

Generic Preliminary Information Memorandum

February 2014



EXECUTIVE SUMMARY

Investment opportunity

Through the process for Tender Round 3 (**TR3**), interested parties have the opportunity to become the Offshore Transmission Owner (**OFTO**) for offshore transmission assets currently being developed and constructed by offshore wind developers. The assets will be acquired at a transfer value determined by Ofgem. Following transfer of ownership, the OFTO will own and manage the transmission assets (including the cables and associated connection equipment) between the offshore point of connection with the generator and the point of connection with the onshore network.

During the process a prospective OFTO will bid a 20 year revenue stream calculated on its required return on investment on the transfer value and the ongoing cost of financing, operating and managing the asset. We are introducing the option for prospective OFTOs to bid the proportion of their revenue to be indexed to inflation. At the end of the 20-year revenue stream period, Ofgem will determine the most appropriate course of action, taking into account the ongoing demand for the asset. The options would include: (1) decommissioning the assets and revoking the OFTO's licence; (2) extending the revenue stream for a limited period to cover appropriate costs; (3) running a tender to appoint a new OFTO and revoking the existing OFTO's licence.

Two projects, with an aggregate generating capacity of up to 425MW have qualified for TR3. These are shown in Figure 1 below.

Figure 1: Location map of projects for TR3



Investment Highlights

The OFTO regime continues to attract significant investor interest right across the capital structure with substantial investor appetite demonstrated from capital markets, commercial banks and equity sponsors. The recent Greater Gabbard bond launch saw bids in excess of £800m for a bond sized at £305m, whilst commercial bank support in Tender Round 1 (**TR1**) totalled £2.7bn for assets with a total transfer value of £1.1bn. Equity interest is strong with seven different equity investors holding OFTO stakes to date and several others having participated in TR1 and Tender Round 2 (**TR2**). Key investment highlights in respect of the assets and regime include the following:

- Strong political and regulatory support for UK offshore transmission
- Lenders now familiar with the regulatory regime and tender process
- Robust and transparent competitive process
- Construction risk for projects in generator build taken by developers

- Regulated revenue stream for a 20 year period
- Creditworthiness of revenue stream counterparty (NETSO)
- Upside potential
- Limited operational risk
- Limited interface risk

Tender Process

The tender process has been developed to be robust, fair and transparent to developers and bidders. The process has been demonstrated and established through previous Tender Rounds. The tender process will consist of two stages through to the selection of the preferred bidder. This includes an Enhanced Pre-Qualification (**EPQ**) stage, which combines the Pre-Qualification (**PQ**) and Qualification to Tender (**QTT**) stages used in previous Tender Rounds.

INTRODUCTION

This generic Preliminary Information Memorandum (**PIM**) outlines an opportunity for investors to acquire offshore transmission assets under TR3. As in previous Tender Rounds, OFTOs determined in TR3 will receive a 20 year revenue stream in return for purchasing the transmission assets from the offshore wind generator and providing transmission services in accordance with the requirements of the Offshore Transmission Licences (**OFTO Licences**). Importantly, the revenue stream will be dependent upon transmission asset availability, rather than actual utilisation or wind farm availability.

This generic PIM covers the key aspects of the tender process, regulatory regime and investment opportunities, including:

- Background to the opportunity
- Overview of the opportunity
- Investment highlights
- Overview of the regulatory regime
- Overview of the tender process
- Provisional timelines

In order to provide potential bidders with sufficient information about the opportunities available, an additional, project-specific PIM will be available for each of the projects in TR3. The project specific PIMs should be read in conjunction with the overview and generic information provided by this document.

Context

With the government setting an ambitious target that 15 per cent of the UK's energy needs to be met from renewable sources by 2020, a dynamic approach was needed to deliver the substantial investment required in energy infrastructure. In the case of offshore wind, in June 2009 the Department of Energy and Climate Change (**DECC**), together with Ofgem¹, established the competitive regulatory regime for offshore transmission. Under the regime Ofgem run the competitive tender process to select and licence OFTOs.

From the outset the offshore transmission regime has sought to encourage innovation and to attract new sources of technical expertise and finance, whilst ensuring that grid connections are delivered efficiently and effectively. The competitive regime was designed to be delivered in two parts, a transitional and an enduring regime. Once we have granted OFTO Licences for all projects in the transitional tender rounds it will bring total investment in offshore transmission to approximately £2.5bn. The enduring regime is for projects qualifying after 31 March 2012.

The TR3 projects are being built by offshore generators (under the 'generator build' model), but the enduring regime also gives generators the choice of an OFTO designing and constructing the transmission assets, under the OFTO build model for future tender rounds. The enduring regime has also introduced process efficiencies (as

¹ Ofgem is the Office of Gas and Electricity Markets, which supports the Gas and Electricity Markets Authority (the **Authority**), the independent regulator of the gas and electricity markets in Great Britain.

set out under the 'Tender Process' section) and other mechanisms, such as a refinancing gain share and biddable indexation, which have been designed to deliver savings to consumers. Further information on these mechanisms can be found on page 7.

The investment opportunity in the enduring regime is expected to be significantly larger and is likely to deliver billions of pounds of investment in offshore transmission over the next decade. The enduring regime is also operating in the context of the proposed development of increasingly complex, integrated and coordinated offshore grid networks in the UK and the European Union.

BACKGROUND TO THE OPPORTUNITY

A Binding EU Renewable Energy Target

Under the EU Renewables Directive (2009/28/EC), which came into force in May 2009, the UK government is committed to sourcing 15 per cent of all energy from renewable sources by 2020. Given the relative maturity of renewable technologies and government policy in electricity generation compared with other sectors (i.e. transport and renewable heat), the government aims to generate over 30 per cent of the country's electricity from renewables by 2020, exceeding the legally binding target set by the EU.

Commitment to Offshore Wind

The UK is already a world leader in offshore wind power with 3.6 GW of offshore wind capacity installed and operating. A key part in achieving this commitment is the government's ongoing support for offshore wind generation, with government projections expecting a total of 8-15GW of capacity installed by 2020. In their June 2012 report on the offshore transmission regime, the National Audit Office estimated that approximately £8bn of investment will be needed by 2020 to provide connections for offshore wind farms at all stages of development, from planning to operation.

To deliver this deployment, the government has created a subsidy mechanism to provide financial support to offshore wind generators. The Renewables Obligation (RO) is the government's prime incentive mechanism for deploying large-scale renewable generation, available for new generation until 2017, and currently due to end in March 2037. Further guidance on the RO is available online².

