeping costs to consumers and other system users to a minimum;
- increasing competition where appropriate, which should lead to greater innovation;
- better regulation (keeping burdens of regulation on industry to a minimum); and
- complying with domestic and EU legislation.

Ofgem's view

2.26. Ofgem concluded that while both the approaches put forward for consultation would meet these objectives, the common tender approach under the non-exclusive option would best deliver them.

2.27. Ofgem believes the competitive pressures under non-exclusive licensing should minimise the cost of offshore transmission and ensure early delivery. Ofgem believes that, once running, a non-exclusive licensing approach should allow the award of licences more expeditiously than an exclusive approach. Although on the surface it appears more complex, competitive pressures should ensure the timely resolution of issues at all stages of the process. Ofgem believes that because a monopolist would not be under the same pressures, an exclusive approach could lead to some time delays which could prove costly to both consumers and generators.
A regime that is adaptable and capable of enduring

2.28. In considering the possible approaches we have assessed whether they could be both capable of enduring and adaptable to future needs. In particular, we considered whether they were prudent in terms of meeting the known current requirements for offshore transmission under R1 and R2 while allowing flexibility in meeting the needs of future offshore generation. The form, volume and location of future offshore generation beyond R1 and R2 are currently unknown. Given that the transmission requirements for that generation are also unknown and may differ from current requirements, we consider it sensible to leave options open until such time as the future offshore transmission requirements become known. It may also be the case that the initial round of transmission assets will be fully decommissioned at the end of their useful life and be replaced by assets that better meet generators' needs at that time. We are also concerned that the regime should encourage innovation in technical design and financing and provide the correct incentives for investment.

2.29. We concluded that the two approaches put forward for consultation would better meet the criteria of a regime that is adaptable and capable of enduring than any of the approaches that have been ruled out.

A regime that is practicable

2.30. We believe that all five approaches identified are broadly practicable. However, while we believe that there are no insurmountable barriers to implementing any of the approaches, there are a number of undesirable features to the approaches we have ruled out. These are explained in greater detail in the section at the end of this chapter.

2.31. There are also a number of practical issues that would need to be addressed for either of our two favoured approaches, should they be implemented. We identify and discuss some of the major issues relating to the approaches we are consulting on in chapter 3. We do not believe that any of these issues present an insurmountable barrier to the implementation of either approach. Nevertheless, these issues will require careful consideration to ensure the regime which is implemented is robust and fit for purpose.

Option 1 - non-exclusive licences

2.32. The non-exclusive approach would see the Authority issue non-exclusive TO licences for the whole offshore area (or for a more limited area at the request of the licensee) to any applicant which met the criteria under the existing (or amended) application regulations. In licensing terms this is similar to the way in which Ofgem licenses new networks such as IDNOs and IGTs.

2.33. The purpose of allowing more than one licensee to operate in a licensed TO area is to facilitate competition for the construction, ownership, and operation of assets. We have identified two possible approaches:
- a tender process undertaken by a third party (the "common tender" approach), which we are consulting on; and
- a tender process whereby generators contract directly with offshore TOs (the "generator tender" approach), which we are ruling out.

2.34. Under either of these approaches, offshore TO licensees could be allowed to approach generators in advance and, subject to each generator’s consent, to attempt to coordinate applications and form shared connections wherever appropriate. Market forces suggest this should happen naturally and there would be no need to impose an obligation on offshore TO licensees to do so.

**Favoured non-exclusive approach – the "common tender" approach**

2.35. Our favoured non-exclusive approach is designed to capture the advantages of the onshore transmission connection arrangements by retaining as many elements as possible. The approach would retain the same approach to charging and, with the exception of allowing TOs to compete for the construction, ownership and operation of assets when a generator applies for connection to the transmission system, it would also retain the principles of onshore transmission connection application arrangements. In effect this means that from the generator’s point of view there is little difference between the non-exclusive and exclusive options except that the additional competitive element should bring a more economic offer under the non-exclusive option. The process would still see a generator apply to the GBSO for connection to the transmission system and then be subsequently issued with a connection offer which it may accept or reject.

2.36. The key differences would be for offshore TOs and for the Authority. An invitation to make a TO Connection Offer (TOCO) would be issued to all offshore TOs, rather than one incumbent. It is likely in many cases that there will be multiple options available for sub-sea routing, landing and grid connection. In these cases it is possible that the GBSO (or another party) could be required to undertake preliminary works to identify a small number of feasible routing options and obtain seabed surveys that would be made available to all TOs interested in bidding. This would be more economic and efficient than all bidders undertaking similar expensive survey work.

2.37. Each TO would have the opportunity to bid to become the builder, owner and operator of the required assets for the lifetime of those assets. These bids would be assessed under transparent pre-set criteria, with the winning bidder’s TOCO making up part of the connection offer issued to the generator. Bid evaluation could potentially be complex (addressing price and timescale factors amongst other things) and the criteria might, for example, require the appointment of an independent tender panel to ensure the process is transparent.

2.38. The Authority would be required to accept or reject the terms of the price control that underpinned the winning bid. The price control could be either wholly or partially locked for the lifetime of the assets (which potentially could be depreciated in line with the life of the generating plant to which they would be
attached, rather than the expected life of the assets). As with onshore price controls, it may be that to address specific external events such as changes to relevant safety legislation there is a case for re-opening price controls. These circumstances would be set out in specific "re-opener" conditions of the price control.

2.39. Although bidding criteria might cover a range of factors, one key factor is likely to be cost, with each TO bidding a revenue stream. Bidding rules would need to incorporate arrangements to ensure:

- that arrangements existed to deal with a situation where no licensee bids;
- that the winning TOCO was economic; and
- all parties had confidence in the operation of the bidding process.

2.40. There is a risk under both the proposed non-exclusive and exclusive approaches that a TO might not come forward. In the case of the non-exclusive approach, the risk is that circumstances are such that no licensed TO sees sufficient incentive to bid to provide the connection. However, this approach leaves open the possibility that the developer may apply for a TO licence, and if successful, may bid to provide its own connection.

**Ofgem’s view of the non-exclusive option**

2.41. Overall, Ofgem favours the non-exclusive option because it believes that it carries the correct balance of consistency with onshore arrangements, competitive pressure to obtain cost and time efficiencies, incentive for investment and protection for consumers.

2.42. Introducing a competitive element to the process should bring quicker delivery, drive down prices so they are more aligned to costs, encourage innovation and reveal important market information. Ofgem believes that a competitive process will provide greater certainty on *ex-ante* costs. It believes it will provide longer term certainty for generators and consumers on the costs they will face and for transmission companies on the revenues they will receive. It believes the regime should bring greater transparency by allowing clear performance measures for the delivery and operation of each asset. The regime allows for more light-handed regulation, complying with better regulation principles. It believes this option allows the greatest scope for a cost effective and flexible regime which can be delivered in the most expeditious manner.

