

## STRICTLY PRIVATE AND CONFIDENTIAL

28 May 2025

Ofgem  
10 South Colonnade,  
Canary Wharf,  
London, E14 4PU

By email to: [ikbal.hussain@ofgem.gov.uk](mailto:ikbal.hussain@ofgem.gov.uk)

For the attention of Ikbal Hussain

Dear Mr Hussain,

### **Gwynt y Môr OFTO plc (the Licensee) – Income Adjusting Event (IAE) Notice pursuant to amended standard licence condition E12-J3 (the Condition) regarding failure of subsea export cable 3 (SSEC3)**

The Licensee submits this IAE Notice seeking recovery of further costs incurred in resolving issues arising from a latent defect that exists in the PE sheath of the fibre optic cable contained within SSEC3. The Licensee does not have recourse to its insurance policies to recover the costs which are being claimed and submits this IAE Notice on the grounds of Uninsurability.

This IAE Notice is submitted in connection with the power core failure to SSEC3 that occurred in December 2023 (the **2023 Cable Failure**) and is a follow up to the IAE Notice submitted on 25 June 2024 (the **2024 IAE Notice**) and 22 October 2024 (the **Oct-24 IAE Notice**). All the correspondence referenced in the 2024 IAE Notice (and the Oct-24 IAE Notice) is equally relevant to this IAE Notice and the terms defined in that notice are reused (where possible) in this IAE Notice. The Licensee completed the first stage of the repair activity (the **Stage 3 Repair**) to resolve the 2023 Fault in 2024 and has now placed the repair contract of the second stage of the repair activity (the **Stage 4 Repair**).

We received 7km of new export cable in December 2024, which was unloaded at the Port of Belfast. We have also appointed the Repair Contractor for the Stage 4 Repair on 22 March 2025 and we plan to complete the Stage 4 Repair by September 2025 (weather permitting). We are using the same repair contractor as for the Stage 3 Repair and the repair scope is broadly similar with some important differences:

- We have cleared the old SSEC3 cable from the HDD duct designated for the SSEC3 cable so we can realign the SSEC3 cable through this duct rather than the Spare HDD duct that was used for the Stage 3 Repair.
- We will lay the new section of SSEC3 cable in a new corridor c.40m offset from the original SSEC3 alignment (as we did for the Stage 2 Repair in 2022).
- There is a hard clay layer just below the seabed for the first c.1,000m from the shoreline. We will deploy an excavator on a barge to create the trench necessary to bury the new cable at the required depth.
- We will install new cable out to c.KP5.3, which means that all the defective SSEC3 cable from the shore to KP12.5 will have been removed following the Stage 4 Repair.
- We will use a bespoke cable repair vessel for the Stage 4 Repair rather than the two jack-up barges that were used in the Stage 3 Repair.

The Licensee did approach 4/5 repair contractors for the Stage 3 Repair and only two were interested in bidding (with a third indicating they might be interested in the Stage 4 Repair). We approached three contractors in December 2024 for the Stage 4 Repair (and one immediately declined). As a result we issued the ITT to two contractors [REDACTED]

The Licensee holds an offshore electricity transmission licence, granted on 11 February 2015 under section 6(1)(b) of the Electricity Act 1989 (the “**Licence**”). The Licensee gives Notice to the Authority, pursuant to paragraph 14 of the IAE Condition, that it has incurred an increase in costs and/ or expenses (in excess of the IAE Condition thresholds) that it considers qualifies for the IAE Condition in line with the Uninsurability Policy.

Paragraph 16 of the Condition requires the Licensee to give particulars of:

**(a) the event to which the Notice relates and why the event constitutes an IAE;**

The increase in costs relate to separate events as follows:

- Further costs incurred in 2024/25 connected with the Stage 1 Repair and the Stage 2 Repair in response to the 2020 Cable Failure (the **Further Costs**), and
- Costs incurred in 2024/25 in connection with the Licensee’s Option B / Stage 3 repair for the 2023 Cable Failure (the **Further Stage 3 Repair Costs**).
- Costs incurred in 2024/25 in connection with the Licensee’s Option C / Stage 4 repair for the 2023 Cable Failure (the **Initial Stage 4 Repair Costs**).

The Authority has already determined that the event giving rise to these additional costs constitutes an IAE in the 2023 IAE Determination, 2024 IAE Determination and the 2025 IAE Determination.

The Licensee’s insurance policy was renewed in November 2023 (with agreement to extend on similar terms in November 2024) using two lead insurers. The lead insurers were only prepared to provide cover for the offshore export cables with a LEG 1 exclusion given the long history of issues with the existing offshore cables. The insurances were extended in November 2024 on the same terms, so no additional information is provided here. In addition, Moody has recently completed a review of the Licensee’s bond issue and concluded that the Baa2 rating, with a negative outlook will remain unchanged.

In summary, the Licensee’s position is that 2020 Cable Failure and the 2023 Cable Failure:

- have been caused by a latent defect that existed prior to the Licensee owning the asset;
- the Licensee was not aware of the latent defect, and could not have been aware of the latent defect prior to purchasing the asset;
- the event would normally be covered by insurance with a LEG 3 Exclusion, but the Licensee’s insurers either declined to provide LEG 3 cover or, where LEG 3 was available, included a specific exclusion for loss or damage arising directly or indirectly from this latent defect;
- the Licensee has incurred costs above the IAE condition threshold.



- (b) the amount of any change in costs and/or expenses that have been caused by each event and how the amount of these costs and/or expenses has been calculated;

The Licensee summarises the Further Costs incurred since the IAE Notice submitted on 22 October 2024 in Table 1 below. These Further Costs comprise funding costs associated with the PBCE drawdown with further explanation provided in Annex A. The Authority has already accepted the principle that these funding costs can be recovered in the 2025 IAE Determination.

**Table 1 Summary of Further Costs in this IAE Notice**

Cost Category	01-Apr 2024 31-Mar 2025	01-Apr 2025 31-Mar 2026	Total
13.PBCE Interest payments			
<b>Total Further Costs</b>	<b>338,136.57</b>	<b>0.00</b>	<b>338,136.57</b>

The Licensee sets out the nature and relevance of the Further Stage 3 Repair Costs incurred in Annex B to this letter and summarises the costs incurred in the Relevant Year in Table 2 below.

**Table 2 Summary of Further Stage 3 Repair Costs in this IAE Notice**

Cost Category	01-Apr 2024 31-Mar 2025	01-Apr 2025 31-Mar 2026	Total
02.Advisors			
04.Repair Management			
07.Parts_Stage3-5			
<b>Total – Stage 3 Repair</b>	<b>938,020.66</b>	<b>1,338.40</b>	<b>939,359.06</b>

The Licensee sets out the nature and relevance of the Initial Stage 4 Repair Costs incurred in Annex C to this letter and summarises the costs incurred in the Relevant Year in Table 3 below.

The Licensee also refers to the costs related to the Stage 4 Repair that were deferred in the 2025 IAE Determination. £1,063,813.50 and £15,756.68 for financial year 2023/24 and 2024/25.

**Table 3 Summary of Initial Stage 4 Repair Costs in this IAE Notice**

Cost Category	01-Apr 2024 31-Mar 2025	01-Apr 2025 31-Mar 2026	Total
01.Testing			
02.Advisors			
04.Repair Management			
07.Parts_Stage3-5			
08.Repair contract			
09.Cable loading			
12.Duct Clearance			
<b>Total Stage 4 Repair</b>	<b>5,332,631.27</b>	<b>381,705.09</b>	<b>5,714,336.36</b>

The Licensee sets out the nature and relevance of the Initial Stage 5 Repair Costs (for a repair from KP12.5 to the offshore platform in the future) incurred in Annex C to this letter and summarises the costs incurred in the Relevant Year in Table 4 below.

