

## RIIO-2 Final Determinations – SHET Annex (REVISED)

<b>Publication date</b>	03 February 2021	<b>Contact:</b>	RIIO Team
		<b>Team:</b>	Network Price Controls
		<b>Tel:</b>	020 7901 7000
		<b>Email:</b>	RIIO2@ofgem.gov.uk

Our aim for the RIIO-2 price controls is to ensure energy consumers across GB get better value for money, better quality of service and environmentally sustainable outcomes from their networks.

In 2019, we set out the framework for the price controls in our Sector Specific Methodology Decisions. In December 2019, Transmission and Gas Distribution network companies and the Electricity System Operator (ESO) submitted their business plans to Ofgem setting out proposed expenditure for RIIO-2. We assessed these plans, engaged with a wide range of stakeholders, and published our consultation on Draft Determinations in July 2020.

Based on a review of all the responses to our Draft Determinations, including further evidence received from the companies and wider stakeholders as well as a period of further engagement including Open Hearings, this document, and others published alongside it, set out our Final Determinations for company allowances under the RIIO-2 price control, which will commence on 1 April 2021.

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## 1. Introduction and overall package

### Purpose of this document

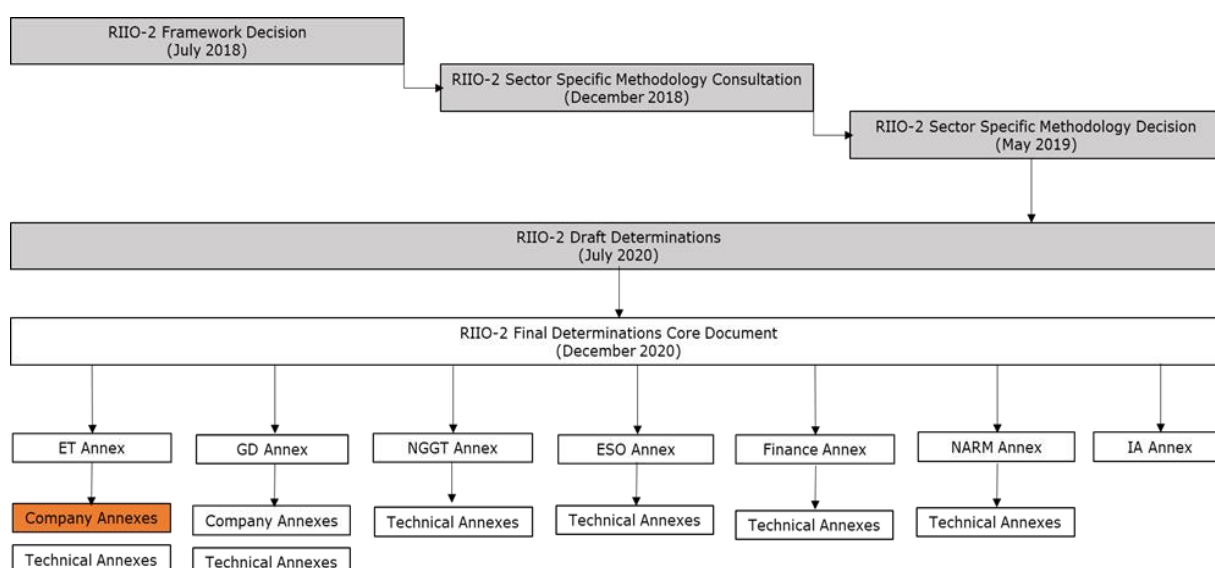
1.1 This document sets out our Final Determinations for the Electricity Transmission (ET) price control (RIIO-ET2) for the areas that are specific to Scottish Hydro Electric Transmission (SHET) focusing on its:

- Baseline cost allowances
- Outputs package, including Licence Obligations (LOs), Output Delivery Incentives (ODIs)<sup>1</sup> and Price Control Deliverables (PCDs)
- Uncertainty Mechanisms (UMs)
- Level of Network Innovation Allowance (NIA)
- Business Plan Incentive (BPI).

1.2 All figures are in 2018/19 prices except where otherwise stated.

1.3 This document is to be read alongside the RIIO-2 Final Determinations Core Document (Core Document), the RIIO-2 Final Determinations – Electricity Transmission Sector Annex (ET Annex) and the RIIO-2 Final Determinations – NARM Annex (NARM Annex). Figure 1 sets out where you can find information about other areas of our RIIO-2 Final Determinations.

**Figure 1: RIIO-2 Final Determinations documents map**



<sup>1</sup> ODIs can be reputational (ODI-R) or financial (ODI-F).

## An overview of SHET's RIIO-2 price control

1.4 This section focuses on bringing together the key aspects of SHET's RIIO-2 Final Determinations. We present a summary of SHET's baseline Totex in Table 1. This reflects our view of efficient costs including ongoing efficiency over RIIO-2. For further details of any values, please refer to Chapter 3.<sup>2</sup>

**Table 1: SHET's submitted versus allowed baseline Totex<sup>3</sup> (£m, 2018/19)**

<b>Cost area</b>	<b>SHET submitted Totex (£m)</b>	<b>Ofgem Draft Determinations proposed baseline (£m)</b>	<b>Ofgem Final Determinations allowed baseline (£m)</b>
Load related capex	850.9	717.3	815.4
Non-load related capex	811.6	540.5	794.3
Non-operational capex	112.4	54.8	103.9
Network operating costs	207.8	90.2	165.8
Indirect opex	360.3	265.7	357.7
Other costs	43.9	38.1	47.4
Ongoing efficiency	-	<b>-97.9</b>	<b>-126.7</b>
<b>Core Baseline Totex</b>	<b>2,386.8</b>	<b>1,608.7</b>	<b>2,157.7</b>
Initial RPE allowances	N/A	N/A	62.6
Innovation, pass through and other estimated items	N/A	N/A	523.1
<b>Modelled upfront funding</b>	<b>N/A</b>	<b>N/A</b>	<b>2,743.4</b>

1.5 In addition to the core baseline totex allowance of £2159.8m, we have also made allowances for items such as the initial RPE allowances, the network innovation allowances and the strategic innovation fund. Our financial model has also included estimated allowances for some uncertainty mechanisms, pass through costs and other revenue items. This results in a total modelled upfront funding of £2743.4m.

<sup>2</sup> Where the source document is not stated, we are referring to this document (Final Determinations – SHET Annex, abbreviated to SHET Annex).

<sup>3</sup> Baseline Totex refers to total controllable costs (this excludes BPI, RPEs, pass-through costs and includes ongoing efficiency).

- 1.6 We have decided to set SHET’s RIIO-2 Totex Incentive Mechanism (TIM) rate at 36%. Further details about TIM can be found Chapter 10 in the Core Document.
- 1.7 Table 2 sets out the package of outputs that will apply to SHET during RIIO-2 – further details are contained within Chapter 2. For further details of our decisions on the bespoke outputs in SHET’s Business Plan see Appendix 2.

**Table 2: RIIO-2 outputs package for SHET**

<b>Output name</b>	<b>Output type</b>	<b>Applicable to</b>	<b>Further detail</b>
<b>Meeting the needs of consumers and network users</b>			
Energy Not Supplied (ENS)	ODI-F	ET sector	ET Annex, Chapter 2
Timely Connections	ODI-F	ET sector	ET Annex, Chapter 2
SO:TO Optimisation	ODI-F	ET sector	ET Annex, Chapter 2
Quality of Connections Survey	ODI-F	ET sector	ET Annex, Chapter 2
New Infrastructure Stakeholder Engagement Survey	ODI-R	ET sector	ET Annex, Chapter 2
Network Innovation Allowance	UIOLI	ET, GT, GD sectors	Core Document, Chapter 8
<b>Maintain a safe and resilient network</b>			
Network Asset Risk Metric (NARM)	PCD and ODI-F	ET, GT, GD sectors	NARM Annex
Cyber Resilience OT	PCD and UIOLI	ET, GT, GD sectors	Core Document, Chapter 7
Cyber Resilience IT	PCD	ET, GT, GD sectors	Core Document, Chapter 7
Network Access Policy (NAP)	LO	ET sector	ET Annex, Chapter 2
Large Project Delivery (LPD)	ODI-F and PCD	ET sector	ET Annex, Chapter 2
Pre-Construction Funding	PCD	ET Sector	ET Annex, Chapter 4
Shared infrastructure schemes	PCD	ET sector	Chapter 2, this document
Wider Works	PCD	ET sector	Chapter 2, this document
Resilience and Operability	PCD	ET sector	Chapter 2, this document
<b>Delivering an environmentally sustainable network</b>			
Net Zero and re-opener development	UIOLI	ET, GT, GD sectors	Core Document, Chapter 7; ET Annex, Chapter 2
Environmental Action Plan and annual environmental report	ODI-R and LO	ET, GT, GD sectors	Core Document, Chapter 4; ET Annex, Chapter 2
Business Carbon Footprint	ODI-R	ET, GT, GD sectors	Core Document, Chapter 4; ET Annex, Chapter 2
Environmental Scorecard	ODI-F	ET sector	ET Annex, Chapter 2

Output name	Output type	Applicable to	Further detail
Insulation and Interruption Gas (IIG) leakage incentive	ODI-F	ET sector	ET Annex, Chapter 2
Visual amenity in designated areas provision	PCD, UM	ET sector	ET Annex, Chapter 2

1.8 We set out the UMs that will apply to SHET during RIIO-2 price control period in Table 3. For further detail of our decision on the UMs for SHET, see Chapter 4.

**Table 3: RIIO-2 Uncertainty Mechanisms package for SHET**

UM name	UM type	Applicable to	Further detail
Bad Debt	Pass-through	ET, GT, GD sectors	Finance Annex
Business Rates	Pass-through	ET, GT, GD sectors	Finance Annex
Ofgem Licence Fee	Pass-through	ET, GT, GD sectors	Finance Annex
Pensions (pension scheme established deficits)	Re-opener	ET, GT, GD sectors	Finance Annex
Tax Review	Re-opener	ET, GT, GD sectors	Finance Annex
Cost of debt indexation	Indexation	ET, GT, GD sectors	Finance Annex
Cost of equity indexation	Indexation	ET, GT, GD sectors	Finance Annex
Inflation Indexation of RAV and Allowed Return	Indexation	ET, GT, GD sectors	Finance Annex
Real Price Effects	Indexation	ET, GT, GD sectors	Core Document, Chapter 7
Cyber Resilience OT	Re-opener	ET, GT, GD sectors	Core Document, Chapter 7
Cyber Resilience IT	Re-opener	ET, GT, GD sectors	Core Document, Chapter 7
Non-operational IT and Telecoms Capex	Re-opener	ET, GT, GD sectors	Core Document, Chapter 7
Physical Security (PSUP)	Re-opener	ET, GT, GD sectors	Core Document, Chapter 7
Coordinated Adjustment Mechanism	Re-opener	ET, GT, GD sectors	Core Document, Chapter 7
Net Zero	Re-opener	ET, GT, GD sectors	Core Document, Chapter 7
Opex Escalator	Volume driver	ET sector	ET Annex, Chapter 4
Generation and Demand Connections	Volume driver	ET sector	ET Annex, Chapter 4
Large Onshore Transmission Investments (LOTI)	Re-opener	ET sector	ET Annex, Chapter 4
Pre-Construction Funding	Re-opener	ET sector	ET Annex, Chapter 4
Medium Sized Investment Projects (MSIP)	Re-opener	ET sector	ET Annex, Chapter 4
Access Reform	Re-opener	ET Sector	ET Annex, Chapter 4
Visual amenity in designated areas	Re-opener	ET sector	ET Annex, Chapter 4

UM name	UM type	Applicable to	Further detail
Subsea cable repair re-opener	Re-opener	SHET only	Chapter 4
ENS Compensation Scheme	Pass-through	SHET only	Chapter 4

1.9 We have decided to set £8.0m for SHET’s RIIO-ET2 NIA, conditional on the implementation of an improved reporting framework. For further detail of our decision on the NIA for SHET, see Chapter 5.

1.10 Table 4 summarises the outcome of RIIO-2 BPI performance for SHET each of the four stages of the incentive. For further detail of our decision on the BPI for SHET, see Chapter 6 in this document and Chapter 10 in the Core Document.

**Table 4: RIIO-2 BPI performance for SHET**

BPI stage	Final Determination
Stage 1 - Minimum requirements	Pass
Stage 2 – CVP reward	Reward of £10.55m for 2 CVPs
Stage 3 – Penalty	-£4.49m
Stage 4 – Reward	£15.75m
<b>Total</b>	<b>£21.81m Reward</b>

1.11 Table 5 summarises the financing arrangements that we have decided to apply to SHET. Please refer to the Finance Annex for more detail on these areas.

**Table 5: RIIO-2 financing arrangements for SHET<sup>4</sup>**

Finance parameter	SHET rate	Source
Notional gearing	55%	Finance Annex
Cost of Equity	4.25%	
Expected outperformance	0.22%	
Allowed return on equity	4.02%	
Allowed return on debt	1.59% <sup>5</sup>	
Allowed return on capital	2.69%	

<sup>4</sup> We present here a forecast average of RIIO-2 allowed returns. Final allowances for debt and equity from 2022/2023 onwards will reflect changes in market observations. Totals may not add due to rounding. Please see Finance Annex for further detail.

<sup>5</sup> SHET will have a RAV weighted cost of debt indexation mechanism. Please see Finance Annex for further detail.



## 2. Setting outputs

### Introduction

2.1 This Chapter sets out our decisions for each output area that will apply to SHET and lists out all use-it-or-lose-it (UIOLI) allowances specific to SHET. It is structured under the headings of the RIIO-2 outcomes:

- meet the needs of consumers and network users
- maintain a safe and resilient network
- deliver an environmentally sustainable network.

2.2 This Chapter does not repeat the rationale for any changes from Draft to Final Determinations that are already set out either in the Core Document, the ET Annex or in Chapter 3 of this document. Table 2 above sets out where further detail on our decisions can be found.

### Meet the needs of consumers and network users

2.3 This section sets out decisions for each of SHET’s outputs related to delivering a high quality and reliable service to all network users and consumers, including those in vulnerable situations, in RIIO-ET2.

#### Energy Not Supplied (ENS) ODI-F

**Purpose:** To encourage ETOs to improve network reliability in an efficient way by managing short-term operational risk.

**Benefits:** Improving the reliability of electricity supply and reducing the negative impacts of disruption on consumers and network users.

Output Parameter	Final Determination	Draft Determination
ODI Type	Financial	Same as FD
Incentive Type	Reward/Penalty	Same as FD
Performance Measure	The volume of ENS each year. Establish an industry working group in RIIO-ET2 to include embedded generation in the calculation of the ENS performance measure for RIIO-ET3.	Same as FD
Performance Target	102MWh	Same as FD

Output Parameter	Final Determination	Draft Determination
Baseline Setting Methodology	50% weighting on average ENS performance during RIIO-ET1 (2013-2019) 25% weighting on average ENS performance during TPCR4 (2007-2012) 25% weighting on average ENS performance during TPCR3 (2000-2006)	Same as FD
Incentive value	The incentive rate is set to the Value of Lost Load (VoLL) in 2018/19 prices (£21,000/MWh). The financial reward or penalty is calculated by multiplying the difference between actual ENS and the performance target, by VoLL and applying the TIM sharing factor. We will consider updating the VoLL if there is new evidence during RIIO-ET2 that its value has changed materially.	Same as FD
Financial Collar on Penalties	1.9% of ex ante base revenue	3% of ex ante base revenue
Reporting method	Annual RRP reporting	Same as FD
Applied to	All ETOs with company-specific values	Same as FD
Licence condition	Special Condition 4.2	N/A

### Timely Connections ODI-F

**Purpose:** To encourage the efficient timely delivery of connection offers to applicants (via the ESO) for new connections to the Transmission Network.

**Benefits:** Higher quality of service to connection customers, improved stakeholder engagement between connection customers and network companies, and streamlined new connections.

Output parameter	Final Determinations	Draft Determination
ODI type	Financial	
Incentive type	Penalty only	Same as FD
Performance measure	Performance will be measured annually by the number of offers which are timely (made within three months, minus 13-15 working days) <sup>6</sup> as a percentage of the total number of offers	Same as FD
Performance target	100%	Same as FD
Incentive value	The penalty is calculated by dividing the total number of untimely offers, by the total number of offers, multiplied by 0.5% ex ante base revenue	Same as FD
Cap	N/A	N/A
Collar	0.5% of ex ante base revenue	Same as FD

<sup>6</sup> See Standard Licence Condition D4A (Obligations in relation to offers for connection etc), and Part 2, Para 4.8.1 Section D of the System Operator – Transmission Owner Code (STC).

Output parameter	Final Determinations	Draft Determination
Reporting method	Annual RRP reporting	Same as FD
Applied to	All ETOs	Same as FD
Licence condition	Special Condition 4.4	N/A

### SO:TO optimisation ODI-F

**Purpose:** A two-year trial incentive to encourage the ETOs to provide solutions to the ESO to help reduce constraint costs according to the STCP11-4 procedures.

**Benefits:** A reduction in constraint costs.

#### Final Determination

Output parameter	Final Determination	Draft Determination
ODI type	Financial	We consulted on rejecting three bespoke proposals from each of the ETOs and a joint ETO proposal that related to constraint cost mitigation in our Draft Determinations.
Incentive type	Reward only during the trial period of year 1 and 2 of RIIO-2.  Following the trial, the performance of this ODI-F will be assessed through a report provided jointly by the TOs and another report provided separately by the ESO. <sup>7</sup> The details of this performance report will be provided in the relevant governance document, which we will aim to consult on prior to April 2021.  The incentive could be extended to the remaining years of RIIO-2 subject to the review of the trial.	
Performance measure	The ex-ante forecast constraint savings provided through the solutions delivered by the ETO, as determined by the ESO through the usual STCP11-4 processes <sup>8</sup> .	
Performance target	N/A	
Incentive value	10% of the forecast constraint cost savings from all solutions provided in that regulatory year.	
Cap (annual)	£1.2m	
Collar	N/A	
Reporting method	Annual RRP. ETOs will provide a joint report on how this ODI-F has been utilised during the trial period. The format of this report will be provided in the relevant governance document.	

<sup>7</sup> Chapter 8 of the ESO annex sets out our decision for the ESO's role within this trial ODI.

<sup>8</sup>STCP11-4 can be found on the ESO's website: <https://www.nationalgrideso.com/document/141111/download>

Output parameter	Final Determination	Draft Determination
	The ESO will report separately on their assessment of the benefit delivered through this ODI-F.	
Applied to	All ETOs	
Licence condition	Special Condition 4.7	

### Quality of connections survey ODI-F

**Purpose:** To incentivise companies to improve the quality of service delivered to connections customers.

**Benefits:** Improving the quality of service delivered for current and future connections customers, thereby enabling the transition to a low carbon economy.

Output parameter	Final Determination	Draft Determination
ODI type	Financial	Same as FD
Incentive type	Reward only in year 1 Reward and penalty in years 2-5	We did not consult on these aspects of the policy in DDs. In DD we consulted on switching off the incentive whilst we pilot the survey for baseline development purposes.
Performance measure	Measuring the satisfaction score from a scale of 1-10	
Performance target	7.7/10 with a reward score cap of 9/10 and a penalty score collar of 6.4/10	
Incentive value	Reward: 0.19% of ex ante base revenue for each score point for year 1 0.38% of ex ante base revenue for each score point for years 2-5  Penalty: 0.38% of ex ante base revenue for each score point for years 2-5	
Cap	0.25% of ex ante base revenue for year 1  0.5% of ex ante base revenue for years 2-5	
Collar	N/A for year 1  0.5% of ex ante base revenue for years 2-5	
Incentive metrics review period	We will review the performance target, cap, collar, and incentive value in period	
Reporting method	Annual RRP	
Customer scope	The ETOs will survey their customers at common milestones, as set out in DD	Same as FD
Survey provider and assurance	The ETOs can use their own survey provider.	Same as FD
Applied to	All ETOs	Same as FD

Output parameter	Final Determination	Draft Determination
Licence condition	Special Condition 4.5	N/A

### **New infrastructure stakeholder engagement survey ODI-R**

**Purpose:** To encourage the ETOs to survey stakeholders impacted by new infrastructure projects on their stakeholder engagement experience.

**Benefits:** Tailored engagement that better meets the needs of local stakeholders impacted by transmission works.

Output parameter	Final Determination	Draft Determination
ODI type	Reputational	Same as FD
Measurement	Survey of stakeholders affected by new transmission projects on stakeholder engagement process.	
Reporting method	Reporting via the company’s websites, where appropriate.	
Applied to	All ETOs	
Licence condition	No	

## **Maintain a safe and resilient network**

2.4 This section sets out each of SHET’s outputs related to delivering a safe and resilient network that is efficient and responsive to change in RIIO-ET2.