**Option 2 - exclusive licences**

2.43. This option would see an extension of the principles of the onshore transmission licensing approach, creating geographic monopolies offshore. We identified three broad variations on how this could be rolled out offshore. These are:
- breaking up the offshore area up into smaller zones (the "multi-zone" approach), which we are consulting on;
- creating a single offshore zone (the "one zone" approach), which we are ruling out; and
- extending the existing onshore areas offshore (the "extension" approach), which we are also ruling out.

2.44. The differences between the variations lie in the extent of the geographic area and how ownership is established. We believe it is appropriate to restrict the geographic area to meet current foreseeable needs, and therefore are consulting on the multi-zone approach.

2.45. From a generator’s point of view an exclusive system would be identical to that onshore: it would apply to the GBSO for an offer to connect to the transmission system, the GBSO would invite the relevant monopoly TO and any other affected TOs to provide TOCOs, and the GBSO would then relay a combined offer back to the generator. The exclusive option may offer generators the certainty of knowing the identity of a TO in a licensed area. Generators will form a view as to whether this certainty offsets the higher charges they are likely to face under the exclusive option.

2.46. It would be necessary to establish a Regulatory Asset Value (RAV) when setting an initial price control. This could be done in a number of ways. However, it is likely that at least in the construction stage and the first years of operation this approach would see a process akin to pass through of costs, albeit subject to a test that they had been efficiently and economically incurred. Nonetheless this option has the advantage of providing the opportunity to re-set the price control in the light of new information, as is done at present onshore.

2.47. Under both exclusive and non-exclusive options the GBSO would retain its role of operational planning. Under the exclusive option the TO, which undertakes technical planning, might better facilitate co-ordinated network development within an area. The non-exclusive option does not preclude co-ordination and it would be expected that commercial arrangements would be struck between separate TOs where there was advantage in so doing.

**Favoured exclusive approach - the "multi-zone" approach**

2.48. Our favoured approach under the exclusive option is the "multi-zone" approach, which would create relatively limited regional monopolies. Granting regional monopolies could be done on any arbitrary basis, with one possible example being to tender for the three existing strategic areas where all R2 generation is currently located and leave the remainder of the offshore area unlicensed until planned new generation triggers a need for a new tender.

2.49. Compared with other possible approaches under the exclusive approach, this approach has a number of potential benefits from a regulatory point of view. It may offer the ability to benchmark the ex-post performance and costs of offshore licensees. This would be on the assumption that the areas were allocated to
different licensees. Were all the areas to be awarded to the same licensee, this approach would become significantly less attractive. Assuming more than one licensee however, of all the monopoly variants it may offer the best opportunity to assess efficient costs. However, we note that this may to a significant extent be limited by the potential differences between the marine conditions and required assets in each licensed area.

2.50. In terms of future-proofing, it allows discretion in the future award of licences in other areas (or for the extension of the licences granted if that is deemed appropriate). In any case given the relatively smaller size of areas involved the award of future reward and risk is limited in comparison to the other monopoly variants. The tender allows a competitive element in the award of licences, thereby allowing the Authority to select licensees that best meet set criteria.

2.51. As with the non-exclusive common tender approach, there is a risk under this approach that a TO may not come forward. Under this approach, the risk is that no TO would be interested in bidding for a given zone. Unlike the non-exclusive common-tender approach, the opportunity would not exist for a generator to provide its own connection. However, a generator could bid for the whole zone in which it is located and take on the obligation to make offers to connect all generators, including itself, in the zone. As with onshore, offers to connect would have to be made on a non-discriminatory basis.

2.52. There would also be an additional regulatory burden from the requirement to run a tender each time a new zone was required. It also remains unclear, given the uncertainty in terms of potential revenue and risk accruing to an offshore TO, how a meaningful competition with clearly-defined financial terms for the three areas could be run. This is discussed further in chapter 3.

**Ofgem’s view of the exclusive option**

2.53. Ofgem is of the view that introducing a monopoly, albeit on a regional basis, is always likely to be a ‘second best’ option if there is a workable alternative which would introduce some elements of competition. A company will always have the incentive to maximise its profits and under a monopoly in ways that may be at the expense of those who pay for using its services, in this case consumers and generators. The reason for this is that the monopolist’s excessive charges are not undercut by competitors, as these by definition do not exist. Creating a monopoly is only desirable where economies of scale are so large that the only efficient solution is for one firm to serve an entire market. In a price controlled environment, excessive charges by a monopolist are avoided by the regulator acting as a proxy for competition, although this is second best to actual competition. Ofgem believes that there is no current evidence to suggest that there will be sufficient economies of scale to justify a monopoly approach and that such economies of scale that may exist could also be captured by TOs bidding for a number of projects in a competitive approach.
2.54. Ofgem also has concerns about the limited scope for measuring performance for the delivery and operation of each asset under a monopoly operator. It has concerns that the selection process for monopoly licensees may not be sufficiently robust to ensure generators receive optimum service in terms of the timing and cost of their connections. Therefore, while Ofgem believes this option is workable, it does not feel that it is appropriate to artificially create monopolies where this is not necessary.

**Approaches we are not consulting on**

2.55. There are three approaches that we have identified, considered, and have decided to rule out. Overall, we believe the three approaches outlined below are less optimal than the two approaches we have put forward for consultation when considered against our criteria outlined in paragraphs 2.19 - 2.30. We therefore do not intend to consider these approaches further.

**Ruled out non-exclusive approach – the "generator tender" approach**

2.56. One alternative approach to operating non-exclusive licences would be to try to replicate as closely as possible the way arrangements work in the licensing of IDNOs and IGTs. In this case, generators or groups of generators would tender for and select a licensed offshore TO to be their network provider. The GBSO would therefore play no role in the process.

2.57. We do not favour this approach for a number of reasons. We believe that it would be very difficult to capture the advantages of co-ordination under this approach. Further, as generators only pay a proportion of network charges (with the majority paid for by demand customers) we do not feel it would be appropriate for the generator to select a network provider where it does not solely bear the risk of that decision. Under the IDNO and IGT regimes, network companies are price controlled by means of a cap on charges relative to an incumbent provider. As there are no incumbents offshore, it is difficult to see how this might be easily replicated.

**Ruled out exclusive approach - the “one zone” approach**

2.58. One alternative way to roll out the monopoly approach is to award, by competitive tender, a single exclusive TO licence for the whole offshore area. This approach benefits from relative simplicity in that it provides certainty for all parties, involves a single offshore TO licensee and precludes the need to award any future TO licences for offshore areas, while introducing a small initial competitive element.

2.59. We do not favour this approach as it has a number of undesirable features. The potential offshore TO would be required to commit to connect any generator across a substantial marine territory which is greater in size than the combined area of the existing incumbent TOs. Its "network" could potentially include an uncertain number of highly dispersed projects. The size of this commitment, its inherent uncertainty and the financing risks that this brings is likely to deter most potential
bidders, thereby rendering any competition sub-optimal at best and meaningless at worst. From a regulatory point of view, this approach would preclude any kind of benchmarking. The terms under which applicants could meaningfully compete for the single offshore TO licence are unclear.

