

## Update on the Competition Proxy delivery model

**Publication date:** 14<sup>th</sup> September 2018

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## Introduction

1.1. The Competition Proxy model (CPM) is the regulatory model we have decided to apply to the Hinkley-Seabank (HSB) electricity transmission project. As set out in our January update on competition in electricity transmission<sup>1</sup>, we intend to consider the CPM and SPV delivery models for all future SWW projects that are subject to a Needs Case assessment during RIIO-T1 and that meet the criteria for competition<sup>2</sup>.

1.2. We are now providing this document to stakeholders to explain how we expect the CPM framework, developed in the context of HSB and decided on in our July-2018 decision<sup>3</sup>, will be applied to these projects. For this reason the document summarises the detailed arrangements set out in chapter 3 of the July 2018 decision and the methodology that will be used to set the cost of capital range for HSB. It also provides detail of the circumstances in which we may consider, on a project-by-project basis, varying the approach to the CPM that we have decided to apply to HSB.

1.3. For the avoidance of doubt, this document and the associated Impact Assessment (IA) do not reopen or reconsider any aspect of the July 2018 decision on the delivery model for the HSB project.

### ***Documents published today***

1.4. Alongside this document we have published two other documents relevant to the CPM. These are:

<sup>1</sup> <https://www.ofgem.gov.uk/publications-and-updates/update-competition-onshore-electricity-transmission>

<sup>2</sup> Our criteria for competition are new, separable, high value.

<sup>3</sup> <https://www.ofgem.gov.uk/publications-and-updates/hinkley-seabank-decision-delivery-model>

- 1) **Update on Extending Competition in Transmission<sup>4</sup>** – this letter updates stakeholders on our arrangements to extend competition in onshore electricity transmission. It sets out the background to competition in electricity transmission, our approach to the future application of the CPM and SPV model, and an overview of our future programme and its links to our RIIO-2 work.
- 2) **Impact Assessment on applying the Special Purpose Vehicle and Competition Proxy models to future new, separable and high value projects<sup>5</sup>** – an Impact Assessment setting out our analysis of the benefits and costs to consumers and other industry parties of applying the CPM and SPV model to future projects that meet the criteria for competition, against a counterfactual of delivery through the prevailing price control by the relevant incumbent TO.

1.5. As set out in the Update on Extending Competition in Transmission, we intend to consider on a case-by-case basis the most appropriate delivery model for any projects that meet the criteria for competition and come forward to us for consideration during RIIO-T1.

1.6. Where we consult on, and ultimately decide to apply the CPM to a project that meets the criteria for competition, we expect the regulatory model will be aligned with the model that we have decided to apply to HSB<sup>6</sup>. However, as set out in the January update on competition in electricity transmission, for each project we will also consider whether there should be any divergence from the approach determined for HSB. This would be based on the characteristics of the specific project being considered. In our consolidated summary of the model in the following sections, we have indicated a number of areas where we consider there may be scope for variation between projects. These are areas where we have already made decisions in relation to HSB based on the characteristics of that project.

## The delivery model

### *Financing arrangements*

1.7. The CPM involves setting a largely project-specific set of regulatory arrangements to cover the construction period and a 25-year operational period (rather than for a portfolio of assets under a price control settlement).

1.8. The CPM assumes that the full construction debt is raised upfront and then drawn down upon as expenditure is incurred on the project. The allowed cost of capital (as determined through the cost of capital methodology determined for HSB) is applied to the annual allowed expenditure during construction. This allowed expenditure is determined through our detailed assessment of the project costs, which is referred to as the Project Assessment (PA) process. By the end of the construction period, the full construction period capital costs allowance will be uplifted by the annual construction cost of capital to determine a total capital cost value at

<sup>4</sup> <https://www.ofgem.gov.uk/publications-and-updates/update-extending-competition-transmission-and-impact-assessment>

<sup>5</sup> <https://www.ofgem.gov.uk/publications-and-updates/update-extending-competition-transmission-and-impact-assessment>

<sup>6</sup> <https://www.ofgem.gov.uk/publications-and-updates/hinkley-seabank-decision-delivery-model>

the end of construction. This capital cost value, minus any allowed revenue recovered during construction, will be recovered by the TO over the following 25-year operational period with the operational cost of capital applied.

1.9. An annual operating cost allowance will apply during the operational period. We intend to add this annual allowance to the annual recovery of the construction capital cost value across the full 25-year revenue term. The annual revenue allowance during the operational period will be based on this total amount including returns distributed evenly on an NPV neutral basis across the full revenue term.