### **Cyber Resilience IT and OT**

2.5 Cyber resilience IT and OT are not discussed in this document in the interests of national security. A separate confidential Cyber Resilience Annex has been provided to SHET.

### **Network Access Policy (NAP) LO**

**Purpose:** To require ETOs to have in place a policy to support engagement between themselves and the ESO around outage planning.

**Benefits:** Enhanced outage planning coordination and communication between the respective ETOs and the ESO.

Output parameter	Final Determination	Draft Determination
NAP	Pursuant to paragraph 2J.13 of Special Condition 2J - Network Access Policy (SpC 2J) of the RIIO-1 licence, we have decided to approve the final version of the consolidated NAP which was submitted to us in May 2020 following some changes to the version of the NAP as submitted to us by the ETOs as part of their business plans <sup>9</sup> .	Same as FD
Reporting requirements for RIIO-2	<p>ETOs should publish the KPIs on their respective websites in a way that is accessible to users. These should be published within two months of the end of each Regulatory year.</p> <p>The KPIs should be accompanied by text explaining what they stand for, and year on year changes where applicable.</p> <p>The NAP working group will govern the processes and procedures to populate the KPIs to ensure transparency, alignment, and comparability between the ETOs respective KPIs.</p>	In DDs, we proposed to work with the network companies to agree the format of the reporting and publication of the KPIs ahead of our decision in Final Determinations
Applied to	All ETOs	Same as FD
Licence condition	Special Condition 9.10	2J

### Large Project Delivery (LPD) PCD and ODI-F

**Purpose:** To incentivise the timely delivery of large transmission projects.

**Benefits:** Minimising consumer detriment from projects being delivered late.

Output parameter	Final Determinations	Draft Determination
ODI type	Financial	Same as FD
Incentive type	<p>LPD is a combination of an ODI-F and a PCD.</p> <p>To remove financial benefit from delay based on either of the following:</p> <ul style="list-style-type: none"> <li>• Re-profiling mechanism</li> <li>• Milestone-based approach</li> </ul> <p>To ensure that consumer harm caused by delay is minimised:</p> <ul style="list-style-type: none"> <li>• Project Delay Charge</li> </ul>	Same as FD

<sup>9</sup> The majority of the changes since December 2019 were made in order to add clarity and to simplify the language of the document following engagement with and feedback from the TOs' respective stakeholders.

Output parameter	Final Determinations	Draft Determination
Performance measure	Performance will be assessed against the delivery dates for large (£100m+) projects, set out in licences on a project-by-project basis.	Same as FD
Performance target	Delivery of large (£100m+) projects by the delivery dates stated for them in the licence.	Same as FD
Incentive value	To be determined on a project-by-project basis	Same as FD
Cap	N/A	N/A
Collar	To be determined on a project-by-project basis	Same as FD
Reporting method	Annual RRP reporting on general progress and a specific independent report to confirm delivery of the output.	Same as FD
Applied to	All ET, GT, and GD companies	Same as FD
Licence condition	No – Where appropriate we will modify the licence during the RIIO-ET2 period when we decide to apply an LPD mechanism.	N/A

### Pre-Construction Funding (PCF) PCD

**Purpose:** To ensure that TOs are funded for the efficient costs that are incurred prior to commencing construction of large transmission projects.

**Benefits:** Allows timely development of important strategic projects whilst protecting consumers from providing pre-construction funding (PCF) for speculative projects.

Output parameter	Final Determination	Draft Determination
Type	Evaluative	Same as FD
Outputs	Delivery of planning consent and Final Needs Case approval for the following projects:	
	E4D3: Peterhead - Drax; Eastern subsea HVDC link, 31/03/2026, £19.4m	Same as FD
	E4L5: Peterhead - South Humber; Eastern subsea HVDC link, 31/03/2026, £29.2m	Spend Disallowed
	Skye / Western Isles Upgrade, 31/03/2026, £15.9m	Spend Disallowed
	Argyll and Kintyre 275kV Strategy, 31/03/2026, £20.43m	Not Included
	Additional allowances against this PCD: Annual costs, 31/03/2026 (£1.2m) and Regional development plans, 31/03/2026 (£1.5m)	Same as FD
Delivery date	See above	Same as FD
Totex baseline allowances	£87.6m	£27.4m

Re-opener	Yes – for new PCF PCDs, or where expected PCF costs are likely to be at least double those provided in baseline allowances.	Same as FD
Reporting method	<ul style="list-style-type: none"> <li>PCD report</li> <li>Annual RRP reporting</li> </ul>	Same as FD
Adjustment mechanism	Ex post review for partial/non-delivery, with fixed percentages assigned to the varying degrees of delivery status. See ET Annex for details.	Same as FD
Companies applied to	All ETOs	Same as FD
Licence obligation	Special Condition 3.15	N/A

### Wider Works PCD

**Purpose:** To manage the uncertainty associated with large load related reinforcement schemes derived from the ESO Network Options Assessment process.

**Benefits:** Protecting consumers from paying for work whose need is no longer apparent.

Output parameter	Final Determination	Draft Determination
Type	Evaluative	Same as FD
Outputs	East Coast 275kV Upgrade, 31/10/2023, £150.08m. The rationale for inclusion is covered in Chapter 3.	Same as FD
	East Coast 400kV Upgrade, 31/03/2026, £206.115m. The rationale for inclusion is covered in Chapter 3.	Not Included. Funding request accepted. Output not accepted.
Delivery date	See above	Same as FD
Totex baseline allowances	£356.19m	£340.00m
Re-opener	No	Same as FD
Reporting method	PCD report, as well as RRP	Same as FD
Adjustment mechanism	Ex post review to determine delivery status	Same as FD
Companies applied to	SHET	Same as FD
Licence obligation	Special Condition 3.9	No

### Shared infrastructure schemes PCD

**Purpose:** To manage uncertainty with Load Related Reinforcement works which include significant non-load related elements or other external interfaces.

**Benefits:** Protecting consumers from paying for work not delivered.



Output parameter	Final Determination	Draft Determination
Type	Evaluative	Same as FD
Outputs	Kinardochoy reactive compensation, 31/08/24, £87.74m. The rationale for inclusion is covered in Chapter 3.	Same as FD
	North East 400kV Upgrade, 31/03/2023, £176.82m. The rationale for inclusion is covered in Chapter 3.	Same as FD
Delivery date	See above	Same as FD
Totex baseline allowances	£264.05m	£247.75m
Re-opener	No	Same as FD
Reporting method	PCD report, as well as RRP	Same as FD
Adjustment mechanism	Ex post review to determine delivery status	Same as FD
Companies applied to	SHET Only	Same as FD
Licence obligation	Special Condition 3.17	No

### Resilience and Operability PCDs

**Purpose:** To specify investments proposed by SHET to ensure network resilience and operability.

**Benefits:** Protecting consumers from paying for work not delivered.

Output parameter	Final Determination	Draft Determination
Type	Evaluative	Same as FD
Outputs	Improved Security Measures on up to 78 Substations, 31/03/2026, £8.53m	Same as FD
	Replacement of 22 bay protection systems, 41 bays enhancements and 33 Remote Terminal Units, 31/03/2026, £24.48m	Same as FD
	Ensuring a minimum of 72 hours autonomy for 116 substations in accordance with ENA ER G91. Upgrade of sites to meet 120 hours of autonomy at sites which do not meet the ENA ER G91 guidance of 72 hours, 31/03/2026, £44.57m	Same as FD
	Installation of monitoring equipment at 350 equipment installations. Forensic Analysis of 26 Transformers, and Deployment and Integration of a Data Analytics Platform, 31/03/2026, £14.10m. The rationale for inclusion is covered in Chapter 3.	Spend Disallowed
	Construction of a new Operations Centre with a contingency control centre, 31/03/2026, £14.64m. The rationale for inclusion is covered in Chapter 3.	Spend Disallowed
	A warehouse (7,500m <sup>2</sup> ) in the Dundee Area and a warehouse (7,500m <sup>2</sup> ) in the Inverness area. This will include facilities for storage of oil filled plant,	Spend Disallowed

Output parameter	Final Determination	Draft Determination
	31/03/2026, £32.89m. The rationale for inclusion is covered in Chapter 3.	
	Installation of 338km of new fibre optic cable. Upgrade of 91 Multiplexors across the SHET network. Upgrade of IP/Data network hardware at 89 SHET substations, 31/03/2026, £21.08m. The rationale for inclusion is covered in Chapter 3.	Spend Disallowed
Delivery date	See above	Same as FD
Totex baseline allowances	£160.30m	£92.45m
Re-opener	Yes: MSIP Resilience and Operability	Same as FD
Reporting method	PCD report, as well as RRP	Same as FD
Adjustment mechanism	Ex post review to determine delivery status	Same as FD
Applied to	SHET Only	Same as FD
Licence obligation	Special Condition 3.18	No

## Deliver an environmentally sustainable network

2.6 This section sets out our decisions for each of SHET’s outputs related to enabling the transition towards a smart, flexible, low cost and low carbon energy system for all consumers and network users in RIIO-ET2.

### Environmental Action Plan (EAP) and annual environmental report (AER)

**Purpose:** To ensure that the TOs take responsibility for the environmental impacts arising from their networks and are more transparent in what they are doing to mitigate these.

**Benefits:** These mechanisms will support cross-sector consistency and greater environmental ambition from the companies.

#### *ODI-R on business carbon footprint (BCF) reduction target*

Output parameter	Final Determinations	Draft Determinations
ODI type	To set a common reputational incentive for SHET on their respective BCF reduction targets	Same as FD
Measurement	Licensee's business carbon footprint comprising scope 1 and 2 emissions excluding electricity losses (based on GHG	BCF reduction targets proposed by licensees in their EAPs

Output parameter	Final Determinations	Draft Determinations
	Protocol Corporate Standard); tonnes of carbon dioxide equivalent emissions (tCO <sub>2</sub> e)	
Performance target	Licensee's BCF reduction target for the end of RIIO-2 (interpolated from each licensee's science-based target validated by the SBTi)	Same as FD
Reporting method	Annual RRP reporting and the AER	Same as FD
Applied to	All ETOs	Same as FD
Licence condition	N/A	N/A

### SHET's EAP commitments<sup>10</sup>

Output parameter	Final Determinations	Draft Determinations
EAP commitments	We are accepting all of SHET's EAP commitments (that are not bespoke PCD, ODI or UM) for: <ul style="list-style-type: none"> <li>• Business carbon footprint reduction and related initiatives</li> <li>• Sustainable resource use, recycling and reducing waste</li> <li>• Reducing pollution to the local environment</li> <li>• Enhancing biodiversity and natural capital</li> </ul>	Same as FD
Measurement	Milestones and metrics as specified in licensee's EAP <sup>11</sup>	Same as FD
Performance target	Targets as specified by the licensee in its EAP	Same as FD
Reporting method	AER	Same as FD
Applied to	All ETOs	Same as FD
Licence condition	N/A	N/A

### Annual Environmental Report Licence Obligation

Output parameter	Final Determinations	Draft Determinations
Licence obligation	New requirement to publish an AER on progress in achieving EAP commitments, relevant ODIs, PCDs, UMs and an annual update on the environmental impact of network.	Same as FD
Applied to	All ETOs	Same as FD
Licence reference	Special Condition 9.1	Same as FD

<sup>10</sup> EAP commitments is the term we have given to the initiatives that the TOs included in their respective EAP to improve their environmental performance that were not otherwise specified as one of the components in the RIIO-2 output framework described in Chapter 4 of the FD Core Document ie licence obligations, price control deliverables or output delivery incentives. EAP commitments will have a formal status in the reporting guidance that we are developing for the Annual Environmental Report.

<sup>11</sup> SHET's EAP, <https://www.ssen-transmission.co.uk/media/3759/sustainability-action-plan.pdf>

## Environmental Scorecard ODI-F

**Purpose:** To incentivise the TOs to outperform selected RIIO-2 targets in their Environmental Action Plans (EAP).

**Benefits:** The TOs will further reduce carbon emissions, improve the environment and reduce resource use for the benefit of existing and future consumers.

Output parameter	Final Determinations	Draft Determination
ODI type	Financial	We did not consult on this proposal <sup>12</sup>
Incentive type	Reward and penalty	
Performance measure	Percentage change in any of the following impact areas: a) Operational transport emissions b) Business mileage emissions c) Waste recycling d) Waste reduction e) Water use reduction f) Environmental value of non-operational land g) Biodiversity net gain on new network projects	
Performance target	Annual reward and penalty thresholds that are to be specified by SHET for the impact areas a) to g) that are relevant to its network	
Incentive value	<ul style="list-style-type: none"> <li>Incentive is calculated by comparing actual percentage change in impact areas a) to g) to annual performance reward/penalty thresholds. If actual percentage change is above or below relevant threshold SHET will receive a reward or a penalty. There is no reward or a penalty if actual percentage change is between the first penalty threshold and the first reward threshold.</li> <li>Incentive rates are based on an estimate of the economic value of percentage change in each impact area calculated at the threshold (please see Appendix 1 for information on economic values used to set incentives).</li> <li>TIM is applied to overall payment.</li> </ul>	
Cap	To be calculated after SHET has worked with stakeholders to set the incentive parameters and submitted these to Ofgem for review.	
Collar	To be calculated after SHET has worked with stakeholders to set the incentive parameters and submitted these to Ofgem for review.	

<sup>12</sup> We consulted on accepting the proposal for NGET only.

Output parameter	Final Determinations	Draft Determination
Reporting method	Annual RRP reporting and AER	
Applied to	All ETOs	
Licence condition	Special condition 4.6	

### Insulation and Interruption Gas (IIG) leakage ODI-F

**Purpose:** To incentivise a reduction in leakage of SF6 and other IIGs from assets on the transmission network, and to support the transition to low greenhouse gas alternative IIGs.

**Benefits:** Reduction in the volume of harmful leakage of greenhouse gas emissions from GB’s Electricity Transmission network.

Output parameter	Final Determination	Draft Determination
ODI type	Financial	Same as FD. Decided at SSMD.
Incentive type	Reward and penalty	Same as FD. Decided at SSMD.
Performance measure	IIG emissions leakage below the annual target are rewarded, with a penalty applied for emissions leakage above the target.	Same as FD. Decided at SSMD.
Performance target	<ul style="list-style-type: none"> <li>The baseline tCO<sub>2</sub>e target for year 1 of RIIO-ET2 will be calculated from multiplying SHET’s IIG inventory at the end of RIIO-ET1 by the IIG Baseline Leakage Rate which has a value of 0.38% (SHET’s average leakage rate from 2013-20 with no improvement factor applied), and by the CO<sub>2</sub>e conversion factor.</li> <li>Baseline tCO<sub>2</sub>e targets for years 2 and 5 of RIIO-ET2 will be the year 1 baseline tCO<sub>2</sub>e target adjusted for the forecast abatement of interventions approved through the MSIP or Net Zero reopeners, asset disposals and justified IIG asset additions.</li> </ul>	We proposed to apply a 15% improvement factor to the average leakage rate from 2013-20 that is used to set the baseline tCO <sub>2</sub> e target for year 1. See chapter 2 of ET Annex.
Incentive value	<ul style="list-style-type: none"> <li>Reward/penalty calculated by multiplying the value of CO<sub>2</sub> equivalent (using the Non-Traded Carbon price), for every ton over or below the target.</li> <li>TIM is applied to the calculated annual incentive.</li> </ul>	Same as FD
Cap	N/A – Incentive value is based on the central estimate of the Non-Traded Carbon Price	N/A

Output parameter	Final Determination	Draft Determination
Collar	N/A	N/A
Reporting method	Annual RRP reporting	Same as FD
Applied to	All ETOs	Same as FD
Licence condition	Special Condition 4.3	N/A

### Visual amenity in designated areas provision

**Purpose:** To fund mitigation projects that reduce the visual amenity impacts of existing infrastructure in National Parks, Areas of Outstanding Natural Beauty and National Scenic Areas.

**Benefits:** To restore the quality of visual amenity in National Parks, Areas of Outstanding Natural Beauty and National Scenic Areas for the enjoyment of current and future consumers.

UM parameter	Final Determination	Draft Determination
UM type	Re-opener	Same as FD
Re-opener window	Any time during the price control	Same as FD
Re-opener materiality threshold	Projects that reduce the impacts of existing transmission infrastructure on the visual amenity of National Parks, Areas of Outstanding Natural Beauty and National Scenic Areas	Same as FD
Authority triggered re-opener?	No	Same as FD
Additional requirements	Total expenditure cap of £465m in 2018-19 prices for all TOs' RIIO-ET2 mitigation projects. Expenditure cap includes £7.5m UIOLI allowance per TO for projects that utilise landscaping and environmental enhancement to mitigate visual impacts of existing infrastructure.	Same as FD
Applied to	All ETOs	Same as FD
Licence condition	Special Condition 3.10	N/A

### Net Zero and re-opener development UIOLI

**Purpose:** To enable ETOs to fund early design and pre-construction work.

**Benefits:** Ensures that network companies are equipped to deal with the Net Zero challenge, and can act quickly to changing demands on the energy system and support quicker project delivery.

<b>Parameter</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Type	Mechanistic	This UIOLI allowance was not proposed in our Draft Determinations.
Output	No specific outputs set – A use-it-or-lose-it (UIOLI) allowance that should be spent in accordance with the Net Zero and Re-opener Development Fund governance document.	
Delivery date	31 Mar 2026	
Totex baseline allowances	£12m	
Re-opener	No	
Reporting method	Annual RRP reporting, alongside reporting requirements for individual projects set out in the forthcoming Governance Document	
Adjustment mechanism	Formula defined in the licence	
Applied to	All ET, GT, and GD networks	
Licence obligation	Special Condition 5.4	

### 3. Setting baseline allowances

#### Introduction

- 3.1 This chapter sets out our decision on allowances for the different cost areas within SHET’s business plan submission. We have set baseline Totex allowances for SHET only where we are satisfied of the need for and certainty of the proposed work, and where there is sufficient certainty of the efficient cost of the work.
- 3.2 Table 6 below sets out the RIIO-ET2 Totex allowances for SHET, grouped by the main cost categories within the business plan data template (BPDT).