**Ruled out exclusive approach - the "extension" approach**

2.60. Conceptually, extending the scope of current TO licences of the three incumbent licensees to include adjacent offshore areas is the simplest and easiest way to extend the monopoly approach. This approach would offer certainty to generators and, from a TO point of view, allow the balancing of significant and uncertain investment offshore against relatively large existing asset bases.

2.61. We do not favour this approach for a number of reasons. It would inequitably distribute known and likely future generation projects and the size of area each licensee would be expected to cover. It would unfairly allocate revenue and risk to three parties (and exclude other potentially interested parties) on the basis of historical ownership of onshore transmission networks and would not require any test to determine suitability for operating in an offshore environment or require the demonstration of any financial commitment.
3. Practical issues under the regulatory options

Chapter Summary

This chapter sets out a series of practical issues posed by non-exclusive and exclusive licensing approaches and invites views on these issues.

Questions

Question 1: Could providing anything further, beyond the comfort already provided by Ofgem, be justified for projects that will be constructed or have secured financial close prior to the award of offshore TO licences?

Question 2: Would a departure from Ofgem's current approach to the adoption of assets be justified or would different treatment be unduly discriminatory?

Question 3: What are your views on the potential costs to TOs of bidding to build, own and operate offshore assets? Do you have views on how such costs might be minimised?

Question 4: Do you believe there is a risk of a lack of co-ordination that is specific to the non-exclusive approach? If so, how serious a problem do you believe this is? To what extent could the suggested measures or any other measures mitigate such a risk?

Question 5: Is it appropriate to allow generators to bid to provide their own transmission services, in particular in the light of any potential moves towards unbundling at an EU level?

Question 6: How can confidence be built that the tender process can be run transparently and fairly and to what extent can the proposals outlined in this chapter ensure this?

Question 7: Is it appropriate to have certain defined re-openers in a fixed-price bidding system?

Question 8: How should the geographic extent of exclusive regional licence areas be defined? What is the appropriate balance between obliging exclusive offshore TOs to assume unknown levels of risk and the need for a wider geographic area to ensure a TO is available to connect generators? Is it appropriate to make available three offshore TO licences that cover the three strategic areas and to leave the remainder of the offshore area unlicensed until the need for new licensees arises?

Question 9: On what basis should the competition for offshore exclusive TO licences be run?

Question 10: What is the value and feasibility of benchmarking exclusively licensed offshore TOs and in what way could this be facilitated if desirable?

Question 11: How can suitable incentives be placed on exclusive offshore TOs to ensure that assets are constructed and operated economically and efficiently? Is there an alternative to simply passing through costs which raise the charges paid by consumers and generators? Would it be suitable to use international benchmarks as a means of assessing economy and efficiency?

Question 12: What arrangements would be appropriate for dealing with future build outside of exclusively licensed areas?

Question 13: How can generators be provided with timely, firm offers within reasonable timescales under the exclusive option?
Practical issues for consideration under both non-exclusive and exclusive licensing approaches

Adoption

3.1. The April 2006 Ofgem scoping document identified that developers may choose to construct assets before the introduction of new regulatory arrangements for offshore electricity transmission with the expectation that these will be “adopted” by a licensed TO.

3.2. A number of developers subsequently set up an informal group in order to submit to OTEG a series of papers explaining further their concerns about the adoption issue and providing suggestions as to how it could be addressed. The consortium comprised mainly those developers which can be classified as the early movers who are close to seeking financial close. This work has greatly assisted us in considering this issue further. We recognise that, for a small number of developers, there are genuine concerns. The group has categorised their concerns into two areas in the following terms:

- the "legal issue": being the exposure the developers have to commencing an activity that they know is going to be regulated/prohibited, and which they have no assurance that they will be licensed to conduct for themselves; and

- the "price issue": being the exposure the developers have to an ex-post determination of the regulated price in a new market and how this translates into an acquisition price for the assets. The group is seeking certainty that (1) a TO will adopt their assets and (2) ex-ante certainty about the value that Ofgem will assign to these adopted assets.

3.3. The group argue that the above uncertainties are expected to have a direct bearing on the ability to finance their projects. They argue that the impact of these uncertainties will be that developers may choose to abandon or delay development, or alternatively switch their focus to countries with more clarity. Further, they argue that uncertainty will inevitably increase the risk and, ultimately, the return required by investors to provide finance for these projects thereby hampering the ability of projects to realise potential cost reductions and delaying construction. The implication is that these early mover projects will not at present be constructed in time to contribute to the Government’s 2010 renewables target.

3.4. It is for consideration whether anything further is justified for those few early movers whose projects, including transmission assets, will be either built or at financial close before the regulatory regime is put in place.
The "legal issue"

3.5. Once the relevant sections of the Energy Act 2004 are commenced, the prohibition on unlicensed transmission will be extended to the Renewable Energy Zone (REZ). From that time, the activity will be prohibited in Great Britain, the territorial sea and the REZ. Upon commencement of section 180 of the Energy Act 2004, all offshore connections to shore at 132kV or more will require a licence or an exemption under the new transmission regime.

3.6. One project connecting at 132kV has already been commissioned and it is possible that others will be commissioned prior to commencement of the relevant sections of the Energy Act 2004. Any project with a commissioned transmission connection will be undertaking a prohibited activity from that point if their connection is unlicensed or does not fall under an exemption. Developers are concerned that there is currently no legal mechanism in place to ensure that such offshore connections will be operated under a TO licence or an exemption immediately upon commencement of the new offshore transmission regime.

3.7. The Government recognises that developers feel that they face regulatory uncertainty in this regard. Developers' concerns are currently being considered and will be taken forward separately from this consultation for discussion with the relevant parties.

The "price issue"

3.8. Ofgem previously set out its position on the adoption of offshore assets in an open letter, published in December 2004. This letter noted that it would seek to make allowances in the price control for costs incurred provided the following broad conditions were satisfied:

- the costs were properly incurred and necessary for purpose;
- the level of costs was no more than an efficient level of costs; and
- reasonable forecasts at the time the investment is made show that there would be sufficient demand for the use of the transmission cables to justify the investment.

3.9. Ofgem's position remains that assets will be adoptable on the same basis as onshore provided that they were constructed economically and efficiently and are fit for purpose. Should these criteria be met it is expected that allowances will be made in the price control for properly incurred costs. Ofgem expects charges to be cost reflective, based on the current GB charging methodology administered by the GBSO.

3.10. In an open letter published in July 2006 Ofgem re-stated its position on adoption: that unless significant reasons exist as to why offshore parties should be treated differently, Ofgem will remain consistent in its approach. It is for
consideration whether the consortium's views summarised in paragraphs 3.2 and 3.3 would justify a departure from Ofgem's present approach.

3.11. We would welcome respondents' views on whether providing anything further beyond the comfort already provided by Ofgem is justified for projects that will be constructed or have secured financial close prior to the award of offshore TO licences. We would welcome respondents' views on whether a departure from Ofgem's current approach to the adoption of assets would be justified and whether different treatment might be unduly discriminatory.

