The Sizewell C Project

8.18 Freight Management Strategy

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1 INTRODUCTION

1.1 Purpose of this update

1.1.1 This document updates the Freight Management Strategy (FMS) presented in the Application.

1.1.2 The Notification of Proposed Changes ('Notification Report') [AS-005] explained that SZC Co. intended to provide an update with revised transport assumptions relevant to the project. The Notification Report also explained that SZC Co. proposed to consult on two potential changes to the FMS, namely:

- an increase in the frequency of freight train movements to facilitate bulk material imports by rail; and
- a change to the Beach Landing Facility (BLF) designed to facilitate bulk material imports by sea.

1.1.3 Following consultation, SZC Co. is formally requesting changes to the Application to enable the construction and use of a new, temporary BLF to supplement the permanent BLF proposed in the application. In addition, it is proposing potential changes to the frequency of train movements assumed in the Application documents.

1.1.4 The revised assumptions relating to increased train movements do not involve any change to the Application, in the sense that the proposals for development remain unchanged, but they do assume the rail infrastructure applied for may be used more intensively than was assumed and assessed in the Application and it is appropriate that the implications of that revised assumption are assessed.

1.1.5 In addition, SZC Co. has submitted an update of its **Material Management Strategy** provided in **Appendix 2.2.C** of the **Environmental Statement** (**ES**) **Addendum** (Doc Ref. 6.14), which provides updated information on construction material quantities.

1.1.6 These matters all have an effect on the FMS described in the submitted Application. This document updates that strategy.

1.2 The submitted DCO Freight Management Strategy

1.2.1 The FMS is described and explained in the following submitted Application documents:

- the **Planning Statement** (Doc Ref. 8.4) [APP-590] describes the FMS at **Section 6.5**;

- the **Site Selection Report** (submitted as **Appendix 8.4A** to the **Planning Statement** [APP-591]) at **Section 2.4** explains the evolution of the FMS through the various stages of consultation;
- the **Transport Assessment** (Doc Ref. 8.5(A)) [AS-017] describes the FMS at **Section 8.5**;
- the FMS is described in **Volume 2**, **Chapter 3** of the **ES** (Doc Ref. 6.3) [APP-184].

1.2.2 In short summary, these documents describe the selection of the Integrated Strategy for the movement of freight. The Integrated Strategy has the following principal components:

- the green rail route;
- refurbishment of the Saxmundham to Leiston branch line;
- the construction of rail sidings on Land East of Eastlands Industrial Estate (LEEIE);
- a freight management facility at Seven Hills;
- the Sizewell link road;
- the two village bypass;
- upgrades to eight level crossings; and
- a beach landing facility for Abnormal Invisible Loads (AILs).

1.2.3 In the “early years” prior to the opening of the green rail route, the Sizewell link road and the two village bypass, the Integrated Strategy assumes up to two freight trains per day (four movements) to sidings constructed on LEEIE. Following the opening of the green rail route, the Integrated Strategy allows for up to three trains per day (six movements) to the temporary construction area.

1.2.4 The use of rail freight for the movement of bulk materials in this way, together with the estimate of construction material volumes set out in the **Materials Management Strategy** provided in **Appendix 3B** of **Volume 2** of the **ES** (Doc Ref. 6.3) [APP-185] enabled SZC Co. to propose the following limits on Heavy Goods Vehicle (HGV) movements in the Application:

- Early years: up to 300 HGVs per day (600 movements)

- Typical day at peak: 325 HGVs (650 movements)
- Busiest day: 500 HGVs (1,000 movements)

1.2.5 HGV movements were proposed to take place between 07:00 and 21:00 (Mondays-Fridays) and between 08:00 and 13:00 (on Saturdays) with no HGV movements on Sundays and bank holidays (see **Construction Traffic Management Plan** (Doc Ref. 8.7) [APP-608]).