#### Setting the cost of capital

1.10. The cost of capital for both the construction and operational period will be set using the cost of capital methodology developed with Cambridge Economics Policy Associates (CEPA). This methodology covers the full range of new asset electricity transmission networks projects regulated by Ofgem<sup>7</sup>.

1.11. We consider that it is most appropriate to fix the allowed construction cost of capital at Project Assessment (see 'Cost assessment and treatment') but only set an indicative cost of capital for the operational period at that time. We will then fix the cost of capital for the operational period at the completion of construction.

1.12. We determine the level of cost of capital that TOs are able to recover from consumers during the construction and operational phases of the project. However, we do not mandate that the assumed capital structure within that methodology is followed in the delivery of the project. For example, if a TO wishes to implement a higher project gearing during construction, and allow for a higher return on equity, this would be permitted, as long as it does not result in any consumer detriment relative to the structure assumed within our cost of capital methodology.

1.13. Full detail of the cost of capital methodology that we intend to apply for projects funded through the CPM is set out in our HSB decision on delivery model, and the accompanying report from CEPA. Below, we summarise the methodology, and detail the specific adjustments to this methodology that we may consider appropriate for particular projects. This is to ensure that the cost of capital methodology under the CPM is fully reflective of the risks faced by the specific projects funded by it.

#### Cost of debt during construction

1.14. The cost of debt for the construction period of HSB will be set based on the iboxx index for BBB-rated non-financial corporate debt. The debt tenor for the index used, 5-7 years, matches the expected length of the HSB construction period. For future projects we will continue to rely on the iboxx index with a tenor that is aligned with our view of the appropriate and efficient length of the construction period. This means that if a project has a

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<sup>7</sup>[https://www.ofgem.gov.uk/system/files/docs/2018/07/cepareport\\_newassets\\_july2018\\_final\\_0.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/07/cepareport_newassets_july2018_final_0.pdf) (covers Onshore, Offshore and Interconnector electricity transmission projects)

construction period of 3 years, we would look to implement a debt tenor of 3 years for the construction period, rather than the 5-7 year debt tenor used to set the HSB benchmark.

1.15. Our central assumption is that the BBB-rated debt is the appropriate benchmark for projects that meet the criteria for competition. BBB-rated debt will therefore be used, with an appropriate allowance for transaction costs, as the high end of the cost of debt range during construction. We will consider on a project-by-project basis whether the risk profile of a specific project suggests that A-rated debt is a more appropriate benchmark for the low end of the cost of debt during the construction period. For example, this could be appropriate where a project has a particularly short construction period, or involves a relatively low level of construction risk.

#### Cost of equity during construction

1.16. The cost of equity during the construction period for future projects under the CPM will follow the same framework developed for HSB. Under this approach, the cost of equity is derived from benchmarks of the following building blocks of the cost of equity during construction:

- Risk-Free Rate
- Total Market Returns
- Equity beta ( $E\beta$ )

#### Risk-free rate (RFR)

1.17. RFR is a measure of the market derived level of expected return for an investment that faces no risk. For the HSB construction period this will be benchmarked at the 10-year trailing average of the 10-year UK gilt rate. We consider that using the 10-year gilt rate provides sufficient protection from potentially more volatile shorter terms rates. We will therefore replicate this approach for any future project that is delivered through the CPM.

#### Total Market Returns (TMR)

1.18. TMR is a measure of the average expected equity return within the market. We decided that this will be set using a Dividend Growth Model (DGM) for the HSB project. This approach is based on prevailing returns on the London stock market (FTSE) All-share index at the point the final allowances are set for the project. Estimated growth rates are then used to derived the extent to which these returns may change over the duration of the construction period.

1.19. This approach is used on HSB to reflect that current market expectations at the point the cost of capital is determined will be more relevant for a one-off transaction to cover the construction period than a longer-term average that has been traditionally used in the past for price control cost of capital that applies to a wider portfolio of assets. We do not consider there is any reason to deviate from this approach for future projects under the CPM, therefore this approach will be replicated for any future project that is delivered through the CPM.

## Equity beta ( $E\beta$ )

1.20.  $E\beta$  is a measure of how much the specific assets under consideration are expected to vary from the TMR. In the case of HSB, the low end of the range is derived from the  $E\beta$  benchmark used in the setting of the cost of capital for SHE Transmission's RIIO-T1 price control determination. The high end of the  $E\beta$  range is derived from analysis of how construction companies, as a comparator to the delivery of construction projects such as HSB, compare to the expected return in the FTSE All-share index.