**Table 6: SHET Totex components**

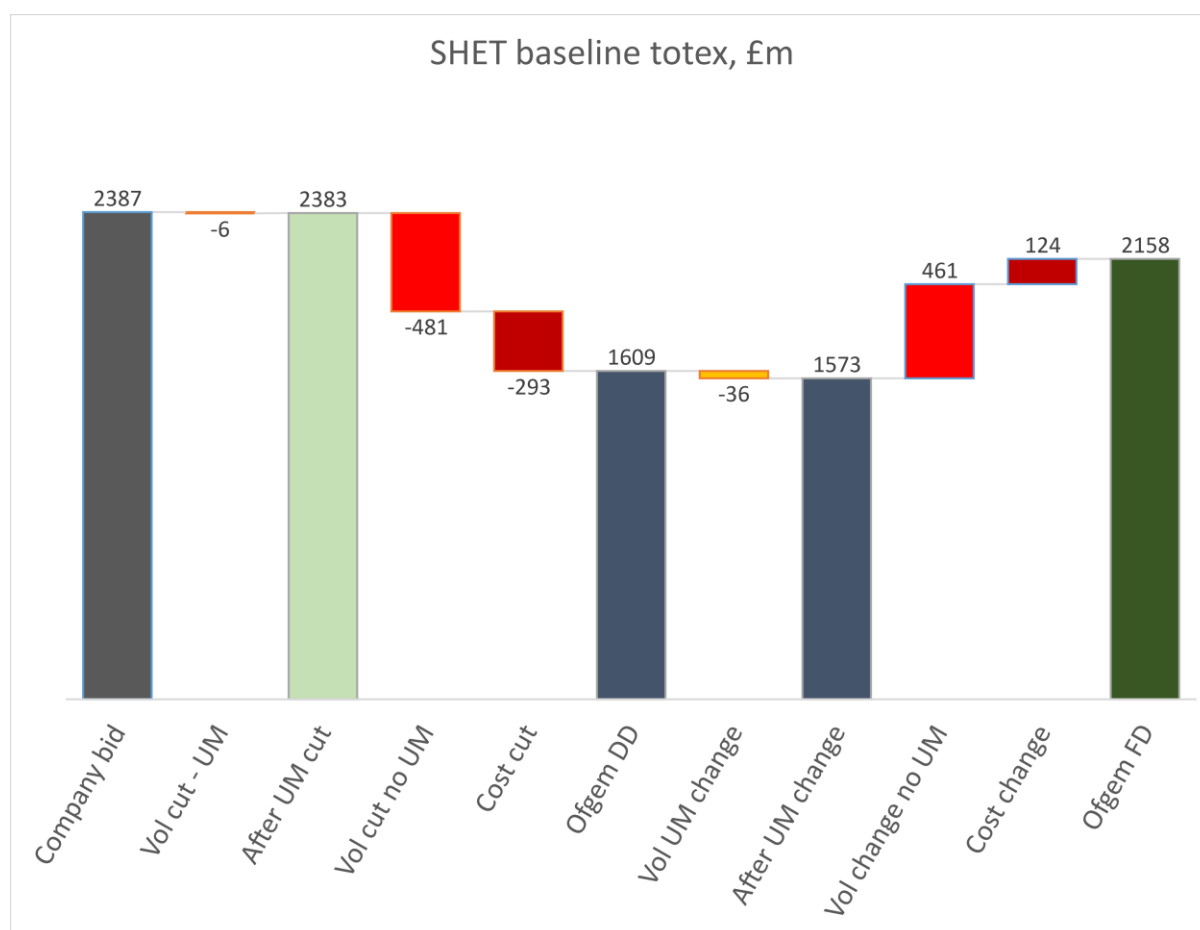
<b>Totex component<sup>13</sup></b>	<b>SHET proposed baseline (£m)</b>	<b>Ofgem DD baseline (£m)</b>	<b>Ofgem FD baseline (£m)</b>
Load related capex	850.9	717.3	815.4
Non-load related capex	811.6	540.5	794.3
Non-op capex	112.4	54.8	103.9
Network operating costs	207.8	90.2	165.8
Indirect costs	360.3	265.7	357.7
Other Costs	43.9	38.1	47.4
Ongoing efficiency		-97.9	-126.7
<b>Total</b>	<b>2386.8</b>	<b>1608.7</b>	<b>2157.7</b>

- 3.3 We have allowed £2.16bn of SHET’s £2.39bn baseline request. Of this baseline allowance, we have linked around 70% to outputs with mechanisms such as price control deliverables (PCDs), volume drivers or use-it-or-lose-it (UIOLI) to reduce allowances for non-delivery. We have also set a number of uncertainty mechanisms to assess further potential expenditure during RIIO-ET2.
- 3.4 Figure 2 shows how we have made adjustments to SHET’s requested baseline funding.

<sup>13</sup> Note reference to the company’s forecast costs for projects within load and non-load related capex sections include Indirect opex costs related to the project, where the companies have provided these as part of gross costs. All Ofgem capex allowances for these projects are stated excluding Indirect opex costs, which are allowed separately as part of Indirect opex allowances.



Figure 2: SHET baseline Totex



3.5 Of the total baseline Totex allowance that is subject to the BPI and TIM mechanisms, we have decided that £1290.8m is of high-confidence and £946.3m of lower-confidence<sup>14</sup>. This results in a sharing factor for the Totex incentive mechanism of 36%.

3.6 Where we have decided that lower-confidence costs are poorly justified, these costs are subject to a BPI Stage 3 penalty. This results in an overall penalty for SHET of £4.49m.

3.7 Where SHET has proposed high confidence costs lower than our independent benchmark, the difference between their proposal and our independent

<sup>14</sup> Note, certain allowances, for example those covered by cross-period funding mechanisms or adjustments like Ongoing Efficiency, are not subject to the BPI and TIM mechanisms.

benchmark is subject to a Stage 4 reward. This results in an overall Stage 4 reward of £15.75m.

3.8 The following sections set out SHET’s allowances, and any differences from the allowances requested by SHET in its submissions.

## Capital Expenditure (Capex)

3.9 We have reviewed the SHET’s submitted capital expenditure programme along the main cost categories of load related (LR) capex, non-load related (NLR) capex and non-operational capex.

**Table 7: Capex allowances**

<b>Non-Op capex category</b>	<b>SHET proposed baseline (£m)</b>	<b>Work Volume Reductions (£m)</b>	<b>Cost Reductions (£m)</b>	<b>Work Volume Reductions subject to Uncertainty Mechanisms (£m)</b>	<b>Ofgem Baseline allowances (£m)</b>
Load related capex	850.9	0.0	7.3	28.2	815.4
Non-load related capex	811.6	2.1	15.2		794.3
Non-operational capex	112.4	0.0	8.5	-	103.9

### Load related capex

#### Final Determination rationale and Draft Determination responses

##### *Needs case assessment*

3.10 In our Draft Determinations for LR capex projects with outputs in the RIIO-ET2 period, we did not propose any construction work volume adjustments, and considered the associated outputs to be reasonable. We considered that in general, the projects were well-justified, and the needs cases are either linked to industry standard processes, such as the Network Options Assessment (NOA), or meet credible local needs.

- 3.11 In one exceptional case, the Kinardochoy Reactive Compensation scheme, which is a local enabling/shared scheme, we had concerns about the delivery timescales and needs case. We proposed in Draft Determinations to provide baseline funding, but only on the basis that SHET could provide additional evidence to justify such baseline funding ahead of Final Determinations.
- 3.12 In our Draft Determinations, we proposed to reject a number of SHET's LR capex baseline preconstruction projects with outputs beyond RIIO-ET2, based on the lack of supporting evidence. This represented a reduction of £88.7m compared to SHET's submission.
- 3.13 In response to our Draft Determinations, SHET submitted additional evidence in support of the Kinardochoy Reactive Compensation scheme, and preconstruction funding schemes.
- 3.14 For Kinardochoy Reactive Compensation, based on the additional analysis and project programmes submitted by SHET, we accept that this work is required to facilitate local connection works in 2024 and to maintain compliance with relevant security standards in the RIIO-ET2 period. Therefore, we have decided to accept this project in the baseline.
- 3.15 For LRE preconstruction funding, SHET revised its request to five preconstruction schemes, for which it sought baseline allowances for a forecast cost of £124.5m, an increase from the original submission of £113.46m.
- 3.16 We have assessed the evidence provided by SHET and accept the need cases for preconstruction funding for the ESO NOA-derived projects, the Skye/Western Isles upgrade, and the Argyll and Kintyre 275kV Strategy. We accept that these projects are required to provide additional boundary capacity or alleviate internal circuit constraints and allow the connection of additional generation in the RIIO-ET2 to RIIO-ET3 timeframes.
- 3.17 We do not accept the needs case for £31.11m of preconstruction baseline funding for the Dounreay to Spittal double circuit and Spittal to Peterhead HVDC link schemes. Our view is that funding this work is premature given that the key driver, the ScotWind seabed leasing by Crown Estate Scotland, will not complete before 2021. We consider that SHET should progress these projects via the Pre-Construction Funding re-opener alongside the project's LOTI Initial Needs Case, once the outcome of the seabed leasing is complete. Any such submission should

consolidate all projects associated with the ScotWind seabed leasing process so far as is reasonably practicable.

- 3.18 In summary, as a result of the revised assessment, we have decided to allow £94.3m for preconstruction funding. This is an increase of £68.3m from our Draft Determination position, but £28.2m lower overall than the amount requested in SHET’s business plan.

#### *Cost efficiency assessment*

- 3.19 In our Draft Determinations, we proposed a reduction of £42m for efficiency adjustments. This comprised £11m of unit cost reductions and £31m on risk and contingency. The following sections detail our position on these elements for Final Determinations.

#### Unit costs

- 3.20 We conducted our own analysis of the efficient unit costs of the projects where we have accepted the needs cases. At Draft Determinations, we had proposed a £11m reduction in SHET’s LR capex submission based on the outcome of our unit cost model. Since then, we have become aware of inconsistencies in how the asset cost data has been compiled by the ETOs. Accordingly, we have reviewed our asset unit costs based on discussion with the companies and have discarded certain unit costs for assets which had a large variation in the scope of works between different ETOs and within different projects. Our view of efficient unit costs for SHET is now based on a combination of benchmarking across SHET, SPT, and Electricity Distribution comparative data and an engineering review of their submitted costs. As a result, we have decided on a unit cost efficiency reduction of £3.5m across the LRE projects, rather than the £11m reduction proposed at Draft Determinations.

#### Risk and contingency

- 3.21 For Final Determinations, we have revised our approach for determining risk and contingency costs for LR capex. Details can be found in Chapter 3 of the ET Annex with regards to our approach for non-asset related risk and contingency costs.
- 3.22 For our assessment of the lead and non-lead asset elements of risk and contingency costs, our Draft Determination position was to assume that an element of risk and contingency was already embedded in the asset costs.

Therefore, we had removed a corresponding amount from the risk and contingency proposed for the total project.

- 3.23 SHET have provided evidence that showed the asset element of project costs are primarily informed by SHET's tendering framework, rather than by historical costs, and therefore do not contain embedded risk. In such instances, we have reinstated the originally requested risk and contingency allowance. Where we have used RIIO-ET1 historical cost information to set asset cost allowances, we have maintained the view that these contain embedded risk and contingency and have reduced the submitted project level request.
- 3.24 As a result of these changes, our decision on SHET's LR capex is to reject £3.85m from risk and contingency costs compared to the £31m removed in Draft Determinations.

*High and Lower Confidence proportion in baseline Totex allowance*

- 3.25 Applying the methodology as set out in the Core Document, we have decided that of the baseline allowance for load related capex, £467m is high confidence and £348m is lower confidence.

*BPI Stages 3 and 4*

- 3.26 In response to our Draft Determinations, SHET provided additional information to justify why costs relating to 'civil works associated with asset replacement' activity should be considered high confidence. Based on the information provided, we have decided that these costs should be classed as high confidence, as they are relatively predictable and unlikely to be significantly influenced by external factors.
- 3.27 For civil works associated with overhead line (OHL) foundations, access tracks, site clearance and bulk earth works, in our view, these costs are highly likely to be impacted by external factors and we have decided they should be classed as lower confidence costs.
- 3.28 We have also re-classed costs related to Flexible AC Transmission System (FACTS) devices as high confidence on the basis of a re-review of the independent cost information provided by SHET further to Draft Determinations.
- 3.29 In respect of risk and contingency costs, in Draft Determinations we proposed that these be lower confidence costs. All three ETOs disagreed with this classification,

arguing that these costs should be classified as high confidence as Ofgem was using an independent cost assessment method to calculate an efficient risk and contingency allowance. We agree with this rationale and have decided that these costs should be classified as high confidence.

- 3.30 At Final Determinations we have removed some proposed preconstruction costs from SHET's baseline allowance. However, we have decided not to penalise these removed costs under Stage 3 because this is due to the significant uncertainty around the need for this work rather than poor or inefficient justification.
- 3.31 For Draft Determinations, we proposed to exclude costs relating to the East Coast 400kV Incremental Upgrade project from the BPI and TIM mechanisms as this project would have delivered outputs in RIIO-3 and was subject to the cross-period funding mechanism. For our Final Determinations, we have decided to include the RIIO-2 costs relating to this project in the BPI and TIM mechanisms, as the majority of costs in this project are due to be incurred in RIIO-2 and SHET provided RIIO-2 deliverable outputs to which we attached price control deliverables (PCD), the details of which are set out in Chapter 2. All costs relating to this project are classified as high confidence as we have been provided with sufficient independent cost information to support this classification.
- 3.32 In summary, of SHET's LR capex submission that was subject to the BPI and TIM mechanisms, £475m has been classified as high confidence, and £348m as lower confidence. None of these lower confidence costs have been disallowed therefore there is no BPI Stage 3 penalty on SHET's LR capex costs. As SHET's proposed high confidence costs were more efficient than our independent benchmark for high confidence costs, we have decided that SHET will be awarded a Stage 4 reward of £0.06m on its LR capex costs.

#### *Summary of LR approved projects*

- 3.33 The ET Annex identifies the differing treatments of LR capex projects depending on their start/end years and the type of work. Appendix 1 lists:
- The T1/T2 overlap projects that have allowances through this settlement, but which will need to be trued up with the allowances from the T1 volume driver mechanism
  - Those T2 baseline projects that fall under the revenue driver mechanism
  - The T2/T3 projects that will be trued-up as part of the T2 closeout or the setting of T3 process.

3.34 The PCDs associated with approved LR projects during the RIIO-ET2 period are set out in Chapter 2.

### **Non-load related capex**

#### Final Determination rationale and Draft Determination responses

##### *Needs case assessment – asset replacement*

3.35 In our Draft Determinations, we proposed to accept the needs cases presented by SHET for 18 of the 28 NLR capex asset replacements schemes, and for the single refurbishment scheme, with no volume adjustments. We also proposed to accept the need for funding of the Spares and Black Start projects, again with no volume adjustments.

3.36 Of the remaining 10 NLR capex asset replacement schemes, we considered that their needs cases had not been justified adequately, they lacked supporting evidence, or the optioneering process, was in our view, deficient. On this basis, we proposed to reject these schemes, which led to a proposed reduction of £182m compared to SHET’s NLR requested funding for replacement schemes.

3.37 In response to our Draft Determinations, SHET submitted additional supporting evidence in the form of ten enhanced Engineering Justification Papers (EJP) associated with the rejected replacement schemes. These papers clarified the needs cases and presented additional evidence and options.

3.38 Having taken this evidence into account, we have decided to accept the needs cases for the NLR asset replacement schemes that we proposed to reject at Draft Determinations, and to provide baseline allowances. The rationale for each of schemes rejected at Draft Determination and the reasoning for decisions is set out below.

<b>Project Proposal</b>	<b>Rationale for Draft Determination Position</b>	<b>Rationale for Final Determination Position</b>
<b>Sloy Substation Works.</b> This is a substation asset replacement project. SHET is proposing the replacement of supergrid transformers (SGT), circuit breakers, switchgear and associated equipment. The total cost of	We considered that the asset condition report did not provide sufficient evidence for the need to replace SGT1, SGT2, SGT3 and SGT4. Based on the evidence provided within the asset condition report, we	Updated analysis from SHET shows SGT3 condition is the primary driver. This transformer will need to be replaced in RIIO-ET2 as it has been shown to be significantly degraded. The optioneering and Cost

Project Proposal	Rationale for Draft Determination Position	Rationale for Final Determination Position
the works proposed is £45.3m.	considered it is possible to extend the life of these transformers into the RIIO-ET3 period, with additional condition monitoring. Given the relative health of the SGTs, we were of the view that the chosen solution was not proportionate to the needs case. On this basis we proposed to reject this scheme.	Benefit Analysis (CBA) show offline whole site replacement of all transformers is the most beneficial method rather than refurbishment or partial replacement options. On this basis we have decided to accept the scheme as proposed. The calculated efficient cost allowance is £41.1m.
<b>Culligran Substation Works.</b> This is a substation asset replacement project. SHET is proposing the replacement of a single transformer substation and the associated equipment. The total cost of the works proposed is £14.3m.	We considered that the asset condition report indicates that the transformer, disconnectors and earth switches did not warrant replacement during the RIIO-ET2 period. We considered that remedial/refurbishment works could be undertaken to extend their predicted end of life. On this basis we proposed to reject this scheme.	SHET presented updated information to show that assets should be considered for intervention in the RIIO-ET2 period. The CBA calculation has identified that the replacement using a new offline build gives the most benefit to consumers. On this basis, we have decided to accept the scheme as proposed. The calculated efficient cost allowance is £13.58m.
<b>Deanie Substation Works.</b> This is a substation asset replacement project. SHET is proposing the replacement of a single transformer substation and the associated equipment. The total cost of the works proposed is £14.6m.	We considered that the asset condition report indicated that the transformer, disconnectors and earth switches did not warrant replacement during the RIIO-ET2 period. We considered that remedial / refurbishment works could be undertaken to extend their predicted end of life. On this basis we proposed to reject this scheme.	SHET presented updated information to show that assets should be considered for intervention in the RIIO-ET2 period. The CBA calculation has identified that the replacement using a new offline build gives the most benefit to consumers. On this basis, we have decided to accept the scheme as proposed. The calculated efficient cost allowance is £13.8m.
<b>Quoich Tee Substation Works.</b> This is a substation asset replacement project. SHET is proposing the replacement of switching station, and local overhead line diversion works. The total cost of the works proposed is £13.6m.	We considered that the asset condition report did not provide sufficient evidence to support the proposed works. We considered that the chosen solution was not proportionate to the identified needs case. In our view, the assets identified for intervention did not have condition ratings that justified replacement or refurbishment. On this basis	SHET presented additional arguments to demonstrate the criticality of the site to Skye and the Western Isles, and provided evidence of secondary driver of generation connections. SHET argues that investment will reduce the risk to consumers. It provided evidence that complete replacement of the site is the only intervention approach available due to



Project Proposal	Rationale for Draft Determination Position	Rationale for Final Determination Position
	we proposed to reject this scheme.	site constraints. On this basis, we have decided to accept the scheme as proposed. The calculated efficient cost allowance is £12.97m.
<p><b>Tummel Bridge Substation Works.</b> This is a substation asset replacement project. SHET is proposing the replacement of transformers and new cable works. The total cost of the works proposed is £14.8m.</p>	<p>We considered that the asset condition report did not provide sufficient evidence to support the proposed works. We considered that the chosen option was not proportionate to the identified needs case and the scope of the solution seemed to have expanded to something far wider with insufficient justification. In our view, the secondary drivers alone were not sufficient to justify substation decommissioning and reconfiguration. On this basis we proposed to reject this scheme.</p>	<p>SHET reduced the scope of work in response to our Draft Determination position. The revised scope of work is to complete a programme of in situ replacement and refurbishments. The forecast cost has reduced to £3.027m. On this basis, we have decided to accept the scheme with the new updated scope. The calculated efficient cost allowance is £2.89m.</p>
<p><b>Kilmorack and Aigas Substation Works.</b> This is a substation asset replacement project. SHET is proposing the replacement of two single transformer substations and the associated equipment. The total cost of the works proposed is £27.6m.</p>	<p>We considered that the asset condition report did not provide sufficient evidence to support the proposed works. We considered that the proposed solution was disproportionate to the needs case. In our view, remedial works to address the oil leakage issue should have been considered, as the primary assets are in reasonable condition. On this basis we proposed to reject this scheme.</p>	<p>SHET presented updated information to show that assets should be considered for intervention in the RIIO-ET2 period. It also presented additional arguments detailing the environmental risk associated with these sites. The optioneering and resulting CBA calculation has shown that an offline build of a single new 132kV substation is significantly better value for money than any other option. On this basis, we have decided to accept the scheme. The calculated efficient cost allowance is £26.15m.</p>
<p><b>Keith Substation.</b> This is a substation asset replacement project. SHET proposes the replacement of the 132kV busbar. The total cost of the works proposed is £39m.</p>	<p>In our view, the asset condition report did not support the needs case as most of the assets are still within their End of Life period. The chosen solution did not appear to represent value for money, although it did improve the operational flexibility and resilience of</p>	<p>In response to the Draft Determinations, SHET has reconsidered the scope of these works to focus on the switchgear elements, which has resulted in the forecast cost reducing to £25.24m. On this basis, we have decided to accept the scheme with the new</p>

Project Proposal	Rationale for Draft Determination Position	Rationale for Final Determination Position
	<p>the network and would have an environmental benefit. However, these secondary benefits were not sufficient to justify the scheme. On this basis we proposed to reject this scheme.</p>	<p>updated scope. The calculated efficient cost allowance is £23.62m.</p>
<p><b>Broadford Substation.</b> This is a substation asset replacement project. SHET proposes replacement of circuit breakers, switchgear and associated equipment. The total cost of the works proposed is £2.63m.</p>	<p>In our view, the assets to be replaced were not showing significant levels of deterioration, according to the asset condition report. In our view, the presence of type fault issues with the family of circuit breakers had not been substantiated. We also noted that only two interventions have been required in the RIIO-ET1 period. On this basis we proposed to reject this scheme.</p>	<p>SHET provided evidence of type faults with Brush DB145 type of circuit breaker. On this basis, we have decided to accept the scheme as proposed by SHET. The calculated efficient cost allowance is £2.37m.</p>
<p><b>St Fillans Substation.</b> This is a substation asset replacement project. SHET is proposing the replacement of a single transformer substation and the associated equipment. The total cost of the works proposed is £6.8m.</p>	<p>In our view, the asset condition report did not support the replacement of the disconnectors and earth switches or the transformer. We considered that continuous monitoring of the demand profile of SGT1 and the undertaking of a 6-monthly oil sampling regime to see if any remedial action is required could extend the lifetime of this asset into RIIO-ET3. Whilst we agreed that circuit breaker 1T0 should be replaced, we considered that the needs case for the majority of the proposed spend in the supporting EJP had not been established. On this basis we proposed to reject this scheme.</p>	<p>Updated analysis from SHET shows transformer condition is the primary driver. This transformer will need to be replaced in RIIO-ET2 as it is shown to be significantly degraded. SHET presented additional arguments detailing the environmental risk associated with this site. On this basis, we have decided to accept the scheme as proposed by SHET. The calculated efficient cost allowance is £5.97m.</p>
<p><b>St Fergus Mobil.</b> This is a substation asset replacement project. SHET is proposing the replacement of substation assets and additional circuit breakers. The total cost of the works proposed is £12.7m.</p>	<p>We considered that the issues presented in the EJP could be dealt with by increased maintenance, and that a refurbishment option should have been taken forward to detailed analysis as part of the solution development. On this basis</p>	<p>In response to our Draft Determination, SHET argued that although a refurbishment will present the lowest initial cost option, it will only extend the life of the plant by up to ten years. We accept this argument. SHET also presented</p>

Project Proposal	Rationale for Draft Determination Position	Rationale for Final Determination Position
	we proposed to reject this scheme.	additional arguments on the criticality of the site. Based on the limited value of refurbishment and overall criticality of the site, we have decided to accept the scheme as proposed by SHET. The calculated efficient cost allowance is £12.16m.