**Table 4 Summary of Initial Stage 5 Repair Costs in this IAE Notice**

Cost Category	01-Apr 2024 31-Mar 2025	01-Apr 2025 31-Mar 2026	Total
07.Parts_Stage3-5			
<b>Total Stage 5 Repair</b>		<b>54,555.60</b>	<b>54,555.60</b>

- (c) the amount of any allowed revenue adjustment proposed as a consequence of each event and how this allowed revenue adjustment has been calculated.

The total amount claimed in this IAE Notice is set out in Table 1 to 4. Details of how these revenue adjustments have been calculated is set out in Annex A, B and C. These costs together with the deferred amounts from the 2025 IAE Determination are set out below:

	2023/24	2024/25	2025/26	Total
<b>TOTAL STAGE 1&amp;2 COSTS</b>				
<b>TOTAL STAGE 3 COSTS</b>				
<b>TOTAL STAGE 4 COSTS</b>				
<b>TOTAL STAGE 5 COSTS</b>				
<b>DEFERRED FROM 2025 IAE DETERMINATION</b>				
<b>TOTAL PER YEAR ALL STAGES</b>	<b>£1,063,813.50</b>	<b>£6,624,545.18</b>	<b>£437,599.09</b>	<b>£8,125,957.77</b>

The Authority has set out in the 2025 IAE Determination that it would not apply a deductible to the costs claimed. The Licensee assumes that the same principle will apply to the Authority's determination in respect of the costs claimed under this IAE Notice.

- (d) any other analysis or information that the Licensee considers sufficient to enable the Authority and the relevant parties to assess fully each event to which the Notice relates.

The Licensee has provided further information in the annexes to this letter to enable the Authority to fully understand how the costs included in the Notice have been incurred as a result of the IAE and procured and delivered efficiently.

The Licensee confirms that, with respect to the Further Costs, the position it set out in the 2021 IAE Notice remains the same in respect of (i) why the event was beyond the Licensee's control, and (ii) why the Licensee's claim for uninsurability is legitimate and there has been no relevant change in the Licensee's insurance position. The Licensee does not repeat (in this IAE Notice) the evidence it has already provided in the previous IAE Notices to support this position.

Furthermore, the position set out in the 2021 IAE Notice in connection with costs incurred following the 2020 Cable Failure apply equally to the cost incurred in delivering the Agreed Repair Plan following the 2023 Cable Failure. So the Licensee does not repeat (in this IAE Notice) the evidence it has already provided. The Licensee has provided the Root Cause Analysis report for the 2023 Cable Failure which confirms the same root cause as the 2020 Cable Failure.

The Licensee's financial position remains under stress in spite of the helpful support arising out of the tripartite meetings. This is evidenced by Moody's decision, on 31 May 2024, to downgrade the bonds (used



to finance the Licensee's assets) from Baa1 to Baa2 with a negative outlook. The downgrade reflects the "impact and severity" of the 2023 Cable Failure following a history of "significant cable faults".

The anticipated cost of delivering the Stage 4 Repair is higher than anticipated during the tripartite negotiations during 2024. Nevertheless, following the 2025 IAE determination (and the related EE claim determinations), the Licensee has the financial resources to deliver the Stage 4 Repair. It does not have the resources to complete the Option D / Stage 5 Repair (from KP12.5 to the Offshore Platform) at this time. We note that:

- there were no cost savings available from carrying out both repairs consecutively;
- our ongoing OTDR testing has not identified any emerging faults between KP12.5 and the OSP;
- GYMOWFL took delivery of a length of cable that would be sufficient to replace this remaining section containing defective cable if the need arises.

Should Ofgem require any further information, please do not hesitate to contact me.

Yours sincerely,



Simon Rooke

**For and on behalf of Gwynt y Môr OFTO plc**

Encl: Annex A – Evidence for the Further Costs claimed under this IAE Notice.

Annex B – Evidence for the Further Stage 3 Repair Costs (as part of the Agreed Repair Plan).

Annex C – Evidence for the Initial Stage 4 Repair Costs (as part of the Agreed Repair Plan).



**ANNEX A - Evidence for the Further Costs claimed under this IAE Notice**

## A1 PBCE Related

- A1.1 The Authority has accepted that the interest costs from the PBCE facility drawdown used to finance the repairs following the 2020 Cable Fault can be recovered as part of an IAE claim. Nothing further is added in this IAE Notice to support that case.
- A1.2 Funds drawn on the PBCE Facility attract an annual interest rate calculated by reference to (i) an interbank reference rate (e.g. LIBOR or its replacement) and (ii) an 'all-in-spread' that is determined by the EIB as an all-inclusive cost for funding the amounts drawn from the PBCE Letter of Credit. The rates used are set out below:

Reference Date	Disb. #	Ref. Rate	All-in-Spread	Interest Rate
31 Mar 2025				

- A1.3 EIB were having problems with their systems in September 2024 and were unable to provide an interest payment notice for the Sep-24 PBCE interest payment. We therefore had to use our estimate workings instead. The claim that we calculated was for £363,449.28 (based on the period 01 Apr 24 to 30 Sep 24). However, when the (Sep-24) notice was finally received from EIB (on 23 Oct 24), the interest value was £369,498.74. The delta is because the EIB notice included the period 28 Mar 24 to 30 Sep 24 (i.e. 3 extra days). The additional interest charge of £6,049.46 is therefore claimed at ID02 in Table 5.
- A1.4 The additional Interest payments to EIB are set out in Table 5.

**Table 5 Summary of PBCE-Related Costs claimed in this IAE Notice**

ID	Supplier	Invoice	Description	Date	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
01			IRN for accrued PBCE interest from Sep-24 to Mar-25. Payable in Mar-25			
02			IRN for accrued PBCE interest from Mar-24 to Sep-24. Payable in Sep-24 (adjusted amount from EIB to that presented in ID74 of the IAE Notice issued in Oct-24)			
			<b>13.PBCE Related - Sub - Total</b>		<b>338,136.57</b>	

**ANNEX B - Evidence for the Further Stage 3 Repair Costs (as part of the Agreed Repair Plan)**



## B1 Summary

- B1.1 The spreadsheet provided with this IAE Notice includes all the tables of information provided in this annex. All the associated invoices are provided in the zip file included with this IAE Notice.
- B1.2 The additional costs related to delivering the Stage 3 Repair as part of the Agreed Repair Plan are summarised in Table 6. Sections B2 to B4 of this Annex provide evidence to support the incurrence of these costs.

**Table 6 Total costs claimed under IAE Notice May 2025 in connection with the Further Stage 3 Repair Costs**

Cost Category	01-Apr 2024 31-Mar 2025	01-Apr 2025 31-Mar 2026	Total
02.Advisors			
04.Repair Management			
07.Parts_Stage3-5			
<b>Total – Stage 3 Repair</b>	<b>938,020.66</b>	<b>1,338.40</b>	<b>939,359.06</b>

## B2 Advisors

B2.1 A brief description of the external advisors used are provided below with costs summarised in Table 7:

Expert advice on fibre optic cables	continued to provide expert advice on the cable behaviour.
Legal advice	The Licensee used  to advise on aspects of the IAE claims that were submitted and their interaction with the Bipartite Agreement and the Mindful to Principles (as defined in the 2024 IAE Notice issued in June 2024). provided advice on the contractual basis for settling the variation claims with the Stage 3 Repair Contractor.
Commercial Advisor	assisted the Project Manager with negotiating the terms of the repair contract, including any feedback from the Lender's legal advisor.

