

# Consultation

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## Bramford to Twinstead – Project Assessment consultation

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We are consulting on our project assessment of National Grid Electricity Transmission's Bramford to Twinstead (BTNO) project. This is a project under the Accelerated Strategic Transmission Investment (ASTI) mechanism in the RII0-2 Price Control Framework. At the project assessment (PA) stage, we review and ultimately set revenue and outputs associated with delivery of an ASTI project.

We would like views from people with an interest in the costs of electricity transmission infrastructure and the transmission owners. We particularly welcome responses from stakeholders impacted by the project. We would also welcome responses from other stakeholders and the public.

This document outlines the scope, purpose and questions of the consultation and how you can get involved. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at [ofgem.gov.uk/consultations](https://www.ofgem.gov.uk/consultations). If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

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## Executive Summary

### ASTI framework

The British Energy Security Strategy sets out the government's ambition to connect up to 50GW of offshore generation to the electricity network by 2030.<sup>1</sup> We identified that facilitating this ambition will require significant reinforcements to the onshore electricity transmission network and a change to the pre-existing regulatory framework in order to accelerate delivery of large projects.

As such, in December 2022 we published a decision to introduce a new Accelerated Strategic Transmission Investment (ASTI) framework.<sup>2</sup> We set out the initial list of ASTI projects, our decision on exempting strategic projects from competition, the new process for assessing and funding ASTI projects and the range of measures we introduced to protect consumers against additional risks that changing the process brings.

Bramford to Twinstead (BTNO) is one of the projects that we have included in the ASTI framework<sup>3</sup> and it is being delivered by National Grid Electricity Transmission (NGET). BTNO is also included among the list of major projects<sup>4</sup> to enable the government's Clean Power 2030 Action Plan.<sup>4</sup>

### Minded-to position

This consultation sets out our minded-to position for BTNO following project assessment (PA).

We are proposing to reduce £60.6 million out of the requested total project cost of £702.8 million to set the overall funding allowance at £642.2 million (2024/25 prices) for NGET to deliver the project. This includes £482.2 million of direct (EPC) costs as well as £160 million of non-EPC costs, indirect costs including risk. During our review of BTNO, we identified areas of uncertainty and have set out different ways to address and fund these should they materialise. The BTNO project is set for a December 2029 ASTI Licence Delivery Date.

Lastly, we are minded to maintain the Cost and Output Adjusting Event (COAE) materiality threshold of 5%, equivalent to a threshold of £32.1 million for this project.

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<sup>1</sup> [British energy security strategy | GOV.UK](#)

<sup>2</sup> [Consultation on accelerating onshore electricity transmission investment | Ofgem](#)

<sup>3</sup> [Decision on accelerating onshore electricity transmission investment | Ofgem](#).

<sup>4</sup> [NESO Clean Power 2030 Annex 2 Final v2.pdf](#)

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**Next steps**

After considering responses to this consultation, we will publish a full decision on the PA for NGET alongside our proposed modifications to the NGET's electricity transmission licence to support delivery of the project.

# 1. Introduction

## Section summary

This section summarises what we are consulting on and provides an overview of BTNO and background information.

## What are we consulting on?

- 1.1 This consultation sets out our minded-to position and seeks stakeholder views on the PA of the Bramford to Twinstead project (Network Options Assessment (NOA) code: BTNO).
- 1.2 Chapter 2 covers the main cost areas of the PA request as submitted by NGET.
- 1.3 Chapter 3 sets out our minded-to position on the funding allowance for each of the cost areas.
- 1.4 Chapter 4 summarises the next steps and our expected timescale to publish our decision.
- 1.5 Our assessment and minded-to position set out in this document are subject to our consideration of any consultation responses and we invite stakeholders to respond using the contact details set out on the front of this document.

## Context

- 1.6 In December 2022, we published our decision on ASTI and included the BTNO project within the ASTI framework.<sup>5</sup> Given this, the BTNO PA is being assessed under the ASTI framework. The framework will assess, fund and incentivise the accelerated delivery of large, strategic onshore transmission projects required to deliver the government's ambition to connect up to 50GW of offshore wind generation to the network by 2030.
- 1.7 The proposal for BTNO consists of:
  - Two new build 400kV double circuit overhead line sections (18km) and two new build 400kV double circuit underground cable sections (11km) requiring four cable sealing end (CSE) compounds and multiple horizontal direct drillings (HDDs) for key crossings

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<sup>5</sup> [Decision on accelerating onshore electricity transmission investment | Ofgem](#)

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- The construction of a new 400/132kV Grid Supply Point substation at Twinstead Green and the expansion of the existing Bramford substation.
- 1.8 The project will play a crucial role in alleviating existing and future network constraints, supporting future power flows in East Anglia and enabling the connection of multiple contracted generation projects.
- 1.9 This document covers our minded-to position on the PA for the BTNO project under the ASTI framework<sup>6</sup>.

**Overview of ASTI re-opener mechanism**

- 1.10 The initial 26 ASTI projects were identified by NESO in the Holistic Network Design<sup>7</sup> (HND) and NOA 7 Refresh<sup>8</sup> as required to deliver the Government's 2030 net zero ambitions.<sup>5</sup> To accelerate delivery of the ASTI projects, all ASTI projects that had not already been granted Pre-Construction Funding (PCF) were granted PCF of 2.5% of their estimated total cost under SpC 3.40. PCF funding is intended to allow ASTI projects to be progressed to the point where all material planning consents have been applied for. BTNO began development in RIIO-T1 and was then funded through baseline cost allowances during RIIO-T2, without a separation between Pre-Construction and Construction Funding. Though an ASTI project, it was agreed with Ofgem that neither a Technical Assessment (TA) nor a Final Needs Case (FNC) would be required. BTNO has not received PCF funding and NGET has submitted its project assessment to Ofgem for the entirety of the project. The project has received Baseline Funding Allowance (BFA) for £164.8 million (2024/25 price base) during RIIO-T2.
- 1.11 Further, should additional funding be required ahead of PA to accelerate an ASTI project, TOs may apply for Early Construction Funding (ECF) which is capped at 20% of the project's estimated costs, unless directed otherwise by Ofgem.
- 1.12 PA is the final stage of the ASTI framework. The PA review determines the efficient allowance to deliver the project, including the efficient costs of construction, risk contingencies, project management and any other elements of delivery.