1.21. We will apply the same analysis for  $E\beta$  when applying the CPM to future projects. However, we consider that there may be specific construction risks that are not applicable to HSB, but may need to be adjusted for within the  $E\beta$  for future projects. One such example is the specific risk relating to marine working during construction.

1.22. Alongside our decision to apply the CPM to HSB, we also published our updated Interest During Construction (IDC) decision for offshore wind projects that make a final investment decision by 31 March 2019. IDC is the cost of capital during construction that these projects are allowed to recover. This IDC rate has been derived using the same methodology as for HSB. However, the IDC rates for offshore generator projects includes a specific uplift at the top of the  $E\beta$  range to account for the specific challenges of subsea working. We would include this risk premium within the cost of equity range considered for any project subject to the CPM that includes a comparable level of risk associated with subsea working.

## Cost of debt during the operational period

1.23. The cost of debt range for the HSB operational period will be derived from the average across the iBoxx 10-year plus index at A-rating and the same index at BBB-rating. We do not consider that there is any reason to deviate from this approach when applying the CPM to future projects. There is limited scope for the level of operational risk on assets to vary once built. Therefore the approach taken on HSB will be replicated for any future project that is delivered through the CPM.

## Cost of equity during the operational period

1.24. The initial cost of equity range for the operational period of HSB will be set based on the rates observed in the winning bids under the OFTO regime in Tender Rounds 2 and 3.

1.25. We will continue to set the operational equity return under the CPM for future projects based on the most contemporary evidence available from the OFTO regime. This is because we continue to believe that OFTOs represent an accurate reflection of the risk profile of the assets delivered under projects that qualify for funding through the CPM.

## Adjustments to the arrangements to facilitate a Project Finance approach

1.26. The cost of equity benchmarks from the OFTO regime reflect the project finance approach that is generally followed under that regime. Whilst we do not consider that the cost of capital ranges for either the construction or operational periods under the CPM specifically

require a project finance approach being taken, we are open to funding the efficient costs of securing a project finance approach.

1.27. Specifically, our Project Assessment will consider any costs associated with setting up a special purpose vehicle (SPV) for the project, and any necessary reserve accounts or other guarantees required to implement such an approach. Efficient, evidenced costs will be allowed for in the project revenue allowance rather than through the project's cost of capital. Any such decision will be on a project-by-project basis and will only be considered where the developing TO specifically confirms its intention to pursue a project finance approach.

#### Allowed revenue during the construction period

1.28. Evidence from our previous work developing the CATO regime suggested that there can be consumer benefits in allowing revenue during construction for larger projects with extended construction periods. These benefits come from reducing the cost of capital by reducing the cash-flow limitations on the developer. For this reason, for projects under the CPM that we consider require a construction period of over 4 years (excluding pre-construction activities), the CPM will allow for revenue during construction.

1.29. As set out in our HSB decision, the revenue provided during construction will cover only the allowed cost of debt, based on the upfront costs set at our Project Assessment. This allows debt to be serviced during construction, but retains the appropriate delivery incentives that would be in place under a typical project finance approach.

#### Adjustments for inflation

1.30. Consistent with the principles under RIIO-T1 and under the OFTO regime, the revenue allowance for projects under the CPM will be adjusted for inflation. In RIIO-T1 and in OFTOs to date the inflationary adjustment is tied to the Retail Price Index (RPI). Since the Government now uses the Consumer Price Index (CPI or CPI-H) to measure inflation, other regulators, such as Ofwat, have proposed future shifts (or partial shifts) towards the use of a version of CPI to track future adjustments for inflation. In our decision on the delivery model for HSB we proposed to align the approach taken for HSB with the wider approach that is ultimately taken forward for RIIO-T2 and OFTOs. We will confirm the use of CPI, CPI-H or RPI as part of our Project Assessment process for HSB. We would then expect to adopt the same approach for any future project that is delivered through the CPM.

#### **Cost Assessment and treatment**

1.31. The approach to setting and monitoring the efficient costs of future projects under the CPM will follow the same framework as set out in the HSB decision on delivery model.

1.32. The cost assessment process under the CPM will have three stages. It will consist of:

- a Project Assessment before construction begins,
- annual reporting during the construction period, and
- a Post-Construction Review (PCR) when construction is completed.

## Project Assessment (PA)

1.33. Under the CPM we will formally review and set cost allowances at PA. Capital cost allowances will be finalised at the PA, subject to the outcome of the annual reporting process and PCR, which are explained later in this document. Provisional allowances for operating costs will also be set at the PA, before being finalised at the PCR.

