



The Sizewell C Project

9.79 Written Summaries of Oral Submissions made at Issue Specific Hearing 8: Air Quality, Noise and Vibration (25 August 2021)

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1 ISSUE SPECIFIC HEARING 8: AIR QUALITY, NOISE AND VIBRATION

1.1 Introduction

1.1.1 This document contains the Applicant's written summaries of the oral submissions made at Issue Specific Hearing 8 (ISH8) on air quality, noise and vibration, including monitoring and mitigation, held on 25 August 2021.

1.1.2 In attendance at ISH8 on behalf of the Applicant was:

- Hugh Flanagan of Francis Taylor Building (Counsel);
- Mike Brownstone of Resound Acoustics (Technical Lead - Noise);
- Rupert Thornely-Taylor of Rupert Taylor Ltd (Technical Expert - Noise);
- Richard Lowe of Aecom (Air Quality Lead);
- John Rhodes of Quod (Planning Manager (Strategic));
- Kirsty McMullen of KMC Planning Ltd (Transport Planning Lead).

1.1.3 Where further information was requested by the Examining Authority (ExA), this is contained separately in the Applicant's **Written Submissions Responding to Actions Arising from ISH8** (Doc Ref. 9.83).

1.2 Matter arising from Open Floor Hearing 10: PM10 and PM2.5 monitoring

1.2.1 Dr Richard Lowe, on behalf of the Applicant, explained that the Applicant was proposing to carry out PM10 monitoring, but that it was not currently proposed to undertake PM2.5 monitoring, on the basis that PM2.5 monitoring was not justified by the impacts of the proposed development, and further that this position was agreed with East Suffolk Council (ESC). Dust deposition monitoring would also be undertaken, which would be done by SZC Co.'s contractors and reported to the Environment Review Group (ERG). In addition, NO2 monitoring would be undertaken on the road network, as is currently undertaken by ESC, and would be financially supported by the Applicant.

1.3 Agenda Item 2: the assessment of the noise and vibration impacts of the Proposed Development

- a) (i) Whether the potential noise and vibration impacts of the Proposed Development can be satisfactorily assessed from the information submitted by the Applicant; (ii) If not, what additional information would be required?

1.3.1 Mr. Flanagan, Counsel for the Applicant, explained that there had been significant engagement between the Applicant and the authorities on this issue, and that ESC's requests for information had been responded to or in the case of the latest request had been responded to in draft and would be submitted at Deadline 7.

1.3.2 Mr Rhodes on behalf of the Applicant explained in response to comments from ESC regarding the **Rail Noise Mitigation Strategy** (RNMS) [AS-258] and information relating to rail noise that the Applicant had sought to share information openly and to keep everybody up to date. Fortnightly meetings were held jointly with the local authorities and Network Rail and the position was also recorded in two Statements of Common Ground with Network Rail [REP2-074 and REP5-095]. In respect of ESC's concern that the RNMS must be deliverable, Mr Rhodes observed that requirement 25 of the **draft Development Consent Order** (DCO) (Doc Ref. 3.1(G)) requires the Applicant to submit and have approved by ESC the RNMS before the Applicant can operate freight trains. That means that the RNMS will have to be delivered and provides the necessary protection. The Applicant had not yet received detailed feedback on the RNMS from the authorities, but if the authorities had detailed comments then the Applicant would consider and seek to address them. Mr Rhodes further explained that the Applicant had, in response to earlier questions from the Examining Authority, identified how the RNMS would be delivered and enforced, for example that track access contracts with Network Rail would provide the necessary speed limit controls, whilst SZC Co. would also embed its commitments in contracts with the Freight Operating Company (ExQ1 NV1.11) [REP2-100]. The two Statements of Common Ground with Network Rail confirm that the Applicant and Network Rail agree that the programme for delivery of the matters in the RNMS and other rail matters is on schedule and progressing.

1.3.3 Mr Rhodes explained that there are two items which are deliberately not included in the **RNMS** [AS-258]. First, improvements to the East Suffolk Line are not included because it is not yet clear whether they are deliverable and because they are not necessary to meet policy requirements. It is the Applicant's objective to deliver them, an objective shared with ESC and track enhancement is certainly desirable, but the acceptability of the noise effects does not depend on them. Secondly, acoustic barriers adjacent to

the rail line are not included. The Applicant has submitted a paper on acoustic fencing adjacent to rail lines (**Appendix I** to SZC's comments at Deadline 6 on earlier submissions) [[REP6-024](#), electronic page 203], which concluded that such acoustic barriers were not in general likely to be an appropriate solution. The Applicant has since heard from Network Rail who have stated in writing in absolute terms that they will not accept the provision of acoustic barriers on their property. Network Rail explained that position to the local authorities at the regular meeting the previous week.