1.2.6 With the benefit of this infrastructure and these forecast movements, the Application estimated that construction materials would be delivered in the following proportions (by weight):

- HGV 61%
- Sea 1%
- Rail 38% (see **Table 2.1** of the **Site Selection Report** (Doc Ref. 8.4) [APP-591])

1.2.7 The submitted **ES** (Book 6) explained that it was anticipated that construction of Sizewell C would require the import of c.10.1 million tonnes of construction materials (see **Table 3.3** of **Volume 2**, **Chapter 3** of the **ES** (Doc Ref. 6.3) [APP-184]). A breakdown of materials was set out in the ES and in the submitted **Materials Management Strategy** provided in **Appendix 3B** of **Volume 2** of the **ES** (Doc Ref. 6.3) [APP-185], which explained:

> *"1.6.8 Refinement of the enabling works design is on-going and the volumes presented may change as this work progresses and at the detailed design stage."*

1.3 Stakeholder engagement and policy requirements

1.3.1 As the **Site Selection Report** (Doc Ref. 8.4) [APP-591] makes clear, selection of the appropriate Freight Management Strategy for the Application has been the subject of continuous engagement and assessment. That engagement has continued since the submission and acceptance of the Application. For example, the Relevant Representations submitted by Suffolk County Council (SCC) [RR-1174] made clear that SCC "*does not support*" SZC Co.'s proposed freight transport strategy as it stands:

> *"..because it is not a sustainable strategy, because an increased proportion of rail transport (and potentially sea-borne transport) could reasonably be achieved and because it does not currently mitigate its transport*

impacts on the highway network to acceptable levels for the community."

1.3.2 SCC's representations ask the Examining Authority to consider the proposals against national policies promoting sustainable transport solutions.

1.3.3 Similarly, the relevant representations from East Suffolk Council (ESC) [RR-0342] explain:

"1.193…we want to work with SZC Co. to maximise the use of rail and sea and avoid unacceptable impact on residents."

1.3.4 The principal policy requirements to which SCC refer are those set out in NPS EN-1 from paragraph 5.13.6 (Ref. 1). The NPS recognises that a new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure and calls upon the applicant to seek to mitigate these impacts including during the construction phase of the development. The NPS then provides the following:

"5.13.8…where mitigation is needed, possible demand management measures must be considered and if feasible and operationally reasonable, required before considering requirements for the provision of new inland transport infrastructure to deal with remaining transport impacts.

5.13.9…the IPC should have regard to the cost-effectiveness of demand management measures compared to new transport infrastructure, as well as the aim to secure more sustainable patterns of transport development when considering mitigation measures.

5.13.10…water-borne or rail transport is preferred over road transport at all stages of the project, where cost-effective."

1.3.5 Mindful of this policy context, SZC Co. has worked closely with stakeholders in order to consider and where appropriate propose changes to its Application and to update its proposed Freight Management Strategy.

2 MATERIALS SOURCES

2.1.1 The **Materials Management Strategy Update** (**Appendix 2.2.C** of the **ES Addendum**) (Doc Ref. 6.14) presents the outcome of SZC Co.'s more detailed analysis of its materials requirements for the construction of the Sizewell C Project. It explains how more detailed design development has enabled a more accurate estimate to be produced of materials that need to be imported to the site than was available at the time of the Application. It explains the changes and provides the following comparison.

Table 2.1: Breakdown of expected import material by type

Type	Imported materials by weight (million tonnes)	
	Original assumption	Updated assumption
Concrete materials	5.1 (50%)	4.8 (40%)
Backfill	2.0 (20%)	3.3 (27%)
Steel	1.0 (10%)	1.0 (8%)
Bitumen	1.0 (10%)	1.0 (8%)
Other	1.0 (10%)	2.0 (17%)
Total	**10.1 (100%)**	**12.1 (100%)**

2.1.2 The increase in materials volumes means that the HGV limits proposed in the Application need to be re-examined. The Freight Management Strategy has been reviewed to take account of this change and for the reasons explained in **Section 1** of this document.

2.1.3 SZC Co.'s supply chain partners have been undertaking detailed work in preparation for implementation in the event that Development Consent Order ('DCO') consent is secured. This has included close working with potential material suppliers and with freight operating and transport logistics companies. The work has also benefitted from the transfer of experience from the Hinkley Point C ('HPC') project. As a result, the likely sources of principal materials are now reasonably well known, although there remain choices to be made during the procurement negotiations.

2.1.4 For concrete making materials, the strategy has always been to replicate, as far as practical, experience at HPC. In order to ensure the quality, consistency, and integrity of material supplies for HPC, a detailed

procurement process was undertaken involving the sampling and testing of alternative supply sources. The extent of the QA process meant that this exercise took approximately 2-3 years. The intention to replicate the same supply sources for SZC Co. would save the equivalent time from the pre-construction programme.