*How adoption will work in principle under the non-exclusive and exclusive options*

3.12. As outlined in chapter 2, under both proposed options TOs will be licensed offshore. Generators requiring a connection would apply to the GBSO for a connection offer in a similar manner to onshore arrangements.

3.13. We recognise that some form of adoption will be required for offshore generators that will have transmission connections in place at the time that the relevant sections of the Energy Act 2004 are commenced. This will need to happen regardless of whether TO licences are awarded exclusively or non-exclusively.

3.14. Under both approaches transmission assets would transfer from the generator to the relevant TO. The only significant difference is that under the non-exclusive option provided the generator successfully applies for a TO licence and successfully bids it may own its transmission assets.

3.15. It remains for consideration exactly how the detailed process for adoption would work under either of the proposed options. Nevertheless the process of considering adoption issues in detail cannot begin until the approach to regulation has been decided.

*Practical issues for consideration under the non-exclusive licensing approach*

**Cost of tendering**

3.16. The non-exclusive approach would see a number of licensed offshore TOs tendering for individual connections or groups of connections. The cost of putting together an unsuccessful bid could deter potential TOs from entering the market and bidding.

3.17. It is likely in many cases that there will be multiple options available for subsea routing, landing and grid connection. It is possible that the GBSO (or another party) could be required to undertake preliminary works to identify a small number of feasible routing options and obtain seabed surveys that would be made available
to all TOs interested in bidding. This would be more economic and efficient than all bidders undertaking similar expensive survey work. It might also be possible for the economic and efficient costs of all bids to be paid for by the successful bidder as a condition of winning the bid.

3.18. A useful precedent could be the way in which Private Finance Initiative tenders are run. The Treasury issues guidelines which could provide useful guidance.4

3.19. We would welcome respondents' views on the potential costs to TOs of bidding to build, own and operate offshore assets. We would also welcome views on how such costs might be minimised.

Co-ordination

3.20. One issue in a competitive environment where individual connections are the subject of bids is whether an aspect of co-ordination might be lost. The potential number of offshore connections might lead to inefficiencies should each individual connection be the subject of a tender. There are a number of possibilities to increase efficiency in this area. A regular 'window' for applications from offshore generators could be introduced (such as annually, for example), thereby allowing TOs to bid for multiple projects in each window, rather than on an ad hoc basis as applications are submitted.

3.21. It might also be possible for bids to be submitted on the basis of providing services to more than one project. In such cases projects need not be located in close proximity. For example, procurement efficiencies from one TO building, owning and operating three connections, wherever they are located, could lead to a lower overall cost than from three different TOs doing the same on an individual basis. This would be reflected in the bid.

3.22. It might be also possible for bids to be submitted on a conditional basis. In these cases a TO that has been unsuccessful in its bid for one group of projects could choose to trigger a second preference bid for an alternative set of projects. This would assist TOs that have a limited investment budget and wished to invest in fewer projects than the total number seeking connection in a given application window.

3.23. We would welcome respondents' views on the extent to which there is a risk of a lack of co-ordination that is specific to the non-exclusive approach. If respondents believe there is such a risk, we would welcome their views on how serious a problem they believe this would be. We would also welcome views on whether the suggested measures or any other measures might mitigate such a risk.

4 http://www.hm-treasury.gov.uk/media/B42/D9/pfi_sopc_ver3_complete_apr04.pdf
Common ownership of generation and transmission

3.24. The non-exclusive licensing option allows for the possibility of an offshore generator providing and owning its transmission connection to the onshore system. This would occur where the offshore generator is able to obtain an offshore TO licence, and then successfully tender for the transmission connection from its generating station to the onshore system. It is likely that generation and transmission licensees would be subject to the same obligations to ring-fence their activities as apply to onshore licensees. Under the exclusive approach it is unlikely that the offshore generator could provide transmission connections exclusively to its own generation stations. This is because an offshore TO would be awarded a licence on the basis of a geographic area which is likely to include other generating stations.

3.25. The possibility of an offshore generator providing its own transmission connection to the onshore system is subject to relevant EU legislation. Ofgem and DTI have noted views that in the context of the forthcoming EU “Strategic Energy Review” the European Commission are considering a range of EU measures, which may include future legislative proposals to prohibit transmission licensees from carrying out generation activities. Were this to occur, it is possible that an offshore generator might be prohibited from providing its own transmission connection to the onshore system. However, at this stage the Commission has not formally signalled what sort of legislation it might introduce and currently there is no legislation to prohibit a generator from providing its own transmission connection to the onshore system.

3.26. We would welcome respondents’ views on whether it would be appropriate to allow generators to bid to provide their own transmission services, in particular in the light of any potential moves towards unbundling at an EU level.

Assessing bids

3.27. Ideally a non-exclusive licensing approach as we outline should have an independent party undertaking the tender process. Bid evaluation could potentially be complex (for example addressing price and timescale factors amongst other things). One option is for the GBSO to undertake the tender process. However, NGET’s role as GBSO and potential offshore TO may cause some parties concern were it to run the tender process. Any perception that it might gain an advantage from its position as SO could undermine confidence in the process.

3.28. There are a number of ways that this could be addressed. One way would be to force the separation of NGET’s SO and TO functions. However, we do not feel this is appropriate at this time and do not propose to do so. Another way to address this, at least initially, is by using a combination of licence condition constraints obliging transparency and independence, and, if necessary using Ofgem’s powers under competition law. We believe that this may be sufficient to ensure both that the GBSO acts appropriately and that other parties have confidence in the process. In order to reinforce this confidence, it may be that further actions are appropriate.
The GBSO's independence could be reinforced by having an independent tender panel, for example.

3.29. We would welcome respondent's views on how confidence can be built that the tender process can be run transparently and fairly and the extent to which the proposals outlined above could ensure this.

Re-openers

3.30. To some degree there is a trade off between the extent to which price controls are re-opened and the quality of the initial bidding process. As a general rule this can be expressed as the greater the scope for re-openers in the price control, the lower the incentive for TOs to bid accurately initially. Certain defined exceptional events such as a change in safety legislation pertaining to offshore equipment might justify a re-opener. TOs may wish to attach conditions to their tenders specifying the stages at which they would require a control to be re-opened and define the scope (e.g. certain seabed conditions requiring a defined amount of additional revenue). These factors could be taken into account during the bid assessment process. Alternatively, it might be appropriate to have fixed periodic reviews to assess whether initial cost estimates have proved accurate.

3.31. We would welcome respondents' views on whether it would be appropriate to have certain defined re-openers in a fixed-price bidding system.

Practical issues for consideration under the exclusive licensing approach

Selection of licensable areas

3.32. There is no immediately obvious means of defining the area for a regional monopoly. Therefore how an area is defined is something of an arbitrary exercise. In considering the size of area, it might be desirable to restrict it as much as possible in order to minimise the TO's commitment to connect unknown numbers of future generation projects. This would minimise the risk that a potential TO would be exposed to and this may assist it in financing its activities. Broadly speaking, the smaller the defined area is, the smaller the level of risk and reward will be. However, one of the key arguments in favour of having monopoly TO areas is that a TO is available to connect generators, therefore an area that is too restricted will not meet this purpose. One option is to offer three licences that match the three strategic areas in which the majority of planned offshore generation is likely to be located and to leave the remainder of the offshore area unlicensed until such time as licences are required.