New generation that comes online between 2014 and 2017 will be able to opt for either the Renewable Obligation mechanism or Contracts for Difference (CfD). Under the Electricity Market Reform (EMR) the subsidy regime for renewable energy is shifting from the RO to CfDs, whereby generators of renewable energy are guaranteed a fixed "strike price" for the energy produced. CfDs are intended to provide long-term revenue stabilisation to low-carbon generators, allowing investment to come forward at a lower cost of capital and therefore at a lower cost to consumers. Further information on how CfDs will work under the EMR is available online³.

Regulating Offshore Transmission

The offshore transmission regime has been developed and refined by Ofgem and government with stakeholder input over the past seven years. The consultation process for the design of the regulatory regime culminated in a final statement published in June 2009⁴.

Competitive Tendering

One of the key decisions made by the government was that OFTO licences would be granted by way of a competitive tender process, with the successful bidder becoming the OFTO. The government also decided that Ofgem would run these tenders.

The regime has been designed to:

- deliver transmission infrastructure to connect offshore generation;
- provide certainty and best value to consumers through the competitive process; and

² <https://www.gov.uk/government/policies/increasing-the-use-of-low-carbon-technologies/supporting-pages/offshore-wind>

³ <https://www.gov.uk/government/publications/electricity-market-reform-contracts-for-difference>

⁴ www.ofgem.gov.uk/Networks/offtrans/pdc/cdr/cons2009/Documents1/Main.pdf

- attract new entrants to the sector.

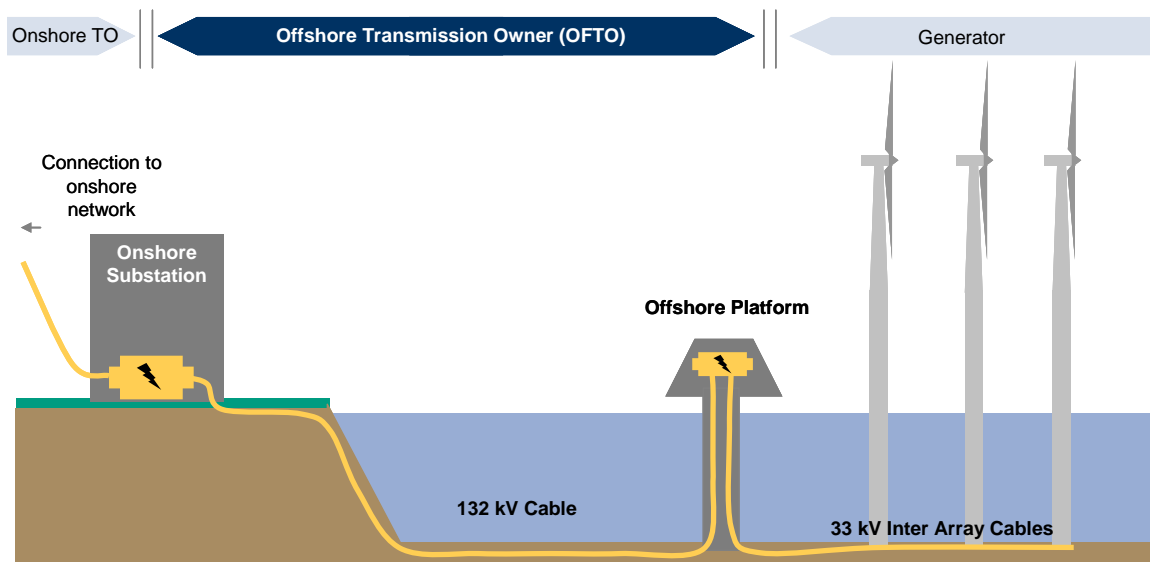
OFTO licences have been granted for nine of the projects in the first two Tender Rounds. Preferred bidders for a further three projects have been announced, with the preferred bidder announcement for the final project in TR2 expected late in 2014. For further details on the regulatory framework see 'Overview of the Regulatory Regime' on page 8.

OVERVIEW OF THE OPPORTUNITY

The Transmission Assets

The OFTO will own the transmission assets between the offshore point of connection with the generator and the point of connection with the onshore transmission operator. This will include the cables and associated connection equipment. The diagram at Figure 2 shows what the transmission assets to be transferred to the OFTO are likely to include. Please see the project specific PIMs for details of the individual assets and expected ownership boundaries.

Figure 2: Diagram of the Generic Ownership Breakdown



Qualifying Projects for TR3

To meet the qualifying project requirements for TR3, a developer must demonstrate that it has:

- entered into a bilateral connection agreement with NGET (in its capacity as the NETSO);
- entered into an agreement for lease of the seabed with The Crown Estate Commissioners;
- obtained all necessary consents and property rights for the transmission assets to be constructed and maintained and ensured that any such consents or property rights which are capable of being assignable to the OFTO are so assignable;
- completed construction of, or entered into all necessary contracts for the construction of the transmission assets and ensured that any such contracts are assignable to the OFTO; and
- secured financing to construct the transmission assets.

Table 1 lists the qualifying projects which will be tendered in TR3. The initial transfer values are based on information provided by developers. The indicative transfer value is expected to be determined at the ITT stage of the tender process.

Table 1: Qualifying Projects for TR3

Project	Developer	Size (MW)	Initial Transfer Value
Westermost Rough	WMR Limited (DONG Energy)	205	£199.5m
Humber Gateway	E.On Climate/Renewables UK	220	£194.7m
Total		425	£394.2m

The investment opportunity offers those parties interested in bidding, either solely or in a consortium, the chance to become an OFTO for one or both of the projects in TR3. OFTO licences will be granted based on a competitive tender exercise for each project, described further in the ‘Overview of the Tender Process’ on page 10.

Cost Assessment

Under the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013 (the **Tender Regulations**)⁵, Ofgem determines the transfer value of the transmission assets to be transferred to the OFTO. An overview of the cost assessment process is set out below. For further detail Ofgem has produced cost assessment guidance⁶.