2.1.5 The replication of the HPC strategy has been of interest, for instance, to the Sizewell local authorities who have been keen to understand the confidence that SZC Co. can have in the integrity and finish of its concrete materials.

2.1.6 As a result, the expectation is that concrete aggregates would be sourced as follows:

- Whatley, Frome, Somerset: 4/10mm and 10/20mm crushed rock: c.1,700,000 tonnes via rail, fed directly from the quarry to the SZC batching plant aggregate stores.
- Batt Combe, Somerset: 0/4 mm manufactured sand: c.680,000 tonnes. There are options for this material which can either be road hauled to Avonmouth for transhipment to rail for transport direct to SZC's batching plant aggregate stores or transhipment onto marine vessels for transport either to a marine transhipment point or directly to SZC via the BLF.
- Masters, Dorset: 0/4 mm natural sand: c.30,000 tonnes road hauled to the project (road being necessary due to the limited volume over the duration of the project).
- Bristol Channel: 0/2 mm marine sand: c.700,000 tonnes (transport offers the same options as the Batt Combe sand from Avonmouth).

2.1.7 Cements and powders for concrete making and soil stabilisation comprise a smaller volume of material and are expected principally to comprise:

- Tata Steel Works, Port Talbot: ground granulated blast-furnace slag ('GGBS'): c.500,000 tonnes.
- Ripplesdale Cement Works, Clitheroe (cement): c.200,000 tonnes.
- Vicat Cement Works, St Egreve, S. France: low heat specialist cement: c.10,000 tonnes.
- Batt Combe, Somerset: filler powder (ground limestone dust) c.68,000 tonnes.

2.1.8 The relatively small volumes of the low heat cement and filler powder mean that they are not suited to bulk transport by rail or sea. The larger volumes of cement and GGBS do enable rail transport but the intention is that the GGBS material would be transported to a trans-shipment site relatively close to Sizewell for onward transport by road because its volume would exceed the capacity of the SZC batching plant and because rail capacity is likely to be limited during the peak periods of demand.

2.1.9 The other principal bulk material required is backfill for which the SZC Co. supply chain has been sourcing options which include:

- Aggregate Industries, Glensanda Quarry, Scotland (marine transport only from quarry to suitable Short Sea port with transhipment to rail/coaster vessel limited supplementary road haulage).
- Hanson, Shap Quarry, Lake District (existing rail infrastructure to allow haulage by rail to SZC bulk materials consolidation and stock piling areas).
- Hanson, Tau or Jelsa Quarries, Norway (vessel potentially moored offshore to allow transhipment to barges for delivery via BLF or marine transport only from quarry to suitable Short Sea port with transhipment to rail/coaster vessel limited supplementary road haulage).
- Tarmac, Mount Sorrel Quarry, Leicestershire (existing rail infrastructure to allow haulage by rail to SZC bulk materials consolidation and stock piling areas).

2.1.10 Whilst there are obvious limitations on the source of suitable materials, therefore, there are also some choices in the means of transport with bulk materials generally only being suitable for transport by either rail or sea, and with a principal determinant being the nature of the source location.

2.1.11 The preferred mode of transport for each material is shown in **Table 2.2**.

2.1.12 In general, bulk materials are well suited to rail or marine transport with smaller or specialist materials, or more reactive requirements better suited to road. The split between rail and sea modes is to some extent interchangeable but approximately 40% of the construction material requires road transport. This is due to the nature of the non-bulk materials. It is not economic to load smaller or specialist materials onto rail or sea. These types of materials include consumables, PPE fuels, oil, greases, timber, skips, lifting and construction equipment, small plant, general stores, and catering/food supplies. Additionally, SZC Co. has been working with the Suffolk Chamber of Commerce to develop the local supply chain. Where materials can be sourced locally, it is unlikely that it would be economic to use rail or marine transport.

2.1.13 Whilst 40% is a significant proportion of the overall material, it is anticipated that HGVs between 3.5 and 7.5 tonnes would generally be delivering smaller consumables and would represent a considerable proportion of the overall total HGV movements.

2.1.14 Due to the nature, criticality and location of the concrete materials requirements, a minimum of 2 trains per day is required to allow haulage of the material to site and to create confidence that materials will be available for the continuous production of concrete. However, two trains per day would not be sufficient to ensure continuous concrete production during the peak period without the additional capacity provided by the temporary BLF or via increased HGVs by road.