**Table 7 Summary of Further External Advisor Costs used for Stage 3 Repair**

ID	Supplier	Invoice	Description	Date	Invoiced (Excl. VAT)	Stage 3 Repair	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
05			Commercial advisory services					
06			Advice on VOR claims					
07			Review IAE claim					
08			IAE and EE Claim works					
09			OSP Termination Point					
			02.Advisors - Sub - Total		12,137.50	12,137.50	12,137.50	

### B3 Repair Management

B3.1 The Licensee received the costs set out in Table 8 after it submitted the Oct-24 IAE Notice. These costs related primarily to work required to configure the onshore cable link pits to be suitable for testing and then re-energising the cable. Other costs include checking joint parts prior to issue to the Repair Contractor and a land survey of the beach area pre repair.

**Table 8 Summary of Further Repair Management Costs for Stage 3 Repair**

ID	Supplier	Invoice	Description	Date	Invoiced (Excl. VAT)	Stage 3 Repair	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
10			V075 Handover Joint Parts at Goole					
11			Fencing Work at TJB site					
12			V071 Land Survey					
13			GYM Link Pit Configuration works					
14			V078 Checking joint parts pre-Stage 3 repair					
			04.Repair Mgmt Stage 3 - Sub - Total		44,740.52	44,740.52	43,402.12	1,338.40



#### B4 Cable

B4.1 The new cable was delivered in December 2024 and included sufficient cable to re-plenish the Licensee's strategic spare export cable stock. The Cable Supplier issued its final invoice following delivery and Table 9 sets out the cable cost recovery proposed by the Licensee. The balance of the invoice total is recovered as part of the Stage 4 Repair costs in Annex C.

**Table 9 Cable costs**

ID	Supplier	Invoice	Description	Date	Invoiced (Excl. VAT)	Stage 3 Repair	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
21			Cable					
			07.Parts_Stage3 - Sub - Total		3,529,924.15	882,481.04	882,481.04	0.00

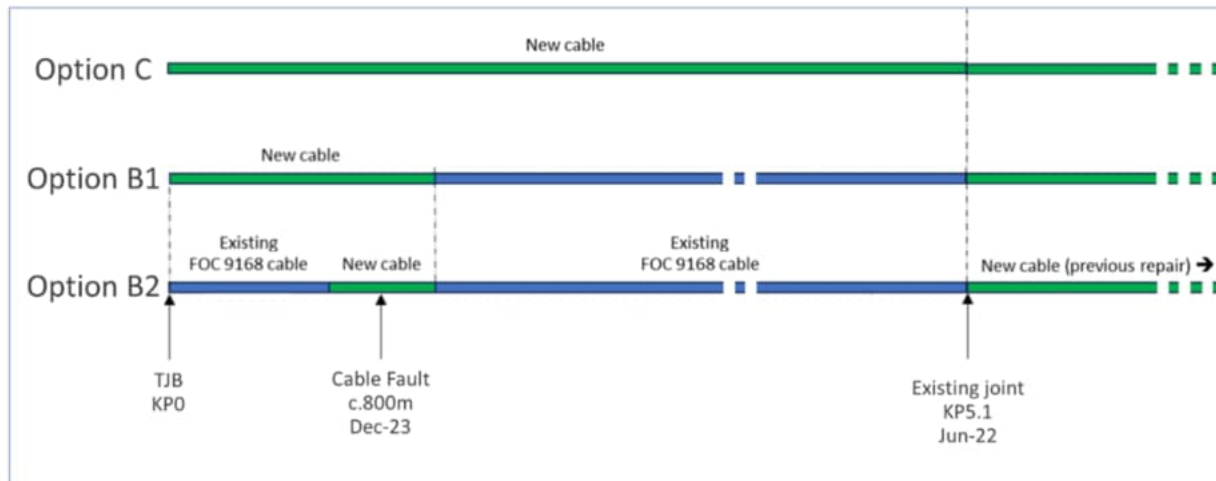
**ANNEX C - Evidence for the Initial Stage 4 Repair Costs (as part of the Agreed Repair Plan)**

## C1 Summary

C1.1 This Annex covers the costs incurred so far in completing the Stage 4 Repair.

C1.2 The Agreed Repair Plan to resolve the 2023 Cable Failure was a two-stage repair:

- The first stage being a local repair from the TJB to just beyond the fault location (option B1 in image below) using the strategic spares that the Licensee has available (as per good industry practice). This repair was the Stage 3 Repair completed in 2024.
- The second stage being to remove cable up to c.KP5.1 (option C in the image below) as it is clear that the SSEC3 cable containing the defective FOC 9168 cannot be considered stable and should now be replaced between the TJB and KP5.1. This is the Stage 4 Repair that will be completed in 2025.



C1.3 The spreadsheet provided with this IAE Notice includes all the tables of information provided in this Annex C. All the associated invoices are provided in the zip file included with this IAE Notice. The total costs related to delivering the Agreed Repair Plan so far are included in this IAE claim and summarised in 0. Sections C2 to C8 of this Annex provide evidence to support the incurrence of these costs.



Table 10 Total costs claimed under IAE Notice May 2025 in connection with the Initial Stage 4 Repair

Cost Category	01-Apr 2024 31-Mar 2025	01-Apr 2025 31-Mar 2026	Total
01.Testing			
02.Advisors			
04.Repair Management			
07.Parts_Stage3-5			
08.Repair contract			
09.Cable loading			
12.Duct Clearance			
<b>Total Stage 4 Repair</b>	<b>5,332,631.27</b>	<b>381,705.09</b>	<b>5,714,336.36</b>

Cost Category	01-Apr 2024 31-Mar 2025	01-Apr 2025 31-Mar 2026	Total
07.Parts_Stage3-5			
<b>Total Stage 5 Repair</b>		<b>54,555.60</b>	<b>54,555.60</b>

## C2 Testing

- C2.1 The Licensee has continued to conduct regular OTDR testing to check the development of further FOC breaks in the SSEC3 export cable. This testing is conducted by the Licensee's Operator (see cost ID 40 in table below).
- C2.2 This testing identified progression of FOC breaks at the end of 2024, which was shared with the Authority as part of the Licensee's most recent EE claim.
- C2.3 As a result of these developments and following the adjustment in the Export Cap applied to SSEC3, the Licensee commissioned a 6-week trial of equipment to continuously monitor OTDR readings alongside the power throughput (see cost ID 41 and 42 in the table below). The findings demonstrated that the Export Cap was achieving its objective and curtailing further progression of FOC burn back between the shore and KP5.2.
- C2.4 The testing costs incurred are summarised in Table 11.