For the purposes of commencing TR3, developers have provided initial transfer values for their qualifying projects as detailed in the table above. Ofgem will conduct a cost assessment exercise for each qualifying project in TR3 ahead of the ITT stage in order to provide an indicative transfer value. This will be based on Ofgem’s estimate of the economic and efficient costs which ought to be incurred in developing and constructing the relevant transmission assets. Bidders will be asked to incorporate the indicative transfer value into their ITT revenue stream bids as the transfer price for the transmission assets. Once construction of the transmission assets is complete and they are available for use, Ofgem will conduct its final cost assessment to determine the economic and efficient costs which ought to have been incurred in developing and constructing the transmission assets. This assessment will form the basis of Ofgem’s determination of the final transfer value of the transmission assets. The revenue stream bid by the successful OFTO will be adjusted to take into account any changes between the indicative and final transfer values.

Transfer agreement

Guidance on the development and content of transfer agreements for transmission assets tendered under TR3 will be published on Ofgem’s website. Developers will be working to produce a project specific transfer agreement based on this guidance. Further details can be found in the guidance, and the EPQ and ITT documents.

The Licence and Revenue Stream

The successful OFTO will be awarded an OFTO licence entitling it to a revenue stream for a default 20 year period during which there is no automatic periodic price review. The revenue stream will be paid to the OFTO by National Grid Electricity Transmission (NGET) in its capacity as the National Electricity Transmission System Operator (NETSO). In the event that the wind farm ceases to operate, NGET’s obligation to pay the OFTO will continue.

The revenue stream received by the OFTO will be largely dependent on the revenue stream bid during the ITT stage of the tender exercise. However there may be adjustments to the revenue stream during the ongoing operation of the transmission assets including under the circumstances outlined below.

Availability Incentive

The OFTO will be subject to a capacity weighted availability incentive which will allow it to gain bonuses or incur penalties based on asset availability. Importantly, the revenue stream will not be dependent on asset utilisation. The OFTO can gain up to 5 per cent of base revenue annually if availability is above the target of 98 per cent. The OFTO can incur a penalty of up to 10 per cent base revenue in any one year if availability drops below 98 per

⁵ http://www.legislation.gov.uk/uksi/2013/175/pdfs/uksi_20130175_en.pdf

⁶ <https://www.ofgem.gov.uk/ofgem-publications/51530/cost-assessment-guidance.pdf>

cent. The OFTO can accrue penalties up to a maximum of 50 per cent of a year's revenue but these penalties are paid over a period of up to five years. During that time additional penalties can be incurred for future payment. However the maximum annual penalty for unavailability remains at 10 per cent of revenue throughout the 20 year incentive period.

TR3 introduces a capacity weighting mechanism to the availability incentive. This weights larger capacity outages more heavily than smaller capacity outages. This is intended to incentivise OFTOs to take smaller capacity outages where economic to do so.

Additional Capacity

An OFTO will be entitled to additional revenue for investment in increased transmission capacity (if needed) provided the additional investment does not exceed 20 per cent of the initial capital cost.

Pass-through costs

An OFTO may pass-through certain costs, including costs incurred as a result of changes to decommissioning legislation, network rates, force majeure events and Ofgem tender fees.

Refinancing Gain Share

A type of pass through cost introduced for TR3, the refinancing gain share will require OFTOs to share 50 per cent of any refinancing gain, except where the refinancing was undertaken to remove the OFTO from financial distress. Further information on the refinancing gain share can be found in the 2013 statement on future generator build tenders⁷.

Biddable Indexation

The OFTO's revenue will be subject to indexation to the Retail Prices Index (**RPI**). For TR3 we have introduced 'biddable indexation' whereby bidders can choose the proportion of their revenue stream they would like indexed to RPI.

End of Revenue Term

In Year 16 of the revenue stream, the OFTO is required to set aside a financial security equivalent to 50 per cent of a year's base revenue. This security is intended to cover any penalties incurred under the availability incentive which have not been paid through the normal revenue adjustment method.

At the end of the 20-year revenue stream period, Ofgem will determine the most appropriate course of action, taking into account the developer's ongoing demand for the asset and its statutory duties at the time. These options would include:

- In the event that the offshore transmission assets were no longer required, the OFTO's licence would be revoked once decommissioning of the assets had been completed.
- In the event that the offshore transmission assets were still required, either:
 - The OFTO's licence could be amended to extend the revenue stream for a limited period of time to cover appropriate costs that will be determined at the time;
 - Or Ofgem could run a tender exercise to appoint a new OFTO and then revoke the licence of the existing OFTO.

OFTO of Last Resort

In certain circumstances, such as the unlikely event that an OFTO business fails, there is a risk of the generator becoming stranded and unable to export electricity to the onshore transmission network. To mitigate this risk, we introduced the OFTO of Last Resort mechanism to the transmission licence (standard conditions B18 and E21), which allows us to appoint an existing OFTO or TO as the OFTO for another project outside of a competitive tender process. In the event that an OFTO business was in difficulty, we would first proactively engage with the licensee to try and resolve any problems and would only expect to use the OFTO of Last Resort process once

⁷ <https://www.ofgem.gov.uk/ofgem-publications/75428/offshore-electricity-transmission-statement-future-generator-build-tenders.pdf>

other options for ensuring ongoing transmission have been exhausted. Further guidance on the OFTO of Last Resort mechanism can be found on our website⁸.

INVESTMENT HIGHLIGHTS

Strong political and regulatory support for UK offshore transmission

As part of the government's commitment to renewable energy and, in particular, the very significant ongoing expansion of the UK's offshore wind industry, the independent ownership and operation of offshore transmission in the UK still enjoys strong political, regulatory and stakeholder support.

Lenders now familiar with offshore transmission regulatory regime and tender process

Through experience gained during Tender Rounds 1 and 2, supporting lenders have developed their understanding of OFTO assets, the regulatory regime and tender process. Significant bank commitments were provided at the ITT stage as part of the £4 billion of commitments. This demonstrates the high level of appetite for OFTO financing from debt providers.

Robust and transparent competitive process

The tender process has been developed in accordance with best practice principles. The process is also designed to provide a level playing field and to encourage the widest possible participation from potential investors, including new entrants to the GB electricity transmission market.

Construction risk for projects under generator build taken by Developers

For TR3, we are running the tenders at a later point in the [windfarm](#) development process and we also intend to grant the OFTO licence after completion of construction of the transmission assets. These measures are expected to give the OFTO some protection against delays and other associated construction risks (although there may be [some](#) ongoing commissioning activities in relation to the transmission and generation assets after transfer). Where possible, Ofgem expects the benefit of construction warranties in relation to the transmission assets to be passed to the OFTO.