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<sup>6</sup> [Decision to modify the special licence conditions in the electricity transmission licences Accelerated Strategic Transmission Investment.pdf](#) (SpC 3.40, 3.41 and 4.9)

<sup>7</sup> [The Pathway to 2030 Holistic Network Design | National Grid ESO](#)

<sup>8</sup> [Network Options Assessment \(NOA\) refresh | National Grid](#)

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**Background**

1.13 BTNO is an infrastructure project located in East Anglia, between Bramford on the outskirts of Ipswich and Twinstead in north Essex. The project lies within three local planning authority areas: Mid Suffolk District (Suffolk) in the east, Babergh District (Suffolk) for the central sections, and Braintree District (Essex) in the west. The BTNO project was initially developed between 2008 and 2014 to connect the Sizewell C nuclear power station. It was initially paused then recommenced later when it was given a proceed recommendation in the 2018/19 NOA which has been maintained in all subsequent NOAs. BTNO is an essential network investment to deliver on the government's CP2030 ambition of connecting 43-50GW of offshore wind generation by 2030. The project is crucial for the integration of other major electricity infrastructure projects; the Sizewell C Connection, Sea Link, the East Anglia Three Windfarm, the North London Reinforcement Project (HWUP), and the Norwich to Tilbury (AENC, ATNC) ASTI projects.

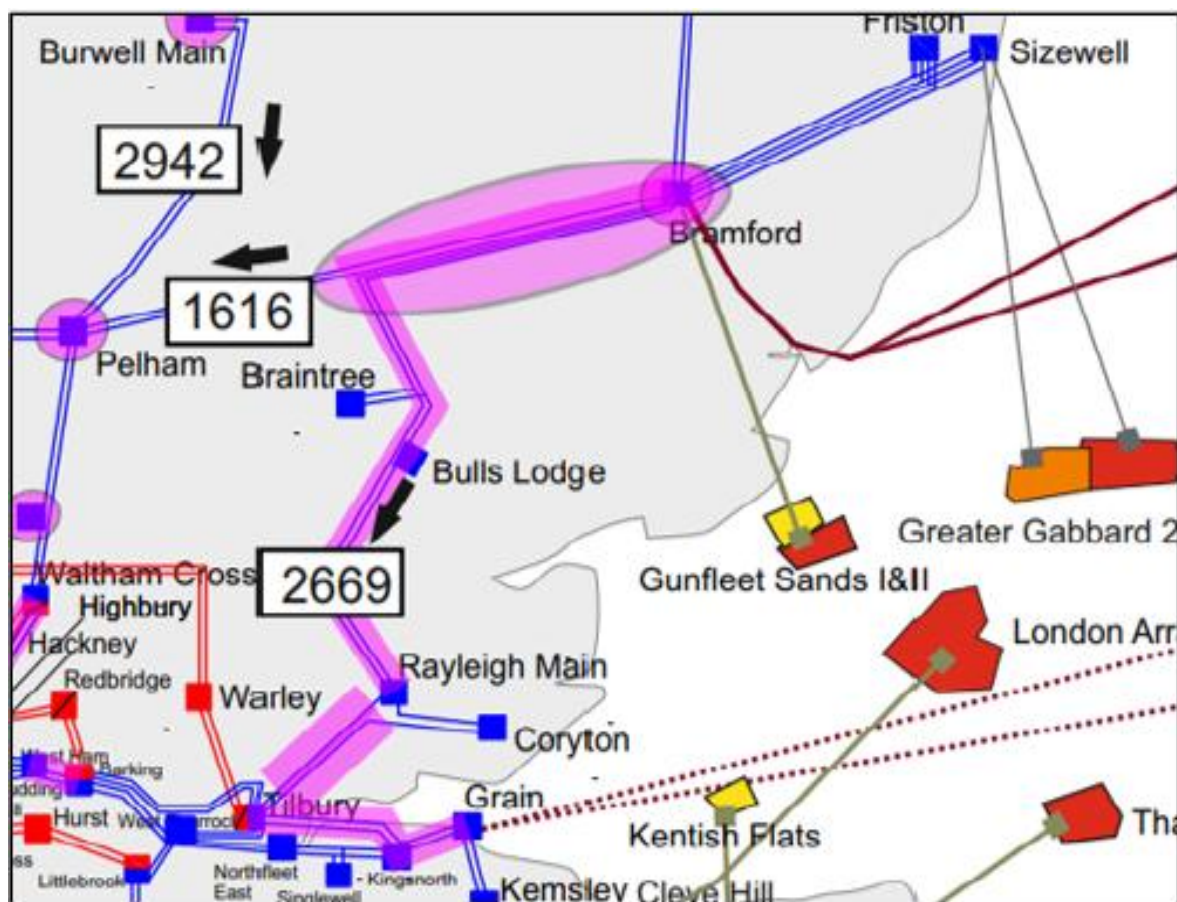
1.14 BTNO's scope of work consists of:

- Reconfiguring the existing overhead line (OHL) infrastructure to remove Twinstead Tee and create a dedicated 400kV double circuit route between Bramford and Pelham. This will provide two electrical circuits
- Construction of a new 400kV double circuit between Bramford and Twinstead to be called RB Route. This will comprise OHL and underground cable sections which will connect the existing 4YLA route close to Alphamstone in the Stour Valley
- The new 400kV RB Route will require the construction of approximately 18km of new OHL and 11km of underground cable (UGC) between Bramford Substation and the existing 4YLA OHL route close to Alphamstone
- Removal of 25km of 132kV OHL will be required to construct the new RB Route owned by UKPN (PCB Route east of the Twinstead Tee). Removal of UKPN's 132kV OHL will require construction of a new 400/132kV GSP Substation to maintain security of supply on UKPN's distribution network