**Table 11 Summary of Testing and analysis undertaken in preparation for Stage 4 Repair**

ID	Supplier	Invoice	Description	Date	Invoiced (Excl. VAT)	Stage 4 Repair	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
39			OTDR Testing					
40			2103-V0104 GYM CT OTDR Testing					
41			Rams, Hotel, Pigtails etc					
42			Optalay 1/2/25-26/2/25					
			01.Testing - Sub - Total		48,378.46	48,378.46	41,559.82	6,818.64

### C3 External Advisors

C3.1 A brief description of the external advisors used are provided below with costs summarised in Table 12:

Legal advice	████ provided further advice to assist in refining the repair contract to give more clarity on waiting on weather claims (see ID43 in table below).
Lenders Advisors	████ provided a technical review of tenders and contractor selection for the repair contractor selection (see ID44 in table below).
Commercial Advisor	The Licensee decided to reinforce the commercial support during the Stage 4 Repair by appointing a new commercial advisor with a quantity surveying background. The first exercise was to review the proposed repair agreement, which has resulted in several changes to tighten up the contractor's obligations and timelines for document delivery. As on previous repairs, the commercial advisor has assisted the Project Manager with negotiating the terms of the repair contract. See ID 45-47 in the table below. They will also manage commercial issues (particularly any variations that arise) during the repair activity.

**Table 12 Summary of External Advisors used in preparation for the Stage 4 Repair**

ID	Supplier	Invoice	Description	Date	Invoiced (Excl. VAT)	Stage 4 Repair	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
43	████	████	Advice re weather claim from Repair Contractor	████	████	████	████	████
44			Professional services					
45			Repair Contract review					
46			SSEC3 Stage 4 contracts manager Feb-25					
47			SSEC3 Stage 4 contracts manager Mar-25					
			02.Advisors - Sub - Total		35,864.82	35,864.82	35,864.82	



## C4 Repair Management

- C4.1 Following the Stage 3 Repair the Licensee took time to consider how to organise the repair management team for the Stage 4 Repair. We reflected that there was more time to plan for this repair (compared to the challenges in the six months that followed the 2023 Cable Failure event). This was also prompted by the availability (for the Stage 4 Repair) of a project manager [REDACTED] that had not been able to commit full time to the Stage 3 Repair. This project manager did provide very useful input during the Stage 3 Repair and provided a convincing case to take on the role for the Stage 4 Repair (which was largely a repeat of the Stage 3 Repair).
- C4.2 The Licensee was happy to appoint this project manager to co-ordinate the Stage 4 Repair because it was (i) confident in his ability and knowledge, and (ii) the project manager had seen how the Stage 3 Repair had been delivered and presented coherent ideas on how it could be delivered more efficiently. The Licensee also anticipated there would be some cost savings in following this approach.
- C4.3 Once again, the process set out in the Licensee's cable repair contingency plan was followed and the project manager set about establishing a Project Repair Team (PRT) comprising:
- (a) Additional project management support from [REDACTED] (that had been involved in the Stage 3 Repair) and commercial management support from [REDACTED] (as described in Section C3).
  - (b) [REDACTED] (formerly [REDACTED]) to provide support in securing the marine repair licence permit from NRW.
  - (c) [REDACTED] (formerly [REDACTED]) as the marine warranty surveyor (MWS) to review the repair contractor's proposals and then provide MWS services for the repair.
  - (d) [REDACTED] (health and safety consultant) and [REDACTED] (technical marine consultants) were appointed to provide specialist advice as required.
  - (e) The Licensee's General Manager
  - (f) Accountancy support for the PRT was provided by [REDACTED] under the terms of the professional services agreement.
  - (g) Additional support from specialists in [REDACTED] were also available to strengthen the PRT in key areas.
- C4.4 The PRT prepared ITT documents and updated the proposed contract for the Stage 4 Repair in November and December 2024 and established an evaluation criterion based on three determining factors (i) quality of proposals and outage length, (ii) probability of success and (iii) price.
- C4.5 The Licensee did approach 4/5 repair contractors for the Stage 3 Repair and only two were interested in bidding (with a third indicating they might be interested in the Stage 4 Repair). Therefore, the PRT approached three contractors in December 2024 for the Stage 4 Repair (one immediately declined).
- C4.6 As a result the ITT for the Stage 4 Repair was issued to two contractors (the same contractors that tendered for the Stage 3 Repair). [REDACTED]



C4.9 The PRT has also been involved with the cable unloading activity in Belfast (see Section C7), arranging for the SSEC3 HDD duct clearance (see Section C8) and ensuring that sufficient joint parts were ordered in good time for the repair (see Section C5). The latter task has proven its worth as the lead time for some joint components has increased from 3 months to between 6 and 9 months following the tariff exchanges implemented by the Trump administration.

C4.10 The costs incurred in providing repair management so far in preparation for the Stage 4 Repair are set out in Table 13.

Table 13 Summary of Repair Management Costs for Stage 4 Repair

ID	Supplier	Invoice	Description	Date	Invoiced (Excl. VAT)	Stage 4 Repair	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
48			SSEC3 2025 repair – Oct-24					
49			SSEC3 2025 repair – Nov-24					
50			SSEC3 2025 repair – Dec-24					
51			SSEC3 2025 repair – Jan-25					
52			SSEC3 2025 repair – Feb-25					
53			SSEC3 2025 repair – Mar-25					
54			SSEC3 2025 Cable repair support					
55			SSEC3 2025 Cable repair - marine survey scope					
56			SSEC3 2025 Cable repair support					
			04.Repair Management Stage 4 - Sub - Total		122,602.98	105,559.23	59,319.63	46,239.60



## C5 Joints and Cable

### C5.1 Joint costs

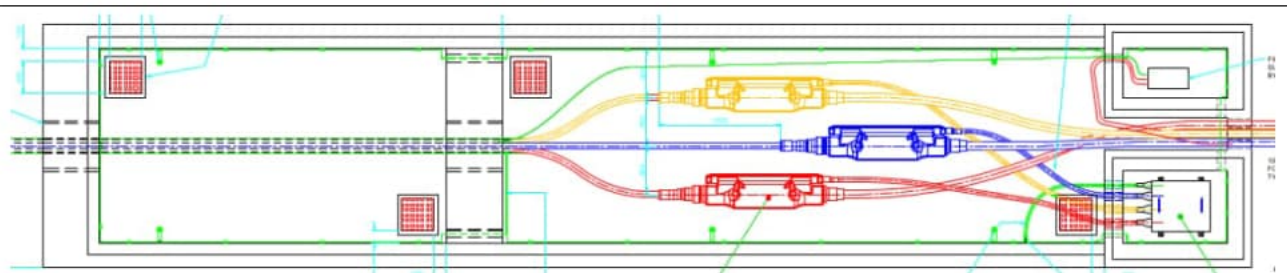
C5.1.1 The Licensee has ordered several joint components in preparation for the Stage 4 Repair (and a Stage 5 Repair in case it is necessary) as set out below:

	Description	Repair	Supplier	Cost	Invoiced
1	Onshore (Tyco) joints. The Licensee has one spare from the Stage 3 Repair.	Stage 4			
2	Onshore beach clamp. The Licensee has one spare from the Stage 3 Repair.	Stage 4			
3a	The Licensee has ordered parts to prepare four offshore joints to be available. The parts for two joints are required for the Stage 4 Repair (one to use and one spare in case of issues during the repair)	Stage 4			
3b	Two further joints are being prepared for a Stage 5 Repair (should this be required). The Authority requires such costs to be reported in the financial year they are incurred, even if they are not used / claimed until a later financial year.	Stage 5			
4	Fibre optic joints for onshore jointing (2 used and 1 spare). These fibre joints will connect the new offshore cable FOC to the short length of existing FOC that is buried in the TJB. The existing FOC is connected to onshore fibres in the fibre box chamber of the TJB and will not be altered.	Stage 4			
5	Parts to make a new NKT onshore joint in the TJB if required. This may be necessary as we have to manipulate the existing cables in the TJB to prepare new joints which may damage one of the existing NKT joints (see explanatory diagrams of the planned jointing work).	Stage 4			
<b>Approximate Total</b>				<b>318,503.57</b>	