Regulated revenue stream for a 20 year period

The 20-year revenue stream bid by the prospective OFTO will be incorporated into its OFTO licence, and will be fixed, subject to agreed adjustment mechanisms set out in the licence and summarised above.

Creditworthiness of revenue stream counterparty

The OFTO's revenue stream will be paid by NGET as NETSO, which is the regulated entity responsible for the operation of the transmission system in the UK. Its cost base (including payments it will be required to make to OFTOs) is eligible to be passed through to system users and ultimately consumers. NGET is rated A- by Standard & Poor's, A3 by Moody's and A by Fitch Ratings. In keeping with its licence obligations, NGET will always have to meet specified credit rating requirements. Furthermore, when carrying out its functions, the Authority must have regard to the need to ensure that licence holders are able to finance the activities which are the subject of statutory obligations placed upon them.

Upside potential

In addition to potential cost savings throughout the life cycle of the assets, OFTOs could have the opportunity to earn additional revenues for better than expected operational performance, increased capacity and certain non-regulated services.

Limited operational risk

Operational risk associated with electricity transmission is typically low, and transmission assets typically incur relatively low ongoing operation and maintenance costs compared to their capital investment. An OFTO's revenue stream will also not be dependent on the operational performance of the wind farm that it serves.

⁸ <https://www.ofgem.gov.uk/publications-and-updates/guidance-offshore-transmission-owner-ofto-last-resort-mechanism-0>

OVERVIEW OF THE REGULATORY REGIME

In the electricity industry, the regulatory framework is set out in a number of instruments, including primary legislation, secondary legislation, licences granted by Ofgem, industry codes and technical standards. It is expected that some bidders may not have previous experience of the Great Britain electricity market. This section and the Appendix give bidders an overview of the regulatory and contractual framework.

Figure 3 summarises the current regulatory framework governing electricity transmission in the UK.

Figure 4 summarises the key industry codes which constitute the contractual framework by which owners, operators and users of the various parts of the electricity network in Great Britain are bound and interact with each other.

Figure 5 outlines the key parties and commercial structure.

Figure 3: Current Regulatory Framework

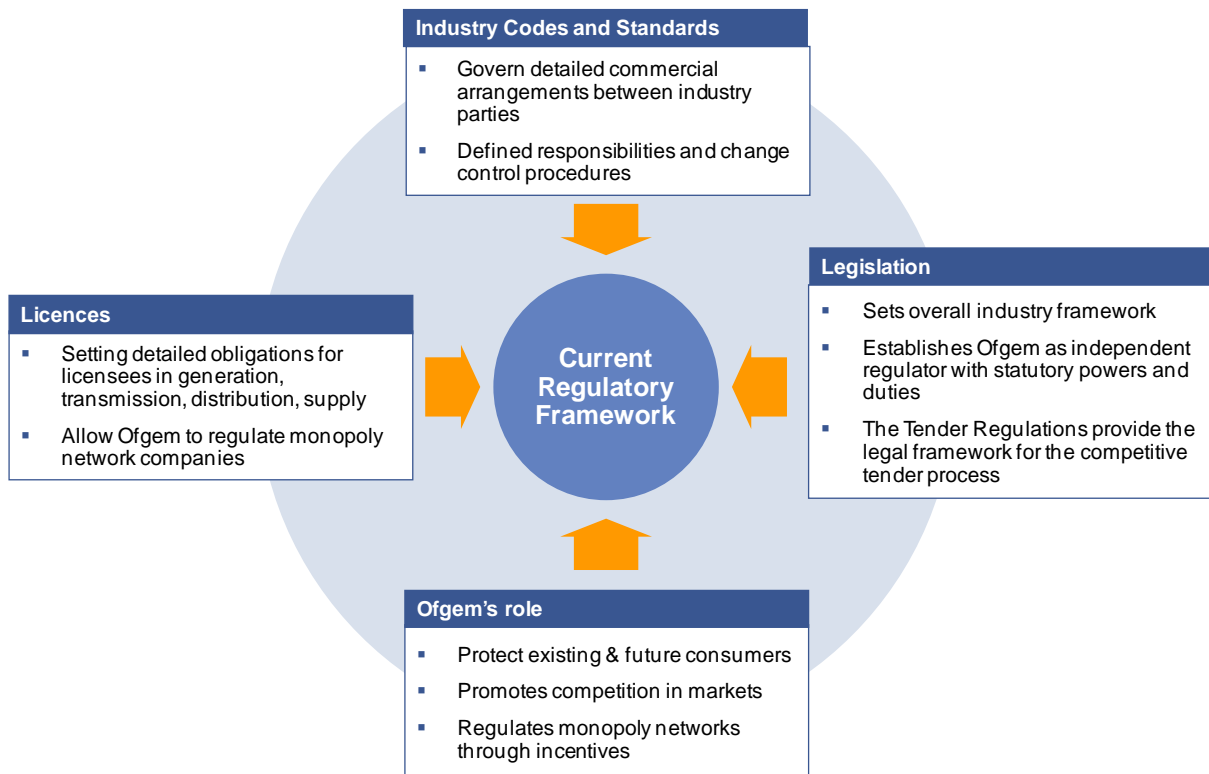
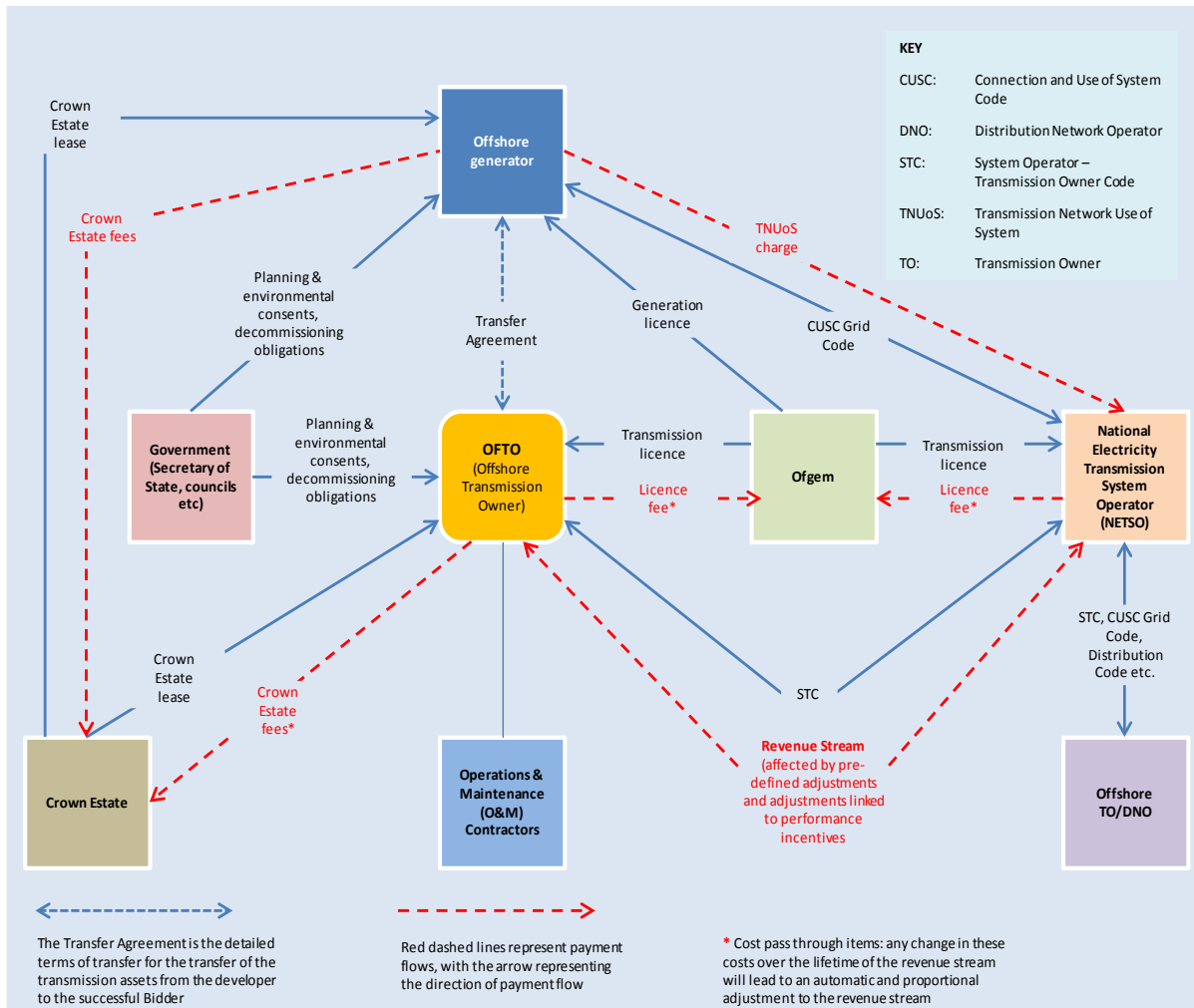