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- Reconfiguration of the existing 4YLA route into an existing Bramford – Bulls Lodge circuit to be migrated from its current arrangement on the 4YLA route to the new RB route. The second circuit on the 4YLA route namely the Pelham – Braintree – Rayleigh main circuit which will be repurposed as the new Bramford – Braintree – Rayleigh circuit
- Installation of two 200MVAR Shunt Reactors (SHRs) at Bramford Substation on the circuit ends of the new RB Route to compensate for the capacitive effects of the underground cable sections. The diagram below shows the connections linking to Bramford substation including Tilbury and link to Sizewell C.



| KEY  |               |   |                             |
|--|---------------|---|-----------------------------|
| <span style="display: inline-block; width: 15px; height: 15px; background-color: red; border: 1px solid black;"></span>  | 275kV Circuit | <span style="display: inline-block; width: 15px; height: 15px; background-color: magenta; border: 1px solid black;"></span> | Upgrade/Reconductor Circuit |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: blue; border: 1px solid black;"></span> | 400kV Circuit | <span style="display: inline-block; width: 15px; height: 15px; background-color: pink; border: 1px solid black;"></span>    | New Circuit/Network Changes |

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- 1.15 In 2022 the NESO NOA refresh, which now fully integrates the HND, confirmed that delivering BTNO is essential to achieving the Government’s net zero ambitions.<sup>9</sup> The project is already included in the list of projects in Appendix 1 of NGET’s electricity transmission licence, SpC 3.41.<sup>9</sup>
- 1.16 The final PA was submitted in December 2024 by NGET. Ofgem and NGET have had engagement prior to submission on costs for the BTNO programme to better understand the procurement environment and development of project scope.

## Related publications

- [Decision to modify the Special Conditions in the electricity transmission licences: Accelerated Strategic Transmission Investment | Ofgem](#)
- [Decision on accelerating onshore electricity transmission investment | Ofgem](#)

## Consultation stages

| Stage 1           | Stage 2   | Stage 3                          | Stage 4                       | Stage 5  |
|-------------------|---|----------------------------------|-------------------------------|--|
| Consultation open | Consultation closes (awaiting decision). Deadline for responses | Responses reviewed and published | Licence modification decision | [if applicable – licence modifications come into effect] |
| 30/01/26          | 02/03/26  | Spring 2026                      | Summer 2026                   | 56 days after the licence modification decision          |

## How to respond

- 1.17 We want to hear from anyone interested in this consultation. Please send your response to the person or team named on this document’s front page.

<sup>9</sup> [Decision to modify the Special Conditions in the electricity transmission licences: Accelerated Strategic Transmission Investment | Ofgem](#)

<sup>10</sup> [Network Options Assessment \(NOA\) refresh | National Grid ESO](#)

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- 1.18 We have asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.
- 1.19 We will publish non-confidential responses on our website at [www.ofgem.gov.uk/consultations](http://www.ofgem.gov.uk/consultations).

**Your response, data and confidentiality**

- 1.20 You can ask us to keep your response, or parts of your response, confidential. We will respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.
- 1.21 If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you *do* wish to be kept confidential and those that you *do not* wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we will get in touch with you to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.
- 1.22 If the information you give in your response contains personal data under the General Data Protection Regulation (Regulation (EU) 2016/679) as retained in domestic law following the UK's withdrawal from the European Union ("UK GDPR"), the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 2.
- 1.23 If you wish to respond confidentially, we will keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We will not link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

**General feedback**

- 1.24 We believe that consultation is at the heart of good policy development. We welcome any comments about how we have run this consultation. We would also like to get your answers to these questions:

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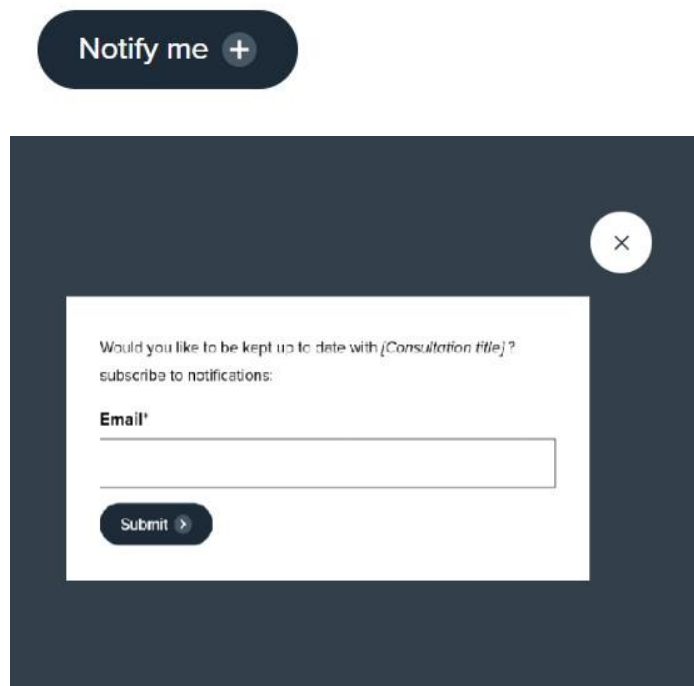
1. Do you have any comments about the overall process of this consultation?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Were its conclusions balanced?
5. Did it make reasoned recommendations for improvement?
6. Any further comments?

Please send any general feedback comments to [stakeholders@ofgem.gov.uk](mailto:stakeholders@ofgem.gov.uk)

**How to track the progress of the consultation**

You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website.