3.33. We would welcome respondents' views on:
how the geographic extent of exclusive regional licence areas could be defined;
the appropriate balance between obliging offshore TOs to assume unknown levels of risk and the need for a wider geographic area to ensure a TO is available to connect generators; and
whether it would be appropriate to make available three offshore licences that cover the three strategic areas and to leave the remainder of the offshore area unlicensed until the need for new licensees arises.

Scope of tender process

3.34. Competitive tendering is a feature of both the preferred options. The tender process however occurs at different points in the process in the two options.

3.35. Under the non-exclusive option, pre-licensed bidders would be bidding for defined and quantifiable sets of assets. This makes assessing the value of bids comparatively straightforward.

3.36. Under the exclusive option, however, bidders will be seeking the right to provide services for both defined and hypothetical future sets of assets. It is therefore extremely unlikely that they will be able to make any reasonable projection as to the value of future revenues and the extent of future obligations. Depending on the extent of the uncertainty, this could lead to a situation of negative bids being submitted. Given the likely inability of bidders or those assessing bids to properly assess the value of the licences being bid for, it seems likely that the competition might have to be on a different and more arbitrary basis. One possibility is on the basis of a combination of credit worthiness and relevant experience. An alternative possibility is on the basis of a competition for the initial connections in each designated licence area.

3.37. We would welcome respondents’ views on the basis on which the competition for offshore exclusive licences should be run.

Retaining the ability to benchmark

3.38. A potentially important element of the multi-zone approach is the ability to benchmark licensees. Given the different conditions that might exist in each area in terms of the number and nature of connections, differing seabed conditions and differing requirements of generators, it remains open to question how useful this ability might be. Nevertheless, an important element of the tender process would be to ensure that more than one company was awarded an offshore transmission licence. Under normal competition on a given variable (such as price or credit worthiness) it is possible that a company that is most competitive for one licence will be the most competitive for all of the available licences and would therefore win all of the available licences. One way to ensure that different licensees were appointed would be to run a competition on a preference basis, whereby the best bidder received its first choice of area, with each subsequently ranked bidder allowed to choose from the remaining licences in turn.
3.39. We would welcome respondents' views on the value and feasibility of benchmarking exclusively licensed offshore TOs and the ways that this could be facilitated if desirable.

Setting price controls in the absence of price controllable assets

3.40. Price controls are normally applied to existing networks. These networks have an established RAV and the cost of capital is relatively low, reflecting the low-risk nature of investment. It is less obvious how to establish a RAV and determine a cost of capital in cases where there are no existing assets. One way is to allow TOs revenue on a cost pass-through basis, that is to allow the TO to recover all its costs subject to an economy and efficiency test. The disadvantage of this approach is that the lack of suitable benchmarks makes testing for economy and efficiency problematic.

3.41. We would welcome respondents' views on how suitable incentives can be placed on offshore TOs to ensure that assets are constructed and operated economically and efficiently and whether there is an alternative to simply passing through costs which raises charges to consumers and generators. We would particularly welcome views on whether it would be suitable to use international benchmarks as a means of assessing economy and efficiency.

Dealing with future build outside of licensed areas

3.42. In combination with the issue of how to set the initial geographic scope of offshore licences, there is also an issue of how to determine the requirement for future offshore zones. Should the Government repeat its policy of issuing a number of offshore generation site leases in rounds, then the issue would be the same as for the initial tranche of licences. However, a more incremental approach to future generation projects, with a number of stand alone projects appearing at different times in geographically diverse locations would pose a different set of problems. It might be necessary to define parameters to determine at what point a new licensable area would be required and opened up to tender and the geographic extent that it would encompass. It might also be appropriate to define parameters under which existing monopoly areas might be expanded to incorporate generation located outside of the licensed area.

3.43. We would welcome respondents' views on the appropriate arrangements for dealing with future build outside of licensed areas.

Encouraging efficiency in timing

3.44. In order to introduce the exclusive approach it will be necessary to make regulations to allow the Authority to grant offshore TO licences as a result of a tender process. Once the regulations come into force, the Authority will then be able to commence a tender process and, upon its completion, grant offshore TO licences.
The need to make regulations, and for the Authority to conduct a comprehensive tender process, will significantly lengthen the time before an offshore TO licence can be granted by the Authority.

3.45. A second issue with respect to timing is how to ensure that offers containing sufficient detail to allow a generator to reach a decision are made in a timely manner without the incentive of competitive pressures. Onshore, licence conditions oblige offers to be made within set timescales unless an extension is specifically permitted by the Authority. However, onshore licensees have many years experience and connecting additional users to their networks is, relatively speaking, a small increment. It is unclear whether the level of detail that could be provided in an offer from an offshore TO in similar timescales to those onshore would provide a sufficient basis for an offer to a customer, particularly where that TO does not bear the full risk of the offer and may subsequently adjust it, potentially several times. The consequent lack of certainty may cause delays for generators.

3.46. We would welcome respondents' views on how generators can be provided with timely, firm offers within reasonable timescales under the exclusive option.
# Appendices

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Appendix 1 - Consultation response and questions

1.1. Ofgem and DTI would like to hear the views of interested parties in relation to any of the issues set out in this document.

1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter heading and which are replicated below.

1.3. Responses should be received by 8 January 2007 and should be sent to:

John Overton
Department of Trade and Industry
Bay 2107, 1 Victoria Street, London SW1H 0ET
Offshore.Transmission@dti.gsi.gov.uk

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem’s library and on Ofgem and DTI’s websites www.ofgem.gov.uk and www.dti.gov.uk. Respondents may request that their response is kept confidential. Ofgem and DTI shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Next steps: Having considered the responses to this consultation, Ofgem and DTI intend to publish a decision early in 2007. Any questions on this document should, in the first instance, be directed to:

Giles Stevens
Transmission
Ofgem, 9 Millbank, London SW1P 3GE
020 7901 7082
Giles.stevens@ofgem.gov.uk
or
John Overton
DTI
Bay 2107, 1 Victoria Street, London SW1H 0ET
020 7215 6481
John.overton@dti.gsi.gov.uk
CHAPTER: One

There are no questions in this chapter.

CHAPTER: Two

**Question 1:** Which option do you favour and what are your reasons for doing so? Do you have any views on any aspect of our intended approach under each option?

**Question 2:** Do you think that the approaches which have been ruled out should be considered further and are there any other options or approaches that should be considered?

**Question 3:** Should anything further have been taken into account in assessing the options?

CHAPTER: Three

**Question 1:** Could providing anything further, beyond the comfort already provided by Ofgem, be justified for projects that will be constructed or have secured financial close prior to the award of offshore TO licences?

**Question 2:** Would a departure from Ofgem's current approach to the adoption of assets be justified or would different treatment be unduly discriminatory?