Figure 4: Key Industry Codes

nationalgrid STC	nationalgrid CUSC	nationalgrid Grid Codes	DCode Distribution Codes
<p>The STC Code defines the high-level relationship between the GB System Operator and the Transmission Owners. It is supported by a number of procedures (SOTO Code Procedures or STCPs) that set out in greater detail the roles, responsibilities, obligations and rights etc of the NETSO and the TOs.</p>	<p>The Connection and Use of System Code (CUSC), which constitutes the contractual framework for connection to, and use of, National Grid's high voltage transmission system.</p>	<p>The Grid Code is required to cover all material technical aspects relating to connections to and the operation and use of the transmission system or, in as far as relevant to the operation and use of the transmission system, the operation of the electric lines and electrical plant connected to it or to a distribution system.</p> <p>The Grid Code also specifies data which system users are obliged to provide to National Grid for use in the planning and operation of the transmission system</p>	<p>Licensed electricity distribution businesses, or Distribution Network Operators (DNOs), are obliged under Condition 21 of their licences to maintain a Distribution Code detailing the technical parameters and considerations relating to connexion to, and use of, their electrical networks.</p>

Figure 5: Key Parties and Outline Commercial Structure

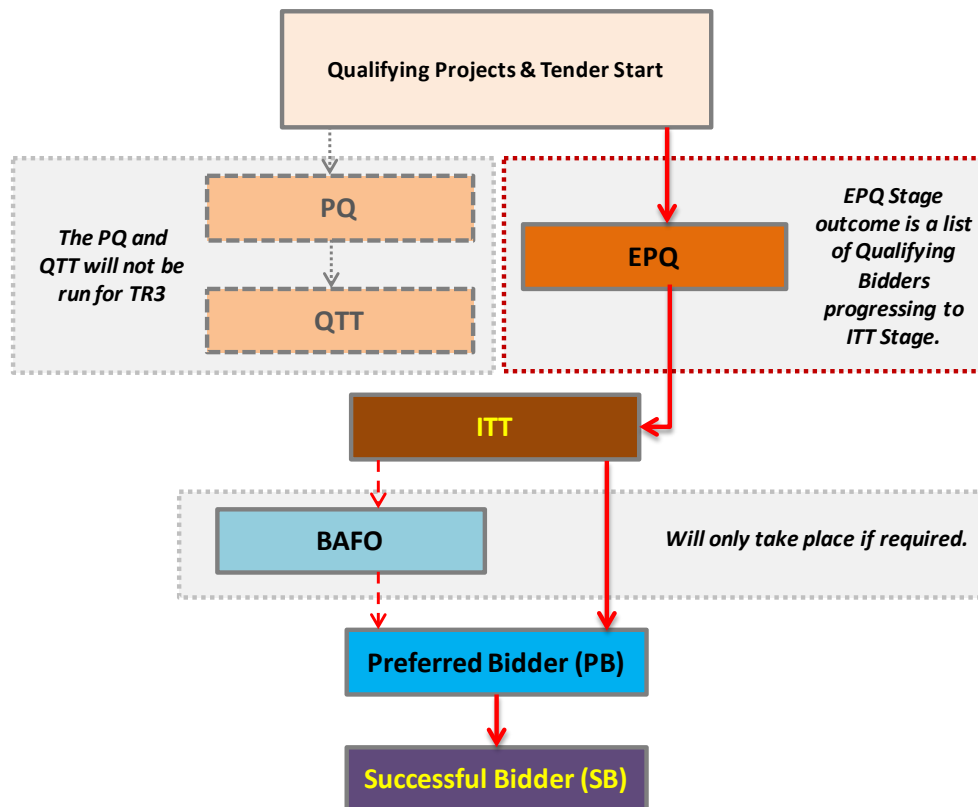


The Tender Regulations set out the tender process framework under the Enduring Regime for the granting of an OFTO Licence, including how Ofgem will run a competitive tender process for Generator Build and OFTO Build projects. The Tender Regulations came into force on 22 February 2013⁹.