[Ofgem.gov.uk/consultations](https://www.ofgem.gov.uk/consultations)



The image shows a dark blue button labeled 'Notify me' with a white plus sign. Below it is a dark blue modal box with a white close button (X) in the top right corner. Inside the modal is a white form with the text 'Would you like to be kept up to date with [Consultation title]?' and 'subscribe to notifications:'. Below this is an 'Email' label and a text input field. At the bottom of the form is a dark blue 'Submit' button with a white right arrow.

Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:

**Upcoming** > **Open** > **Closed** (awaiting decision) > **Closed** (with decision)

## **2. Requested cost allowances**

### **Section summary**

This section details the funding requested by NGET in its submission.

- 2.1 The total cost estimate for BTNO project is £729.03 million (2024/25 price base) which includes previously granted Baseline Funding Allowance (BFA) of £164.8 million during RIIO-T2 and an allowance of £26.24 million during RIIO-T1.
- 2.2 This section sets out the main parts of the funding requested by NGET in its submission. It includes the requested project allowances for direct construction costs, indirect costs and risk, as well as the request to adjust the Cost and Output Adjusting Event (COAE) threshold.

### **Direct construction costs**

- 2.3 NGET has requested £492.8 million out of the total project cost of £702.8 million to fund direct construction (EPC) works for BTNO. The high-level scope of BTNO comprises 18km of OHL, 11km of UGC, a new Grid Supply Point (GSP) at Twinstead and an upgrade to Bramford substation. At the time of PA submission, the contract for Bramford substation extension works had not been awarded and the cost estimate presented by NGET is based on NGET's internal E-hub pricing estimate. ASTI guidance provides for the inclusion of estimated costs in a PA. We have considered whether these estimates are suitably robust to enable us to reach a minded-to position, discussed in the next chapter.
- 2.4 Two 400/132kV240MVA Super Grid Transformers (SGTs) are required at the new GSP constructed near Twinstead Green. NGET has stated that due to extended lead times and differing schedule requirements, the procurement of SGTs was undertaken separately through a NGET Framework Agreement.
- 2.5 The PA submission states that NGET utilised its existing RIIO-T2 framework agreements for construction works as a preferred route to market following the design freeze requirements to support the DCO submission and supply chain constraints at the time.
- 2.6 The project team carried out the Front End Engineering Design (FEED) work to inform and de-risk procurement, followed by the award of a Main Works Contracts (MWC) to contractors picked for the project. The FEED process is a critical phase

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in large-scale infrastructure projects where the goal is defining the project scope, establishing technical requirements, identifying risks and providing cost and schedule estimates before committing to full-scale execution.

- 2.7 NGET utilised NEC4-based call-off contracts under its existing framework agreements for the four main works packages. This is an agreement where a supplier is pre-approved to provide goods or services over a set period, and specific orders called call-offs are placed as needed. The main contract framework sets terms and conditions, pricing structure and scope, but does not commit to exact quantities upfront for the project. In NGET's view, this mitigated against some of the market capacity constraints by utilising pre-existing frameworks that provide efficient access to suppliers that have been assessed as capable of delivering electricity transmission infrastructure to the required quality and technical standards. During pre-market engagement, NGET concluded that the project had attracted sufficient supply chain interest to generate competition among NGET's framework suppliers.

**Direct non-EPC costs, indirect costs and risk**

- 2.8 NGET requested £209.9 million for direct non-EPC costs, indirect costs and a P70 level of confidence funding for the BTNO project. A P70 level of risk funding means sufficient funding to ensure that there is a 70% chance that the level of funding is sufficient or higher than required for the project based on the TO's probabilistic modelling of potential risk outcomes.
- 2.9 The indirect costs also included local and regional programmes that effectively deliver tangible benefits to local communities and the environment.
- 2.10 NGET explained in its PA submission that it seeks to create programmes that are tailored to local communities under the government's guidance on community funds for transmission infrastructure.<sup>11</sup> Community funds are monetary and non-monetary benefits provided by developers. The funds might provide support for:
- projects that enhance the local economy, society, and environment
  - community priorities such as local tourism, education, and skills development opportunities

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<sup>11</sup> [Community funds for transmission infrastructure \(accessible webpage\) - GOV.UK](#)

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- 2.11 In line with the government guidance on community funds for transmission infrastructure, the BTNO project has community benefits cost set at £4.24 million.
- 2.12 Biodiversity Net Gain (BNG) is an approach to development and land management that aims to leave biodiversity in a better state than it was before. It involves calculating biodiversity losses and gains from development projects, with the goal of enhancing the natural environment. NGET's submission states that it has committed to deliver a net gain of at least 10% or greater in environmental value (including biodiversity) on all its construction projects which is in line with new legislation for Town and Country Planning Act developments and for Nationally Significant Infrastructure Projects (NSIPs).<sup>12</sup>
- 2.13 NGET has applied for £8.14 million to deliver the 10% or greater environmental value BNG. The estimate used market rates for biodiversity units and was based around initial delivery plus 30 years of management and maintenance.

**P70 level of confidence**

- 2.14 NGET has requested funding based on a P70 level of confidence for BTNO project. Ofgem's approach is to normally fund projects to a P50 level of confidence. Cost confidence levels are a measure of confidence in the project's estimated costs constructed using probability. They are used to gauge the appropriate level of funding against the likelihood of the project being successfully delivered for a given cost.
- 2.15 A project costed at the P50 confidence level means that 50% of estimates exceed the P50 estimate and 50% of estimates are less than the P50, with P50 classed as a middle estimate. A P70 level of funding exceeds a P50 level as a greater volume and value of risk will be funded up front under P70, with a correspondingly greater likelihood that the project will be delivered within that cost estimate, but corresponding risk that the funding may not be required.
- 2.16 For BTNO, the P50 level of funding submitted was £[REDACTED] million and P70 level of funding was £[REDACTED] million.
- 2.17 NGET provided several points of justification for seeking funding at a P70 rather than P50 level:
- P70 contingency allows NGET room to handle difficult terrain for OHL or UGCs