C5.1.2 The following diagram explains the approach taken for jointing within the Transition Joint Bay

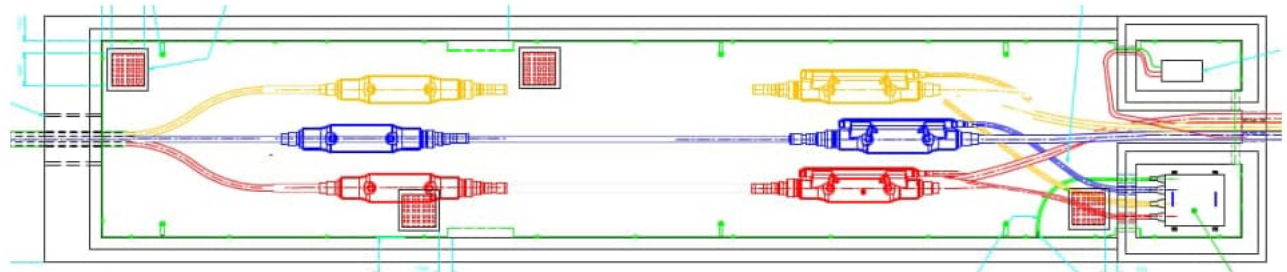
**Plan view of Joint arrangement in the TJB prior to the 2023 Fault.**

Three NKT in-line joints connect each phase of the export cable coming in from the left to each onshore cable going out to the right.



**Plan view of Joint arrangement in the TJB after the Stage 3 Repair.**

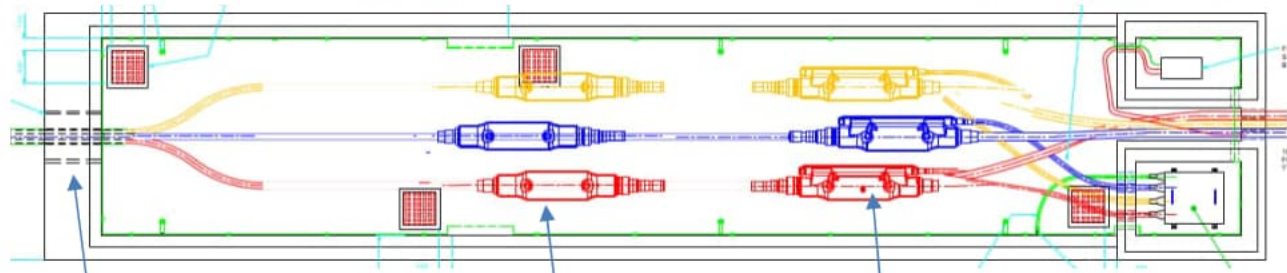
The existing NKT joints were retained and NKT export cable was cut to expose long tails so that new joints could be made (as far to the left end of the TJB) between the tails and each of the conductors of the new export cable.



**Plan view of Joint arrangement in the TJB after the Stage 4 Repair (Proposed).**

The existing NKT joints were retained and new joints will be made between the tails and each of the conductors of the new export cable. The joints and export cable installed in 2024 are removed and the new joints are made between the NKT joints and the joints that had been installed in 2024.

The tails need to be manipulated to achieve this and there is a risk of damage to the NKT joint. For this reason we will have a spare NKT joint ready.



Beach clamp  
in wall of TJB

New Tyco  
joints

Original  
NKT joints

C5.1.3 The parts that have been invoiced so far are set out in Table 14.

**Table 14 Joint costs**

ID	Supplier	Invoice	Description	Date	Invoiced (Excl. VAT)	Stage 4 Repair	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
57			Parts for NKT onshore joint					
58			fibre junction kits					
59			Onshore landing clamp					
60			for new joint parts for 4 joints					
			07.Parts_Stage 4 - Sub - Total		140,623.23	86,067.63	31,512.03	54,555.60

ID	Supplier	Invoice	Description	Date	Invoiced (Excl. VAT)	Stage 5 Repair	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
60			for new joint parts for 4 joints					
07.Parts_Stage 5 - Sub - Total					109,111.20	54,555.60		54,555.60



## C5.2 Cable costs

C5.2.1 The costs incurred in relation to the 7km of new cable delivery are set out in Table 15.

- (a) ID 20 relates to costs of witnessing the final acceptance tests in Japan prior to shipment of the cable.
- (b) ID 21 covers the balance of the cable cost and shipment cost. The out-turn transportation cost was higher than the estimate provided with the original quote. This was understood on the basis the actual costs plus a 7% handling fee would be charged. A reconciliation is provided below:

	Qty	Rate	Out-turn Cost	Est. Cost Mar-24	Comments
Ocean freight	1				
Additional Demurrage fee (per day)	5.5				
Berth shift at Hitachi port	1				Required to allow safety inspection audit
Berth shift (Barnett to D1 dock) Belfast port	1				As instructed by Port authority
<b>Sub-total Vessel Costs</b>					
Dismantling cable reels in Vessel	1				Original quote based on one cable reel
<b>Sub-Total delivery cost</b>					
SEI Handling Fee	7%				As per contract terms
<b>Total delivery cost</b>					
<b>Unloading Support</b>					
Technical support during unloading activity	106				Cable Supplier has extensive cable loading /unloading experience and advice. Sensible for the Licensee to make use of it.
Expenses for technical support					
<b>Technical Support fee</b>					
<b>Total Delivery Cost + technical support</b>			£1,939,882.15	£1,719,600.00	

- (c) ID 22 is the fees levied by the Port of Belfast while the delivery vessel was in port.



Table 15 Cable costs

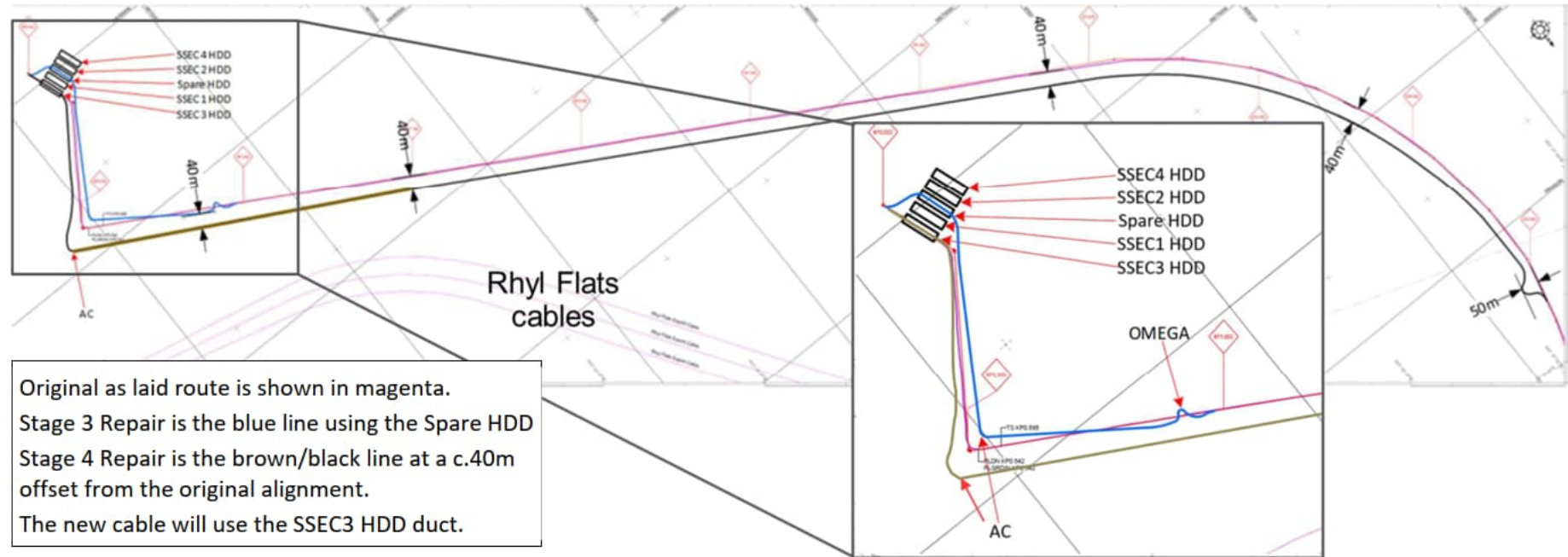
ID	Supplier	Invoice	Description	Date	Invoiced (Excl. VAT)	Stage 4 Repair	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
20			Engineering consultancy					
21			Cable					
22			Fees levied by the Port of Belfast					
			07.Parts_Stage4 - Sub - Total		3,560,679.77	2,678,198.73	2,678,198.73	