OVERVIEW OF THE TENDER PROCESS

The tender process has been developed to be robust, fair and transparent to developers and bidders. The process has been demonstrated and established through previous Tender Rounds. At the early stages of the process limited resources are required by bidders to participate. TR3 tender exercises will have two stages through to the selection of the preferred bidder. Figure 6 provides an outline of the tender process:

Figure 6: The Stages of the Tender Process for TR3



1. EPQ

Each completed EPQ submission will be evaluated in accordance with the evaluation criteria and process set out in the EPQ document. The EPQ Stage will combine the PQ and the QTT stages that were undertaken for Tender Rounds 1 and 2. Each qualifying project will be subject to a separate tender exercise but the respective EPQ stages will be run together.

The outcome of this stage will be a shortlist of qualifying bidders for each qualifying project who will be invited to participate in the ITT Stage for the relevant qualifying project.

⁹ The Tender Regulations revoke, subject to Regulation 2, the Electricity (Competitive Tenders for Offshore Transmission Licenses) Regulations 2010.

2. Invitation to Tender

The main purpose of the ITT Stage is to identify a preferred bidder for each project. Each qualifying project will be subject to a separate tender exercise. We currently expect that the ITT Stage will be run separately for each project, subject to individual project timelines,

At the ITT Stage shortlisted qualifying bidders will be granted access to the data room for each qualifying project, which will be populated predominantly with information provided by the developer. The data room will include sufficient information relating to the relevant qualifying project to enable bidders to make an informed investment decision. This will include information relating to contracts, leases, warranties, assets and liabilities, investment and operating plans, sea-bed surveys and evidence of compliance with all applicable legislation and regulations.

The stage will involve an evaluation of a tender submitted by each shortlisted qualifying bidder against a set of criteria which will be published at the start of the stage. This will include an evaluation of the financial and non-financial deliverability of each qualifying bidder's submission, including the tender revenue stream submitted by each qualifying bidder to compensate it for the cost of acquisition, financing and operation of the transmission assets over the 20-year revenue stream.

The outcome of this stage will either be selection of a preferred bidder (and possibly also a reserve bidder) for each qualifying project, or a decision to run a BAFO stage.

3. Best and Final Offer (optional)

The purpose of the optional BAFO Stage is to determine a preferred bidder for a qualifying project. A BAFO Stage will only be run should the criteria set out in the ITT document be met. Where a BAFO Stage is run for a tender exercise, a small number of qualifying bidders will be asked to submit information, including any updated tender revenue stream bid, which will be evaluated against a set of criteria which will be published at the start of the stage.

The outcome of this stage will be selection of a preferred bidder (and possibly also a reserve bidder) for each relevant qualifying project.

4. Preferred Bidder and OFTO licence grant

After the preferred bidder is selected, the preferred bidder and the relevant developer will work together to finalise arrangements for transfer of the transmission assets from the developer to the licenced OFTO. It is expected that most of the issues arising during this stage will be resolved on a commercial basis between the preferred bidder, the developer and any other relevant parties. Once arrangements are finalised there will be a 28 day public consultation on the proposed modifications to the OFTO licence in order to incorporate the OFTO-specific provisions in the licence. Following the consultation the OFTO licence can be granted. Financial close usually occurs the day after the OFTO licence is granted and asset transfer takes place on the same day or shortly after financial close. Licence grant and asset transfer will not occur until construction has been completed.¹⁰

PROVISIONAL TIMELINES

Below are provisional timelines for TR3 tender exercises. Ofgem may amend the timelines at its discretion and at any time during TR3, subject to individual project circumstances.

March 2014	Tender launch and release of EPQ documents, including PIMs
May 2014	EPQ submission deadline
July 2014	Shortlist of qualifying bidders
August 2014	ITT launch for Westernmost Rough

¹⁰ <https://www.ofgem.gov.uk/ofgem-publications/86337/20140226tr3guidenoteprocstoclose.pdf>

November 2014	ITT launch for Humber Gateway
February 2015	Preferred bidder announcement for Westermost Rough
May 2015	Preferred bidder announcement for Humber Gateway

PROCESS AND CONTACT PERSONS

Documentation for the EPQ stage and other relevant information, including all guidance and related documents, may be accessed via the Ofgem website¹¹. Project specific information, such as Confidentiality Agreements, Information Memoranda and draft Transfer Agreements are only available on the Offshore eTendering Portal (the Portal). Access to confidential information will be made available once prospective bidders have provided a signed Confidentiality Agreement and Conflicts of Interest Declaration. Guidance is available on our website for how to do this.

The information in this document is provided for information purposes only. All enquiries or communications, including requests for additional information, should be sent to tendercoordinator@ofgem.gov.uk.

¹¹<http://www.ofgem.gov.uk/Networks/offtrans/Pages/Offshoretransmission.aspx>

APPENDIX 1 – OVERVIEW OF UK LEGISLATION SETTING OUT REGULATORY FRAMEWORK FOR ELECTRICITY TRANSMISSION

Electricity Act 1989 (as amended)

The Electricity Act 1989 is the primary legislation governing the electricity industry in Great Britain. It:

- 1) sets out the Authority's principal objectives;
- 2) outlines the way in which the Authority must carry out its functions;
- 3) provides for the granting of licences to transmit, distribute, generate and supply electricity in Great Britain;
- 4) provides for the modification of such licences; and
- 5) provides for the granting of offshore transmission licences by way of competitive tender run by the Authority.

Energy Act 2004

The Energy Act 2004 amended the Electricity Act 1989 to facilitate the introduction of the offshore electricity transmission regime, including the extension of the prohibition on the transmission of electricity to the offshore environment. It also enabled the Secretary of State to designate changes to relevant industry codes and the standard licence conditions of the transmission licence to accommodate offshore electricity transmission. The Energy Act 2004 also extended the onshore system operator role offshore.

The Energy Act 2004 applies a special insolvency regime, known as an Energy Administration, to entities which operate or own essential energy infrastructure. The objective of an Energy Administration is to secure that essential energy infrastructure (including electricity transmission systems) is, and continues to be, maintained and developed as an economical system in the event of financial failure. Energy Administration would apply to OFTOs. The details of Energy Administration are set out in Part 3 Chapter 3 of the Energy Act 2004.