*Needs case assessment – RIIO-ET3 preconstruction projects*

- 3.39 In our Draft Determinations, based on the lack of supporting evidence, we proposed to reject SHET's baseline preconstruction projects. This represented a reduction of £13m (including indirects) compared to SHET's submission.
- 3.40 In response to our Draft Determinations, SHET submitted evidence to support the proposed NLR preconstruction funding. On the basis of this evidence, we have decided to allow the preconstruction funding request in full.

*Cost efficiency assessment*

- 3.41 In line with the changes on unit costs and our approach to risk and contingency that we detailed in the LR capex section above, we have changed our views on the efficient costs of the projects with approved needs cases. As a result, we have decided on a unit cost efficiency reduction of £9.17m across the NLR Capex projects, instead of the £75m reduction proposed at Draft Determinations.
- 3.42 Much of this difference is driven by SHET providing justification on why specific assets exceeded the expected cost level, for example, costs for circuit breakers using alternative technology in lieu of SF6 insulation.
- 3.43 Following our revised approach on risk and contingency, our decision on SHET's NLR capex is to remove £6m of allowance requested from risk and contingency costs compared to the £25m removed in Draft Determinations.

*High and Lower Confidence proportion of baseline Totex allowance*

3.44 Applying the methodology as set out in the Core Document, we have decided that of the baseline allowance for non-load related capex, £266m is high confidence and £529m is lower confidence.

*BPI Stages 3 and 4*

3.45 Based on additional evidence received since Draft Determinations, we have decided that the Peterhead and Foyers NLR capex projects are no longer lower confidence costs, as we accept that partial completion of the scope is not likely. However, as uncertainty remains about SHET's ability to complete the planned scope of the Willowdale scheme and Beauly/Aigas-Deanie scheme, we have therefore classified these works as lower-confidence costs.

3.46 In line with the approach set out in the LR capex section of this chapter, we have classified, as high confidence assets, costs for which we have been provided suitable independent benchmarks. We have classified some costs relating to 'civil works associated with asset activity' and risk and contingency costs as high cost confidence.

3.47 Of SHET's NLR capex submission that was subject to the BPI and TIM mechanisms, £281m has been classified as high confidence, and £553m as lower confidence. Of these lower confidence costs, we disallowed £24.7m as poorly justified costs. Accordingly, we have decided that these will attract a £2.5m penalty under the BPI Stage 3 mechanism. As our independent benchmark for the high confidence costs was more efficient than SHET's proposed costs, we have decided that there will be no Stage 4 reward on SHET's NLR capex costs.

*Summary of NLR capex allowance*

3.48 The ET sector document identifies the differing treatments of NLR capex projects depending on their start/end years and the type of work. Appendix 1 lists the T2/T3 projects that will be trued-up as part of the T2 closeout or the setting of T3 process. The PCDs associated with approved NLR projects during the RIIO-ET2 period are detailed in Chapter 2.

**Non-operational capex**

3.49 Non-operational capex relates to assets not directly connected to the network, but which support the general functioning of the business. Costs comprise the

following four categories: Property; Small tools, equipment, plant and machinery (STEPM); Vehicles and Transport; and Information Technology and Telecoms (IT&T).

- 3.50 The details of the assessment methodologies for each of these non-operational capex sub-categories are provided in the ET sector Annex.

#### Final Determination rationale and Draft Determination responses

##### *Property*

- 3.51 Property costs for SHET consisted of a number of discrete investments that were detailed in EJPs. We assessed the needs cases and cost efficiency of these investments at an individual scheme level.
- 3.52 In our Draft Determinations, we proposed a reduction of £52.6m relating to the proposals for a new operational centre and new warehousing facilities. We rejected these proposals because SHET had not demonstrated a clear and unambiguous needs case, provided sufficient justification for the preferred options or demonstrated value for money.
- 3.53 In response to our Draft Determinations, SHET provided two enhanced EJPs for the two proposals we had rejected. These papers clarify the need for them, present additional evidence and provide details of the enhanced optioneering process undertaken by SHET.
- 3.54 We have reviewed the enhanced EJPs and associated evidence and have decided to approve the two proposed property proposals and provide the associated baseline allowances as we are now satisfied with the needs case and costs presented.

##### *IT&T*

- 3.55 SHET also disagreed with our evaluation of its Non-operational IT&T business plan and questioned the proposed level of reductions to their IT proposals. It provided additional evidence to support its IT proposals to respond to the deficiencies we highlighted in our Draft Determinations proposals. We have assessed this evidence and consider it remains insufficient against the resource and cost assessment criteria to support SHET's proposal. We have therefore decided to implement our DD proposal to reject these costs.

*STEPM*

3.56 We have decided to implement our Draft Determinations proposals for STEPM as in our view, SHET’s submission for STEPM (£1.0m) is efficient.

3.57 Our Final Determinations for the Property schemes and accompanying rationale is set out below.

<b>Project Proposal</b>	<b>Draft Determination Position</b>	<b>Final Determination Position and Rationale</b>
<b>Materials Mgt/Warehousing.</b> A warehouse (7,500m <sup>2</sup> ) in the Dundee Area and a warehouse (7,500m <sup>2</sup> ) in the Inverness area. This will include facilities for storage of oil filled plant. £37.6m.	We considered that SHET had not provided sufficient justification for the preferred option of two new warehouses. The corresponding EJP provided neither a clear and unambiguous needs case nor demonstrates value for money or efficiency. On this basis we proposed to reject this scheme.	SHET have presented updated information to show the condition of the current facilities and the key drivers that required the enhanced capabilities. The updated submission now includes an enhanced optioneering process and justification for the investment. On this basis we accept the scheme as proposed, and the associated PCD.
<b>Operations centre.</b> Construction of a new Operations Centre with a contingency control centre. £15.0m.	We considered that SHET had not provided sufficient justification for the preferred option of a new control room and associated building. The corresponding EJP did not provide a clear and unambiguous needs case or demonstrate value for money or efficiency. On this basis we proposed to reject this scheme.	SHET have presented updated information to show the condition of the current facilities and the key drivers that required the enhanced capabilities. The updated submission now includes an enhanced optioneering process and justification for the investment. On this basis, we accept the scheme as proposed, and the associated PCD.

*High and Lower Confidence proportion in baseline Totex allowance*

3.58 Applying the methodology as set out in the Core Document, we have decided that of the proposed baseline allowance for Non-operational capex that is subject to the BPI and TIM mechanisms, £103.9m is high confidence with no lower confidence costs.

*BPI Stages 3 and 4*

3.59 In our draft determination, we had disallowed SHET’s property investment proposals. As noted in the table above, further information in support of this

investment was provided following our DD, which resulted in us deciding to approve these costs and classify them as high confidence.

3.60 Of the £112.4m of SHET’s submitted Non-Operational capex costs that are subject to the BPI and TIM mechanisms, we have decided to classify all of them as high confidence. As our independent benchmark for the high confidence costs was more efficient than SHET’s proposed costs, we have decided that there will be no Stage 4 reward on SHET’s Non-operational capex costs.

## Operational Expenditure (Opex)

3.61 Operating expenditure comprises network operating costs and indirect operational expenditure.

**Table 8: Opex allowances**

<b>Opex component</b>	<b>SHET proposed baseline (£m)</b>	<b>Work Volume Reductions (£m)</b>	<b>Cost Reductions (£m)</b>	<b>Work Volume Reductions subject to Uncertainty Mechanisms (£m)</b>	<b>Ofgem Baseline Allowances (£m)</b>
Network operating costs	207.8	20.1	8.7	13.1	165.8
Indirect costs	358.4	0.0	0.8	0.0	357.7

### Network Operating Costs (NOC)

3.62 These costs can be broken into the following sub-categories as reported in the BPDTs:

- Faults
- Inspections
- Repairs and Maintenance
- Vegetation Management
- Operational Protection Measures and IT Capex
- Legal and Safety

### Final Determination Rationale and Draft Determination responses

3.63 In its response to our Draft Determinations, SHET was of the view that its BP proposals for network operating costs were efficient and referenced the associated

EJP as evidence. However, our view remains that this paper argues generically about the efficiency of these costs and lacks the necessary detail to clearly demonstrate efficiency at the sub-category level. SHET's forecast RIIO-ET2 costs were higher than its RIIO-ET1 costs but no coherent explanation for this difference was provided across the different cost categories.

- 3.64 SHET also stated that the reporting of RIIO-ET1 data in the RIIO-ET2 BPDT required it to recut the data in a way that impacted our assessment approach and contributed to the level of disallowance we proposed in our Draft Determinations.
- 3.65 We acknowledge the challenge for all the transmission companies of reporting of RIIO-ET1 data in the RIIO-ET2 BPDT but consider that this was a necessary part of the business plan review process. We actively engaged the ETOs throughout the RIIO-2 process to identify and address data issues that may have impacted on our assessment approach and results. An example of this for SHET is the consideration of HVDC repair and maintenance costs, where SHET provided additional evidence to support its request where there was no comparator works in RIIO-ET1. We have reviewed this evidence and have decided to allow the HVDC repair and maintenance costs.

#### *Faults and Inspections*

- 3.66 We have decided to implement our Draft Determination proposals for both the faults and inspections cost categories. This is based on our assessment approach discussed in the ET Annex and detailed in full in our Draft Determinations. No compelling evidence was provided to affect our previous conclusions in these cost areas.

#### *Repairs and Maintenance*

- 3.67 In our Draft Determinations, we proposed to allow £19.4m of SHET's £51.8m ask for repairs and maintenance costs based on our cost assessment which compared its annualised spend in RIIO-ET1 against the proposed spend in RIIO-ET2. This assessment was based on annualised figures because SHET had not initially provided volumes data in its BPDT for the repairs and maintenance cost category.
- 3.68 Since Draft Determination, SHET highlighted their previous submission of volumes data for repairs and maintenance, which we have used in our updated assessment to derive the Final Determinations allowances.



3.69 We have also decided to allow in full the cost of HVDC repair maintenance costs based on the additional information provided by SHET in support of these costs.

3.70 With regards to civils works costs, in its response to Draft Determinations, SHET maintained the need for additional costs within this category. Following further review of the evidence provided, we have decided to allow these costs.

#### *Vegetation Management*

3.71 We have decided to implement our Draft Determination proposals for the vegetation management cost category. This is based on our assessment approach discussed in the ET Annex and detailed in full in our Draft Determinations.

#### *Operational Protection Measures and IT Capex*

3.72 In its business plan, SHET sought funding for a number of discrete operational protection, telecommunication and monitoring equipment investments which were detailed in EJPs. We assessed the needs cases and cost efficiency of these investments at an individual scheme level.

3.73 In our Draft Determinations, we proposed to reject two of the investments; one associated with telecommunications and the second for an integrated monitoring system with associated costs of £72.42m. In our view SHET had not presented a clear needs case for these investments or evidence to support the proposed costs.

3.74 In response to Draft Determinations, SHET rescope the rejected schemes, and introduced a new scheme (Dynamic Line Rating) split out of the integrated monitoring system scheme. It provided justification across three enhanced EJPs with additional evidence clarifying the proposed investments. The revised ask was for the three schemes to be included in the baseline allowances with a forecast cost of £52.28m.

3.75 On review of the enhanced EJPs and associated evidence, we have decided to approve two of the revised schemes and accept the associated baseline allowances for them. We have decided to reject the third scheme and disallow the proposed costs for it. The rationale for our decisions on each of the schemes is out below.

<b>Project Proposal</b>	<b>Rationale for Draft Determination Position</b>	<b>Rationale for Final Determination Position</b>
<p><b>Integrated Condition Performance Monitoring.</b> SHET propose the rollout of digital condition monitoring equipment to legacy equipment and substations. The total cost of the works proposed is £43.4m.</p>	<p>We considered that SHET had not presented a clear and unambiguous needs case. The majority of the monitoring proposed in this scheme is not critical to the safe operation of the transmission system. Although there may be benefits from an Integrated Condition &amp; Performance Monitoring system, it is not clear what the measurable outputs of this scheme would be. In addition, SHET has systems in place to mitigate the risks presented in the EJP. On this basis we proposed to reject this scheme.</p>	<p>SHET has significantly reduced the scope to focus on equipment monitoring. The forecast cost for the new scope is now £15.7m. The needs case is now clear. SHET will install monitoring devices at equipment that is approaching end of life with a view to controlling asset risk and informing future business plans. On this basis, we have decided to accept the scheme with the new updated scope and the proposed PCD.</p>
<p><b>Transmission Communications Upgrade.</b> SHET propose the rollout of high speed and high bandwidth data connections to each SHET substation sites to enable long-term implementation of Internet Protocol solutions and the wider digital substation strategy. The total cost of the works proposed is £ 29.022m.</p>	<p>We considered that SHET had not presented a clear and unambiguous needs case. The justification for the needs case is based on the increasing digitisation of the SHET network and the integrated condition performance monitoring project. It is not clear what the material outputs of this scheme would be. On this basis we proposed to reject this scheme.</p>	<p>SHET have updated the proposal to give a clear unambiguous demonstration of need and scope of this proposal has been reduced. The material outputs are now clear and the forecast cost for the new scope is now £23.5m. On this basis, we accept the scheme with the new updated scope and the proposed PCD.</p>
<p><b>Dynamic Line Rating.</b> This proposal seeks to install Dynamic Line Rating (DLR) and seven overhead transmission lines (OHLs) projects. The total cost of the works proposed is 13.12m</p>	<p>This proposal was part of the Integrated Condition Performance Monitoring scheme at Draft Determinations. In our view, the proposal was deficient as the proposed installation locations were not clear and the proposed benefits case was not established. On this basis we proposed to reject this scheme.</p>	<p>We have decided to reject this proposal as the costs are not clear and there is a dependency on the Transmission Communications Upgrade works. Due to this uncertainty, we do not think it is appropriate to provide a baseline allowance. Once sufficient progress on the Transmission Communications upgrade has been made, and the cost and benefits can be clearly demonstrated, SHET may wish to apply for funding for its DLR proposals via the package of Uncertainty Mechanisms.</p>

### *Legal and Safety*

3.76 We have decided to implement our Draft Determination proposals for the legal and safety cost category, with the exception of substation electricity costs, which we have allowed. This is based on our assessment approach discussed in the ET Annex and detailed in full in our Draft Determinations.

### *High and Lower Confidence proportion in baseline Totex allowance*

3.77 Applying the methodology as set out in the Core Document, we have decided that of the proposed baseline allowance for Network Operating Costs that is subject to the BPI and TIM mechanisms, £96.1m is high confidence and £69.7m is lower confidence costs.

### *BPI Stages 3 and 4*

3.78 In our draft determination, we proposed that the disallowance operational protection measures and IT capex was inefficient and would be subject to a BPI Stage 3 penalty. SHET has provided additional information in support of its submission which we have reviewed as described in the rationale section above.

3.79 Of SHET's network operating costs submission that was subject to the BPI and TIM mechanisms, £104.8m has been classified as high confidence, and £89.9m as lower confidence. Of these lower confidence costs, we propose to disallow £20.1m as poorly justified costs. Accordingly, we have decided that these will attract a £2m penalty under the BPI Stage 3 mechanism.

3.80 As our independent benchmark for the high confidence costs was more efficient than SHET's proposed costs, we have decided that there will be no stage 4 reward on SHET's network operating costs.

### **Indirect Opex**

3.81 Indirect opex consists of Business Support Costs (BSC) and Closely Associated Indirect (CAI) costs. BSC are incurred supporting companies' general business activities while CAI costs support operational activities.

3.82 Our assessment approach for indirect opex costs is unchanged from Draft Determinations and is detailed in our Draft Determination ET Annex.

### Final Determination rationale and Draft Determination responses

- 3.83 SHET agreed with our BSC position at Draft Determinations. Our decision on SHET’s BSC is to implement our Draft Determinations proposals.
- 3.84 In our Draft Determinations, we deemed SHET’s CAI submission of £253.5m efficient for its proposed capex level but due to our proposed capex workload reductions, we proposed CAI allowance reductions of £93.9m. In response, SHET pointed out that the application of a cap unduly understated the allowance by approximately £51m. We agree and have adjusted our model accordingly for Final Determinations.
- 3.85 In SHET’s response to Draft Determinations, it agreed with us that capex and MEAV are appropriate cost drivers for CAI overheads but argued for a better balance of explanatory variables in place of those we had proposed.
- 3.86 SHET has also highlighted specific costs such as Operational Training and those associated with the Environmental Action Plan (EAP) that it believes are justified and should not be subjected to an efficiency reduction, arising from an aggregate regression model.
- 3.87 We have considered the SHET’s response along with those provided by the other ETOs in making our Final Determination, in particular the challenges raised on our use of regression modelling and the interpretation of the model. Our position remains that the regression modelling for indirect opex is appropriate as a commonly adopted regulatory tool. Our ET Annex provides more detail on our reasoning in this regard.
- 3.88 However, we have also considered the additional evidence provided by SHET to justify its costs and have agreed to exclude the cost categories of Operational Training and Insurance to IT&T from the scope of any efficiency or workload reductions applied from our regression analysis. We have also considered the efficiency of Wayleaves and those costs relating to the HVDC centre previously reported against Innovation, and costs arising from the EAP which are embedded in CAI sub-categories outside the modelling process and have allowed for these costs where they have been demonstrated to be efficient.
- 3.89 We have also decided to implement our Draft Determination proposal for the opex escalator; more detail on this can be found in the ET Annex.

*High and Lower Confidence proportion in baseline Totex allowance*

3.90 Applying the methodology as set out in the Core Document, we have decided that £357.7m of the proposed baseline allowance for indirect opex that is subject to the BPI and TIM mechanisms, all are high confidence with no lower confidence costs.

#### *BPI Stages 3 and 4*

3.91 In our Draft Determination, our independent benchmark was lower than SHET's proposed indirect opex costs. However, changes to our Indirect opex modelling process have resulted in higher modelled costs for SHET than their submission.

3.92 Of the £358.4m of SHET's submitted indirect opex cost which are subject to the BPI and TIM mechanisms, we have decided to classify all of them as high confidence. As SHET's submission was more efficient than our independent benchmark for high confidence costs, we have decided that there will be a stage 4 reward on SHET's indirect opex costs of £15.75m.

## **Other Costs**

3.93 The "other costs" category comprises cyber resilience costs, physical security costs and injurious affection costs.

3.94 Cyber resilience IT and OT are not discussed in this document in the interests of national security. A separate Cyber resilience Annex has been provided to SHET.

### **Physical security**

3.95 SHET submitted costs under the Physical Security Upgrade Programme (PSUP), a BEIS-led national programme to enhance physical security at Critical National Infrastructure sites. We have reviewed these and provided the requested amount in full.

### **Injurious affection**

3.96 Injurious affection relates to the provision of landowner compensation when SHET needs access for the purpose of developing its network. At Draft Determination, we had allowed the requested amount although we had not assessed it but stated that we would review this ahead of Final Determinations.

3.97 We have decided to implement our Draft Determination proposal and allow the full amount requested by SHET as baseline allowance, and we will true-up efficiently incurred costs as part of RIIO-ET2 close out. We consider that SHET should not benefit or be penalised through the TIM in regard to landowner compensation, as any over or under-performance is not likely to be due to efficiency/inefficiency, but rather due to the nature of how the costs arise.