## C6 Stage 3 Repair Contractor

C6.1 The Licensee signed a repair contract with [REDACTED] for the Stage 4 Repair (the **Repair Contractor**) on 22 March 2025.

C6.2 The schematic for the repair is shown below. Important features are:

- (a) The new cable will revert to pass through the SSEC3 HDD duct under the railway.
- (b) The new alignment is c.40m offset from the original so that the cable can be laid out before the outage commences
- (c) There is a more pronounced alignment at c.KP0.5 so that the turning point is further up the beach (addresses a lesson learned from Stage 3 Repair).
- (d) The proximity of the Rhyl Flats Cables will be reflected in the Repair Contractor's anchor handling plan.



C6.3 The following vessels have been contracted for this repair:

- (a) A purpose-built cable lay vessel [REDACTED] from the Repair Contractor's own vessel fleet.
- (b) A flat bottom barge with an excavator, to create a trench through the heavy clay just below the seabed out to c.KP1.5
- (c) a multi-cat vessel, to carry out cable cutting, cable de-burial and re-burial and other support activities, and
- (d) an anchor-handling tug for the flat bottom barge and the Cable lay vessel (when operating in shallow waters – dynamic positioning capability is not effective in shallow depth)
- (e) crew transfer vessels (CTV)s for ferrying personnel between vessels and between vessels and shore





C6.4 In addition to chartering the repair vessels, the Repair Contractor has appointed:

- (a) an electrical sub-contractor, [REDACTED] (the “**Jointer**”) to conduct all electrical switching / safety from the system and testing works and all jointing works; and
- (b) a local contractor, [REDACTED] to deliver the onshore civils activity (the “**Onshore Contractor**”). The Onshore Contractor has been used for the Stage 3 Repair and the HDD clearance work (and had also been used by the windfarm developer for work on the HDD ducts and TJB installation when the GyM OFTO assets were constructed).

C6.5 The indicative repair programme is set out below:

	Key Activity	Date
1	Mobilisation of Repair VESSELS	06-Jul-2025
2	Collection of New Cable from Belfast	13-Jul-2025
3	Start of new cable installation	16 Jul 2025
4	Start of Outage	22 Jul 2025 (target)
5	Re-energisation of Cable	35 days after the actual Start of Outage date
6	Issue of As-Built documentation and H&S File	14-Sep-2025
7	Completion Date	14-Sep-2025

C6.6 The repair contract includes the following liquidated damages provisions (with a cap set at 10% of the contract fee):

- (a) £10,000.00 per calendar day if re-energisation takes longer than 35 calendar days (plus any agreed weather delays) from the start of the outage.
- (b) £5,000.00 per calendar day for a delay to the project completion date.

C6.7 As with previous contracts, milestone payments have been established

MS	Description	Payment Condition	% of FEE	Amount
PM1	Early works and reservations	Upon contract signature		
PM2a	Survey works	Upon physical completion		
PM2b	Pre-Trenching works	Upon completion of pre-trenching works		
PM3a	Mobilise Cable Repair Vessel	Start of works		



MS	Description	Payment Condition	% of FEE	Amount
PM3b	Mobilise Cable Repair Vessel	Complete Mobilisation / start transit		
PM3c	Mobilise Supporting Vessel	Start of works		
PM3d	Mobilise Supporting Vessel	Complete Mobilisation		
PM3e	Mobilisation of beach site	Upon completion		
PM4	Collection of repair cable	Upon completion of load-out test		
PM5	Commencement cable repair	Start of Outage		
PM6	New cable installation	Upon completion of landfall pull-in		
PM7	Cable repair Joint	Upon completion of joint over boarding		
PM8	Old cable removal	Upon completion		
PM9	Completion of cable burial	Upon completion on basis of tool data		
PM10	Complete demobilisation of Cable Repair Vessel	Upon completion		
PM11	Complete demobilisation of Support Vessel	Upon completion		
PM12	Energisation and successful soak test	Upon completion of soak test		
PM13	Issue of as-built documentation	Upon completion		
	<b>Total:</b>			

C6.8 The invoices received from the Repair Contractor so far are set out in Table 16 below.

**Table 16 Summary of fixed price costs paid to the Stage 4 Repair Contractor**

ID	Supplier	Invoice	Description	Date	Invoiced (Excl. VAT)	Stage 4 Repair	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
61			Milestone 1					
			08.Repair contract - Sub - Total		1,633,564.40	1,633,564.40	1,633,564.40	

## C7 Cable Unloading in the Port of Belfast

- C7.1 The Licensee ordered 7km of new export cable in March 2024 for delivery into the Port of Belfast in December 2024. GYMOWFL also ordered 11km of the same export cable shortly thereafter and due to be delivered on the same repair vessel. GYMOWFL intends to make the 11km cable available to the Licensee in the event that a Stage 5 repair is required (to replace SSEC3 cable between KP12.5 and the offshore substation).
- C7.2 GYMOWFL and the Licensee collaborated to agree an arrangement for offloading and storing both cables in a single location at the Port of Belfast. The key features of this collaboration agreement were:
- (a) The Licensee would arrange to unload both cables into a single storage facility at Barnett Dock in the Port of Belfast.
  - (b) GYMOWFL would contribute £293,400 towards the unloading cost.
  - (c) GYMOWFL would enter a storage agreement with the Port of Belfast covering both cable lengths (£20,000 per calendar month for 6 months; then £10,000 per calendar month).
  - (d) When the Licensee collected the 7km cable it would re-imburse GYMOWFL for the storage costs incurred up to the date of collection.
  - (e) If the Licensee collected the 11km cable for a Stage 5 Repair, then it would re-imburse GYMOWFL for the further storage costs incurred up to the date of collection of the 11km cable as well as the cost of buying the 11km cable from GYMOWFL and removing the storage facility from Barnett Dock.
- C7.3 The Licensee approached two contractors to deliver the unloading activity. The initial offers received are set out below:

Supplier	Outline offer	Offer	Comments
Contractor X [REDACTED]	Single cable basket (ID 12m; OD 23m) for two cables. Both rings formed from 3m tall, L-Shaped concrete plinths. Any delay to target programme charged at day rates	£850k Allowance	Bearing capacity constraint is satisfied. Additional interlocking concrete blocks to form a barrier to other users' activity in Barnett Dock.
Contractor Y [REDACTED]	Design and Build two cable baskets. One for each cable ID 12m and OD 17m. Inner ring steel construction; outer ring – concrete. Any delay to target programme charged at day rates	£823k Allowance	Insufficient space for two cable baskets. Size proposed will overload the bearing capacity constraint at Barnett Dock. Increasing the OD (to reduce bearing load) would require a larger more expensive loading arm (and this supplier could not locate a suitable arm).