**Question 3:** What are your views on the potential costs to TOs of bidding to build, own and operate offshore assets? Do you have views on how such costs might be minimised?

**Question 4:** Do you believe there is a risk of a lack of co-ordination that is specific to the non-exclusive approach? If so, how serious a problem do you believe this is? To what extent could the suggested measures or any other measures mitigate such a risk?

**Question 5:** Is it appropriate to allow generators to bid to provide their own transmission services, in particular in the light of any potential moves towards unbundling at an EU level?

**Question 6:** How can confidence be built that the tender process can be run transparently and fairly and to what extent can the proposals outlined in this chapter ensure this?

**Question 7:** Is it appropriate to have certain defined re-openers in a fixed-price bidding system?

**Question 8:** How should the geographic extent of exclusive regional licence areas be defined? What is the appropriate balance between obliging exclusive offshore TOs to assume unknown levels of risk and the need for a wider geographic area to ensure a TO is available to connect generators? Is it appropriate to make available three offshore TO licences that cover the three strategic areas and to leave the remainder of the offshore area unlicensed until the need for new licensees arises?

**Question 9:** On what basis should the competition for offshore exclusive TO licences be run?

**Question 10:** What is the value and feasibility of benchmarking exclusively licensed offshore TOs and in what way could this be facilitated if desirable?
Question 11: How can suitable incentives be placed on exclusive offshore TOs to ensure that assets are constructed and operated economically and efficiently? Is there an alternative to simply passing through costs which raise the charges paid by consumers and generators? Would it be suitable to use international benchmarks as a means of assessing economy and efficiency?

Question 12: What arrangements would be appropriate for dealing with future build outside of exclusively licensed areas?

Question 13: How can generators be provided with timely, firm offers within reasonable timescales under the exclusive option?
Appendix 2 – Government policy

Summary of Government policy

1.1. The Government reiterated in the 2006 Energy Review\(^5\) its long-term goal of cutting carbon emissions in the UK by 60% by 2050. Renewable energy is an integral part of this objective, as it produces less carbon dioxide and other greenhouse gases than electricity generated by fossil fuels. By increasing the amount of energy we get from renewable sources – like offshore wind, wave and tidal energy – we can also reduce our dependence on those 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. Recognizing the important contribution that renewables can make to achieving our energy policy goals, in the 2003 Energy White Paper the Government set a target of 10% of electricity supply from renewable energy by 2010, with a further aspiration to derive 20% by 2020.

1.2. For the immediate future it is likely that both onshore and offshore wind generation will need to make a significant contribution to the UK’s renewable energy targets and aspirations given the significant wind resource in the UK onshore and offshore and the relatively advanced nature of wind generation technology.

1.3. We will also need to maximize potential contribution from other emerging technologies, such as wave and tidal generation. The Government has already set out and consulted on its strategy for the development of offshore wind in the document ‘Future Offshore – A Strategic Framework for the Offshore Wind Industry’ published in 2002\(^6\). A key factor behind this policy is that the UK has some of the best offshore wind resources in Europe, if not the world. Currently, there are plans for up to 8GW of electricity generation projects (which represents just under 10% of current generating capacity) to be developed in the sea around Great Britain, harnessing those from wind resources.

1.4. But exploitation of this potential offshore energy source requires connection to the onshore GB transmission and distribution networks. A broad framework for the regulation of offshore transmission and distribution of electricity was set out in the Energy Act 2004. It amends section 4 of the Electricity Act 1989 so that the prohibitions (and licensing and exemption regime) also apply in the Renewable Energy Zone (REZ) and confirms that the regime applies in the territorial sea adjacent to Great Britain. It also gives the Secretary of State broad powers to introduce a new regulatory regime for offshore electricity transmission and distribution. Following a preliminary consultation, the Government announced on 30

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\(^5\) The Energy Challenge; [http://www.dti.gov.uk/energy/review/page31995.html](http://www.dti.gov.uk/energy/review/page31995.html)

March 2006 that it has decided the form of regulation to be applied to offshore transmission would be a price control regime, implemented through a system of licences, industry codes and industry standards. This is likely to be implemented in 2008.

1.5. The Government concluded that the regulated price control approach provided a number of clear benefits to offshore wind farm developers and the efficient operation of the transmission system as a whole, by:

- ensuring consistency with the regulatory arrangements onshore;
- providing a financial benefit to offshore developers by spreading the costs they face to connect to the onshore electricity system through annual transmission charges recovered over a number of years;
- sharing the responsibility for developing the offshore transmission network with the GBSO and TO; and
- providing additional environmental benefits, as it will help to ensure a co-ordinated approach to the development of the offshore network, which will reduce unnecessary duplication of transmission assets.

1.6. In the Government’s view this approach most clearly achieved its four energy policy goals and meant that the renewable energy targets and aspirations could be achieved.

1.7. Licensing of TOs is a key element of implementing this regime. The Government believes that the two preferred approaches proposed in this consultation document both contain the essential elements to enable the identified benefits above to be realised. They are:

- a system operator with responsibility for co-ordinating network development;
- a regulated price control approach to cost recovery; and
- spreading the risk of owning and operating offshore transmission assets.

1.8. In its response to the consultation document the Government concluded that the broad principles established by the New Electricity Trading Arrangements (NETA) and British Electricity Trading and Transmission Arrangements (BETTA) provided the appropriate regulatory precedents when considering what form of regulation should be introduced offshore. In reaching its conclusion it was noted that it was necessary to consider whether there were particular aspects of offshore transmission which meant that the general principles set out by NETA/BETTA should be departed from. Those differences include the radial nature of offshore connections, the fact that there are no consumers offshore, few existing networks or assets offshore and no incumbent network businesses. Under the BETTA model there are currently three TOs licensed to operate onshore. However, in view of the differences offshore the Government believes that there is scope to have competition for the new transmission licences or between new transmission licensees which is in line with the Government’s policy of encouraging competition in the provision of energy assets where appropriate.

1.9. In deciding on the scope of TO licences and the method for their allocation, the Government will seek to balance the costs and benefits of each option, which will
include assessing them against the following objectives (in no particular order of priority):

- contributing to 2010 target (speed of implementation and ability to provide certainty to industry);
- delivery of significant amounts of offshore wind (overall attractiveness of the regime to offshore developers and TOs);
- creation of an enduring regime that will enable connection of marine renewables beyond R1 and R2 offshore wind;
- ensuring reliability and security of supply;
- consistency with the onshore regime where possible, taking into account the differing nature of offshore conditions;
- minimising environmental impact through ability to co-ordinate construction of assets;
- keeping costs to consumers and other system users to a minimum;
- increasing competition where appropriate, which should lead to greater innovation;
- better regulation (keeping burdens of regulation on industry to a minimum); and
- complying with domestic and EU legislation.

1.10. The Government recognises that until a decision is taken on the detailed licensing regime, there remains unavoidable uncertainty for developers.
Appendix 3 – Offshore Transmission Expert Group (OTEG)

Summary of function and terms of reference

1.1. In developing the detail of this regulatory regime, DTI and Ofgem recognise the benefits of drawing upon the specialist expertise of the existing transmission licensees, offshore developers and other parties with experience relevant to offshore transmission activities.