## Ongoing efficiency and Real Price Effects (RPEs)

3.98 As detailed in the Core document, we have implemented ongoing efficiency at a rate of 1.15% (compounded annually) for capex and 1.25% (compounded) for opex. Please note that this has been applied to the allowances after application of the company’s capitalisation policies.

3.99 The rate for deriving the estimated future view for RPE allowance, by year, is given in the table below.

**Table 9: Rates applied for estimating future RPE allowances**

<b>Year</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Rate	1.59%	2.36%	3.05%	3.71%	4.39%

## 4. Adjusting baseline allowances for uncertainty

### Introduction

- 4.1 This Chapter sets out our decisions on each Uncertainty Mechanism (UM) that will apply to SHET during RIIO-ET2 price control period.
- 4.2 Where a UM is common to all sectors or the ET sector, we do not repeat in this chapter the rationale for any changes from Draft to Final Determinations, as this is already set out in either the Core Document or the ET Annex.
- 4.3 Where a UM is directly related to our baseline Totex assessment, relevant details can be found in Chapter 3.

### ET UMs

#### Generation Connections volume driver / Demand Connections volume driver

**Purpose:** To ensure that ETOs are funded through an automatic mechanism to undertake load-related capital expenditure required to connect new generators and new demand customers seeking connection to the transmission system.

**Benefits:** Enabling ETOs to provide connections in a timely manner and consumer payment reflecting efficient costs for actual connections delivered.

Parameter	Final Determination	Draft Determination
Type	Volume driver	
Volume metrics	<p>The following volume metrics are all measured relative to the defined baseline levels for each company:</p> <ul style="list-style-type: none"> <li>the number of generation or demand connection projects</li> <li>the incremental Connection Entry Capacity (in Scotland) / Transmission Entry Capacity (in England and Wales) for generation connected to the network or the system capacity associated with connection of multiple new demand connections as specified in relevant agreement between the ETO and the ESO pursuant to the STC</li> <li>the incremental increase in the offtake capacity at grid exit points for demand connected to the network</li> </ul>	Form and values of volume driver based on regression analysis at the time.

Parameter	Final Determination	Draft Determination																
	<ul style="list-style-type: none"> <li>length of new build OHL</li> <li>length of reconductoring OHL</li> <li>length of new underground cables each shorter than 1km</li> <li>length of new underground cables each equal to or longer than 1km.</li> </ul>																	
Delivery date	<p>The connections volume driver will apply to works anticipated to deliver within the RIIO-2 period and in year 1 and year 2 of RIIO-3 (31st March 2028), except for:</p> <ul style="list-style-type: none"> <li>projects that SHET start in RIIO-1 and deliver in year 1 and year 2 of RIIO-2 are funded via the existing respective RIIO-1 volume drivers</li> <li>projects whose expected costs are beyond the defined tolerance range (see detail below) will be considered under the MSIP re-opener.</li> </ul>																	
Totex baseline allowances	<p>Generation: £258.87 million (LE Entry) and £15.3 million (LE Entry - sole use)</p> <p>Demand: no schemes.</p>																	
Baseline outputs profile	<p>Generation schemes connecting in the first two years of the RIIO-ET2 period will be recovered under the existing RIIO-ET1 volume driver. All remaining schemes are funded via RIIO-ET2 baseline allowances. The volume driver will cover schemes that originate within the RIIO-2 period and expect to deliver output beyond 31 March 2026. Only when the need materialises will revenues be adjusted, and those revenues are output dependent.</p>																	
Unit rates	<table border="1"> <thead> <tr> <th>Volume Metric (Unit)</th> <th>Unit Rate</th> </tr> </thead> <tbody> <tr> <td>Number of connection projects (#)</td> <td>£0.81m per project</td> </tr> <tr> <td>Generation capacity (MW or MVA)</td> <td>£56.6k per MW or MVA</td> </tr> <tr> <td>Demand capacity (MW or MVA)</td> <td>Outside volume driver (See further detail below)</td> </tr> <tr> <td>New Build OHL (km)</td> <td>£263k per km</td> </tr> <tr> <td>Reconductoring OHL (km)</td> <td>£257k per km</td> </tr> <tr> <td>Underground Cable &lt;1km (km)</td> <td>£3.58m per km</td> </tr> <tr> <td>Underground Cable = or &gt;1km (km)</td> <td>£0.91m per km</td> </tr> </tbody> </table>	Volume Metric (Unit)	Unit Rate	Number of connection projects (#)	£0.81m per project	Generation capacity (MW or MVA)	£56.6k per MW or MVA	Demand capacity (MW or MVA)	Outside volume driver (See further detail below)	New Build OHL (km)	£263k per km	Reconductoring OHL (km)	£257k per km	Underground Cable <1km (km)	£3.58m per km	Underground Cable = or >1km (km)	£0.91m per km	
	Volume Metric (Unit)	Unit Rate																
	Number of connection projects (#)	£0.81m per project																
	Generation capacity (MW or MVA)	£56.6k per MW or MVA																
	Demand capacity (MW or MVA)	Outside volume driver (See further detail below)																
	New Build OHL (km)	£263k per km																
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	Underground Cable <1km (km)	£3.58m per km																
Underground Cable = or >1km (km)	£0.91m per km																	
Reporting method	<p>Annual reporting on outturn and updated forecast costs will be facilitated through the RRP.</p>																	
Adjustment mechanism	<p>Adjustment to allowance (up or down) is the sum of: the volume metrics multiplied by the relevant unit rates as set out above. Allowances will be profiled through this mechanism to ensure adequate funding is provided to TOs. For this we have assumed an average project lifespan of 4 years for connections</p>																	



Parameter	Final Determination	Draft Determination
	with costs spread in the following profile: 25%/25%/25%/25%.	
Additional requirements	An upper and lower tolerance range will be set based on the standard error resulting from our regression analysis multiplied by a factor of 1. Projects whose expected costs are beyond this range will be considered under the MSIP re-opener. For SHET this provides a range between plus and minus £12.63m around the allowance calculated by the volume driver.	Indicated for finalisation at FD
Applied to	All ETOs with company-specific values	No change
Licence condition	Special condition 3.11	N/A

4.4 The risk that does remain is one that applies in any ex ante regulation; that the actual costs (in this case the applicable metrics for particular works) are different to the allowed metrics set above. This sets an incentive for SHET to find efficiency savings, which will benefit consumers. By retaining the TIM sharing factor, this will help ensure an incentive remains to find further efficiencies in RIIO-ET2.

#### Demand connection projects

4.5 There was no data to establish a coefficient that could be used as the basis of a unit rate to fund the construction and delivery of new demand connections for SHET. In the event that a prospective connection project materialises during RIIO-2, it will qualify for submission via the MSIP re-opener or the LOTI re-opener (if likely to cost £100m or more).

### **Large Onshore Transmission Investments (LOTI) re-opener**

**Purpose:** To ensure that TOs are funded to undertake necessary large investments on the transmission network.

**Benefits:** Allows Ofgem to scrutinise, on behalf of consumers, large transmission investments at the point at which needs case and efficient costs can be scrutinised more effectively.

UM parameter	Final Determination	Draft Determination
UM type	Re-opener	Same as FD

UM parameter	Final Determination	Draft Determination
Re-opener window	Any time during the price control	Same as FD
Re-opener materiality threshold	ET projects expected to cost £100m or more that are in whole or in part load-related or related to a shared-use or sole-use generator connection project.	Same as FD
Authority triggered re-opener?	No	Same as FD
Additional requirements	<p>There is a four-stage assessment process that ETOs must followed to secure LOTI funding, unless otherwise directed by Ofgem in accordance with the relevant licence provisions. In summary:</p> <ul style="list-style-type: none"> <li>• Eligibility to apply – a short notification to Ofgem signaling an intent to use the LOTI process</li> <li>• Initial Needs Case – an early assessment of the need for the project and its initial optioneering</li> <li>• Final Needs Case – final confirmation that the project is required</li> <li>• Project Assessment – detailed assessment of project costs to determine allowance - costs to be set out in licence.</li> </ul>	Broadly the same as FD, though timings of stages have been condensed slightly, further to consideration of DD responses.
Applied to	All ETOs	Same as FD
Licence condition	Special Condition 3.13	N/A

### Pre-Construction Funding (PCF) re-opener

**Purpose:** To provide flexibility in the event that further PCF is required during the price control period.

**Benefits:** Allows timely development of important strategic projects whilst protecting consumers from providing PCF for speculative projects.

UM parameter	Final Determination	Draft Determination
UM type	Re-opener	Same as FD
Re-opener window	Alongside an Initial Needs Case for a LOTI project	At the end of the price control period
Re-opener materiality threshold	There is no materiality threshold for the value of PCF requested, but the re-opener can only be used to request PCF for LOTI projects.	Same as FD
Authority triggered re-opener?	No	Same as FD
Additional requirements	Generally, we would only expect the PCF re-opener to be used for projects which did not receive baseline PCF PCDs (these are set out in company annexes).	PCF re-opener to be used for projects which did not receive baseline PCF PCDs.

UM parameter	Final Determination	Draft Determination
	However, where PCF costs are expected to be more than double the amount provided for in the baseline PCD allowance, submissions for additional allowances can be submitted. The definition of PCF is “the funding required to develop a LOTI project to the point that consents are obtained, and the project is ready to begin construction.”	The definition of PCF was “the funding required to develop a LOTI project to the point that consents are obtained.”
Applied to	All ETOs	Same as FD
Licence condition	Special condition 3.15	N/A

### Medium Sized Investment Projects (MSIP) re-opener

**Purpose:** To ensure that ETOs are able to undertake necessary investments in the transmission network, funding for which has not been provided in RIIO baseline allowances.

**Benefits:** Allows Ofgem to scrutinise, on behalf of consumers, the need for and cost of projects with more unusual characteristics.

UM parameter	Final Determination	Draft Determination
UM type	Re-opener	Same as FD
Re-opener window	Each year of the price control between January 25th and January 31st.	January 2024 only
Re-opener materiality threshold	One or more project(s) expected to cost less than £100m each, which cumulatively exceed 0.5% of ex ante average annual base revenue when allowances are set.	Various thresholds, specific to each area.
Authority triggered re-opener?	No	Same as FD
Additional requirements	Most areas covered by MSIP are driven by circumstances outside of the control of the ETOs, so submissions in respect of each area will be required to meet certain criteria in order to be eligible for consideration under the MSIP re-opener. These criteria are set out in Table 10.	Same as FD
Applied to	All ETOs, with some exceptions set out in Table 10 below.	Some areas have been added or removed since DDs. See Table 10.
Licence condition	Special condition 3.14	N/A

**Table 10: Areas covered by the MSIP re-opener**

<b>Area</b>	<b>Criteria for assessment under MSIP</b>	<b>ETO</b>
Atypical connection projects	Minimum and maximum intervals to determine instances of material deviation between the predicted allowance generated by the application of the volume driver unit rates to the total forecast cost of each project. For SHET the intervals are based on the application of the standard error: +/- £12.63m (std error).	All
NOA 'Proceed' Projects	Any project that secures a NOA 'proceed' signal in most recent NOA.	SPT and SHET
ESO-driven requirements	Written request by the ESO for additional investment in relation to system operability and constraint management requirements.	All
Harmonic Filtering Equipment	Requests from ETO customers to aggregate and deliver harmonic filtering requirements or following ESO/TO system studies showing a potential breach of planning limits.	All
Protection Equipment	Protection changes required to address system issues following ESO/ETO system studies and includes Operational Load Management Schemes, subject to the receipt of an STC planning request, and dynamic line rating equipment.	All
Energy Data Taskforce recommendations	Recommendations regarding specific outputs required to meet principles developed via industry working groups (including SCADA).	All
Projects to maintain SQSS compliance	ETO demonstration of the need to modify the network to meet SQSS compliance for security and system operability.	All
Black Start	A new Black Start Standard, currently under review by BEIS.	All
Flooding	Updated ETR138 guidance on flooding, and/or a direction from BEIS to protect sites from flooding.	All
SF6 Asset Intervention	Where ETOs can demonstrate efficient costs and asset intervention at sites containing SF6, through a well-justified intervention plan. Consideration should be given to retro-fill and SF6 alternative gasses. We would expect only one submission in this area per ETO during the RIIO-ET2 period.	All

**Access Reform re-opener**

**Purpose:** A mechanism to reduce Totex allowances if changes to industry codes arising from our Access and forward-looking charges Significant Code Review (SCR) leads to a reduction in network costs.

**Benefits:** This re-opener would ensure that consumers receive the benefits of changes to transmission use of system charges and access rights through lower charges in a timely manner.

UM parameter	Final Determination	Draft Determination
UM type	Re-opener	We sought views in the DD Core Document on how the Access review may manifest in its interaction with elements of the price control.
Re-opener window	Any time during the price control	
Re-opener materiality threshold	0.5% of ex ante average annual average base Revenue	
Authority triggered re-opener?	Exclusively Authority-triggered	
Additional requirements	Adjustments to baseline allowances and unit rates for volume drivers, would be triggered if there is a demonstrable likelihood of reduction in costs as a result of industry code changes to implement the outcome of our access and forward-looking charges SCR.	
Applied to	All ET sector companies	
Licence condition	Special Condition 3.16	N/A

## Cross-sectoral UMs

### Net Zero re-opener

**Purpose:** To introduce an increased level of adaptability into the RIIO-2 price control by providing a means to amend the price control in response to changes connected to the meeting of the Net Zero targets, which have an effect on the costs and outputs of network licensees.

**Benefits:** To allow for necessary amendments within the RIIO-2 period, as opposed to waiting until the settlement of the subsequent price control.

UM parameter	Final Determination	Draft Determination
UM type	Re-opener	Same as FD
Re-opener window	At any time in RIIO-2	Same as FD
Re-opener materiality threshold	0.5% of average annual ex-ante base revenue	1% of average annual ex-ante base revenue
Authority triggered re-opener?	Yes	Same as FD

<b>UM parameter</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Additional requirements	n/a	Same as FD
Applied to	Cross-sector UM - All ET, GD, and GT companies	Same as FD
Licence condition	Special Condition 5.4	Same as FD

### **Coordinated Adjustment Mechanism (CAM) re-opener**

**Purpose:** To enable a licensee to submit an application to reallocate responsibility and associated revenue for an activity to or from another licensee’s price control (only where the other licensee is in agreement, and there are demonstrable benefits to the consumer).

**Benefits:** Delivers greater benefits for consumers by allowing more efficient solutions to be taken up elsewhere in the system as they are identified, rather than tied to the initial allocation.

<b>UM parameter</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Re-opener window	Annual re-opener windows.	Annual re-opener windows or two sets of re-opener windows.
Timing of windows	May	January or May
Re-opener materiality threshold	None (submissions will be assessed on the scale of increased benefits for consumers, not the project costs)	Same as FD
Single or joint application	Application to come from single licensee, but must contain a statement of agreement between the licensee who was originally assigned the responsibility and associated revenues for the output or project and the licensee who is able to deliver it with greater overall value to consumers.	Same as FD
Authority triggered re-opener?	No. The network companies only can trigger the CAM on a voluntary basis.	Same as FD

UM parameter	Final Determination	Draft Determination
'Foreseeable'	There is no additional requirement that the proposed reallocation was 'foreseeable' at the time of BP submission	Same as FD
Incentive	No financial incentive for networks to utilise this reopener. Networks may agree commercial compensation for potential losses between themselves where necessary.	Same as FD
Reporting / submission requirements	Main requirement to demonstrate greater benefits for the consumer than the status quo. Further information on the evidence licensees must provide in the CAM Re-opener Application Guidance.	Same as FD
Applied to	All network companies, except the ESO, on a within sector and cross sector basis, i.e., any combination of licensees from any sector may submit an application.	Same as FD
Licence condition	Special Condition 3.8	N/A

### IT Non-operational Capex Reopener

**Purpose:** To provide allowed expenditure to network companies to implement efficient IT enhancements in support of the business systems and networks.

**Benefits:** Ensures network companies are able to achieve their IT strategy and meet the aspiration of digitalising the energy sector.

UM parameter	Final Determination	Draft Determination
UM type	Re-opener	Same as FD
Re-opener window	<ul style="list-style-type: none"> <li>Between 1 April 2021 and 8 April 2021; and</li> <li>between 25 January 2023 and 31 January 2023.</li> </ul>	Same as FD
Re-opener materiality threshold	No materiality threshold	Same as FD
Authority triggered re-opener?	Yes	Same as FD

UM parameter	Final Determination	Draft Determination
Additional requirements	<p>The licensee must submit to the Authority a Non-operational capex IT Plan setting out:</p> <p>(a) details of any proposed activities that the licensee considers would be capable of improving its Non-operational capex IT</p> <p>(b) how the adjustment requested would improve its Non-operational capex IT</p> <p>(c) the basis of the calculations for the adjustment requested to allowances</p> <p>(d) provide detailed supporting evidence, as is reasonable in the circumstances, which must include:</p> <ul style="list-style-type: none"> <li>• improvement plans</li> <li>• a prioritisation programme</li> <li>• market and industry cost comparison</li> <li>• anticipated business benefits derived from any risk reduction as a result of the proposed activities.</li> </ul> <p>Further guidance on the application process and content can be found in the IT&amp;T Non-operational capex reopener guidance</p>	Same as FD
Applied to	All ET, GT, and GD companies	Same as FD
Licence condition	Special Condition 3.7	N/A

**Cyber Resilience Operational Technology (OT) and Cyber Resilience Information Technology (IT)**

**Purpose:** To reduce risk, improve cyber resilience and response outcomes on the networks and comply with relevant regulations.

**Benefits:** Ensure network companies are managing risks posed to the security of the network and information systems and preventing and minimising the impact of incidents on these essential services to ensure a safe and resilient network.



Cyber Resilience OT

<b>UM parameter</b>	<b>Final Determination</b>	<b>Draft Determination</b>
UM type	Re-opener	Same as FD
Re-opener window	Two re-opener application windows for all network companies available at the beginning of the price control (2021), and midperiod (2023).	Same as FD
Re-opener materiality threshold	No materiality threshold and no aggregation.	Same as FD
Authority triggered re-opener?	Yes	Same as FD
Additional requirements	All licensees required to submit application at first re-opener window. Allowances will be provided on a UIOLI basis and appropriate PCD outputs will be set.	Same as FD
Applied to	Cross-sector UM - All ET, GD, and GD companies	Same as FD
Licence condition	Special Condition 3.2	N/A

Cyber Resilience IT

<b>UM parameter</b>	<b>Final Determination</b>	<b>Draft Determination</b>
UM type	Re-opener	Same as FD
Re-opener window	Two re-opener application windows for all network companies available at the beginning of the price control (2021), and midperiod (2023).	Same as FD
Re-opener materiality threshold	No materiality threshold and no aggregation.	Same as FD
Authority triggered re-opener?	Yes	Same as FD
Additional requirements	All licensees required to submit application at first re-opener window. Allowance subject	Same as FD

UM parameter	Final Determination	Draft Determination
	to ongoing monitoring as part of outcome based PCDs.	
Applied to	Cross-sector UM - All ET, GD, and GD companies	Same as FD
Licence condition	Special Condition 3.3	n/a

### Opex Escalator

**Purpose:** To ensure SHET is funded through an automatic mechanism for varying operational costs associated with capital investments delivered through UM's.

**Benefits:** Provides SHET with opex allowances when capex allowances are funded through the relevant UM, and ensures that those opex allowances are consistent with those set for baseline allowances.

UM parameter	Final Determination	Draft Determination
Type	Volume driver	Same as DD
Volume Metrics	<ul style="list-style-type: none"> <li>• The RAV addition measured in £m arising from the new asset of specific load related UMs at the point of energisation:                             <ul style="list-style-type: none"> <li>○ Connection/demand volume driver</li> <li>○ MSIP re-opener</li> <li>○ LOTI re-opener</li> </ul> </li> <li>• The capex addition measured in % of the baseline Capex allowance from specific UMs:                             <p><u>All ETOs</u></p> <ul style="list-style-type: none"> <li>○ Connection/demand volume driver</li> <li>○ MSIP re-opener</li> <li>○ LOTI re-opener</li> <li>○ Visual amenity in designated areas provision</li> </ul> <p><u>SHET only</u></p> <ul style="list-style-type: none"> <li>○ Subsea cable repair re-opener.</li> </ul> </li> </ul>	Same as DD

UM parameter	Final Determination		Draft Determination
Unit rates	<b>Volume Metric (Unit)</b>	<b>Unit Rate</b>	Indicated values to be set in FD
	RAV addition (£m)	0.5% per year from the year of energisation	
	Capex addition (% of baseline Capex allowance £1719.8m)	0.734% of baseline CAI allowance (£253.4m) per 1% of capex addition	
Reporting method	Annual RRP		Same as DD
Adjustment mechanism	Adjustment to opex allowance is the RAV addition and Capex addition multiplied by the relevant unit rates.		Same as DD
Applied to	All ETOs with company-specific values		Same as DD
Licence condition	Applied to all relevant capex Uncertainty Mechanisms conditions		N/A

## SHET-specific UMs

### Subsea cable repair re-opener

**Purpose:** To enable SHET to seek funding for efficient costs associated with resolving unexpected subsea cable faults, or for mitigating the risk of these faults occurring.