1.34. Capital costs will be formed of controllable firm costs that have been agreed (either incurred or forecasted), and risk and contingency costs that are estimates.

1.35. For each project we will also determine the exact value of the sharing factor at the PA.

### Assessment of the controllable (firm) costs

1.36. Our assessment of the firm capital costs will include the following elements:

- consideration of the suitability of the tender processes and subsequent award of contracts;
- use of benchmarking, where applicable, as a signpost exercise to establish the efficiency of the costs; and
- detailed review of the submitted firm capital costs on an overall and component basis.

1.37. As part of annual reporting and the PCR, we will assess the actual spend in relation to firm costs to ensure that actual spend is in line with the cost allowances set at PA.

### Assessment of uncertain risk and contingency costs

1.38. We expect that each project will have areas of cost uncertainty relating to both risk-related expenditure or contingency costs. The uncertain nature of these cost areas is one of the reasons why the capital allowance set at the PA will be reviewed annually and at the PCR.

1.39. At PA we will also identify risk costs which we do not consider should be funded up front. This could include risks that are unlikely to occur, but that would be likely to have a large impact, if they did occur. It could also include other risks that are difficult or inefficient to quantify up front. These "qualifying risks" will be treated as part of the PCR.

1.40. As part of annual reporting and the PCR, we will assess the actual spend in relation to these costs and update the allowances accordingly.

## Assessment of operational period costs

1.41. We will set an indicative operational cost allowance at PA based on an efficiency assessment of the relevant TO's proposed costs. This will include an assessment of the proposed inspection, operation, and maintenance strategy for the assets once built.

## Post Construction Review (PCR)

1.42. The PCR will serve three main functions:

- assess whether any qualifying risks from the PA have eventuated, and, if so, establish the efficient level of funding under the terms of the CPM (the costs associated with these risks will not be subject to the sharing factor);
- reconcile all of the remaining actual costs incurred during construction, which will have been reviewed by Ofgem during the annual reporting, against the allowances set at PA (the sharing factor will also be applied to underspends and overspends on each individual cost item); and
- finalise the ongoing operational costs for the project.

1.43. We consider that this approach to setting cost allowances under the CPM will ensure that a TO is appropriately incentivised to minimise costs of the kind it can control, whilst avoiding the TO receiving windfall gains or suffering losses from risks it cannot control.

1.44. The result of the PCR will be an update to cost allowances in the TO's licence, which will represent the values for the 25-year operational period of the project.

1.45. We would expect to start the PCR process at the earlier of:

- 90-95% spend committed on the project;
- one year after the delivery date set out in the TO licence for the project; or
- if the project is driven by a single large generator, at any point during construction if it becomes apparent that the generator project will be materially delayed due to factors which are beyond the TO's control.

## The Sharing Factor

1.46. A TO will share underspend or efficient overspend of the cost allowances that we set at PA with consumers. The sharing factor on these costs will be applicable to each specific cost item as opposed to the total risk pot, and will be assessed on a case-by-case basis. This will retain the incentive on a TO to drive down the construction costs.

1.47. The sharing factor will not be applicable to expenditure associated with qualifying risks that are considered through the PCR. For those events the TO will receive full funding for the costs providing that those events are eligible for funding under the PCR and the costs are efficiently incurred.

1.48. The exact value of the sharing factor for each project will be determined at the PA. Whilst our starting expectation is that it will be set at a similar level to currently in place under RIIO-T1, broadly 50%, the final rate will be contingent on the proportion of the total costs that are submitted for each project that we determine should only be funded through the PCR rather than via an ex-ante allowance.

#### Treatment of late delivery

1.49. For each project funded through the CPM, a specified project output and date will be inserted into the TO's licence. This will indicate what needs to be delivered by the project and by when. In line with our usual processes, we would consider whether any late delivery against this date constituted a breach of the licence condition and whether to consider enforcement action. In considering whether this is the case or not, we would follow our usual processes and policies for enforcement.

1.50. Irrespective of whether any delay is treated as a breach of licence requirements, we propose that additional costs incurred during a delay will not be reflected in the revenue allowance during construction. Subject to the arrangements set out in the preceding section on the PCR, only unavoidable costs incurred during delays will be reflected in the revenue stream and recovered over the 25-year operational period. Where it can be evidenced by a TO that a construction delay was unavoidable and outside of its control, it would be able to earn the allowed construction cost of capital during the length of the delay.