1.2. Ofgem’s Scoping Document announced the setting up of OTEG. This is the forum in which Ofgem and DTI draw upon such specialist expertise and experience.

1.3. The purpose of OTEG is to provide advice to DTI and Ofgem on options and issues associated with the development of a regulatory regime for offshore electricity as outlined in the April 2006 Ofgem scoping document.

1.4. It is important to note that OTEG is a development group and not a decision making body. In particular, nothing presented or discussed at the group can have the effect of fettering the Authority’s or Minister’s discretion in relation to any decisions taken.

1.5. OTEG meets monthly (from May 2006). Every third meeting is open to other interested parties. Two sub-groups have been formed to look at the specific areas of the GB SQSS and price controls. These sub-groups report back to OTEG. A schedule of all meeting dates, agendas, and papers and the full terms of reference for OTEG are available on the DTI and Ofgem websites.

Membership

1.6. Membership of OTEG reflects the issues being addressed and therefore the expertise required. To this extent, new members, additional delegates from existing members or delegates from relevant subgroups are invited to join the group to advise it on specific areas as appropriate.

1.7. Whilst it is our view that for the group to be effective it needs a small representative membership, the other elements of the consultative process mean the chance to influence the shape of the new offshore regime is by no means restricted to the participants of the group.

1.8. Every third OTEG meeting is open to all interested parties, in order to increase transparency, to provide an opportunity for wider discussion, and to ensure maximum participation in the OTEG process.
1.9. Details of the members of OTEG, members of its subgroups and attendance at open meetings are available on the DTI and Ofgem websites.
Appendix 4 - OTEG subgroups

1.1. OTEG has established a number of subgroups to help inform its work. The GB SQSS subgroup has produced a recommendation which is being published for comment separately to this consultation. A price control subgroup has also been formed and its preliminary recommendations are outlined below. A number of subgroups will shortly be established to take forward other work streams.

**GB Security and Quality of Supply Standards (GB SQSS) subgroup**

1.2. The first subgroup established by OTEG was the GB SQSS subgroup. This was formed to review the existing technical rules governing onshore networks to see how they could be made to work offshore.

1.3. The subgroup was asked to complete a review of the current GB SQSS and consequently consider:

- whether it is appropriate to apply to the present onshore standard to offshore transmission networks;
- if amendments are needed to extend the GB SQSS offshore; and
- the range of options that exist for alternative security standards for offshore transmission networks.

1.4. In particular, the subgroup was tasked with the following specific objectives:

- to develop a framework of security rules that can be applied to offshore transmission networks that is compatible and consistent with the current onshore transmission network and market structure;
- to assess the relevance of the existing GB SQSS for offshore transmission networks in the first instance and, if required, to outline any amendments that are needed to extend the GB SQSS offshore; and
- to identify and develop a range of feasible alternative options for security standards relating to offshore transmission networks.

1.5. A full Terms of Reference for the subgroup is available on the Ofgem and DTI websites.

1.6. The subgroup has produced a recommendation to Ofgem and DTI. This will be published separately to this document and views invited on the recommendation. The Secretary of State has powers to designate changes to the GB SQSS. Should Ofgem and DTI accept the recommendation in full or in a modified version, any changes that the Secretary of State may propose to designate will be subject to consultation.
Price control subgroup

1.7. One of the work streams outlined in Ofgem's Scoping document was the design of the price controls offshore.

1.8. At the second meeting of OTEG on 1 June 2006 it was decided that there was merit in setting up an initial subgroup ('the price control subgroup') to undertake high level work to assist Ofgem/DTI in developing their thinking on the design of the price control. The price control work stream was seen as being a two stage process:

- firstly, an initial series of meetings (July – September) to consider the issues, high level principles and options of what an offshore price control might look like in terms of scope, form and duration; and
- secondly, after the broad regulatory framework has been decided next year, the group will reconvene to consider in more detail what the actual design of a price control might look like in terms of scope, form and duration. This group may also consider associated issues such as charging, interaction with other transmission price control reviews and the adoption of transmission assets.

1.9. The purpose of the group was to act on an advisory basis reporting to OTEG which would provide the central point of contact for all price control issues and will continue to be once the group reconvenes. Participation was limited to those prospective parties involved with the price control and the meetings were chaired by Ofgem.

1.10. The group met twice and its full report is available on the DTI and Ofgem websites.

1.11. Key issues identified by the paper include:

- the price control will need to build on the onshore regime as much as possible but should also recognise and address the differences offshore;
- there is a significant degree of cost uncertainty associated with the development of offshore networks;
- there is an absence of robust historical/benchmark data to enable development of incentive and efficiency mechanisms;
- an effective solution is needed that can be implemented as quickly as possible balanced with the need to develop an enduring regime; and
- there should be an appropriate balance between the interests of all stakeholders in terms of attracting the necessary investment while promoting cost efficiency.

1.12. These issues will require further examination once the Government and Ofgem's decision on the detailed TO licensing model has been announced. In early 2007, the sub-group will be reconvened to assess their recommendations against this model decision. They will also be invited to start work on the second stage of the price control development process. Detailed price control arrangements will be consulted on fully in 2007.
Interface between offshore TOs and onshore DNOs

1.13. Once the offshore transmission regime is in place an offshore generator may connect to an onshore network via an offshore transmission licensee. The offshore transmission licensee may connect either:

- directly to the onshore transmission network, or
- to an onshore distribution network.

1.14. There is increasing evidence that R2 windfarm developers are choosing to install 132kV offshore connections and are seeking agreements with onshore distribution licensees. Once the offshore transmission regime is in place, these will be transmission connections.

1.15. Preliminary work by industry identified three possible areas of work for future consideration in the interface between offshore transmission networks and onshore distribution networks. These areas would be common to both non-exclusive and exclusive options. They are:

- access, charging and compensation;
- connection processes; and
- integration of DNOs.

1.16. The arrangements for offshore electricity transmission will need to ensure that any specific issues that arise in these areas are addressed. Any work on these issues may be progressed through OTEG together with DTI and Ofgem.
Appendix 5 – Illustrative maps

1.1. The three maps below illustrate actual or potential connection arrangements for R1 and R2 generation. Colour key for generation sites: R1 projects (generating or under construction) = yellow, other R1 projects = blue, R2 projects = red.

Figure 1 Greater Wash region.

7 The wind farm site data is provided by The Crown Estate. The Crown Estate website www.thecrownestate.co.uk will reflect any updated information.
Figure 2 Thames Estuary region.
Figure 3 North West region.
Appendix 6 – The Authority’s powers and duties

The Authority

1.1. Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority ("the Authority"), the regulator of the gas and electricity industries in Great Britain. This Appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2. The Authority’s powers and duties are largely provided for in statute, principally the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Act 2004, as well as arising from directly effective European Community legislation. References to the Gas Act and the Electricity Act in this Appendix are to Part 1 of each of those Acts.8

1.3. Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This Appendix must be read accordingly9.