**Benefits:** Ensures that the consumer is only paying SHET to manage necessary risks.

#### Final Determination

UM parameter	Final Determination	Draft Determination
UM type	Re-opener	Same as FD
Re-opener window	January 2024 and RIIO-2 closeout	Same as FD
Re-opener materiality threshold	0.5% of Annual ex-ante base revenue	1% of Annual ex-ante base revenue
Authority triggered re-opener?	No	No
Additional requirements	Not Applicable	Same as FD
Applied to	SHET	Same as FD
Licence condition	Special Condition 3.29	N/A

Final Determination rationale and Draft Determination responses

4.6 In Draft Determinations, we proposed to accept SHET’s bespoke re-opener for subsea cable repairs. No respondents' commented on this re-opener, other than SHET, which agreed with our proposal. Therefore, we have decided to accept SHET’s bespoke output UM out in Draft Determinations.

**ENS Compensation Scheme pass-through**

**Purpose:** To provide payments to customers who experience interrupted power supply due to lower standard design of network in some parts of SHET’s transmission area.

**Benefits:** Proportionate and efficient approach to compensate customers for a higher risk of ENS compared to more costly network solutions.

Final Determination

<b>Output parameter</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Type	Pass through funding	Same as FD
Output	Provide payments to customers who are off supply for 6 hours and additional payments for customers off supply for 12+ hours.	Same as FD
Delivery date	End of RIIO-ET2	Same as FD
Totex baseline allowances	£0	Same as FD
Re-opener	No	Same as FD
Reporting method	Annual RRP reporting	Same as FD
Adjustment mechanism	None	Same as FD
Companies applied to	SHET only	Same as FD
Licence obligation	Special Condition 6.3	Same as FD

Final Determination rationale and Draft Determination responses

4.7 In Draft Determinations, we proposed to accept SHET’s bespoke output to retain the existing RIIO-ET1 compensation scheme. We did not receive any direct responses on our proposal to accept this bespoke proposal from SHET. Therefore, we have decided to accept SHET’s bespoke output set out in Draft Determinations because we consider it provides a proportionate and efficient approach to

reimburse customers who face a higher risk of ENS due to the design of SHET's network.<sup>15</sup>

- 4.8 We expect SHET to update its Compensation Methodology Statement, including updating monetary payments to customers in 2018/19 prices, and submit it to Ofgem by 31 January 2021 for approval before the start of RIIO-ET2.

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<sup>15</sup> SHET's network includes some self-derogated lines where the risk profile relating to ENS may differ from other TOs' networks.

## 5. Innovation

### Introduction

5.1 This Chapter sets out our Final Determination on SHET’s Network Innovation Allowance (NIA) for the RIIO-ET2 price control period. Chapter 8 of the Core Document also details our Final Determination on the RIIO-2 NIA framework and the Strategic Innovation Fund.

#### Network Innovation Allowance

**Purpose:** To fund innovation relating to the energy system transition and/or support for consumers in vulnerable situations.

**Benefits:** The NIA will enable companies to take forward innovation projects that have the potential to address consumer vulnerability and/or deliver longer-term financial and environmental benefits for consumers, which they would not otherwise undertake within the price control.

#### Final Determination

<b>Network Innovation Allowance</b>	<b>SHET proposed NIA (£m)</b>	<b>Ofgem Draft Determinations position (£m)</b>	<b>Ofgem Final Determinations decision (£m)</b>
Level of NIA funding	8	8, conditional on an improved industry-led reporting framework.	8

#### Final Determination rationale and Draft Determination responses

5.2 We have decided that all network companies and the ESO will be able to access NIA funding during RIIO-2, as they have satisfactorily evidenced that an improved industry-led reporting framework will be in place for the start of RIIO-2 (see Chapter 8 of the Core Document).

5.3 We have decided to award SHET £8m NIA funding. This is consistent with our Draft Determination proposal and was fully supported by the three respondents, Citizens Advice, the SHET UG and SHET, who directly addressed SHET’s NIA.

## 6. Totex Incentive Mechanism and Business Plan Incentive

### Introduction

6.1 This chapter sets out our Final Determination for SHET on the Totex Incentive Mechanisms, and the Business Plan Incentive (BPI). Further details of our decisions on confidence assessments and cost justifications can be found in Chapter 3 of this document, and further details of the BPI at a cross-sectoral level and the rationale underpinning our decisions can be found in Chapter 10 of the Core Document.

**Table 11: Summary of decisions on the BPI for SHET**

<b>BPI stage</b>	<b>Final Determination</b>
Stage 1 - Minimum requirements	Pass.
Stage 2 – CVP reward	£10.55m
Stage 3 – Penalty	-£4.49m
Stage 4 – Reward	£15.75m
Total	£21.81m Reward

### Totex Incentive Mechanism

6.2 The Totex Incentive Mechanism (TIM) is designed to encourage network companies to improve efficiency in delivery and ensures that the benefits of these efficiencies are shared with consumers. It also provides some protection to companies from overspends as the costs of overspends are also shared with consumers.

**Table 12: RIIO-ET2 TIM incentive rate for SHET**

<b>Licensee</b>	<b>Draft Determination</b>	<b>Final Determination</b>
SHET	30.9%	36%

6.3 The main driver for the change in our FD decision from our DD position is the inclusion of the East Coast 400kV Incremental upgrade project in BPI and TIM mechanisms as the majority of costs for this project are in T2 and are now subject

to a PCD. Other updates on our cost confidence relating to SHET’s plan and our allowances are explained in Chapter 3 of this document.

- 6.4 See Chapter 10 in the Core Document for an overview of the TIM across all sectors.

## Stage 1 – Minimum requirements

### Final Determination

- 6.5 We have decided to proceed with our proposal that SHET has met all of the Business Plan minimum requirements set out in our SSMD, and has, therefore, passed Stage 1 of the BPI.

### Final Determination rationale and Draft Determination responses

- 6.6 In our DDs, we set out our provisional view that SHET had met all the Business Plan minimum requirements and had passed Stage 1 of the BPI.
- 6.7 None of the responses to our DDs disagreed with that position, and we do not see a reason to change our position.

## Stage 2 – Consumer Value Propositions

- 6.8 We have decided to allow two CVPs proposed by SHET – Science Based Target and Biodiversity No Net Loss / Net Gain - with a total consumer value of £29.3m. This translates into a £10.55m reward for SHET. Further details of these CVPs are provided below.
- 6.9 For details of our decisions on CVPs that we have not allowed, see Appendix 2.

### **Science Based Target**

**Purpose:** To encourage SHET to reduce its emissions in order to achieve a 1.5-degree Science Based Target (SBT).

**Benefits:** Reduced network carbon emissions for current and future consumers.

### Final Determination



<b>CVP parameter</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Output	Achieving emission levels at the end of RIIO-ET2 consistent with a 1.5-degree Science Based Target	CVP rejected at DD
Performance measurement	Network emissions in t/CO <sub>2</sub> e <sup>16</sup> . Target is an emissions reduction of 2,816 t/CO <sub>2</sub> e relative to a 2019 baseline.	CVP rejected at DD
Delivery date	31 Mar 2026	CVP rejected at DD
CVP value	£5.79m	CVP rejected at DD
CVP reward	£2.08m	CVP rejected at DD
Reporting method	Annual RRP reporting	CVP rejected at DD
Adjustment mechanism	Linear adjustment based on reducing emissions from ≤727 t/CO <sub>2</sub> e (return full reward) to ≥2816 t/CO <sub>2</sub> e, relative to 2019 baseline	CVP rejected at DD
Licence obligation	Special Condition 4.8	CVP rejected at DD

### Final Determination rationale and Draft Determination responses

- 6.10 We received four consultation responses relating to our Draft Determinations proposed position to reject this CVP. A consumer group and the CEG both supported our general CVP assessment, while SHET and a community energy group encouraged us to reconsider this proposal. SHET stated that setting a 1.5-degree SBT goes beyond BAU and the community energy group stressed it is vital that networks move towards implementation of SBTs and actions should be supported.
- 6.11 Further to consideration of DD responses and following further engagement with SHET, we have decided to accept this CVP and have set a reward of £2.08m.
- 6.12 We had proposed to reject this CVP at Draft Determinations as we had stated in our Business Plan Guidance<sup>17</sup> that it was the minimum level of ambition we would expect from network companies in RIIO-2. However we now accept that, while simply having a SBT does not go beyond BAU, SHET’s proposal to set a target of 1.5 degrees goes above the 2.0 degree target we would expect as BAU, and this ambition should be rewarded through a CVP.
- 6.13 We recognise that this proposal had the support of environmental stakeholders, and we welcome the engagement we have had with SHET subsequent to Draft Determinations. Through a number of bilateral meetings with Ofgem, SHET has

<sup>16</sup> Tonnes of carbon dioxide equivalent emissions

<sup>17</sup> RIIO-2 Business Plan Guidance (October 2019) Appendix 2

demonstrated the consumer benefit of setting a 1.5-degree SBT relative to a 2.0-degree target in terms of reduced environmental impact.

6.14 We consider the additional consumer value of setting a 1.5-degree SBT to be the extra reduction in carbon emissions relative to setting a 2.0-degree SBT. The emissions reduction target for the end of RIIO-ET2 based on a 2.0-degree SBT is 727 t/CO<sub>2</sub>e, while the target based on a 1.5-degree SBT is 2,816 t/CO<sub>2</sub>e. Therefore, to calculate the size of the CVP reward we multiplied the difference (2,089 t/CO<sub>2</sub>e) by the traded cost of carbon, then multiplied this by SHET’s TIM sharing factor.

6.15 If SHET does not deliver the specified emissions reduction target, we will claw back the CVP reward based on a linear adjustment for emissions reductions from 727 t/CO<sub>2</sub>e (return the full reward) to 2,816 t/CO<sub>2</sub>e (keep the full reward).

### **Biodiversity No Net Loss / Net Gain**

**Purpose:** To encourage SHET to improve the biodiversity and natural capital of land impacted by construction projects.

**Benefits:** To improve local environments and ecosystems that suffer damage due to network construction. Provides additional consumer value because of the improved environmental amenity it will create.

### Final Determination

<b>CVP parameter</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Output	Achieving Biodiversity No Net Loss (NNL) on construction projects consented from 2020, and Biodiversity Net Gain (BNG) on construction projects consented from 2025 <sup>18</sup> .	Same as FD
Performance measurement	Number of Biodiversity Units (BU) designed into new construction projects	Did not propose measurement at DD
Delivery date	NA	Same as FD
CVP value	£23.51m	Did not propose value at DD
CVP reward	£8.46m	Did not propose reward at DD
Reporting method	Annual RRP reporting	Same as FD

<sup>18</sup> [Forest Trend Organisation website](#): No Net Loss and Biodiversity Net Gain

<b>CVP parameter</b>	<b>Final Determination</b>	<b>Draft Determination</b>
Adjustment mechanism	Linear adjustment based on the number of BUs designed into new construction projects against the BUs required to achieve NNL/BNG	Not discussed at DD
Licence obligation	Yes	NA

### Final Determination rationale and Draft Determination responses

- 6.16 We received five consultation responses to this CVP, all of which were supportive of our DD position.
- 6.17 We have decided to accept this CVP and we are setting a CVP reward of £8.46m. We accept that this proposal provides additional consumer value because of the improved environmental amenity it will create and recognise that it has stakeholder support. We consider this activity goes beyond BAU as there is no obligation on SHET to achieve NNL and BNG on its construction projects.
- 6.18 Whilst the consumer value is evident, we recognise that biodiversity NNL and BNG are difficult to accurately quantify in terms of consumer value, and we welcome the positive engagement we have had with SHET, National Grid and SPT subsequent to DDs to help us to determine an appropriate methodology to use to value biodiversity enhancements.
- 6.19 The TOs proposed a number of methodologies for rewarding biodiversity improvements, including using tools to measure biodiversity improvements against a baseline and refined Willingness-to-pay (WTP) studies.
- 6.20 We decided to use a methodology that combined the Willingness-to-pay (WTP) study that SHET based its original submission on with the valuation determined using National Grid’s Natural Capital Tool, as proposed by SHET during a bilateral meeting.
- 6.21 SHET’s WTP study determined the value consumers place on biodiversity enhancements at its sites to be £634.4m. During post-DD engagement, SHET proposed setting a reward value at 10% of this, following application of the sharing factor. This would result in a reward of £22.84m.
- 6.22 The Natural Capital Tool calculated the value of biodiversity improvement – using natural capital as a proxy, which we accept is reasonable in the absence of an

- alternative measurement – to be £5.51m.<sup>19</sup> This is based on the benefits providing consumer value for 30 years, using a discount rate of 3.5% to determine Net Present Value (NPV), as proposed by SHET. We acknowledge that there is no way of accurately forecasting how long the proposed biodiversity enhancements will provide benefit to consumers; however, we have confidence that as these enhancements are being made on operational sites that they will be maintained by SHET, and therefore we have decided that 30 years is reasonable.
- 6.23 Weighting the above approaches equally would give a CVP reward value of £14.17m.
- 6.24 We accept the basis of the methodology proposed by SHET; however, we have based the WTP component on 5% of the WTP value (£11.42m) rather than the proposed 10%. We recognise that neither the 10% or 5% are completely accurate figures and accept the unavoidable limitations of our chosen methodological approach in establishing a precise reward value. However, we consider the value produced using 5% of the WTP value to be more consistent with the value produced using the Natural Capital Tool and thus more likely to reflect the actual consumer value than the 10% proposed.
- 6.25 We took the mean average of this figure and the figure produced by the Natural Capital Tool, which resulted in a CVP reward of £8.46m<sup>20</sup>. We consider this to be consistent with the reward value for similar activities incentivised through NGET's environmental ODI, and consider that it appropriately rewards SHET's ambition in this area.
- 6.26 We expect SHET to report its performance through its annual regulatory reporting. We will engage with SHET with an aim to develop an appropriate reporting mechanism ahead of RIIO-ET2.
- 6.27 We engaged with SHET subsequent to our DD on an appropriate methodology for assessing delivery of the CVP. We accept that projects will not be completed until beyond RIIO-ET2 and therefore it will not be possible to assess whether SHET has fully delivered the biodiversity enhancements during the price control. SHET's proposal to assess delivery it to measure the number of BUs designed into consented projects relative to the number of BUs required to achieve NNL or BNG. We accept it is an acceptable proxy under the circumstances as designing BUs into

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<sup>19</sup> All CVP reward figures are post-application of the sharing factor

<sup>20</sup>  $((£634.4m * 0.05) + £15.3m) / 2 = £23.51m$  (CVP value before application of sharing factor)

new projects commits SHET to deliver biodiversity improvements for the projects that do complete after RIIO-ET2.

- 6.28 If SHET does not deliver the proposed biodiversity enhancements, we will look to claw back a proportion of the CVP reward as part of RIIO-ET2 close out. This will be a linear adjustment based on the number of BUs designed into new consented projects against the number of BUs required to meet the NNL/BNG target, as proposed by SHET.

## Stage 3 – Penalty on poorly justified lower confidence costs

- 6.29 We have decided that SHET will incur a penalty of £4.49m following our BPI Stage 3 assessment. Table 13 sets out our decision across all cost categories.

**Table 13: Summary of decisions for stage 3 disallowance penalty.**

<b>Cost category</b>	<b>Poorly justified lower confidence cost disallowance (£m)</b>	<b>BPI Stage 3 penalty (£m)</b>
Load Related Capex	0	0
Non-Load Related capex	24.7	2.47
Indirect opex	0	0
Non-Operational capex	0	0
Network Operating Costs	20.1	2.01

### Final Determination rationale and Draft Determination responses

- 6.30 In our DDs, we consulted on our provisional assessment that SHET would receive a penalty of £47.3m under BPI Stage 3.
- 6.31 Following receipt of further information in response to DDs, we have changed our assessment of cost confidence in some areas, and we have decided to allow certain costs that we had proposed to disallow. Further details of these changes and our rationale for making them, are set out in Chapter 3 of this document.
- 6.32 SHET’s Stage 3 penalty has gone down to £4.49m as a result of these changes.

## Stage 4 – High cost confidence reward

6.33 We have decided that SHET will earn a £15.75m reward following our BPI Stage 4 assessment. Table 14 sets out our decisions on high cost confidence cost categories and the associated Stage 4 rewards.

**Table 14: Summary of decisions for high confidence cost categories**

<b>Cost category</b>	<b>SHET's forecast high confidence costs (£m)</b>	<b>Ofgem's Independent Benchmark (£m)</b>	<b>BPI Stage 4 Reward (£m)</b>
Load Related Capex	474.6	474.8	0.06
Non-Load Related capex	281	267.8	0
Indirect opex	358.4	402	15.7
Non-Operational capex	112.4	103.9	0
Network Operating Costs	104.8	96.1	0

### Final Determination rationale and Draft Determination responses

- 6.34 In our DDs, we consulted on our provisional assessment that SHET would receive no rewards under BPI Stage 4.
- 6.35 Following DDs, changes to our Indirect Opex modelling process have resulted in higher modelled costs for SHET than their submission. Further details of these changes and our rationale for making them, are set out in Chapter 3 of this document.
- 6.36 At FDs we have also decided to apply our Stage 4 assessment at a more disaggregated level than we had proposed to do in our DDs. Further detail and our rationale for doing so are set out in Chapter 10 of the Core Document.
- 6.37 Following these changes, we have decided that SHET's Stage 4 reward would be £15.75m.