Table 2.2 Preferred modal splits for material transport

Material	Primary Mode of Transport		
--	Rail	Sea	Road
Concrete Aggregates	✓	✓	
Backfill Aggregates	✓	✓	
Cement and Lime Powders (for Ground Improvement)	✓		✓
Concrete Powders			✓
Tunnel Segments	✓		✓
Reinforcement	✓		✓
Other Materials			✓
Overall Ambition	30% - 50%	10% - 30%	40%

2.1.15 Whilst **Table 2.2** shows an idealised modal split, which would reduce HGV movements from the 61% anticipated in the Application to 40%, it can only be achieved, of course, if there is sufficient capacity for rail and marine movements. There is potential for some flexibility between rail and sea transport but only up to 60% of material volumes.

3 INFRASTRUCTURE

3.1 The role of the FMS within the Application

3.1.1 Whilst the submitted Application describes the Integrated Freight Management Strategy, the application, of course, seeks development consent for the physical infrastructure to enable that strategy (such as the proposed rail and road infrastructure). The submitted application includes assessments of the likely use of that infrastructure under the Integrated Freight Management Strategy but it would be for the Examining Authority and the Secretary of State to determine whether the proposed strategy is appropriate and whether, for example, requirements should be imposed to govern the number of HGV movements or train movements.

3.1.2 The same applies to the application as proposed to be changed with the addition of a second BLF and with revised assumptions for up to four trains per day.[1] The additional capacity that this would create increases the available options for the movement of materials by the three principal modes. The **ES Addendum** (Doc Ref. 6.14) tests the potential worst-case impacts that would arise from the maximum use of rail and marine options, whilst the **ES Addendum** (Doc Ref. 6.14) and the **Transport Assessment Addendum** (Doc Ref. 8.5(A)Ad) also model the likely significant effects of reduced HGV movements. The Examining Authority has the benefit of the submitted assessments in the Application which model the likely significant effects of greater HGV movements.

3.1.3 Through the examination, the balance to be struck between the three modes can be examined and there may be scope to vary the extent of material carried by the different modes, subject to the constraints inherent in the source and character of the materials.

3.1.4 In this important respect, the application meets the requirements of the NPS and the applicant has done what it reasonably can to respond to the requests of stakeholders to attempt to maximise the practical use of both rail and sea for the movement of materials so that HGV movements can be reduced to a minimum.

3.1.5 The Application, as now proposed to be changed, contains all of the necessary infrastructure to enable that to be achieved.

3.1.6 The associated development transport infrastructure within the application is proposed both to facilitate construction and operation but also,

[1] A fifth train each day is being investigated and assessed in the Environmental Statement Addendum but it is not considered likely to be achievable and is not assumed to be in place for the purposes of any calculation of transport capacity.

importantly to mitigate the impacts of the construction of Sizewell C. In this respect:

- the freight management facility is proposed to manage and smooth the delivery of HGVs on the local road network during construction;
- the Sizewell link road and the highway infrastructure improvements at Yoxford are proposed to reduce the impact of HGV movements at Yoxford and on the B1122 communities;
- the two village bypass is proposed in order to mitigate impacts of HGV and other movements on Stratford St Andrew and Farnham;
- the rail infrastructure (upgrading the Saxmundham – Leiston branch line, sidings at LEEIE plus the green rail route) would have the effect of significantly reducing HGV movements on the road network; and
- the permanent BLF would remove a significant number of AIL movements from the road network, whilst the proposed new temporary BLF has the capacity to significantly reduce HGV movements on the local road network.