Energy Act 2008

The Energy Act 2008 amended the Electricity Act 1989 to provide further detail on the competitive tender process for the granting of OFTO Licences. This included the ability for the Authority to make a property transfer scheme if commercial negotiations for the transfer of assets between parties fail, in order to ensure that property is transferred from the developer of offshore wind generation assets to the OFTO, and also the ability for the Authority to recover its costs for running competitive tenders.

14

Energy Act 2013

The Energy Act 2013 amended the Electricity Act 1989 to allow generators constructing offshore transmission assets to commission those assets without being in breach of the prohibition on transmission without a licence. The generator commissioning clause¹² enables generators to convey electricity for a defined period in certain circumstances by providing an exception to the prohibition on transmission without a licence during generator commissioning activities and during the period leading to OFTO Licence grant, while still ensuring that generators transfer the transmission assets to the OFTO in a timely manner.

Licences

The Authority may grant licences in relation to the following activities in Great Britain under the Electricity Act 1989:

- 1) participation in the transmission of electricity;
- 2) distribution of electricity;
- 3) generation of electricity;
- 4) supply of electricity; and
- 5) participation in the operation of an electricity interconnector

Licences issued by the Authority are available on the Authority's electronic public register¹³ and contain:

- A. standard conditions applicable to all licensees of the same class;
- B. special conditions or amended standard conditions relevant to a single licensee; and
- C. general terms as to duration and revocation of the licence.

¹² <https://www.ofgem.gov.uk/publications-and-updates/consultation-implementation-generator-commissioning-clause>

¹³ <http://epr.ofgem.gov.uk/>

Tender Regulations

The Tender Regulations were made on 30 January 2013 and came into force on 22 February 2013. They provide the legal framework for the competitive tender process¹⁴. The Tender Regulations set out Ofgem's main role under in relation to TR3, which is to:

- determine the projects that qualify for the tender round;
- run competitive tender exercises in order to determine the entities to whom OFTO Licences will be granted for each qualifying project (as summarised in this document and as detailed in the Tender Rules for TR3);
- calculate the costs incurred in developing and constructing transmission assets; and
- publish rules for the Tender Round and publish a methodology for recovering Ofgem's costs of running the Tender Round.

Industry Codes and Technical Standards

In addition to the legislation and licences, a large number of the regulatory requirements for electricity transmission are contained in detailed industry codes and technical standards. These are collectively known as the standard framework documents. There are provisions contained in the relevant licences which oblige licence holders to comply with the requirements of these documents.

Each of the industry codes has a separate defined process for:

- 1) initiating a review of code obligations;
- 2) proposing changes to code obligations;
- 3) developing a code change proposal; and
- 4) requesting a decision on a change proposal.

Bidders are required to satisfy themselves of the requirements of each relevant industry code and technical standard. However, for assistance, below is a short description of each. This summary should not be used as a substitute for an understanding of and familiarity with the industry codes and standards.

The Connection and Use of System Code (CUSC)

The CUSC¹⁵ is a legal document that constitutes the contractual framework for connection to or use of the National Electricity Transmission System (**NETS**). Parties to the CUSC are the NETSO, generators, distribution licensees and suppliers (not an exhaustive list). It defines arrangements for:

- 1) Connection – it sets out arrangements that define the stages for connection. These include: application; connection; and termination of a connection agreement.
- 2) Use of system – it sets out arrangements that define the stages for application to, and termination of, a use of system agreement, including the different types of transmission access products available to user's of the NETS.
- 3) De-energisation and disconnection – it sets out arrangements that cater for de-energisation and disconnection of the system for safety issues and non payment reasons.

The System Operator Transmission Owner Code (STC)

The STC¹⁶ defines the obligations and responsibilities of the transmission licensees and the NETSO. Current parties to the STC are NGET, Scottish Power Transmission Limited (**SPTL**), Scottish Hydro-Electric Transmission Limited (**SHETL**) and 9 OFTOs as transmission licensees. An OFTO, as a transmission licensee, will be required to be a party to the STC in accordance with its OFTO Licence.

The STC makes provision for certain interactions between the transmission licensees and the NETSO:

- 1) the provision of transmission services by the transmission licensees to the NETSO;
- 2) directions from the NETSO to configure the NETS;
- 3) transmission outage planning;
- 4) joint transmission investment planning;
- 5) governance of the STC and amendments to it (including accession to the STC); and
- 6) dispute resolution.

¹⁴ The Tender Regulations 2013 revoke the Tender Regulations 2010

¹⁵ <http://www2.nationalgrid.com/uk/Industry-information/Electricity-codes/Connection-and-Use-of-System-Code/>

¹⁶ <http://www2.nationalgrid.com/uk/Industry-information/Electricity-codes/System-Operator-Transmission-Owner-Code/>

Grid Code

The Grid Code¹⁷ is a technical code which sets out, among other things, the planning, connection conditions and testing requirements for the management of the NETS. It is designed to permit the development, maintenance and operation of the NETS. Parties to the Grid Code are NGET and all users of the NETS. OFTOs will be obliged by the STC to comply with specific sections of the Grid Code.

The Great Britain Security and Quality of Supply Standard (NETS SQSS)

The NETS SQSS¹⁸ sets out a coordinated set of criteria and methodologies that transmission licensees must use in the planning and operation of the NETS. The criterion presented in the NETS SQSS represents the minimum requirements for the planning and operation of the NETS. Additional criteria, for example covering more detailed and other aspects of quality of supply, are contained in the Grid Code and the STC, which should be read in conjunction with the NETS SQSS. The NETS SQSS is subject to informal governance arrangements that were put in place by NGET, SPTL and SHETL.

Other Industry Codes and Charging Methodologies

The industry codes and charging methodologies described below are not applicable to OFTOs. However, we include a brief description of the documents and charging methodologies as they form part of the overall regulatory framework which applies to the electricity industry.