### ***Arrangements during the operational period***

#### Opex

1.51. As explained above, we will set provisional operational costs for the 25-year revenue term of each project at the PA. This will provide TOs with a degree of confidence as to what cost allowance to expect during the operational period. We intend to finalise the operational cost allowance at the PCR unless we determine from evidence provided by the TO that those costs can be clearly and accurately determined at the PA.

#### Incentives

1.52. Of the current incentives in place under RIIO, we expect that the following would be applicable to the operational period of projects under the CPM:

- Reliability incentive (Energy Not Supplied)
- Stakeholder satisfaction output
- Incentive in respect of SF6
- Network Innovation Allowance
- Network Innovation Competition

1.53. Under the status quo SWW arrangements, the delivered assets are likely to contribute towards overall TO performance across their portfolio of assets, against the first three incentives above. The HSB decision on delivery model explained that these three incentives in

combination reflect a comparable balance of risk/reward with the operational incentives that apply to OFTOs. As this remains the case for future projects brought forward by the other TOs, we consider that under the CPM it would be appropriate for the delivered assets of each project to contribute towards the first three incentives above.

1.54. Under those arrangements the annual revenue allowances for each CPM project would be included in the calculation of maximum up and downside exposure to these incentives during the operational period of the projects. Performance against these incentives would be reported and rewarded or penalised as part of the TO's overall price control arrangements. It is possible that there may be material changes to the relevant RIIO incentives before we finalise the operational cost of capital and cost allowances at the end of construction. If this happens, we will make adjustments at the PCR to how those incentives apply to ensure they continue to reflect a comparable balance of risk/reward with the operational incentives that apply to OFTOs.

1.55. Under standard project finance arrangements projects are typically subject to specific operational period performance incentives that can be directly measured for that project. As set out in paragraph 2.36 of the decision on the delivery model for HSB, if NGET finances HSB through project finance, it may request a licence modification for HSB to allow the application of project-specific operational period performance incentives for HSB. We consider it appropriate to also allow the possibility of this arrangement for future projects funded through CPM. This might include for example a project-specific availability incentive. In considering any such request we would want to ensure that any project-specific incentives were directly measurable and reflected a comparable balance of risk/reward with the operational incentives that apply to OFTOs.

#### Cost reopener

1.56. Similar to OFTOs and Interconnectors, the CPM will include a cost reopener mechanism to compensate TOs for low probability, high impact events that they cannot control (eg force majeure events) that trigger a sufficient increase in opex costs. The exact threshold we set for reopening the opex costs will depend upon the quantum and nature of the opex costs identified at PA, and will likely be proportionate to the threshold set under the OFTO regime. The developing TO would be able to make a claim for any efficiently incurred additional costs beyond the relevant threshold where a qualifying event occurs during the operational period.

1.57. In addition, and similarly to the OFTO regime, the CPM will provide protection against certain unanticipated changes in law. Under these arrangements the TO would be able to claim for material increases in costs associated with specific changes in law that impact directly on the cost it incurs on a CPM project.

#### Additional capex requirements during the operational period

1.58. During the revenue term it is possible that the assets delivered through the CPM will need to be upgraded to accommodate additional capacity or connections. Where any upgrade is demonstrated to be needed, and the upgrade is forecast to meet the competition criteria (ie the upgrade is new, separable and high value), we expect the regulatory treatment will mirror

the prevailing arrangements in place at the time. This could mean the CATO, SPV model or the CPM are implemented to deliver the upgrade.

1.59. Where such a network upgrade is demonstrated to be needed but does not meet the criteria for competition, we propose setting a cost allowance for the work based on prevailing RIIO arrangements and market conditions at the time the cost allowance is set.

#### Identifying CPM project costs

1.60. It will be important to ensure that costs associated with the assets delivered by a CPM project and incurred during the construction and operational periods are identifiable as separate from the remainder of RIIO-T1 and any future price controls. This will ensure that costs are appropriately captured as relating to the CPM projects, rather than the wider RIIO portfolio. Where it is efficient to fund CPM project-specific operational costs through an allocation of cost from a wider recorded cost covering work within RIIO, we will expect the relevant TO to propose and adhere to a clear and consistent allocation approach.

#### Treatment of work that doesn't meet the criteria for competition

1.61. Any work that doesn't meet the criteria for competition will be funded through the prevailing price control arrangements of the relevant TO under the RIIO price control framework. This is in line with our decision on the conductor replacement works for HSB. These works do not meet the criteria for competition, and so should be funded through NGET's RIIO-T2 settlement.