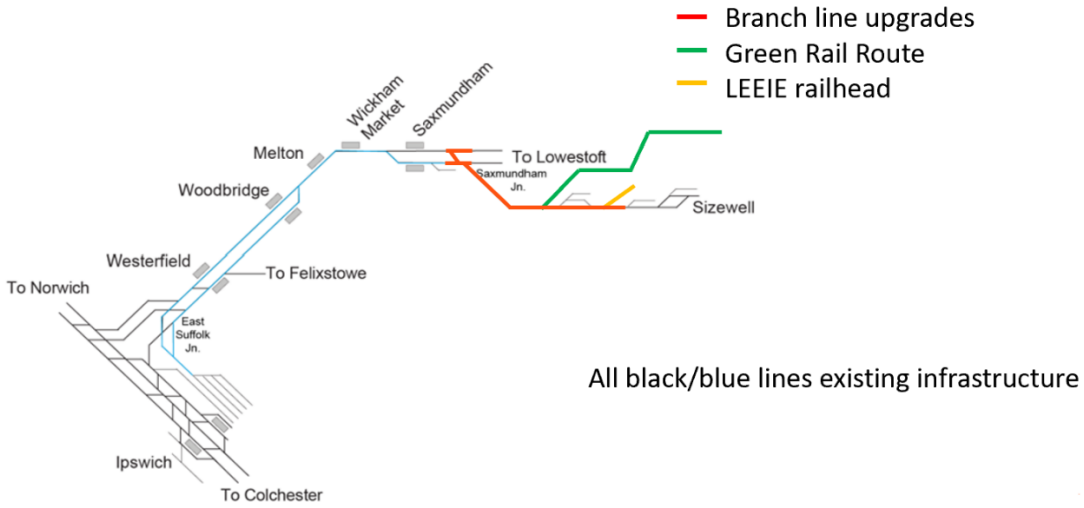
3.1.7 Similarly, the Northern and Southern park and rides sites are proposed specifically to reduce the impacts of traffic movements and of car parking on local roads and on the main development site.

3.1.8 In promoting this infrastructure and the associated transport strategies, SZC Co. has fully complied both with the NPS requirement to mitigate the impacts of its construction phase and also with the NPS requirement to create the opportunity for water borne and rail transport where practical and cost effective. The investment in mitigating infrastructure will be cost effective if it is found to be necessary to achieve a necessary balance between the different transport modes.

3.2 Rail infrastructure

3.2.1 No changes are proposed to the rail infrastructure applied for within the Application. The existing and proposed rail infrastructure is illustrated in **Plate 3.1**.

Plate 3.1 Existing and proposed rail infrastructure



3.2.2 SZC Co. has been working closely with Network Rail, particularly in relation to the following:

- capacity studies to determine the ability of the rail network to accommodate the movement of four trains (eight movements) each day to and from Sizewell C;
- to investigate whether it may be possible to operate a fifth train for two years during the peak of construction;
- the detailed specification of the proposed enhancements to the Saxmundham – Leiston branch line and its interface both with the green rail route and with the East Suffolk Line;
- the potential for additional enhancements to be undertaken to track on the East Suffolk line which would reduce further the noise impact of train movements and;
- details of a **draft Rail Noise Mitigation Strategy** (**Appendix 9.3.E** of the **ES Addendum**) (Doc Ref. 6.14) which, for instance, commits to the use of continuously welded rail on the branch line and would limit the speed (and, therefore, the noise and vibration) of the Sizewell freight trains as they travel through Woodbridge, Campsea Ashe and Saxmundham.

3.2.3 As with the submitted Application, train movements would operate predominantly at night, after 23:00. With four trains, trains would be likely to arrive in the early morning (before 07:00). It is possible that one of the eight train movements would take place during the day but, for the

purposes of the proposed change to the DCO, assumptions have been modelled in which all movements take place overnight where that is the worst case.

3.2.4 For resilience purposes, SZC. Co has proposed and assessed the potential for trains to run 6 days a week, with the sixth day of operation assumed to be Sunday night / Monday morning.

3.2.5 If a fifth train was possible during the peak of construction, that train would need to operate during the daytime.

3.2.6 SZC Co. has examined the availability of train paths on the East Suffolk line and the wider network and satisfied itself that sufficient capacity exists to accommodate four overnight trains. That issue is also being examined by Network Rail and, pending their agreement, it remains possible they will conclude that a fourth train cannot be achieved. SZC Co., however, wishes to secure the opportunity for the fourth train and has therefore, assessed its effects.

3.2.7 A fifth train is more speculative and it currently appears unlikely that additional freight movements can be accommodated during the daytime timetable on the East Suffolk line. However, until that possibility is ruled out, SZC Co. would wish to secure the additional capacity and, therefore, the relevant assessments in the Environmental Addendum have assessed the likely significant effects of a fifth train, operated during the day.

3.2.8 The trains are likely to be formed of a Class 66 locomotive with up to 20 wagons, i.e. up to 339m in length and capable of carrying up to 1,250 tonnes of construction material. The capacity of each train is equivalent to that of 67.5 HGVs (135 two-way HGV movements).

3.2.9 Having regard to the nature and volume of bulk construction materials, SZC Co. anticipates that the optimum number of trains to serve the Sizewell C Project (in the absence of the additional temporary BLF) would be as set out in **Table 3.1**.