The Balancing and Settlement Code (BSC)

- 1) The BSC contains the governance arrangements for electricity balancing and settlement in Great Britain. The BSC is largely a commercially based code which focuses on balancing and settlement arrangements. Parties to the BSC are NGET, distribution licensees, trading parties, interconnector administrators and suppliers. The BSC sets out the detailed arrangements for:
 - A. Balancing – allows each party to the BSC to advise the NETSO of its terms for making a change to its forecast export to or import from the NETS close to real time. The energy balancing aspect allows parties to make submissions to the NETSO to either buy or sell electricity into/out of the market at close to real time in order to keep the system from moving too far out of phase.
 - B. Settlement – provides for the reconciliation of actual exports (from generators) and imports (from suppliers) with the forecast, contracted position. The settlement aspect relates to monitoring and metering the actual positions of generators and suppliers (and interconnectors) against their contracted positions and settling imbalances when actual delivery or offtake does not match contractual positions.
 - C. Metering – specific standards are defined for equipment used to record electricity flows for use in the settlement processes.

The BSC is owned by Elexon. A copy of the document can be found on Elexon's website¹⁹.

Transmission Charging

Assets that facilitate connection to the NETS are (normally) owned, built and maintained by the relevant transmission licensee, the cost of which is recovered through connection charges or Transmission Network Use of System (TNUoS) charges. The NETSO is required to prepare charging methodologies in respect of these charges, including for parties wishing to connect to the NETS²⁰ and in respect of use of systems charges payable (TNUoS and BSUoS)²¹

Miscellaneous parts of the Regulatory and Contractual Framework

Crown Estate Leases

As landowner of the seabed and areas of foreshore by virtue of the Crown Estate Act 1961, The Crown Estate's permission is necessary to place structures on or pass cables over the seabed and its foreshore. In addition to permission from the landowner, potential developers also require statutory consents from a number of government departments responsible for the offshore wind development process. Only when all the necessary

¹⁷ <http://www2.nationalgrid.com/uk/Industry-information/Electricity-codes/Grid-code/>

¹⁸ <http://www2.nationalgrid.com/uk/Industry-information/Electricity-codes/System-Security-and-Quality-of-Supply-Standards/>

¹⁹ <http://www.elexon.co.uk/bsc-related-documents/>

²⁰ <http://www.nationalgrid.com/NR/rdonlyres/4811E6E0-3AA5-468F-9ADC-740FE9424180/24473/GBCCMI4R0FINAL.pdf>

²¹ <http://www.nationalgrid.com/NR/rdonlyres/BC5D87D0-4682-4C56-9375-7B932A1BD726/24713/UoSCMI4R0FINALBSUoS.pdf>

statutory consents are obtained will The Crown Estate grant a lease for development. The Crown Estate will issue leases for the development of sites within the 12 nautical mile territorial limit, whilst the Energy Act 2004 gave it rights to issue leases for development beyond the territorial limit within Renewable Energy Zones (REZ) out to 200 nautical miles.

Round one and two projects were initially granted full term leases of twenty-two and forty years respectively with a further three years allowed for decommissioning. However, on 6 July 2009, the Crown Estate announced that all wind farm operators will be given the opportunity to extend their lease terms to 50 years. For TR3 projects, the Crown Estate will be granting 50 year leases.

Decommissioning

Sections 105 to 114 of the Energy Act 2004 introduce a decommissioning scheme for offshore wind and marine energy installations. Under the terms of the Energy Act 2004, the Secretary of State may require a person who is responsible for one of these installations to submit (and eventually carry out) a decommissioning programme for the installation.

These decommissioning provisions reflect the government's view – taking into account the UK's international obligations under UNCLOS (United Nations Convention on the Law of the Sea) and the OSPAR Convention (the Convention for the Protection of the marine Environment of the North-East Atlantic) – that anyone who constructs, extends, operates or uses an installation should be responsible for the costs of ensuring that it is decommissioned at the end of its useful life in accordance with the 'polluter pays' principle.

DECC believes that imposing a legal obligation on businesses to prepare and carry out a decommissioning programme – and potentially requiring them to provide financial security – reduces the risk of them defaulting on their decommissioning liabilities. At the same time, it does not want to hinder the development of offshore renewable energy installations.

DECC's approach²² is to seek decommissioning solutions which are consistent with its international obligations, as well as UK legislation, and which have a proper regard for safety, the environment, other legitimate uses of the sea and economic considerations. DECC will act in line with the principles of sustainable development, and aims to ensure that interested parties are given clear information on the operation of the decommissioning scheme. DECC intends that processes for approving decommissioning programmes should be open and transparent, and that decisions should be taken in an efficient way, with as little administrative work as possible.

Offshore wind farm developers are likely to have already prepared a decommissioning proposal during the development of the offshore wind project.

²² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/80786/orei_guide.pdf

APPENDIX 2 – DISCLAIMER AND NOTICES

Non-reliance, Accuracy of Information and Exclusion of Liability

- 1.1 It is the responsibility of each bidder to ensure that it has all of the information it needs to prepare its submissions.
- 1.2 While information provided by Ofgem and/or its advisers in this Generic PIM or otherwise in relation to the Tender Round has been prepared in good faith, neither Ofgem nor any of its advisers make any representation or warranty (express or implied) in relation to the Tender Round or any information provided by developers through data rooms or otherwise. Ofgem and its advisers expressly disclaim any and all liability (other than in respect of fraudulent misrepresentation) based on or relating to any such information or representations or warranties (express or implied) contained in, or errors or omissions from, the Generic PIM or based on or relating to its use by a bidder, a developer and/or any other interested party.

Use of Information

- 1.3 This Generic PIM is not intended to provide the basis of any investment decision, nor is it intended to be considered as an investment recommendation by Ofgem or by any of its advisers. Each bidder, developer and any other interested party must make its own independent assessment of the qualifying project(s) after making such investigation and taking such professional advice as it deems necessary.
- 1.4 The material in the Generic PIM is not and should not be regarded as legal or professional advice. Bidders, developers and other interested parties should seek their own legal or other professional advice where appropriate.
- 1.5 Nothing in the Generic PIM is intended to, or shall be deemed to establish any partnership or joint venture between Ofgem and any bidder or any developer.
- 1.6 Advisers acting for Ofgem in relation to the Tender Round will not regard any developer or bidder or other interested party as their client or be responsible to anyone other than Ofgem for providing the protections afforded to their clients or for advising any other person on the Tender Round or any matter related to it.

Copyright

- 1.7 The information contained in this Generic PIM is subject to Crown copyright protection unless otherwise indicated. The Crown copyright protected material may be reproduced free of charge in any format or medium provided it is reproduced accurately and not in a misleading or derogatory manner. Where any of the Crown copyright material in this Generic PIM is being published or copied to others, the source of the material must be identified and the copyright status acknowledged.