



Making a positive difference  
for energy consumers

Offshore wind farm developers  
and other interested parties

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Dear colleague

## **Proposed Interest During Construction for Offshore Transmission and proposal to extend annual methodology to Interconnectors granted the Cap and Floor Regime**

### **1. Overview**

Developers of generator build offshore transmission assets, invest capital during the planning and construction phase with no return on this investment until the project is complete. In determining the final asset values that developers receive when the ownership of the assets is transferred to Offshore Transmission Owner we include the efficient cost of capital for construction through Interest During Construction (IDC). IDC is accrued on the actual cash flow when payments are made against the contracts for developing and constructing the transmission assets. We have determined that IDC should be allowed up to the point where the transmission assets are available for use for the transmission of electricity.

Similar conditions apply to Interconnector construction being developed through the Cap and Floor regime and we propose to move to annual updates of IDC for Interconnectors to align the two IDC calculations as set out in this note. This will be more efficient and give Interconnectors clarity as to what the IDC will be for a particular project in development. It is intended this process will apply only to projects yet to make Final Investment Decision.

Ofgem determines the efficient cost of capital for construction of those assets by allowing for the application of a cap for IDC. In December 2013, we committed to annual reviews of the IDC cap for OFTOs to reflect current market conditions, with the latest capped rate being set at 7.44%<sup>1</sup> for the 2016-17 financial year.

This letter presents the capped rate of IDC Ofgem is minded-to apply to offshore transmission and interconnectors within the Cap & Floor regime for the 2017-18 financial year (April 2017 to March 2018) this being 6.83% OFTOs (pre-tax, nominal), and 5.10% Interconnectors (vanilla, real), which would be applied to all assets that reach final investment decision (FID) during that period. We would like to invite interested parties to respond to the position set out on this letter by 27 January 2017.

### **2. Approach**

We propose to apply the same methodology for calculating the forthcoming IDC as we used in setting the rate applied for 2015-16 and 2016-17. This involves deriving an estimate of the Weighted Average Cost of Capital (WACC) by applying the Capital Asset Pricing Model (CAPM) as set out in Ofgem's decision document of 18 December 2013.

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<sup>1</sup> Pre-tax nominal

Interconnectors will attract the same IDC as OFTOs with the addition of specific risk premia for development and construction risks. The Cap & Floor regime requires IDC to be set in vanilla, real terms, whereas OFTO IDC is set in pre-tax, nominal terms so the two values are arrived at by two parallel calculations based on the same market parameters.

The updated IDC reflects an update of the standard input metrics used for the CAPM to reflect current market conditions. All input variables have been updated to reflect current values. These inputs are listed below in Table 1 which also indicates the sources of the actual values used.

### 3. Findings of the IDC Review/Calculation of the CAPM

Table 1 below illustrates the updated values for offshore transmission. These figures are based on input parameters as of 31 August 2016 as compared to one year prior.

**Table 1: Indicative values for input parameters of IDC rates**

Component	Parameter	2016-17	2017-18	Source
A	Cost of debt (nominal and pre-tax)	4.29%	3.86%	2 year average yield on A and BBB rated bonds more than 10 years from iBoxx Sterling non-financial series
B	Risk-free rate (nominal)	3.41%	3.12%	Ten year average of ten year gilt spot yield
C	Market risk premium	4.50%	4.40%	Credit Suisse Global Investment Returns Sourcebook
D	Equity beta	0.92	0.93	Comparator companies using 2 year average of weekly price vs the MSCI World Index
$E = B + (C \times D)$	Cost of equity (nominal, post-tax)	7.55%	7.22%	
F	Gearing	38.70%	41.22%	Comparator companies
G	Tax rate	20.00%	19.00%	HMRC
$H = A \times F + E \times (1 - F) \times 1 / (1 - G)$	<b>Pre-tax WACC (nominal)</b>	<b>7.44%</b>	<b>6.83%</b>	<b>IDC for OFTOs</b>
$I = A \times F \times (1 - G) + E \times (1 - F) \times 1 / (1 - G)$	Vanilla WACC (nominal)		6.53%	
J	Inflation		2.78%	Government Liability Curve for inflation – Bank of England
$K = (I - J) / (1 + J)$	<b>Vanilla WACC (real)</b>		<b>3.65%</b>	
L = Development risk premium uplift %	0.54%			Grant Thornton review <sup>2</sup>
M = Construction risk premium uplift %	0.91%			Grant Thornton review
<b>N = K + L + M</b>	<b>Vanilla WACC (real)</b>		<b>5.10%</b>	<b>IDC for Cap &amp; Floor interconnectors</b>

The magnitude of overall change from the previous IDC cap for OFTOs of 7.44% is material with a 0.62% decline in the prevailing IDC rate.