## Appendices

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## Appendix 1 – Additional Information

**Table A1.1: Calibration of incentive rates for Environmental Scorecard ODI-F**

Impact area	Values used to calibrate of incentive rate
Reduction in emissions from operational transport and business mileage	1. Non-traded value of carbon, HMT Green Book Supplementary Guidance <sup>21</sup> 2. Nitrogen Oxide (NOx) air quality damage cost, DEFRA Air Quality Damage Guidance Cost Appraisal <sup>22</sup> 3. Particulate Matter air quality damage cost, DEFRA Air Quality Damage Guidance Cost Appraisal
Operational and office waste that is recycled	1. Non-traded value of carbon, HMT Green Book Supplementary Guidance 2. Government Landfill tax, HRMC <sup>23</sup>
Reduction in waste created at SHET offices	As above
Reduction in water use for main offices	Non-traded value of carbon, HMT Green Book Supplementary Guidance
Increase in environmental value of non-operational land	Estimates of natural capital value if applicable
Net gain on all construction projects	Based on replacement cost plus 10% margin

**Table A1.2: Network operating costs – detailed breakdown of allowance**

Network Operating Cost category	SHET proposed baseline (£m)	Work/Volume Reductions (£m)	Cost Reductions (£m)	Uncertainty Mechanisms (£m)	Ofgem Baseline Allowances (£m)
Faults	4.7	0.0	1.8	0.0	2.9
Inspections	16.1	0.0	4.7	0.0	11.5
Repairs and Maintenance	51.8	0.0	1.6	0.0	50.2
Vegetation Management	9.8	0.0	0.7	0.0	9.1
Operational Protection Measures and IT Capex	103.0	20.1	0.0	13.1	69.7
Legal and Safety	22.5	0.0	0.0	0.0	22.6

<sup>21</sup> Valuation of energy use and GHG emissions appraisal:

<https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal>

<sup>22</sup> Air quality appraisal: damage cost guidance: <https://www.gov.uk/government/publications/assess-the-impact-of-air-quality/air-quality-appraisal-damage-cost-guidance>

<sup>23</sup> Environmental taxes, reliefs and schemes for businesses: <https://www.gov.uk/green-taxes-and-reliefs/landfill-tax>



<b>Network Operating Cost category</b>	<b>SHET proposed baseline (£m)</b>	<b>Work/Volume Reductions (£m)</b>	<b>Cost Reductions (£m)</b>	<b>Uncertainty Mechanisms (£m)</b>	<b>Ofgem Baseline Allowances (£m)</b>
Total	<b>207.8</b>	<b>20.1</b>	<b>8.7</b>	<b>13.1</b>	<b>165.8</b>

Table A1.3: Closely associated indirects – detailed breakdown of allowance

<b>CAI Costs category</b>	<b>SHET proposed baseline (£m)</b>	<b>Work/Volume Reductions (£m)</b>	<b>Cost Reductions (£m)</b>	<b>Uncertainty Mechanisms (£m)</b>	<b>Ofgem Baseline Allowances (£m)</b>
Operational IT & Telecoms	10.8	0.0	0.1	0.0	10.7
Project management	47.7	0.0	0.0	0.0	47.7
Network design and engineering	16.9	0.0	0.0	0.0	16.9
System mapping	1.8	0.0	0.0	0.0	1.8
Engineering management and clerical support	126.0	0.0	0.0	0.0	126.0
Network policy (including R&D)	8.2	0.0	0.0	0.0	8.2
Health, safety, and environment (HSE)	5.2	0.0	0.0	0.0	5.2
Operational training	6.5	0.0	0.0	0.0	6.5
Store and logistics	5.1	0.0	0.0	0.0	5.1
Vehicles and transport	10.4	0.0	0.0	0.0	10.4
Market facilitation	2.1	0.0	0.0	0.0	2.1
Network planning	12.8	0.0	0.0	0.0	12.8
<b>Total</b>	<b>253.5</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>253.4</b>

**Table A1.4: Business support costs – detailed breakdown of allowance**

<b>BSC Category</b>	<b>SHET proposed baseline (£m)</b>	<b>Work/Volume Reductions (£m)</b>	<b>Cost Reductions (£m)</b>	<b>Uncertainty Mechanisms (£m)</b>	<b>Ofgem Baseline Allowances (£m)</b>
Information Technology & Telecoms (IT&T)	33.7	0.0	0.6	0.0	33.1
Property management	12.1	0.0	0.0	0.0	12.1
Audit, finance, and regulation	15.7	0.0	0.0	0.0	15.7
HR and non-operational training	7.1	0.0	0.0	0.0	7.1
Insurance	7.1	0.0	0.0	0.0	7.1
Procurement	14.8	0.0	0.0	0.0	14.8
CEO and group management	14.4	0.0	0.0	0.0	14.4
<b>Total</b>	<b>104.9</b>	<b>0.0</b>	<b>0.6</b>	<b>0.0</b>	<b>104.3</b>

**Table A1.5: Non-operational capex allowances**

<b>Non-Op Capex category</b>	<b>SHET proposed baseline (£m)</b>	<b>Work/Volume Reductions (£m)</b>	<b>Cost Reductions (£m)</b>	<b>Uncertainty Mechanisms (£m)</b>	<b>Ofgem Baseline Allowances (£m)</b>
Property	69.7	3.4	0.0	0.0	66.3
IT&T	41.7	0.0	5.1	0.0	36.6
STEPM	1.0	0.0	0.0	0.0	1.0
Vehicles & Transport	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>112.4</b>	<b>3.4</b>	<b>5.1</b>	<b>0.0</b>	<b>103.9</b>

**Table A1.6: LR schemes started in RIIO-ET1 period continuing into RIIO-ET2**

<b>Scheme reference</b>	<b>SHET T2 request (inc indirect opex), £m</b>	<b>Ofgem T2 allowance (exc indirects), £m</b>
SHT2001	56.10	53.04
SHT2002	50.39	47.12
SHT2003	18.93	16.58

<b>Scheme reference</b>	<b>SHET T2 request (inc indirect opex), £m</b>	<b>Ofgem T2 allowance (exc indirects), £m</b>
SHT2004	62.90	57.37
SHT2005	2.29	2.19
SHT2006	112.39	109.33
SHT2007	11.80	11.22
SHT2008	30.89	29.54
SHT20011	92.63	87.74
SHT20012	3.01	2.56
SHT20013	1.64	1.27
SHT20014	0.97	0.93
SHT20015	13.25	12.44
SHT20016	3.21	3.08
SHT20017	3.60	3.44
SHT20018	31.64	30.05
SHT20019	4.12	3.88
SHT20020	1.81	1.74
SHT20021	1.24	1.19
SHT20022	0.09	0.08
SHT20023	0.57	0.54
SHT20025	13.08	12.51
SHT20042	3.43	3.29

**Table A1.7: LR baseline projects subject to RIIO-ET2 generation/demand volume driver**

<b>Scheme reference</b>	<b>SHET T2 request (inc indirect opex), £m</b>	<b>Ofgem T2 allowance (exc indirects), £m</b>
SHT2000	19.15	17.10

**Table A1.8: List of NLRE projects started in RIIO-ET1 period crossing into T2**

<b>Scheme reference</b>	<b>SHET T2 request (inc indirect opex), £m</b>	<b>Ofgem T2 allowance (exc indirects), £m</b>
SHNLT205	18.9824	18.3009058

**Table A1.9: List of LRE projects in RIIO-ET2 period crossing into T3**

<b>Scheme reference</b>	<b>SHET T2 request (inc indirect opex), £m</b>	<b>Ofgem T2 allowance (exc indirects), £m</b>
SHT2009	189.75	182.02
SHT20010	25.20	24.09

## Appendix 2 Rationale for Ofgem’s decision on SHET’s proposed bespoke outputs and CVPs

**Table A2.1: SHET’s bespoke ODI proposals**

ODI name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
<p><b>Energy Not Supplied (ENS) Compensation Scheme:</b> SHET proposed to continue its RIIO-T1 scheme for RIIO-2. The scheme provides payments to customers off supply for 6 hours and additional payments for customers off supply for 12+ hours.</p>	<p><b>Accept:</b> We considered that it is appropriate to continue the scheme due to network design characteristics specific to Scotland and SHET’s network.<sup>24</sup> We considered that the scheme provides a proportionate and efficient approach to reimburse customers who face a higher risk of ENS due to the design of its network.</p>	<p>We received no direct responses on our DD proposal.</p>	<p><b>Accept:</b> We have decided to implement this proposal for the same reasons set out in the DD. Please see chapter 2 for further detail.</p>
<p><b>International benchmarking: ITOMs (ODI-R):</b> SHET proposed a reputational incentive in respect of the International Transmission Operations and Maintenance Study (ITOMS). SHET has set a target to achieve low cost/ high service (quartile 4) outcome by the end of the RIIO-T2 period.</p>	<p><b>Accept:</b> We agreed that companies should strive for continuous improvement and can learn from others through benchmarking performance. We would look for this to be done in an administrative-light manner and that any reporting should be open and transparent so that we can gauge whether meaningful progress is being made through this commitment.</p>	<p>SHET welcomed the DD decision to approve this and agrees with the administrative light touch but notes that this is only deliverable if SHET has the resources to do so. A consumer representative group agreed with the proposal to accept this ODI.</p>	<p><b>Accept:</b> We have decided to implement this proposal for the same reasons set out in the DD.</p>

<sup>24</sup> In Scotland, the 132kV network is part of the transmission network and is less interconnected to Grid Supply Points, compared to higher voltage levels. As a result, the transmission network in Scotland has less “redundancy”, meaning there is a higher risk that a network outage in Scotland could result in ENS.

<b>ODI name and description</b>	<b>Ofgem’s Draft Determination summary</b>	<b>Consultation response summary</b>	<b>Ofgem’s Final Determination</b>
<b>International benchmarking: ITAMs (ODI-R):</b> SHET proposed a reputational incentive in respect of being an upper quartile (i.e., top 25%) operator in the International Transmission Asset Management Study (ITAMS) by 2026.	<b>Accept:</b> We agreed that companies should strive for continuous improvement and can learn from others through benchmarking performance. We would look for this to be done in an administrative-light manner and that any reporting should be open and transparent so that we can gauge whether meaningful progress is being made through this commitment.	SHET welcomed the DD decision to approve this and agrees with the administrative light touch but notes that this is only deliverable if SHET has the resources to do so. A consumer representative group agreed with the proposal to accept this ODI.	<b>Accept:</b> We have decided to implement this proposal for the same reasons set out in the DD.
<b>RIIO-T2 System Outage Management Proposals to Reduce Constraint Costs:</b> This was a joint ODI-F proposal from the Transmission Owners (TOs) and Electricity System Operator (ESO) for a four-staged approach to implementing a TO ‘on demand service’ which will provide flexibility to the ESO.	<b>Reject:</b> We considered that there was insufficient evidence that an incentive is required to encourage the use of STCP 11.4. We encouraged the ETOs to resolve the barriers that exist in the procedures that they have identified.	We received 12 responses to this proposal. The majority of the responses disagreed with our proposal and flagged the need for an incentive in this space.  Please refer to chapter 2 in the ET sector annex to review the summary of responses.	<b>Accept:</b> We decided to accept a common ODI-F to encourage the ETOs to deliver solutions under existing STCP11-4 for a trial period of two years. Please refer to chapter 2 in SHE Transmission’s Annex document for additional details on the incentive. Please refer to Chapter 2 in the ET Annex for our rationale.

**Table A2.1: SHET's bespoke PCD proposals**

<b>PCD name and description</b>	<b>Ofgem’s Draft Determination summary</b>	<b>Consultation response summary</b>	<b>Ofgem’s Final Determination</b>
<b>Resilience: Physical security:</b> SHET proposed a number of substation security improvements by 31 March 2026.	<b>Accept:</b> We proposed to accept this proposal and the associated baseline funding request in full.	We did not receive any responses relating to this output.	<b>Accept:</b> We have decided to accept this proposal and the associated baseline funding request. The needs case and outputs are well justified. SHET will install CCTV and alarms at 35 substation and cable sealing end compounds where none

PCD name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
			exist and upgrade 20 obsolete systems. In addition, SHET will upgrade 23 substations with palisade and new safety signage. This work will complete by 31 March 2026.
<p><b>Shared Use Infrastructure:</b> SHET proposed delivering 2047 MVA of shared use infrastructure capacity by 31 March 2026.</p>	<p><b>Accept:</b> We proposed to accept a deliverable of 1440MVA of shared use infrastructure associated with the North East 400kV Upgrade.</p> <p>The 607MVA associated with the Lairg to Loch Buidhe was judged to be generation connections works rather than shared infrastructure and shall not be included in the PCD.</p>	<p>We did not receive any responses relating to this output.</p>	<p><b>Accept with Amendments.</b> We have decided to accept a deliverable of 1440MVA rather than the proposed 2047 MVA. The Lairg to Loch Buidhe scheme will not form part of this PCD.</p> <p>SHET will deliver 1440MVA of shared use infrastructure associated with the North East 400kV Upgrade by 31 October 2023.</p>
<p><b>Strategic Network Capability:</b> SHET proposed to increase the boundary transfer capability of the B4 boundary by 1090MW by 31 March 2026.</p>	<p><b>Accept with Amendments:</b> We proposed to accept the East Coast 275kV component with a Boundary Capability Uplift of 610MW.</p> <p>For the East Coast 400kV component that delivers the remaining 480MW, the proposed completion data was in the RIIO T3 period. We therefore proposed to provide <i>ex ante</i> funding but did not propose to accept the output.</p>	<p>SHET disagreed with our draft determination and in response to our draft position SHET provided clarifications on the East Coast 400kV project that allowed us to accept the output of 480MW.</p> <p>SHET proposed an interim output of completion of OHL works and completion of substation works by 31 March 2026 such as is required to allow commissioning to commence and deliver the boundary output by the 31 October 2026.</p>	<p><b>Accept with Amendments.</b> We have decided to accept the associated baseline funding request, and we have decided to specify two discrete PCDs to ensure that the deliverables are specific and measurable.</p> <p>For the East Coast 275kV upgrade SHET will deliver a B4 boundary uplift of 610MW by 31 October 2023.</p> <p>For the East Coast 400kV upgrade SHET will complete the OHL works and of substation works by 31 March 2026 such as is required to allow commissioning to commence and deliver the boundary B4 boundary uplift of <b>480MW by</b> the 31 October 2026.</p>

PCD name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
<p><b>Resilience: Protection and control:</b> SHET proposed to upgrade 64 protection schemes and 33 RTUs by 31 March 2026.</p>	<p><b>Accept:</b> We proposed to accept this proposal and the associated baseline funding request.</p>	<p>We did not receive any responses relating to this output.</p>	<p><b>Accept:</b> We have decided to accept this proposal and the associated the baseline funding request. The needs case and outputs are well justified. SHET will upgrade up to 64 protection installations and 33 RTUs. All works shall be completed by 31 March 2026.</p>
<p><b>Response and recovery: substation resilience:</b> SHET proposed to increase substation standby capability to 120 hours standalone operation and providing dual LV supplies by 31 March 2026.</p>	<p><b>Accept:</b> We proposed to accept this proposal and the associated baseline funding request.</p>	<p>We did not receive any responses relating to this output.</p>	<p><b>Accept:</b> We have decided to accept this proposal and the associated baseline funding request. The needs case and outputs are well justified. SHET will carry out works to meet 120 hours of autonomy at sites which do not meet the ENA ER G91 guidance of 72 hours. SHET will upgrade up to 116 substation sites. All works shall be completed by 31 March 2026.</p>
<p><b>Reactive Power:</b> SHET proposed to maintain long term compliance with the SQSS and delivering + 325/-225 MVar of reactive power by March 2026.</p>	<p><b>Accept:</b> We proposed to accept this proposal and the associated baseline funding request.</p>	<p>We did not receive any responses relating to this output.</p>	<p><b>Accept:</b> We accept this proposal and the associated baseline funding request because needs case and outputs are well justified.</p> <p>SHET will complete the Kinardochoy reactive compensation and establish a new 400kV GIS substation on the Beaulieu – Denny 275kV circuit. SHET will deliver delivering + 325/-225 MVar of reactive power by 31<sup>st</sup> August 2024.</p>
<p><b>Waste sent to landfill:</b> SHET proposed to achieve zero non-compliance waste to landfill by the end of 2025/26.</p>	<p><b>Amend and accept:</b> We proposed to re-classify several PCDs that SHET proposed in its Environmental Action Plan as EAP commitments and for SHET to report on these in</p>	<p>SHET agreed with our DD proposal to re-classify its waste targets as EAP commitments, and to report on these in its AER.</p>	<p><b>Accept:</b> We have decided to implement this proposal for the same reasons set out in the DD.</p>



PCD name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
<p><b>Construction waste:</b> SHET proposed targeting 70% recycling, recovery and reuse of construction and demolition waste by 2025/26.</p>	<p>its Annual Environmental Report (AER). This is because we considered it was not proportionate to specify PCDs for these proposals.</p>		
<p><b>Scope 1 and 2 GHG emissions:</b> SHET proposed targeting a 33% reduction by 2025/26 compared to 2018/19 levels.</p>	<p><b>Amend and accept:</b> We proposed to re-classify the proposed PCD on its business carbon footprint as an ODI-R in order to harmonise its classification with the BCF targets for the other electricity transmission and gas distribution companies (which are also specified as ODI-R).</p>	<p>SHET agreed with our proposal in DD to re-classify its BCF target as an ODI-R.</p>	<p><b>Accept:</b> We have decided to implement the ODI-R on BCF for the same reasons set out in the DD. Please see chapter 4 in the Core Document for more detail.</p>
<p><b>Diversity and inclusion:</b> SHET proposed to provide inclusion and diversity training to its employees.</p> <p><b>Stakeholder Engagement Commitment:</b> SHET proposed to survey its stakeholders, using KPIs to measure performance and the Accountability AA1000 Health Check as part of its engagement strategy.</p>	<p><b>Reject:</b> We welcome SHET’s proposal. However, we do not consider there is any need for this to be an additional PCD and these activities are funded through baseline allowances.</p>	<p>SHET accepts that these BP items are not classified as PCDs but commits to the delivery due to the importance to stakeholders. This is subject to funding; SHET highlighted that the proposed cuts to its Closely Associated Indirect allowance in DD puts delivery of these EAP commitments at risk.</p>	<p><b>Reject:</b> We have decided to implement our DD position not to set PCDs for these activities. We note SHET’s commitment to delivering on its EAP commitments and that we have reinstated SHET’s CAI funding request that is associated with, amongst other areas, SHET’s EAP commitments (please see Chapter 3 of this document for more information).</p>
<p><b>Reliability: Digitising the network:</b> SHET proposed the installation of smart monitoring and establishing real time asset analytics at a</p>	<p><b>Reject:</b> We proposed to reject the baseline funding request for the new integrated condition monitoring equipment, and the dedicated control room facility.</p>	<p>SHET disagreed with our draft determination and provided additional evidence in support of their proposals. SHET’s response is detailed in</p>	<p><b>Accept with Amendments.</b> We have decided to accept the associated baseline funding request, but we have amended the proposed deliverables such that they are specific and measurable. Therefore, this PCD will be split into three bespoke PCDs:</p>

PCD name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
dedicated control room facility.		Chapter 3 of this document. No other parties provided significant comments.	<p>A) Operations Centre                      B) Communications Upgrade                      C) Integrated Condition Monitoring</p> <p>These PCD are captured in the Resilience and Operability PCD with the rationale for each decision detailed in Chapter 3 of this document.</p>
<b>Enhanced Reporting Framework:</b> SHET proposed adopting a reporting framework, developed in conjunction with Citizens Advice, to increase transparency around company operations.	<b>Accept:</b> We welcome attempts to increase transparency in reporting so that consumers can be more aware of the role and responsibilities of transmission companies.	No direct response on this proposal.	<b>Accept:</b> We have decided to implement our DD position for the same reasons.
<b>New CBA framework:</b> SHET proposed using a new Cost Benefit Analysis (CBA) framework for the evaluation of new investments from 1 April 2021	<b>Reject:</b> We are encouraged that SHET is looking to expand the remit of the traditional CBA to take in to account other factors, but we are concerned that this may lead to a deviation of outcomes on project evaluation between Ofgem and SHET. We would be willing to evolve our current CBA framework if SHET is able to bring forward new ideas, so that the industry can progress in unison.	SHET said that it would continue with the development of this initiative as it is supported by its stakeholders, subject to Ofgem addressing the cut to its Closely Associated Indirect costs.	<b>Reject:</b> We have decided to implement our DD position. We note that we have reinstated SHET’s CAI funding request that is associated with, amongst other areas, SHET’s EAP commitments (please see Chapter 3 of this document for more information). This should enable SHET to further develop its initiative, and to engage with interested parties on any potential changes to industry’s approach to CBA evaluation.

PCD name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
<b>Faults:</b> SHET proposed a bespoke PCD which aims to reduce the number of unplanned interruptions of all durations with no exclusions. No baseline funding has been proposed for this PCD.	<b>Reject:</b> We welcome SHET’s proposal. However, we do not consider there is any need for this to be an additional PCD. We consider network performance is adequately funded and incentivised via existing mechanisms i.e., Energy Not Supplied.	SHET said it will continue to report on this for stakeholders even if not classified as a PCD. A respondent was concerned that Ofgem had not considered the whole-system cost of rejecting this proposal.	<b>Reject:</b> We have decided not to specify a PCD for this area. As noted by SHET this does not preclude it from reporting this information to its stakeholders.
<b>Redundancy: Back up assets:</b> SHET proposed inventory management systems to be of industry best practice commensurate with larger network size and range of technologies. The proposed output was two specialist warehousing facilities.	<b>Reject:</b> We proposed to reject the baseline funding and PCD request for the new warehouse facilities.	SHET disagreed with our draft determination and provided additional evidence in support of their proposals.	<b>Accept with Amendments:</b> We have decided to accept the associated baseline funding request, but we have amended the proposed deliverables such that they are specific and measurable. For further information please see our decision on non-operational capex in Chapter 3 of this document.