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<sup>12</sup> [The Biodiversity Net Gain Statutory Instruments | GOV.UK](#)

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- greater assurance to stakeholders regarding budgeting for compliance related risks, delays or adjustments
- proactive approach to risk, reducing budget overruns or delays for the project
- project resilience from experience on cost overruns in past projects relating to complexity of integrating OHL, UGC and construction of substations
- constraints regarding NGET's ability to secure all necessary outages during the construction period

2.18 We will cover our minded to position for P70 level of funding in the following chapter.

**Price Adjustment Mechanisms (PAMs)**

2.19 A supply chain indexation Price Adjustment Mechanism is a contractual mechanism for managing changes to the contract price post award. Costs are treated as pass-through and are therefore not pre-determined but instead are treated by ex-post allowance adjustment which is trued up on an annual basis based on indices. PAMs have been demanded by the supply chain to manage costs which they have not been able to fix, and which remained highly volatile at the point of procurement.

2.20 NGET will utilise PAMs to adjust the target costs for each Engineering, Procurement and Construction (EPC) package using pre-agreed industry linked indices. Volumes required to deliver the defined scope of work will be fixed at contract award. The target cost will fluctuate based on these adjustments, which will be reconciled with the Contractors on an annual basis. Although NGET has assumed the long-term inflation rate of 2% past FY27, this does not include any real price effect indices. The level of uncertainty associated with the commodity price and inflation movements could not be included in the PA costs. NGET suggests that setting an ex-ante funding allowance would not be appropriate due to the unpredictability of movement of these cost indices. NGET is therefore requesting the use of a Cost Uncertainty Re-opener for PAMs related costs for the project.



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- 2.21 Part E of SpC 3.41 provides for a COAE re-opener mechanism to adjust outputs and allowances in Appendix 1 to SpC 3.41 should there be a COAE, as defined in the licence.
- 2.22 NGET had taken an initial view in its submission that 5% was too high a threshold to breach for COAE and that it exposed the project to individual unfunded risks. NGET therefore requested a COAE threshold of 3.6% which is equivalent to £25.3 million. However, during the engagement following the PA submission, NGET requested a revised COAE threshold of 4.6% (£32.3 million) instead of 3.6%.
- 2.23 Our minded-to position on NGET's funding request is presented in chapter 3.

**Cost Uncertainty Funding Mechanism**

- 2.24 To mitigate unnecessary contingency costs, NGET has suggested and requested four specific cost re-openers without a qualifying materiality threshold for i) Horizontal Directional Drilling (HDD) trenchless drilling, ii) PAMs for each EPC contract, iii) final costs associated with BNG and iv) final costs associated with EPC works required at Bramford substation. NGET's justification for suggesting these Re-openers is described as follows:

- i) **HDD Trenchless Drilling** of glacial floodplains for the laying of underground cables for BTNO. Glacial floodplains have variable soil composition including clay, sand and gravel. These materials can shift or collapse, making drilling unpredictable and increasing the chances of equipment getting stuck or damaged thereby increasing risk and potentially costs during the process. Following discussions with the contractor, NGET has advised Ofgem that there are risks associated with the drilling process which could materialise in delays and increased costs from drilling into rocks. According to NGET, any costs will not be known until the digging process has been started in the glacial floodplains area. NGET has therefore requested this re-opener as a Deferred Risk Funding Mechanism, should it become necessary to utilise an alternative methodology.
- ii) **Price Adjustment Mechanisms** for each of the EPC contracts. Inflation fluctuations during project delivery may be higher or lower than estimates submitted at PA. NGET proposes to submit an application under its suggested cost re-opener without a qualifying materiality threshold to

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capture actual costs. NGET has advised that inflation has been a key driver of cost increases for BTNO and considers any ongoing uncertainty in this regard is best managed through a re-opener to avoid under or overfunding based on upfront estimates.

- iii) **Final costs associated with BNG:** Under its Environmental Action Plan 2021-26,<sup>13</sup> NGET has committed to deliver a net gain of at least 10% or greater in environmental value (including biodiversity) on all construction projects considered over a 30-year period. It has provided BNG estimates as a guide to potential costs of project delivery but considers true costs may be uncertain during the early stages due to the evolving strategy. Given this uncertainty, NGET would like to use the re-opener to allow for potential cost adjustments in light of cost estimates increasing or decreasing during project delivery.

- iv) **Final costs associated with EPC works required for Bramford substation:**

[REDACTED]

[REDACTED]

[REDACTED] To meet the project delivery timeline and ASTI ODI Target Date of 2029, NGET submitted a cost estimate for Bramford works based on its FEED assumptions and internal E-hub pricing estimates at the time of submission. NGET has requested the use of the above mechanism for Bramford substation extension works should the contract award price be higher or lower than its current estimate.

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<sup>13</sup> [17309 NG Environmental Action Plan April 2024 AW06.pdf](#)

### 3. Minded-to position

#### Section summary

This section explains our minded-to position on NGET's PA funding request. It provides a summary of the total funding we are minded-to allow to NGET for delivery of the BTNO project.

#### Questions

- Q1. Do you agree with our minded-to position on direct costs for BTNO?
- Q2. Do you agree with our minded-to position on non-EPC costs and indirect costs for BTNO?
- Q3. Do you agree with our minded-to position in relation to risk funding for BTNO? If not, could you provide more information on how best to appropriately balance the risk between consumers and the TOs, while incentivising risks to be managed to a level as low as practicable?
- Q4. Do you agree with our minded-to position on the requested 0% materiality threshold re-opener mechanism for BTNO?
- Q5. Do you agree with our minded-to position on the COAE threshold adjustment for BTNO?