- C7.4 The OFTO Board agreed to proceed with Contractor X as they offered a compliant bid that addressed the site constraints, and which could be delivered in the required timeframe. The Licensee appointed Contractor X as the preferred supplier and proceeded to agree contract terms.
- C7.5 The Licensee received advice from [REDACTED] to negotiate the collaboration agreement with GYMOWFL and the unloading contract with Contractor X



C7.6 During this process the agreed contract price increased to include appropriate levels of insurance for the unloading activity. The final agreed contract price is set out below and the Licensee signed the cable unloading agreement with Contractor X on 27 November 2024.

	Project phase	Costs (£)
1	Planning, Reporting, project management	
2	Constructing Onshore Storage Facility	
3	Cable Testing	
4	Mobilisation and Demobilisation	
5	Cable Unloading Activity	
	<b>Initial offer at Tender stage</b>	
6	Insurances	
	<b>Total Contract Price</b>	<b>936,899.00</b>

C7.7 The expected delivery programme was as follows:

WBS	Task Name	Owner	Start	End
<b>1</b>	<b>Project Documentation</b>	<b>Contractor X</b>	<b>24-Nov-24</b>	<b>26-Dec-24</b>
1.1	General Document and RAMS etc	Contractor X	24-Nov-24	07-Dec-24
1.2	Cable Storage Hand Over Pack	Contractor X	21-Dec-24	26-Dec-24
<b>2</b>	<b>Project Site Set-up</b>	<b>Contractor X</b>	<b>10-Dec-24</b>	<b>23-Dec-24</b>
2.1	Site Set-Up Barnett Dock	Contractor X	10-Dec-24	17-Dec-24
2.2	Set Up 30m concrete barrier and demobilise	Contractor X	21 Dec 24	23 Dec 24
<b>3</b>	<b>Cable Operation Offloading</b>	<b>Contractor X</b>	<b>16-Dec-24</b>	<b>21-Dec-24</b>
3.1	Kick-off meeting cable spooling Ph1	Contractor X	16 Dec 24	16 Dec 24
<b>3.2</b>	<b>Cable transportation vessel arrival</b>	<b>Cable Supplier</b>	<b>16-Dec-24</b>	<b>16-Dec-24</b>
3.3	11 km Cable spooling operations	Contractor X	16-Dec-24	18-Dec-24
3.4	Lessons learned - cable spooling Ph2	Contractor X	18-Dec-24	19-Dec-24
3.5	7 km Cable spooling Operations	Contractor X	19-Dec-24	21-Dec-24
3.6	Remove Cable Reels from Vessel	Cable Supplier	No estimate when Contractor X was appointed	
3.7	Cable transportation vessel departure	Cable Supplier		

Actual Start	Actual End	
<b>24-Nov-24</b>	<b>26-Dec-24</b>	
24-Nov-24	07-Dec-24	
21-Dec-24	26-Dec-24	
<b>10-Dec-24</b>	<b>23-Dec-24</b>	
10-Dec-24	13-Dec-24	
20-Dec 24	21 Dec 24	
<b>16-Dec-24</b>	<b>21-Dec-24</b>	
14 Dec 24	14 Dec 24	
<b>12-Dec-24</b>	<b>12-Dec-24</b>	
14-Dec-24	17-Dec-24	
18-Dec-24	18-Dec-24	Weather delay
18-Dec-24	19-Dec-24	
20-Dec-24	24-Dec-24	
24-Dec-24	24-Dec-24	

- C7.8 The Cable Supplier provided an estimated shipping cost (£1.7m) for transporting the new cable from Japan to Belfast in its offer for the 7km cable. The Cable Supplier also confirmed that the 11km cable could be transported on the same vessel, there could be a marginal additional cost for achieving this (longer time to load and unload the cable) but the transit cost would not change if two cables were delivered on the same vessel.
- C7.9 The shipping cost assumed 12 days of demurrage (port time for the vessel) to load and unload the cable (based on a single cable). Following the loading activity in Japan there remained just over 8 days of demurrage for the unloading activity. Additional demurrage is charged at c.USD 25,000 per day.
- C7.10 The Licensee had previously had cable delivered into Sunderland in 2022 and the ETA was adjusted (delayed) several times during the voyage, which resulted in additional costs for the unloading contractor. We wanted to mitigate this risk for this unloading activity so, the mobilisation activity was determined based on the ETA when the vessel left Japan, and we would update when the delivery vessel cleared the Panama Canal.
- (a) When the vessel left Japan on 29 October its ETA was 16 December 2024.
  - (b) The vessel cleared the Panama Canal on 26 November and adjusted its ETA to 12 December
  - (c) The vessel arrived outside the Port of Belfast on 11 December and was moored alongside Barnett Dock on 12 December 2024
- C7.11 The Licensee notified the Contractor X of the new ETA on 26 November and requested they accelerate the mobilisation activity in an attempt to be ready to unload by the 13 December. Contractor X agreed to attempt to achieve this by working 24/7 rather than 12-hour shifts. Contractor X initially claimed £181.6k for this acceleration work but subsequently agreed a total of £36.8k, a reduction of £144.8k (**variation V004** included in invoice for Milestone 5).
- C7.12 Contractor X had visited Barnett Dock prior to submitting its tender. However, at that time the dock area designated for the cable storage facility was being used for storing aggregate material and so the dock surface and levels could not be inspected. When Contractor X arrived to mobilise, the dock surface and levels were found to be unsuitable for establishing the cable storage facility. Contractor X proposed to import some fill to create a level area at a cost of £18,149, which was accepted by the Licensee (**variation V002** included in invoice for Milestone 6).
- C7.13 However, the additional work required to deliver this variation meant that Contractor X did not complete the mobilisation activity until the morning of the 14 December. Contractor X started the unloading activity on the 14 December and both cables were unloaded by 14:00 on 19 December. There were delays for waiting on weather due to high winds during this period that added c.24 hours to the unloading time.
- C7.14 The unloading activity used up the balance of the vessel demurrage time included in the original cable transportation cost provided by the Cable Supplier. However, the Cable Supplier now had to dismantle the two cable storage drums from inside the hold of the delivery vessel before it could depart. The cost for this activity is covered in Section C5.2.
- C7.15 Several pictures of the cable unloading operation are provided on the following pages.