Table 3.1 No. of trains per day over the construction period

Construction Year	Nominal number of trains per day
2022	0
2023	2
2024	4
2025 – 2026	4 to 5*
2027 – 2028	4
2029	3
2030 - 2034	2 reducing to 0

* The potential for a 5th train at the very peak of construction has been identified, although current studies suggest that it is unlikely there would be a train path available. As a worst case, its environmental effect has been assessed in the ES Addendum.

3.2.10 There would be potential to reduce the number of trains to a minimum of 2 per day through the construction period if the temporary BLF is consented and operational. **Section 4** of this document explains the various modal scenarios that have been considered, showing potential train numbers with and without the temporary BLF.

3.3 The temporary beach landing facility

3.3.1 The proposed temporary BLF is described in **Chapter 2** of the **ES Addendum** (Doc Ref. 6.14).

3.3.2 The operational constraints of the weather and the tide limit the marine campaign to a 7-month period annually between April and October. Based on these 29 weeks of operation each year, with a vessel of 4,500 tonnes offloading over each high tide there is a theoretical capacity of 1,827,000 tonnes. Allowing for efficiency, adverse weather, tidal conditions, breakdowns, the current assessment is that 70% utilisation is the upper limit that could be achieved which would allow around 1,275,000 tonnes per year to be imported.

3.3.3 The **ES Addendum** (Doc Ref. 6.14) also assesses the likely significant effects if use is made of the new, temporary BLF outside the summer campaign, weather and other conditions permitting. For the purposes of this Freight Management Strategy, however, the potential for less frequent use of the new BLF outside the campaign period is regarded as helpful resilience rather than a source of supply that can be relied upon.

4 MATERIALS MOVEMENTS

4.1.1 Based on the updated materials volumes in the updated **Materials Management Strategy** (**Appendix 2.2.C** of the **ES Addendum**) (Doc Ref. 6.14) (and having regard to the nature of those materials and their suitability for different modes), the proposed changes to the infrastructure and the additional capacity that could be provided as described in **Section 3** of this document provide the potential for a range of options to be considered in the modes of transport used for the delivery of construction materials to the main development site.

4.1.2 The theoretical range of options is summarised in **Table 4.1**. In reality, however, practical considerations limit the scope of those choices. The table is based on the latest understanding of materials requirements set out in the updated **Materials Management Strategy** (**Appendix 2.2.C** of the **ES Addendum**) (Doc Ref. 6.14).

Table 4.1: The Effect of Alternative Modal Scenarios

Scenario	Trains	Marine	HGV (Typical)	HGV (Peak)	Comments
Early Years	2	--	300 (600)	--	--
DCO Baseline	3	DCO BLF - AILs	325 (650)	500 (1,000)	Not achievable due to inc. volume.
Enhanced Rail	4	DCO BLF - AILs	300 (600)	450 (900)	--
Enhanced Rail + 2nd Bulk BLF @ 70%	4	DCO BLF – AILs 2nd BLF - Bulk	250 (500)	350 (700)	Minimum possible HGV deliveries (40%)
No Rail + 2nd Bulk BLF	0	DCO BLF – AILs 2nd BLF - Bulk	500 (1,000)	600 (1,200)	Not meet minimum rail requirements
No Rail, No Bulk BLF	0	DCO BLF – AILs	600 (1,200)	750 (1,500)	As above
Min Rail + 2nd Bulk BLF	2	DCO BLF – AILs 2nd BLF - Bulk	350 (700)	500 (1,000)	To maintain concrete aggregate supply via rail
DCO Rail + 2nd Bulk BLF	3	DCO BLF – AILs 2nd BLF - Bulk	300 (600)	450 (900)	Rail capacity to support fill outside marine campaigns

4.1.3 As a result of the additional import requirements detailed in the updated **Materials Management Strategy** (**Appendix 2.2.C** of the **ES Addendum**) (Doc Ref. 6.14), if no additional use was made of rail or if a second BLF is not taken forward, the HGV volumes would be likely to increase.[2] That outcome would not respond to the strong representations from stakeholders, and neither would it maximise the use of rail and waterborne transport options, which is something preferred by planning policy, where that is cost-effective.