- 3.1 In the previous section we outlined NGET's PA funding request and the reasons behind its submitted costs for BTNO.
- 3.2 This section sets out our minded-to position on this PA submission. It outlines our views on the efficient allowances for the project across direct construction costs, indirect costs and risk, including our approach to the confidence level of contingency funding and our response to NGET's request for a 0% materiality threshold re-opener as a cost uncertainty funding mechanism. It also clarifies our view on the requested COAE adjustment. Finally, it summarises the requested allowance and the total sum of funding we propose to allow.
- 3.3 In summary, against the total requested project allowance of £702.8 million, we are minded-to allow £642.2 million of costs for the overall delivery of BTNO and to maintain the COAE threshold at 5%. Out of the total reduction of £60.6 million, £26.1 million is subjected to disallowance while the remaining deferred amount of £34.5 million can be funded through alternative regulatory routes outside the PA funding allowance.

**Consultation – Bramford to Twinstead – Project Assessment****Direct construction costs**

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- 3.4 The main submission document detailed the ongoing constraints in the supply chain environment and the challenge this presented in terms of contractor willingness and ability to bid for projects, changes to their risk appetite, lengthening lead times for key equipment and increased costs. We recognise the challenges this situation may have presented for the project, although note that the ASTI framework was designed to support and incentivise TOs to manage these risks.

**Bramford Substation**

3.5

[REDACTED]

- 3.6 Following the PA submission, NGET has communicated to us that the final contract award price for Bramford substation is on course to significantly exceed the cost estimate used for PA submission due to design changes and market challenges faced in the procurement process. NGET has requested to subject the final contract award price to a cost re-opener. We are minded to subject the final cost of Bramford substation to an Uncertain Cost Re-opener guidance for which will be published soon following a consultation. We would scrutinise any proposal in depth and reserve the option of utilising an independent review to support our assurance of costs and processes if a re-opener for the additional cost is requested.

- 3.7 We would expect any submission to provide robust justification of the drivers of any cost increase with a clear demonstration of how costs have been controlled to a level as low as practicable throughout the development, design and procurement of the Bramford substation works. It should also set out the specific changes in clear detail, both in terms of costs and activities on site as compared to the assumptions behind the original £76.8 million estimate. In particular, we would require a compelling case for NGET's decision making in ensuring the competitiveness and efficiency of the procurement process to demonstrate the

**Consultation – Bramford to Twinstead – Project Assessment**

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efficiency of any submitted costs. Any submission should clearly and fully comply with the requirements set out in our ASTI Guidance and any associated guidance on first submission. Any further detail that NGET can provide on the technical assumptions that sit behind the current estimate through its response to this consultation will strengthen the case for us to consider adjustments through a re-opener submission.

**EPC costs**

- 3.8 NGET have included an upfront pain/gain cost of £[REDACTED] million for a projected overspend on construction associated with the NEC4 Option C contracts for BTNO. This has been identified as a “Fixed Cost” by NGET despite the fact that the works are ongoing and it is not clear that any overspend will be incurred. The pain/gain position is 50/50, capped at 110% of each contract’s value. This amount is not currently due and any overspend would only be calculated at project completion where NGET and the contractor would look at any allocation of costs. This arrangement ensures both NGET and its contractor face a shared incentive to ensure risks are managed efficiently and costs minimised. We are therefore minded to remove £[REDACTED] million from the additional EPC cost requested for the project.
- 3.9 We are minded to remove £0.13 million from the requested EPC costs relating to the storage of OHL metal works as NGET has confirmed the storage is no longer required and it is not incurring this cost.
- 3.10 In relation to our review of the project’s direct costs, our minded-to position is to remove £[REDACTED] million of requested costs [REDACTED], pain/gain share and storage costs, and to allow the direct costs of £482.2 million for the project.

**Direct non-EPC costs, indirect costs and risk**

- 3.11 The direct non-EPC costs for BTNO include categories such as community benefits and BNG, whereas indirect costs include, project management costs including personnel cost, engineering, specialist support, external relations and ASTI overhead cost.

**Consultation – Bramford to Twinstead – Project Assessment****Community Benefits and BNG**

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- 3.12 We recognise the need to ensure communities that host infrastructure also obtain benefit from doing so and the key role that good local stakeholder relations can play in successfully delivering the project on time. While community funds costs should be referenced in PA documentation for completeness, consistent with other pass-through items (e.g. business rates), they will not be subject to efficiency assessment as part of the PA process. NGET can now claim the community benefit funding through the Community Benefit Funding Pass-through consistent with the government's Community Benefits Funding policy introduced under RIIO-ET3.<sup>14</sup> Therefore, we propose removing the costs associated with community benefits funding from the Indirect Cost allowance for BTNO in the PA as a more suitable funding route for eligible costs is available.
- 3.13 We are minded-to remove £4.24 million of community benefits funding from the funding awarded through this PA, in view of the route available for NGET to recover eligible costs related to community benefits funding through the RIIO-ET3 Community Benefit Funding Pass-through mechanism.
- 3.14 The funding request for BNG included a request for 30 years of management and maintenance. We do not consider it appropriate to fund whole lifecycle costs beyond the initial delivery plus a year of operation at PA stage. In addition, the costs submitted were at an immature stage of development. We do not consider it appropriate to fund costs that include such a high degree of uncertainty.
- 3.15 We do not consider it appropriate to fund these costs through upfront allowances; instead, we believe that these highly uncertain costs should be managed in different ways. Where NGET consider it best to transfer lifetime obligations to 3<sup>rd</sup> parties we will review on a case-by-case basis under the afore-mentioned Uncertain Cost Re-opener. Where we agree it is best to transfer the obligations, the costs will be recoverable. In instances where BNG solutions involve ongoing operational costs over 30 years, we will consider funding for efficient cost incurred in this process beyond the first year through future price controls.
- 3.16 We are minded-to remove £2.9 million out of the 30-year management and maintenance costs of BNG and to allow NGET to recover costs incurred complying with BNG legislation through the new Uncertain Cost Re-opener. Where BNG solutions involve ongoing operational costs over 30 years, we are minded-to

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<sup>14</sup> [RIIO-3-Final-Determinations-ET.pdf](#)

**Consultation – Bramford to Twinstead – Project Assessment**

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consider funding for efficient cost incurred in this process beyond the first year through future price controls.