**Table A2.2: SHET's CVP proposals**

CVP name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
<b>Biodiversity No Net Loss / Net Gain:</b> Achieve overall 'No Net Loss' on new infrastructure projects gaining consent in 2020 onwards and achieve 'Net Gain' on projects gaining consent in 2025 onwards, improving biodiversity and natural capital of land, delivering £158.6m benefit.	<b>Accept:</b> We considered that SHET’s proposal goes beyond Business as Usual (BAU) and provided demonstrable consumer benefit – Please see further information under the heading 'Biodiversity No Net Loss / Net Gain'.	We received 5 responses, all of which were supportive of our DD position.  Subsequent engagement with all of the ETOs in developing an appropriate methodology to value	<b>Accept:</b> We have decided to implement our DD proposal and are accepting the CVP and have set a CVP reward of £7.88m.  We used a methodology that combined SHET’s willingness-to-pay study with the valuation determined

CVP name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
		biodiversity improvements has been welcome.	using National Grid’s Natural Capital Tool.  See chapter 6 in the SHET Annex for detailed rationale.
<b>Energy Not Supplied (ENS) Compensation Scheme:</b> Proposal to continue this scheme, providing payments to customers who are off supply for more than six hours. The benefit of this proposal was not quantified in monetary terms.	<b>Reject:</b> The ENS Compensation Scheme is a continuation of RIIO-1 activities. It is not clear how these activities provide additional value to existing and future vulnerable consumers above the BAU established during RIIO-T1.	SHET disagreed with our DD position. SHET considered this goes beyond BAU as no other TO does it, and noted that the consumer benefit was not acknowledged by Ofgem in DDs. No further information provided.	<b>Reject:</b> We have decided to implement our DD position and reject this CVP.  We welcome the proposal by SHET and acknowledge the consumer benefit. However, this is a continuation of a RIIO-1 activity and therefore not eligible for an additional CVP reward.
<b>Connecting for society - local and community energy policy:</b> Facilitating local and community energy by being an expert and trusted partner for local authorities and other local stakeholders as they develop Local Area Energy Plans (LAEP) and Local Heat and Energy Efficiency Strategies (LHEES) and addressing barriers local communities face, delivering £6.6m benefit.	<b>Reject:</b> It was not clear what ‘being an expert and trusted partner’ entails and no detailed initiatives or activities were outlined. LAEPs are a government initiative with mandated targets for meeting locally-owned energy and similar engagement has been undertaken as BAU in RIIO-1.	SHET disagree with our DD position and state that its ambition has not been recognised. SHET consider this goes beyond BAU and has stakeholder support.  A community organisation expressed disappointment at our decision to reject this CVP, and noted networks have a key role to play in the development	<b>Reject:</b> We have decided to implement our DD position.  We recognise the key role that SHET can play in facilitating the development of LEAPs and LHEES, and acknowledge this can bring additional value to consumers.  However, as stated in our SSMD, we expect high quality stakeholder engagement to be BAU in RIIO-2.
<b>Connecting for society - commercial and connections service:</b> Initiatives that deliver	<b>Reject:</b> While we acknowledged that these policy initiatives have been developed in response to	We received two responses disagreeing	<b>Reject:</b> We have decided to implement our DD position and reject this CVP.

<b>CVP name and description</b>	<b>Ofgem’s Draft Determination summary</b>	<b>Consultation response summary</b>	<b>Ofgem’s Final Determination</b>
<p>quality connections services, facilitating an accelerated pathway to net zero delivering societal value over and above the value proposed in the existing framework of outputs, leading to carbon savings, delivering £59.5m of benefits.</p>	<p>stakeholder feedback over RIIO-ET1, we are concerned with the methodology for monetising this CVP and the proposals for reporting on its delivery. In RIIO-ET1 SHET has demonstrated that it is already capable of accelerating connections at a negligible cost. We also have concerns that the proposed measure of delivery of this CVP may be affected by contingency built in the original target. Finally, we consider Quality of Connections survey already helps to drive relevant behaviour.</p>	<p>with our position to reject this CVP.</p> <p>We note that one stakeholder questions whether the incentive being ‘too difficult to measure’ is a valid reason not to progress with this incentive, and encourages incentives directly linked to reducing carbon to be introduced.</p> <p>SHET disagrees with our position in DD and notes that this CVP is intended to deliver consumer benefits through quicker, more efficient and accessible connections. SHET thinks that this CVP is different from the QCS because this CVP is aimed at consumer and societal benefits.</p> <p>SHET provided an alternative approach to calculating the value of this proposal. This approach applied a 10% improvement factor to their RIIO-1 performance</p>	<p>We recognise SHET’s alternative methodology to measuring this CVP is stretching their RIIO-1 performance in accelerating connections. However, in line with our decision on NGET’s accelerating low carbon connection ODI, we think that with this CVP will create a perverse incentive on SHET to inflate their original connection agreement in order to demonstrate an average 144-week acceleration rate on connection dates.</p> <p>We see this as a core activity of the ETOs’ operations and, in our view, the ETOs should be best placed to manage the optimal connection date through their commercial processes.</p> <p>Lastly, we think that the QCS will be a better tool to incentivise all TOs to improve their connections service, thereby bringing forward connection dates where appropriate and enabling net zero and societal benefits to consumers earlier.</p>

CVP name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
		in accelerating connection dates, which would be accelerating connections by 144 weeks. SHET then calculated the consumer benefits associated with the additional 10%, which is £12m.	
<p><b>Supporting local communities - Supporting vulnerable customers:</b> Additional support to vulnerable consumers in the North of Scotland complementing and supplementing the role of the DNO. The benefit of this proposal was not quantified in monetary terms.</p>	<p><b>Reject:</b> We recognised the proposal to provide additional support to vulnerable consumers has merit. However, most of the proposed activities, such as training and clear communication, do not demonstrably go beyond BAU.</p>	<p>SHET stated that the activities proposed may be included in the proposed Community Fund.</p>	<p><b>Reject:</b> We have decided to implement our DD position to reject the proposed CVP. The range and scale of activities are still to be developed, as a result the potential consumer benefit has not been quantified.</p>
<p><b>Promoting the natural environment - Visual amenity:</b> Developing well-justified initiatives in Sustainability Action Plan to improve the natural environment and visual amenity impacts, delivering £30.7m of benefits.</p>	<p><b>Reject:</b> It is not demonstrated why these activities go beyond BAU, particularly the proposed stakeholder engagement activities. Existing licence condition requires stakeholder engagement/input to identify and prioritise mitigation projects.<sup>25</sup> We do not consider the assumptions and WTP studies to be sufficient to justify reward for BAU activity. There is insufficient evidence of stakeholder support for allowing additional reward.</p>	<p>SHET acknowledge proposal requires further development. No further information was provided.</p>	<p><b>Reject:</b> We have decided to implement our DD position to reject this CVP in light of SHET’s response.</p>
<p><b>Connecting for society - Above BAU in whole system network:</b></p>	<p><b>Reject:</b> Having a Network Access Policy in place is already a licence</p>	<p>SHET disagrees with our rejection of this proposal</p>	<p><b>Reject:</b> We have decided to reject this CVP but accept a common ODI-F</p>

<sup>25</sup> Special Condition 6G (Mitigating the impact of pre-existing transmission infrastructure on the visual amenity of designated areas).

<b>CVP name and description</b>	<b>Ofgem’s Draft Determination summary</b>	<b>Consultation response summary</b>	<b>Ofgem’s Final Determination</b>
<p><b>Network Access Policy:</b> Going above and beyond the requirements of the NAP, building on track record in RIIO-T1, delivering £5m of benefits over RIIO-T2.</p>	<p>obligation. ETOs are obligated to ensure outages are efficiently coordinated to minimise whole system costs and efficiently coordinate between networks. We welcome the proposal to inform customers of outages earlier. However, the method used to quantify the benefit is based on assumptions that are difficult to verify. We consider the outages ODI-F is sufficient reward to drive performance in this area. We also did not identify clear stakeholder support.</p>	<p>arguing that it does go above BAU and provides consumer benefits through quicker, more efficient, and accessible connections.</p> <p>SHET states that the type of behaviour proposed to be incentivised under the CVP is above and beyond that of the Quality of Connections ODI-F.</p>	<p>with similar elements that will apply to all ETOs. Accordingly, there is no need for the bespoke proposal. For further information please refer to “RIIO-T2 System Outage Management Proposals to Reduce Constraint Costs (ODI-F)” in the ODI table above. We also confirm our DD position that an ODI-F (quality of connection) is sufficient to incentivise SHET to improve coordination with users as suggested in the CVP.</p>
<p><b>Tackling climate change - Science Based Target:</b> Reducing the controllable greenhouse gas emissions from operations by 33% by 2026, compared to 2018/19 levels, consistent with net zero emissions pathway. The benefit of this proposal was not quantified in monetary terms.</p>	<p><b>Reject:</b> We welcome SHET’s proposed Science Based Target (SBT) and the actions it is taking to achieve it. However, we set out in our SSMD that having an SBT is a minimum requirement for RIIO-2 and we expect initiatives in companies’ EAPs to reduce BCF to be BAU and funded as such. We do not consider this presents additional value to existing and future vulnerable consumers.</p>	<p>We received 4 responses. A consumer group and Enhanced Engagement group both supported our DD position, while SHET and an industry group encouraged us to reconsider the proposal.</p> <p>Subsequent to DDs SHET further demonstrated the additional value of setting a 1.5-degree SBT rather than the 2.0 degree target we consider BAU.</p> <p>SHET also provided a methodology to calculate the consumer value of</p>	<p><b>Accept:</b> We have decided to change our DD position and now accept this CVP and have set a reward of £1.94m.</p> <p>We acknowledge the stakeholder support for this proposal and accept the calculation methodology proposed by SHET.</p> <p>See Chapter 6 in the SHET Annex for our full Final Determination rationale.</p>

CVP name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
		the proposal based on the value of the additional emission reduction.	
<p><b>Reducing risk of consumer overpaying - Volume driver unit cost allowance:</b> Using actual historical costs in setting unit cost allowances (UCAs) rather than forecasts for the volume driver, reducing the risk of outperforming the UCA due to any factors other than efficiencies, delivering £8.5m of benefits in RIIO-T2.</p>	<p><b>Reject:</b> We consider the use of robust, symmetrical volume driver mechanisms such as that proposed in this CVP benefits TOs as well as consumers by reducing cost uncertainty, and it was not demonstrated why this warrants an additional reward.</p>	<p>SHET believes the UMs it has proposed, and continues to develop, are efficient and save consumers’ money. SHET states it demonstrates the value of this CVP through the evidence in its Business Plan.</p>	<p><b>Reject:</b> We have decided to implement our DD position to reject the CVP proposed by SHET. As explained in our DD position, it is not clear why this warrants a reward when the company has legal obligations to carry out their transmission owner functions in an efficient and economic manner.</p>
<p><b>Reducing risk of consumer overpaying - Certain View and output return commitment:</b> Taking a Certain View approach to investment and committing to return unspent infrastructure and non-infrastructure allowances, it is more likely than in the past that any outperformance of the RIIO-T2 price control will only be due to actions taken to make efficiency savings and not due to other factors, delivering £75m of benefits in RIIO-ET2.</p>		<p>We also received a response from a renewables company that is concerned that the proposals for the actual historic data in the volume driver unit cost allowance will be dropped.</p>	
<p><b>Supporting local communities - Local supply chains:</b> Developing well-justified initiatives to support local supply chains in Sustainability Action Plan to optimise the benefits to the local communities in which it</p>	<p><b>Reject:</b> We consider that supply chain management is BAU, and this activity falls within corporate social responsibility.</p>	<p>SHET disagree with our DD position. It believes plans to support local supply chains are not BAU as other TOs are not undertaking similar</p>	<p><b>Reject:</b> We have decided to implement our DD position to reject this CVP.</p> <p>We do not consider that SHET has demonstrated this proposal goes</p>



CVP name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
is operating, delivering £6.4m of benefits in RIIO-T2.		activities. SHET notes that it has also not requested any additional funding for this activity. No further information was provided.	beyond BAU and have not changed our view that supporting local supply chains falls under corporate social responsibility.
<p><b>Early and regional specific engagement:</b> Setting a target for the RIIO-T2 period of holding at least five regional and community engagement events on strategic network development each year. The benefit of this proposal was not quantified in monetary terms.</p>	<p><b>Reject:</b> We do not consider this proposal goes beyond BAU. We consider it is important that SHET engages with stakeholders in the manner outlined in this proposal as a matter of course.</p>	<p>We received one response regarding this CVP. This company understood our rationale for rejection, in combination with rejecting the Enhanced Stakeholder Engagement bespoke PCD. However, they note their concern that Ofgem’s principle of RIIO-T2 being stakeholder led, especially through this next period of unprecedented change in the energy industry is not credible.</p>	<p><b>Reject:</b> We have decided to implement our DD position to reject this CVP.</p> <p>We stated in our SSMD that we expect high quality stakeholder engagement to be BAU in RIIO-2 and we do not consider that SHET has demonstrated this proposal goes beyond that.</p>

Table A2.3: SHET’s bespoke UM proposals

UM name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
<p><b>Subsea cable repair re-opener:</b> To cover high cost low probability events, such as sub-sea faults or</p>	<p><b>Accept:</b> We agreed with SHET’s proposal of a re-opener for high cost low probability subsea cable events. It would not be reasonable to provide baseline funding for</p>	<p>No direct responses received on this bespoke UM.</p>	<p><b>Accept:</b> We have decided to implement the position proposed at DD. Please see chapter 4 of this document.</p>

UM name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
unforeseen damage revealed by inspections.	such low probability events, but we consider that these events could have a potentially significant detrimental impact on both the network and consumers if they did occur. This mechanism is designed to ensure that SHET is appropriately funded to avoid those events occurring, or to mitigate their impact if they do.		
<b>Operating Cost Escalator:</b> SHET proposed a cost escalator to cover cost associated with expansion of inspection and maintenance activities, developing new processes and procedures for new technology on the network, and back office costs like buildings and fleet, following new capital investment.	<b>Accept as common UM:</b> We proposed to introduce a common UM to uplift NOCs based on the historical relationship observed between capex and the subsequent uplift in NOC’s post energisation of the asset.	Stakeholders agreed with the UM in principle. The calculation methodology was queried by some licensees and additional analysis underpinning the outcome was provided by Ofgem.	<b>Accept as common UM:</b> We have decided to implement the position proposed at DD. Please see Chapter 4 of the ET Annex for further information.
<b>Operability and System Management, including Black Start:</b> SHET proposed a mechanism to allow costs associated with ESO requests under the System Operator - Transmission Owner Code Procedures (STCP) to be recovered. In addition to STCP requirements, SHET proposed a series of reopeners to meet future	<b>Accept as common UM:</b> We proposed to introduce a common single re-opener to assess funding requests for transmission network investments less than £100m in value.	No direct DD responses were received on SHET’s bespoke proposal.	<b>Amend and accept as common UM:</b> We have decided to implement our DD position with an annual submission window. Please see Chapter 4 of the ET Annex for further information about our decision on the MSIP re-opener in RIIO-ET2.

UM name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
black start requirements and system operability concerns (Harmonics, Intertrips etc).			
<b>Strategic Wider Works:</b> SHET proposed to continue the RIIO-1 UM for assessing the need for and cost of large transmission investments.	<b>Accept as common UM:</b> We proposed to introduce a common re-opener to assess funding requests for transmission network investments greater than £100m in value.	Responses broadly agreed with our proposal to implement the LOTI re-opener, though raised concerns regarding the timing of the assessment stages.	<b>Amend and accept as common UM:</b> We have decided to implement our DD position with some changes to shorten the assessment of the assessment stages in response to concerns raised in DD consultation responses. Please see chapter 4 of the ET Sector Annex for further information about our decision on the LOTI re-opener in RIIO-ET2.
<b>Volume Driver:</b> SHET proposed an automatic mechanism whereby fixed investment allowances would be released when predefined events occur, for example, associated with the connection of a new renewable generator.	<b>Accept with amendments as a common UM:</b> We proposed to accept this UM with adjustments to form a common volume driver design for all three ETOs using a consistent approach in the level of disaggregation applied to the volume driver, but providing rates for different activities specific to each company to reflect the different connections and network challenges that each ETO has.	Three respondents disagreed with our position. They thought that the proposed mechanisms are poorly designed, would provide inadequate funding, and likely delay projects that are critical to the achievement of Net Zero.	<b>Accept with amendments:</b> We remain of the view that a common form of volume driver with company-specific parameters is appropriate. However, following further engagement with the companies we have made several amendments to the common volume driver design for all ETOs. Please see ET Sector Annex, chapter 4 for further information.
<b>High Value Transmission Projects:</b> To assess funding for predefined investment types.	<b>Reject:</b> We proposed to reject SHET’s proposal because we consider that the policy intent is covered by our proposed common MSIP re-opener, detailed in our ET Annex.	SHET raised concerns regarding the design of our MSIP re-opener, but did not disagree with our fundamental view that the policy intent of its proposed bespoke UM was covered by the MSIP re-opener.	<b>Reject:</b> We have decided to implement the MSIP re-opener, detailed in Chapter 4 of our ET Annex, which removes the need for this bespoke UM.

UM name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
<b>Pre-Construction:</b> SHET proposed a close-out mechanism for 'use it or lose it' allowances for large transmission investments, with scope for in period substitution.	<b>Reject:</b> We proposed to reject SHET's proposal because we consider that the policy intent of SHET's proposal is covered by our proposed common Pre-Construction Funding (PCF) UM, detailed in our ET Annex.	SHET raised concerns with our proposed PCF approach, arguing that leaving the re-opener until the end of the price control places too much risk on network companies.	<b>Reject:</b> We still do not agree that one large UIOLI pot for PCF allowances is appropriate, but our approach has been amended to reflect consultation feedback. This is set out in Chapter 4 of our ET Annex.
<b>Sustainability Escalator:</b> SHET proposed a mechanism to provide an annual increment of 0.5% of capital spend in the year after completion to offset potential costs for managing work associated with reducing GHG emissions.	<b>Reject:</b> We considered that SHET did not provide any substantive justification for this proposal. In any event, the opex escalator covers the same ground, but without the proposed increment being specifically tied to a GHG purpose.	SHET did not agree with our DD position. It restated its BP case for its sustainability escalator proposal.	<b>Reject:</b> We have decided to implement our DD position. We did not receive any new evidence to change our view from DD. We have decided to introduce a common opex escalator that will uplift SHET’s allowances for completion of capital projects – please see chapter 4 of the ET Sector Annex for more information.
<b>HVDC Centre:</b> SHET proposed a re-opener to cover the potential need for physical expansion.	<b>Reject:</b> SHET proposed the HVDC centre re-opener to cover the potential need for physical expansion. <sup>26</sup> However, in its submission SHET has not provided details of any specific projects or investments that are likely to trigger the requirement for additional space at the HVDC centre. On the basis that the need is not clear, we propose to reject this re-opener. We note that the HVDC was originally funded through the Network Innovation Competition (NIC). The allowance for continued operation of the centre after the	No direct response on this proposal.	<b>Reject:</b> We do not accept the need for a reopener. SHET have not provided evidence to demonstrate that there is uncertainty associated with HVDC Centre work program and space requirements.

<sup>26</sup> In 2013, SHET received funding from the NIC to develop the HVDC Centre, which enables the planning, development and testing of high voltage direct current transmission solutions in GB. We have recently published a decision to allow SHET to continue to own and operate the HVDC Centre: [Decision on the future operation of the HVDC centre following the end of NIC-funding period](#).

UM name and description	Ofgem’s Draft Determination summary	Consultation response summary	Ofgem’s Final Determination
	NIC funding period is included in the operating costs allowed for SHET for RIIO-T2. Please see further information in Chapter 3.		
<p><b>Landowner Compensation:</b> SHET proposed a mechanism to compensate landowners when SHET installs equipment on, or needs access rights to, land. This is proposed as an uncertainty mechanism rather than being a part of their baseline allowance</p>	<p><b>Reject:</b> We acknowledged that landowner compensation is a legitimate cost for which SHET should be remunerated. In discussions after their BP submission, SHET noted that the other TOs had included this as part of their baseline submissions. We have included landowner compensation as part of SHET's baseline, as we believe it gives SHET the appropriate incentive to pro-actively manage these costs on behalf of consumers. The level of allowance will be subject to further analysis ahead of our Final Determination.</p>	<p>SHET believes this is an area largely outside of its control and is looking to recover the efficiently incurred costs, not to outperform in this area. One respondent did not think that the Draft Determinations clearly explain the rationale for rejection, including why the proposal is not in consumers’ interests.</p>	<p><b>Accept with amendment:</b> We have decided to implement our DD proposal and allow the full amount requested by SHET as baseline allowance, and we will true-up efficiently incurred costs as part of RIIO-ET2 close out. We consider that SHET should not benefit or be penalised through the TIM in regard to landowner compensation, as any over or under-performance is not likely to be due to efficiency/inefficiency, but rather due to the nature of how the costs arise.</p>
<p><b>Third Party Driven Need:</b> SHET proposed this mechanism to meet third party requirements from parties other than the ESO. This includes new legislative and regulatory requirements.</p>	<p><b>Reject:</b> We considered that the brief of this proposal was too broad, and there were significant overlaps with other mechanisms we are proposing which will give appropriate levels of protection to SHET.</p>	<p>SHET states that ETOs can’t manage the risk of the investment need that is driven by third parties as it is entirely outside of the TOs’ control.</p>	<p><b>Reject:</b> We do not accept the need for new mechanism as we are not convinced on that the impact is material from the SHET’s obligation to meet third party requirements.</p> <p>For information on our decisions related to legislative, policy and standards uncertainty areas where we have been convinced of the need of additional baseline allowances or specific UM’s, please see the respective sector annexes.</p>