4.1.4 **Table 4.1** above illustrates the effects of incremental capacity increases for rail and the BLF. The option which limits HGV movements to no more than the minimum practical requirement of 40% would maximise the sustainable movement of bulk material. That option is also supported and preferred by SZC Co.'s logistics and supply chain partners who welcome the confidence that rail movement of known concrete making materials can bring, together with the additional capacity the BLF offers for bulk backfill materials and the choice it may be able to offer for some elements of the concrete materials.

4.1.5 Consequently, SZC Co.'s preferred option would involve the use of four trains per day, five days a week with the resilience of being able to operate on a sixth day if necessary, together with a second, temporary BLF for bulk movements assumed to be operating at 70% of its campaign capacity. This option has been taken forward as the preferred and most likely option in the revised environmental and transport assessments.

4.1.6 It is not likely that a fifth train path can be secured and, therefore, the availability of a fifth train has not been assumed.

4.1.7 SZC Co.'s preferred option would always be to maximise the use of rail capacity as this has the highest degree of resilience and is best suited to the majority of the bulk materials requiring transport to site. The marine option also has the capacity for large volumes of material import and, in particular, could be tailored and managed to meet the backfill import requirements with the proposed level of additional on-site stockpiling to buffer the material supply outside of the campaign window.

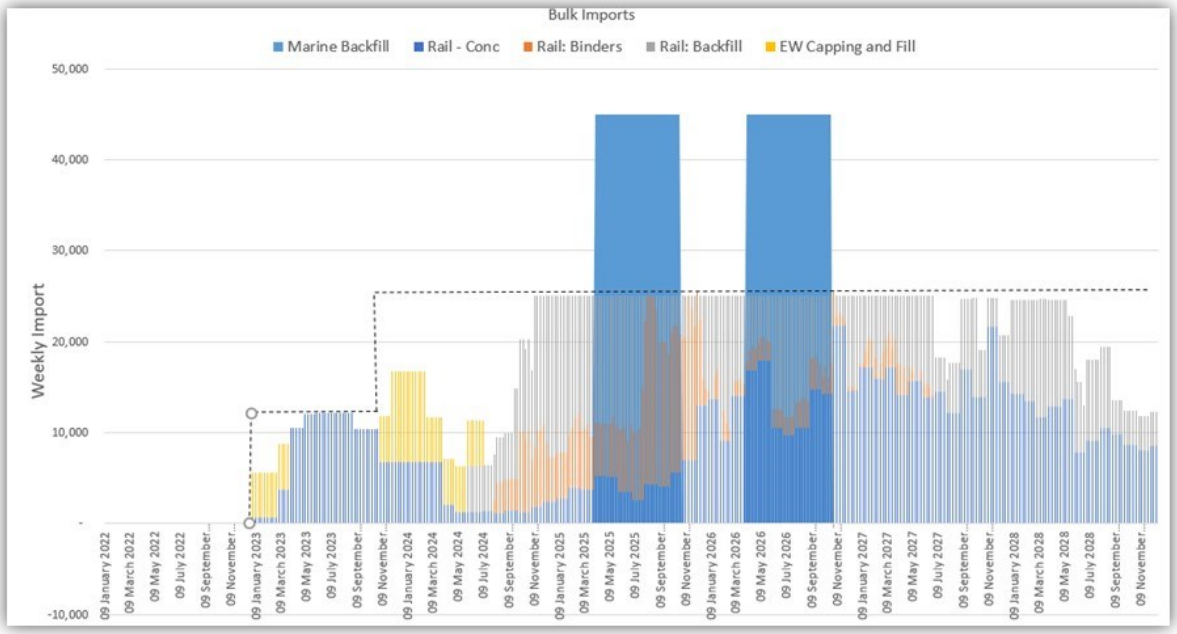
4.1.8 Due to the nature and source of the concrete materials requirements, an absolute minimum of two trains per day is required to allow haulage of the material to site and the continued production of concrete. However, two trains per day would not be sufficient to ensure continuous concrete production during the peak period without the additional capacity provided by the temporary BLF or via increased HGVs by road.

[2] The limits could potentially be observed through measures to smooth the flow, make more use of stockpiles or extend the construction period but those matters are not proposed. On a like for like basis, the numbers of HGVs would increase.

4.1.9 To limit HGV movements to the minimum of 40%, BLF campaigns would be required in 2025 and 2026, with four trains per day operating between Q3 2024 and Q2 2027. From this point, the backfill requirements reduce, and the main bulk import is for concrete production. The released BLF capacity at that point could potentially be used to transport concrete aggregates and reduce rail movements.