**Personnel cost**

- 3.17 We have adopted a holistic view when setting an allowance for NGET project management (PM) and personnel costs. While we acknowledge the increased PM resource requirement for exercising NEC Option C contracts relative to Option A lump sum contracts, we have also noted that the BTNO project employs both NEC Option A and Option C contracts for its various MWCs and the overall allowance needs to reflect this. NGET's PM costs for BTNO appear high compared to other NGET ASTI projects being delivered currently without sufficient justification for why this should be the case.
- 3.18 Comparing NGET's personnel costs as a proportion of total direct EPC costs, we have evaluated BTNO against other recent comparable ASTI projects. Personnel costs as a proportion of the total project value also reveal BTNO as the most expensive.
- 3.19 We are therefore minded to reduce the personnel costs for BTNO by £13.1 million to align them with the median value derived from the above analysis.
- 3.20 We are minded-to remove £21.1 million of the ASTI Overhead costs as further work is already in progress with NGET to improve our understanding of these costs and the efficiencies associated with implementing an ASTI programme office. We are considering the option of funding eligible, efficient overhead costs under the new Cost Uncertainty Re-opener.

**P70 level of confidence**

- 3.21 The PA stage determines the efficient cost allowance for the delivery of the project. It is the stage where we look at the proposed project in depth, focusing on the efficiency of the total forecast costs of construction, risk contingencies and the TOs' readiness to proceed with delivery.
- 3.22 Ofgem has always been clear that ASTI projects should normally be funded to a P50 level of confidence; we judge this to be the most efficient level of funding for risk, providing an incentive to the TOs to proactively manage project risks and seek opportunities without being provided with excessive levels of comfort. Upfront contingency funding is only one element of the mechanisms provided to manage risk within ASTI, alongside the sharing factor under the Totex Incentive Mechanism (TIM) whereby any over or underspend will be shared between the TO

**Consultation – Bramford to Twinstead – Project Assessment**

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and consumers, and uncertainty mechanisms, notably the COAE for high impact risk events.

- 3.23 The P70 risk funding requested by NGET is above our P50 level benchmark for efficient risk expenditure as a percentage of total project cost. Review of the resource profile and risk positions has shown that the project can be submitted under a P50 level of confidence. We are of the view that having considered all these factors represents the optimal mix of balancing risk while mitigating the costs from escalating.
- 3.24 Project delivery at a P50 position is a more efficient level of confidence to proceed with funding. We are minded to reducing the project risk pot from £[REDACTED] million to £[REDACTED] million to align the project to a P50 level of confidence.

**PAMs**

- 3.25 The existing supply chain environment is driving the need for PAMs on several projects, including BTNO. NGET considers that at present it is extremely difficult for suppliers to provide firm, long-term costs and commitments for projects. NGET is therefore seeking the inclusion of PAMs to adjust costs where specific commodity prices rise significantly above the prevailing rate of inflation. NGET is looking to use symmetric PAM costs to be allowed through a re-opener in order to prevent excessive allowances or shortfalls. There is an opportunity for consumers to gain should inflation decrease, and commodity prices come down.
- 3.26 We believe that consistent with our previous decisions on ASTI PAs, PAM funding requests should be considered through the new Cost Uncertainty Re-opener mechanism instead of the suggested 0% materiality threshold re-opener, where TOs can demonstrate there is a need for such a mechanism and it is efficient and in consumers' interests to provide this. This allows flexibility to adjust allowances based on commodity price movements. We can increase allowances if commodity prices increase or decrease allowances if commodity prices decrease in future. This approach prevents consumers from incurring unnecessary costs. It also provides assurance to NGET that there is a mechanism in place for it to request further funding based on the progress on the project. We plan to consult on this new Cost Uncertainty Re-opener in the near future.
- 3.27 For BTNO, this re-opener will allow NGET to submit a further funding request where there is incurred cost via PAMs. We will be assessing whether these costs are reasonable and efficient, therefore we expect this to be evidenced by



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supporting information such as invoices, question and answer logs, and relevant price indices for PAM related costs from BTNO contractors.

**COAE**

- 3.28 We have considered NGET's proposed COAE threshold of 4.6% (equivalent to £32.3 million) intended for very low probability, very high impact events. We are minded-to maintain a COAE threshold at 5% equivalent to £32.1 million based on our minded-to allowance. We note that this figure is lower than the requested threshold of £32.3 million. We believe that £32.1 million represents a single risk of significant magnitude, protecting the interests of consumers while providing NGET with the confidence that low probability high value risks will be funded.

**HDD Trenchless Drilling**

- 3.29 We have assessed NGET's request for a Deferred Risk Uncertainty Re-opener for HDD trenchless drilling. We recognise that the supply chain expressed concerns on the feasibility of HDD given the geological data returned at the proposed HDD locations. We also note the further actions undertaken by NGET in commissioning a study on the areas of highest risk. As the output of the commissioned report did not identify any locations where it found that HDD is not feasible, and the successful tenderer is carrying a share of the risk of any cost impacts (following negotiations), the level of exposure, to NGET and overall, has been reduced. The decision to progress with the existing HDD design appears to be supported in the design and not the forecast additional cost of a new/alternate solution.
- 3.30 Were these risks to materialise, the residual risk which NGET may face could be up to 50% of the costs over the agreed total of prices up to the 110% cap in the Contract Data. Reviewing the submitted risk register included in the PA, there are four submitted risks relating to 'ground conditions' against the UGC contract which appear to reference HDD suitability, with the deterministic valuations represented in the total P50 valuation. The P50 risk values totalled, and as apportioned to NGET, would be £7.1 million against the 24/25 prices for all ground condition matters. Since the risk register at P50 is being funded by Ofgem, this valuation could be drawn down from in the NGET risk register. Should a qualifying event occur, NGET would also have available to it the option to make a COAE submission.
- 3.31 The risks highlighted by NGET on HDD trenchless drilling and the associated costs can be submitted for Ofgem review under the COAE mechanism if a qualifying

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event arises. We consider this combination of mechanisms suitably covers costs related to ground conditions outside the control of NGET, with the 5% COAE threshold aiming to accommodate low probability high impact events which may occur during the drilling and construction phases in the project, were they to require a fundamental change of technology or approach.