L-shape concrete barriers used to form the Storage area



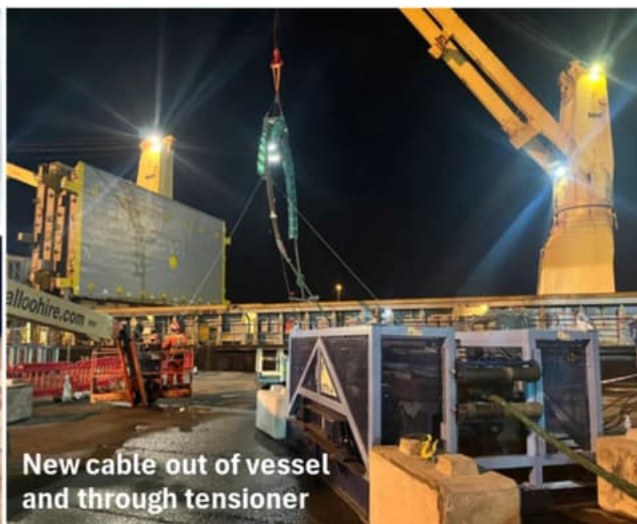
Levelling the inner core with aggregate



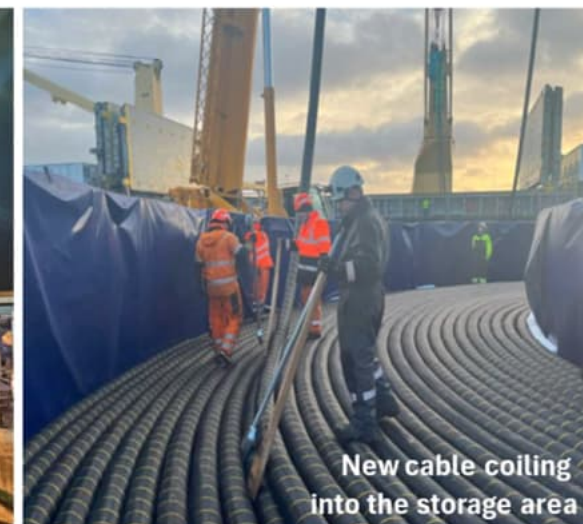
Cable in vessel



Storage area ready for load out with Coiling Arm

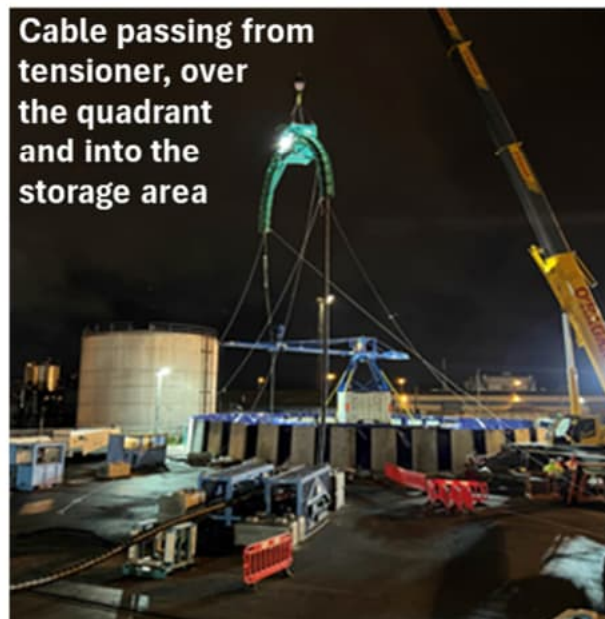


New cable out of vessel and through tensioner



New cable coiling into the storage area





- C7.16 The Licensee appointed [REDACTED] to review the RAMS documents issued by Contractor X and also to provide two Client Representatives to monitor the unloading activity.
- C7.17 One further (minor c.£500) variation was agreed with Contractor X to provide additional Heras fencing to prevent access to the cable storage facility following the unloading activity (**variation V003** included in invoice for Milestone 6).
- C7.18 The Licensee also asked the Cable Supplier to provide advice and on-site support during the cable unloading activity given their extensive expertise from loading cables from the factory in Japan. The cost for this service is included in the cable transportation costs set out in Section C5.2.
- C7.19 The invoices received from the Repair Contractor are set out in Table 17 below.

**Table 17 Summary of Costs for Cable Unloading**

ID	Supplier	Invoice	Description	Date	Invoiced (Excl. VAT)	Stage 4 Repair	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
22	[REDACTED]	[REDACTED]	Cable Unloading agreement	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
23			Collaboration Agreement (cable unload)					
24			Belfast cable offload					
25			Cable unloading					
26			Contract Award - 10% of total					
27			Milestone 2 - 40% of total					
28			Milestone 3					
29			Milestone 4					
30			Milestone 5					
31			Milestone 6					
32			Credit against MS 5 (inv 823)					
33			Contribution to cost of cable unloading					
			<b>09.Cable Unloading - Sub - Total</b>		<b>759,440.59</b>	<b>759,440.59</b>	<b>759,440.59</b>	



## C8 HDD Duct Clearance

- C8.1 As part of the Stage 3 Repair activity, the SSEC3 cable was installed in the Spare HDD duct (under the railway between Pensarn Beach and the TJB) rather than in its dedicated SSEC3 HDD duct. The reasons were explained at paragraph 1.8 of Annex B of the IAE Notice issued in October 2024:  
*It was not clear if the HDD duct containing the SSEC3 cable would be suitable to allow a new cable to be passed through it. Also, the Licensee was concerned that clearing this duct to confirm the situation would be expensive and risk delaying the repair. So, the Licensee investigated whether the spare HDD duct could be used instead (noting that this would require the SSEC3 cable to cross over the SSEC1 cable in two locations). This confirmed the spare HDD could be used.*
- C8.2 In preparation for the Stage 4 Repair, the Licensee considered it would be preferable to re-instate the SSEC3 cable in its original HDD Duct and therefore approached the contractor that had originally installed the ducts and the CableChem filling, to prepare a proposal to clear this duct in advance of the Stage 4 Repair.
- C8.3 The contractor offered an estimated cost of £323,695 to complete this exercise comprising a fixed element of £141,580 and a variable element of £182,155 that would be adjusted for the actual duration of the work activity. This offer was accepted by the OFTO Board in March 2025 and the work was completed successfully in March and April 2025 with an out-turn cost of £367,263. A reconciliation of the out-turn cost is provided below.

Fixed Cost Activity	Rate	Qty	Total
Engineering, RAMS, HSEQ, Preparations			
Mobilise Equipment to site			
TJB Enabling works for Site Set up			
Mobilise Duct Grout Recovery Equipment			
Bespoke Tooling fabricated for HDD Rig			
Set up Beach Compound etc			
De-Mobilise all sites – TJB & Beach			
De-Mobilise Grout Recovery Equipment			
Removal of additional TJB Enabled area			
Grouting Flanges			
<b>Total for Lump-sum Items</b>			<b>141,580</b>



Variable Cost Activity	Rate	Est. Qty	Total	Actual Qty	Total	Comments
TJB Site Spread						Increase of 12 days due to below
General Site operations: Team						Extra time required to extract cable and concrete plug
HDD Team, Rig, Equipment, Recycling system						Increase due to blocked filters because of yarn
Beach Site Compound						Extra time required to extract cable and concrete plug
Cable grouts solids waste away (cost +10%)						
Cable grouts fluids waste away (cost +10%)						
Bentonite (drilling) fluid (cost +10%)						
<b>Total for Day-Rate Items</b>			<b>182,115</b>		<b>225,683</b>	
<b>Total Overall Cost</b>			<b>323,695</b>		<b>367,263</b>	<b>£43,568 (13.5%) increase</b>

C8.4 The invoices received from the duct clearance contractor are set out in Table 18 below.

**Table 18 Summary of Costs for HDD Duct Clearance**

ID	Supplier	Invoice	Description	Date	Invoiced (Excl. VAT)	Stage 4 Repair	01-Apr 24 31-Mar 25	01-Apr 25 31-Mar 26
62			HDD duct Clearance					
63			HDD duct Clearance					
			<b>12.Duct Clearance - Sub - Total</b>		<b>367,262.50</b>	<b>367,262.50</b>	<b>93,171.25</b>	<b>274,091.25</b>