4.1.10 **Plate 4.1** provides a histogram of material movements by mode across the construction period, assuming four train movements per day and the use of the temporary BLF.

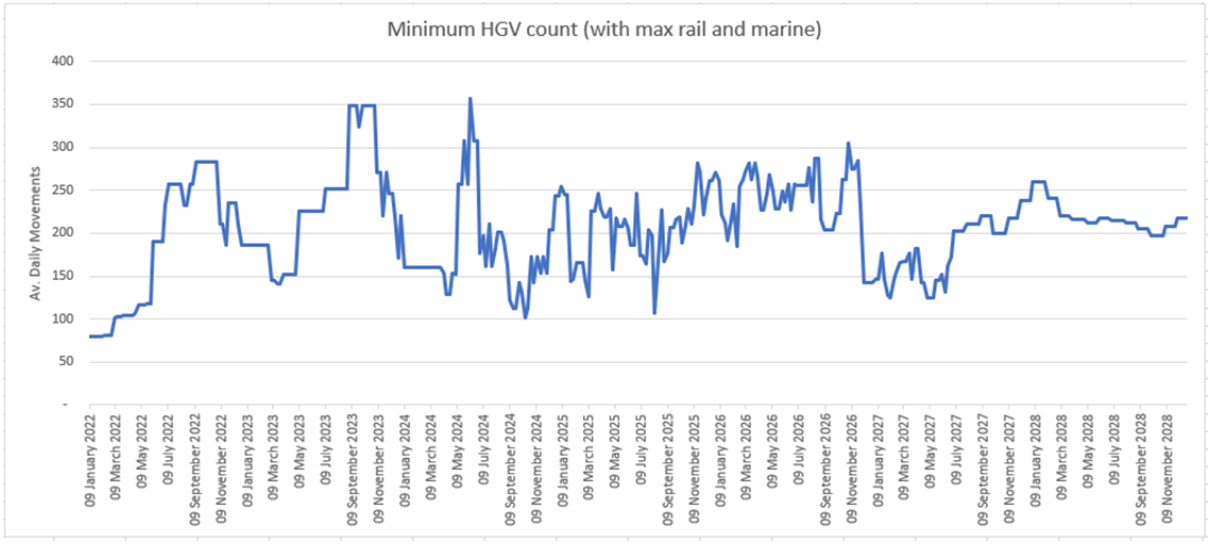
Plate 4.1 Materials by mode: enhanced rail and bulk material BLF



4.1.11 With the additional rail and BLF capacity, HGV movements would be significantly reduced from the limits set out in the Application.

4.1.12 Early years movements would be unaffected (as the green rail route would not be in place and the temporary BLF would not have been constructed). For the peak construction period, however, typical day HGV movements would be reduced from 325 HGVs (650 movements) to 250 HGVs (500 movements), whilst peak HGV activity would reduce from 500 per day (1,000 movements) to 350 per day (700 movements). A forecast of HGV numbers over the construction period on that basis is set out in **Plate 4.2**.

Plate 4.2: Minimum HGV numbers over the construction period.



5 CONCLUSION

5.1.1 This document explains the approach being taken by SZC Co. to ensure resilience and flexibility in its strategy for the movement of construction materials to the Sizewell C Project site.

5.1.2 Revisions proposed to the Application and its assumptions are intended to enhance that resilience but also to respond to clear feedback from stakeholders that sustainable modes must be optimised.

5.1.3 The Application as proposed to be revised meets the requirements of national policy to prefer the use of rail and sea for the movement of materials where that is cost effective by adding to the extensive mitigation measures already proposed in the Application through the addition of a temporary beach landing facility and by creating the opportunity for the additional movement of freight by rail.

5.1.4 This FMS recognises that there are choices to be made but proposes a preferred strategy which is capable of optimising rail and sea transport and minimising the use of HGVs. That preferred strategy would produce an outcome in which the proportion of construction materials moved by HGVs would reduce from the figure of 61% assumed in the Application to 40%.

5.1.5 The relative balance to be struck between transport modes can now be examined and, through this revised approach to its FMS, SZC Co. has provided the environmental, transport and practical information necessary to enable any necessary controls to be put in place to regulate the use of the proposed transport infrastructure to ensure that an appropriate balance is struck in the public interest.

REFERENCES

1. Department of Energy and Climate Change, Overarching National Policy Statement for Energy (EN-1). (London: The Stationery Office, 2011)