- 3.32 Therefore, we are minded-to disallow NGET's request for a Cost Uncertainty Re-opener for HDD drilling. However, we will consider any additional evidence if presented by NGET to support its request for a re-opener as part of its response to this consultation. This can include corresponding adjustments to other aspects of the risk funding arrangements.

**Summary of proposed ASTI Allowances***Summary of our minded-to position*

- 3.33 In summary, we are minded-to allow £642.2 million of costs for the overall delivery of BTNO. This includes £482.2 million for direct construction costs and £160 million for direct non-EPC costs, indirect costs and risk.
- 3.34 The above level of funding and risk reflects our minded-to position to:
- Remove £[REDACTED] million of direct construction (EPC) costs
  - remove £4.24 million of community benefits funding
  - remove £2.9 million out of £8.1 million of BNG funding
  - reduce NGET personnel costs by £13.1 million
  - remove the ASTI overhead cost of £21.1 million
  - remove an amount of £8.4 million from the risk register to align it with a P50 position
  - subject the PAMs to a new re-opener

- 3.35 We are also minded-to retain the COAE threshold at 5%.

*Summary of submitted and proposed funding*

Table 1 below summarises the proposed cost allowances under the ASTI Re-opener for BTNO.

**Consultation – Bramford to Twinstead – Project Assessment****Table 1: Summary of proposed cost allowances under the ASTI Re-opener for the Bramford to Twinstead Project (in 24/25 prices)**

| <b>Cost Category</b>                        | <b>Submitted Cost (£)</b> | <b>Proposed Adjustment (£)</b> | <b>Subject to COAE / Re-opener</b> | <b>Proposed Allowance (£)</b> |
|---|---------------------------|--------------------------------|------------------------------------|-------------------------------|
| Non-EPC Costs, Indirect Costs, P50 and Risk | £209,942,472              | £49,870,932                    | 0                                  | £160,071,540                  |
| Direct Construction Costs                   | £492,851,326              | £10,694,261                    | 0                                  | £482,157,065                  |
| <b>Total ASTI Re-opener Funding</b>         | <b>£702,793,798</b>       | <b>£60,565,193</b>             | <b>Re-opener: PAMs</b>             | <b>£642,228,605 PAMs: Nil</b> |
| <b>COAE threshold</b>                       | <b>4.6%</b>               | <b>0.4%</b>                    |                                    | <b>5%</b>                     |

**Next steps**

3.36 We welcome your general responses to this consultation and to our specific questions set out in Chapter 3. Please send your response to: [MajorProjects.LTPD@ofgem.gov.uk](mailto:MajorProjects.LTPD@ofgem.gov.uk). The deadline for responses is 02 March 2026. We aim to publish our decision and our proposed modifications to NGET's licence in summer 2026.

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**Appendices**

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**Appendix 1 – Consultation questions**

Q1. Do you agree with our minded-to position on direct costs for BTNO?

Q2. Do you agree with our minded-to position on non-EPC costs and indirect costs funding for BTNO?

Q3. Do you agree with our minded-to position in relation to risk funding for BTNO? If not, could you provide more information on how best to appropriately balance the risk between consumers and the TOs, while incentivising risks to be managed to a level as low as practicable?

Q4. Do you agree with our minded-to position on the requested 0% materiality threshold re-opener mechanism for BTNO?

Q5. Do you agree with our minded-to position on the COAE threshold adjustment for BTNO?

## Appendix 2 – Privacy notice on consultations

### Personal data

The Gas and Electricity Markets Authority is the controller (“Ofgem” for ease of reference). The Data Protection Officer can be contacted at [dpo@ofgem.gov.uk](mailto:dpo@ofgem.gov.uk)

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally). It does not refer to the content of your response to the consultation.

#### **1. The identity of the controller and contact details of our Data Protection Officer**

The Gas and Electricity Markets Authority is the controller (“Ofgem” for ease of reference). The Data Protection Officer can be contacted at [dpo@ofgem.gov.uk](mailto:dpo@ofgem.gov.uk)

#### **2. Why we are collecting your personal data**

Your personal data is being collected as an essential part of the consultation process so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

#### **3. Our legal basis for processing your personal data**

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest, i.e. a consultation.

#### **4. With whom we will be sharing your personal data**

N/A.

#### **5. For how long we will keep your personal data or the criteria used to determine the retention period**

Your personal data will be held for six months after the project is closed.

#### **6. Your rights**

The data we are collecting is your personal data and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data,
- access your personal data,

- have your personal data corrected if it is inaccurate or incomplete,
- ask us to delete your personal data when we no longer need it,
- ask us to restrict how we process your personal data,
- get your personal data from us and re-use it across other services,
- object to certain ways we use your personal data,
- be safeguarded against risks where decisions based on your personal data are taken entirely automatically,
- tell us if we can share your personal information with 3rd parties,
- tell us your preferred frequency, content and format of our communications with you,
- lodge a complaint with the independent Information Commissioner's Office (ICO) if you think we are not handling your personal data fairly or in accordance with the law.

You can contact the ICO at <https://ico.org.uk/> or telephone 0303 123 1113.

**7. Your personal data will not be sent overseas**

**8. Your personal data will not be used for any automated decision making**

**9. Your personal data will be stored in a secure government IT system**

**10. More information**

For more information on how Ofgem processes your data, click on "[Ofgem privacy promise](#)"