The minded-to capped rates of 6.83% and 5.10% have been derived using the following parameters:

**Gearing:** Derived from the set of comparator companies used in previous decisions;

**Equity Beta:** Derived from the set of comparator companies used in previous decisions;

<sup>2</sup>

[https://www.ofgem.gov.uk/sites/default/files/docs/2013/10/grant\\_thornton\\_review\\_of\\_interest\\_during\\_construction\\_stage2.pdf](https://www.ofgem.gov.uk/sites/default/files/docs/2013/10/grant_thornton_review_of_interest_during_construction_stage2.pdf)

**Equity Risk Premium:** Credit Suisse Global Investment Returns Sourcebook

**Cost of Debt (nominal):** This has decreased by updating the historical trailing average data;

**Risk-Free Rate (nominal):** Decrease by updating the historical trailing average data;

**Tax Rate:** tax rate (19%) reduced following the Chancellor’s Autumn Statement.

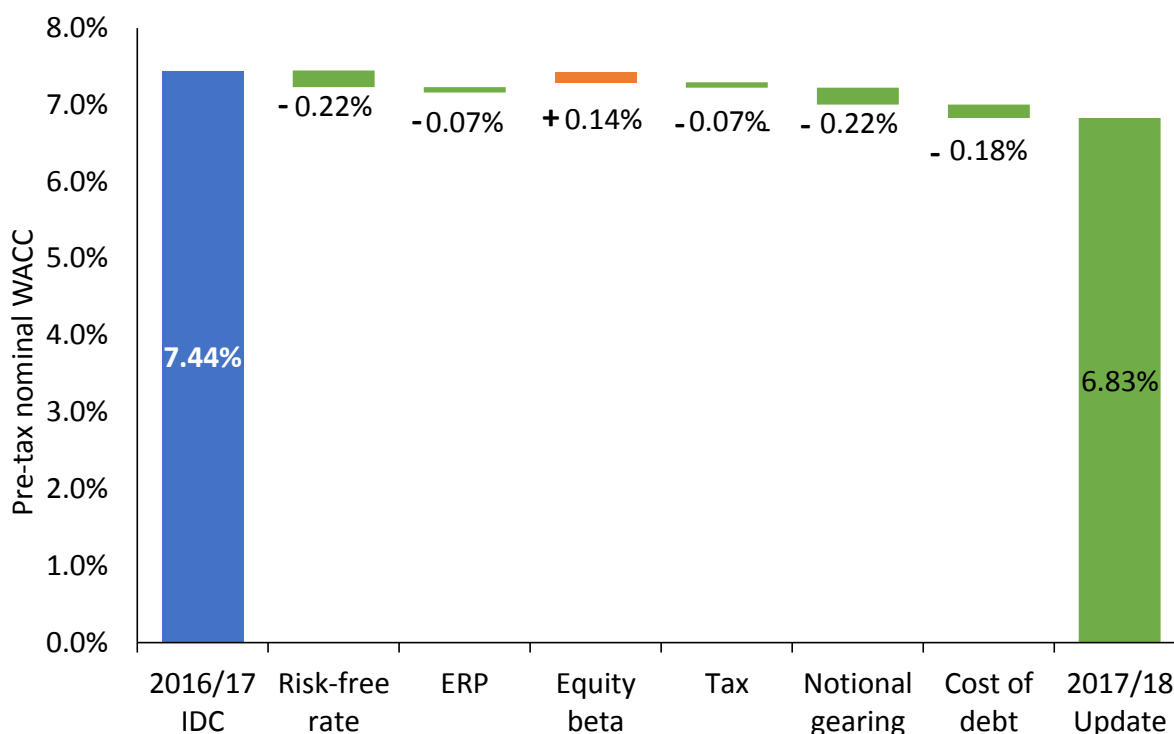
**Inflation expectation:** taken from the Bank of England website.

**Development risk premium:** as initially proposed by Grant Thornton in 2013, a review by Ofgem, with assistance from PWC earlier in 2016, concluded that the original estimate should be kept unchanged but regularly reviewed.

**Construction risk premium:** as initially proposed by Grant Thornton in 2013, a review by Ofgem, with assistance from PWC earlier in 2016, concluded that the original estimate should be kept unchanged but regularly reviewed.

Overall, these changes to each of the input parameters are illustrated in the diagram below:

**Figure 1: Diagram illustrating changes to capped IDC for OFTOs as a result of updated input parameters for 2017-18**



As the updated input values indicate a current rate materially lower than that decided upon last year, we are minded to update the OFTO cap for the financial year 2017-18 to 6.83%.

#### 4. Application to OFTOs

##### *Cap on IDC*

We intend to continue to apply a cap rather than a fixed rate to the IDC for offshore transmission.

##### *IDC fixed at Final Investment Decision (FID) for duration of project*

We also intend to fix IDC at FID for the duration of the project, so that IDC will be fixed until construction of the project is complete.

##### *Review*

We consider that an annual review of the cap will ensure that it remains flexible and responsive to market movements. Changes resulting from such reviews will not affect the projects that have already reached FID. Any decision to make a change to the cap will be communicated prior to the change coming into force, following consultation where appropriate, to give developers time to factor this number into their FID.

#### 5. Application to Interconnectors

##### *IDC fixed at Final Investment Decision (FID) for duration of project*

We also intend to fix IDC at FID for the duration of the project, so that IDC will be fixed until construction of the project is complete.

##### *Review*

We consider that an annual review of the cap will ensure that it remains flexible and responsive to market movements. Changes resulting from such reviews will not affect the projects that have already reached FID. Any decision to make a change to the cap will be communicated prior to the change coming into force, following consultation where appropriate, to give developers time to factor this number into their FID.

#### 6. Responding and Next Steps

Ofgem welcomes the views of interested parties in relation to the updates set out in this document. Please also send us supporting evidence to substantiate your views by 27 January 2017. We intend to reach a decision on the matter soon thereafter.

Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website [www.ofgem.gov.uk](http://www.ofgem.gov.uk). Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. Respondents are asked to put any confidential material in the appendices to their responses.

Responses should be sent to:

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**Email:** [Okon.Enyenihi@ofgem.gov.uk](mailto:Okon.Enyenihi@ofgem.gov.uk) (with 'IDC Review' in the subject heading)

Yours sincerely,



**Steve Beel**

Partner, Competitive Networks