1.4. The Authority’s principal objective when carrying out certain of its functions under each of the Gas Act and the Electricity Act is to protect the interests of consumers, present and future, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas conveyed through pipes, and the generation, transmission, distribution or supply of electricity or the provision or use of electricity interconnectors.

1.5. The Authority must when carrying out those functions have regard to:

- The need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- The need to secure that all reasonable demands for electricity are met;
- The need to secure that licence holders are able to finance the activities which are the subject of obligations on them10; and

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8 entitled “Gas Supply” and “Electricity Supply” respectively.
9 However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.
10 under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Act in the case of Electricity Act functions.
The interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.11

1.6. Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

- Promote efficiency and economy on the part of those licensed under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems;
- Protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity;
- Contribute to the achievement of sustainable development; and
- Secure a diverse and viable long-term energy supply.

1.7. In carrying out the functions referred to, the Authority must also have regard, to:

- The effect on the environment of activities connected with the conveyance of gas through pipes or with the generation, transmission, distribution or supply of electricity;
- The principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and
- Certain statutory guidance on social and environmental matters issued by the Secretary of State.

1.8. The Authority has powers under the Competition Act to investigate suspected anti-competitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

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11 The Authority may have regard to other descriptions of consumers.
12 or persons authorised by exemptions to carry on any activity.
13 Council Regulation (EC) 1/2003
Appendix 7 – Implementing changes

Procedure for licence and code modifications

1.1. The offshore regime will be implemented through modifications to electricity licences, industry codes and standards.

1.2. Section 90 of the Energy Act 2004 (“the 2004 Act”) empowers the Secretary of State to modify the standard conditions of transmission and distribution licences (and make incidental, consequential or transitional changes to particular transmission or distribution licences) and associated codes, for purposes connected with offshore transmission or distribution. Section 91 of the 2004 Act contains a power for the Secretary of State to direct modifications in order to extend the co-ordination licence of the existing transmission licence holder offshore. These modifications can be to the co-ordination licence as well as consequential modifications to any other type of licence.

1.3. The Government’s decision on the high-level regulatory regime in March 2006 stated that the onshore electricity transmission regulatory arrangements would be, as far as practicable, extended offshore. The existing onshore electricity licences, standards and industry codes are therefore being reviewed and will be modified where necessary to extend the onshore regulatory arrangements offshore, whilst taking account of the particular features of the offshore environment.

1.4. We anticipate at this stage that modifications are likely to be required to:

- Standard conditions of the electricity transmission licence;
- Special conditions of existing electricity transmission licences (consequential changes);
- Conditions of other electricity licences (consequential changes);
- Grid Code;
- SO-TO Code (STC);
- Connection and Use of System Code (CUSC) and the CUSC Framework Agreement;
- Balancing and Settlement Code (BSC); and
- GB SQSS.

1.5. Changes may also be required to other industry documents not set out above.

1.6. The Government recognizes that the principles of transparency, procedural clarity, and the ability to influence decisions ex-ante are integral to these codes and standards. To this end, the Government has committed to:

- publish this update, setting out clear procedures and timings for any modifications;
- publish and consult on the range of modifications proposed and on the legal texts of the modifications proposed, in advance of any decision;
invite industry and industry panels to participate in the development of the modification proposals, through participation in OTEG, its subgroups and open meetings, and through written consultation; and

- publish a full explanation of the reasoning for any proposed modifications.

Current proposed timetable for modifications

May 2006 - Q2 2007 - Development of proposed modifications to codes, licences, standards through OTEG sub-groups and discussion with industry and the relevant panels.

Q2 2007 - DTI/Ofgem publish initial legal framework, setting out proposed range of licence and code modifications and any consequential modifications & inviting comments.

Q3 2007 - DTI/Ofgem publish draft legal texts of all modifications, inviting comments.

Q4 2007 - Final 12-week consultation on the full regulatory model and final legal texts.

Q2 2008 - Energy Act 2004 powers are commenced, SoS uses powers under sections 90 and 91 to designate modifications.

1.7. Once the offshore transmission regulatory regime has been implemented it will be for the respective industry panels and Ofgem to administer and if necessary modify or approve modifications to these arrangements so that they remain fit for purpose.
## Appendix 8 - Glossary

### A

**Authority**
Gas and Electricity Markets Authority

### B

**BETTA**
British Electricity Trading and Transmission Arrangements

**BSC**
Balancing and Settlement Code

### C

**CDGSEE**
Centre for Distributed Generation and Sustainable Electrical Energy

**CUSC**
Connection and Use of System Code

### D

**DTI**
Department of Trade and Industry

### G

**GBSO**
Great Britain System Operator

**GB SQSS**
Great Britain Security and Quality of Supply Standard

GW
Gigawatt

I
IDNO
Independent Distribution Network Operator

IGT
Independent Gas Transporter

K
kV
Kilovolt

M
MW
Megawatt

N
NETA
New Electricity Trading Arrangements

NGET
National Grid Electricity Transmission plc

O
Ofgem
Office of Gas and Electricity Markets
OTEG
Offshore Transmission Expert Group

R
R1
Round 1

R2
Round 2

RAV
Regulatory Asset Value

RIA
Regulatory Impact Assessment

S
STC
System operator Transmission owner Code

T
TO
Transmission Owner

TOCO
Transmission Owner Connection Offer
Appendix 9 - Feedback questionnaire

1.1. Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report’s conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments?

1.2. Please send your comments to:

Andrew MacFaul
Consultation Co-ordinator
Ofgem
9 Millbank
London
SW1P 3GE
andrew.macfaul@ofgem.gov.uk
Appendix 10 - Government consultation code of practice criteria

1. Consult widely throughout the process, allowing a minimum of 12 weeks for written consultation at least once during the development of the policy.
2. Be clear about what your proposals are, who may be affected, what questions are being asked and the timescale for responses.
3. Ensure that your consultation is clear, concise and widely accessible.
4. Give feedback regarding the responses received and how the consultation process influenced the policy.
5. Monitor your department’s effectiveness at consultation, including through the use of a designated consultation co-ordinator.
6. Ensure your consultation follows better regulation best practice, including carrying out a Regulatory Impact Assessment if appropriate.

1.1. The complete code is available on the Cabinet Office’s website (http://www.cabinetoffice.gov.uk/regulation/consultation/index.asp).

Comments or complaints

1.2. If you wish to comment on the conduct of this consultation or make a complaint about the way this consultation has been conducted, please write to:

Mary Smeeth
Better Regulation Team
Department of Trade and Industry
1 Victoria Street
London, SW1H 0ET
Telephone Mary on 020 7215 2146
or email to: mary.smeeth@dti.gsi.gov.uk

NB: This consultation will run in a reduced timeframe of 6 weeks, rather than the 12 weeks set out in the consultation criteria below. This is an interim consultation on a set of narrow proposals of a technical nature. A limited number of companies are affected and have been involved in developing these proposals through an industry experts group and open workshops. A preliminary 12-week consultation was held in 2005 and a full 12-week consultation will take place on the final regulatory regime before it is introduced.