- 1.3.4 Notwithstanding this position, Mr Rhodes explained that SZC Co. will continue to explore whether barriers in specific locations might nevertheless be sensible on private land. Outside Network Rail land, there are two particular locations where the Applicant considers that it is worth exploring whether the balance between noise attenuation and visual impact might indicate that barriers are appropriate, namely in the northern part of Whitearch Park and at Campsea Ashe. He said that he is aware that ESC's planning officers are also now looking at these matters in response to the Applicant's submitted planning review of barrier locations [[REP6-024](#), electronic page 203]. He expected that it would be agreed that putting up what would need to be a large barrier through the centre of Woodbridge, for example, would not be sensible. These matters will be discussed further with ESC.
- 1.3.5 In response to comments from Suffolk County Council (SCC) on mitigation of road noise through the use of quiet road surfaces, Mr Rhodes explained that the Applicant has been doing work and having discussions with SCC on this matter and a meeting with SCC is scheduled (see further below).
- 1.3.6 Mr Brownstone on behalf of the Applicant explained that receptor and monitoring locations had been agreed with ESC in advance of undertaking the assessment and that they were a suitable and representative sample of locations to make a robust assessment. In any event, although the monitoring data informs the category of construction noise threshold that would apply, the monitoring data is of limited use in terms of the actual assessments of construction and road traffic noise.
- 1.3.7 On operational noise from the main power station, Mr Brownstone provided a detailed explanation of why ESC's requested night time threshold of a 35dB rating level was not appropriate. Setting limits as a rating level is problematic in that rating levels include corrections for different acoustic character, but those are to be judged in the context of the receptor and once the power station is up and running, which cannot be reliably known in advance for the power station. A rating level for something as complex as a power station is unreasonable therefore. The question of whether there should be a limit at all is something dealt with below. In response to a

question from the ExA as to whether, if a threshold was imposed, it should be measured from facades of the receptors or from the site boundary, Mr Brownstone confirmed that measurement at the receptors is appropriate.

- 1.3.8 On construction noise thresholds, Mr Brownstone explained that there had been further positive engagement with the authorities and their appointed consultants. A further draft of the **Noise Monitoring and Management Plan** (NMMP) [REP6-029] would be submitted to the ExA to reflect those discussions. The revised draft NMMP that has been shared with the authorities contains a process akin to a process under s.61 of the Control of Pollution Act 1974. In particular, the NMMP will require the Applicant to go to ESC to agree a bespoke mitigation plan if it wishes to undertake construction works where the noise will exceed 55dB, and if ESC do not provide their agreement then the works cannot go ahead. There is also a bespoke dispute resolution procedure proposed, which can be activated if agreement is not reached between the Applicant and ESC and which provides for determination by an independent acoustic expert. Both ESC and the Applicant recognise that the magistrates court, to which recourse can be had under the s.61 procedure, is not an ideal forum for resolving technical noise disputes and the bespoke dispute resolution process is proposed as an enhancement in this respect.
- 1.3.9 Mr Brownstone responded to comments by Mr Blacklock of Create Consulting, noting that the Applicant would be responding in writing to the submissions by Create at Deadline 7. In short, however, the Applicant does not agree with the criticisms made by Create of the submitted assessments.
- 1.3.10 On a query from an interested party as to acoustic fencing adjacent to the Green Rail Route, Mr Rhodes explained that it is not an area where benefits of acoustic fencing had appeared likely, but that the Applicant would consider it further.
- b) Whether the SOAEL, LOAEL levels for construction, traffic, rail noise and vibration are set at appropriate levels
- 1.3.11 Mr Flanagan on behalf of the Applicant welcomed the agreement, confirmed orally by ESC and SCC, that the SOAEL and LOAEL levels were all agreed for the various noise sources.
- 1.3.12 Mr Rhodes noted that it was important to be clear on the various levels and thresholds. In policy terms, the obligation is to avoid SOAEL. It would not be right to say that SOAEL cannot be achieved through noise insulation. The purpose of noise insulation was exactly that and its role in that context is directly endorsed in guidance, policy and precedent. SZC Co. also recognises, however, the requirement to mitigate and minimise between

LOAEL and SOAEL, which the Applicant is pursuing through a range of measures.

1.3.13 For rail noise, he made it clear that the **Noise Mitigation Scheme** (NMS) [REP6-015] applies a threshold for insulation below SOAEL, in response to a request from ESC that a lower level be applied and it is understood that that is agreed as an acceptable approach, as long as the RNMS is delivered.

1.3.14 In response to Mr Blacklock, Mr Brownstone confirmed that LOAEL for construction noise was set at a threshold equal to the measured ambient noise levels, but that mitigation is applied irrespective of whether the construction noise levels are above or below LOAEL through the **Code of Construction Practice** (CoCP) (Doc Ref. 8.11(D)).

c) Whether higher standards of protection are appropriate in light of the potential length of the construction period

1.3.15 Mr Brownstone explained the rationale for the 60dB and 55dB construction noise thresholds in the **CoCP** (Doc Ref. 8.11(D)) and the **NMMP** [REP6-029]. The 60dB threshold would remain in the CoCP but the NMMP also introduced a level of 55dB at which a bespoke mitigation plan had to be agreed. The 60dB level already represented a strict threshold, which was lower than guidance in BS5228. If one was to apply the '5dB change' method or the 'ABC' method, a higher limit of at least 65dB would result. Accordingly, the potential length of the construction period had already led to higher standards of protection being adopted, and the additional 55dB threshold was a further higher standard still.

1.3.16 As to the detail of the 55dB threshold, Mr Brownstone explained that Mr Bear on behalf of the authorities was wrong to suggest that a separate and lower evening threshold was required. BS5228-1:2009+A1:2014 at Annex E.5 only advises a daytime limit of 55dB and does not advise a separate evening threshold. The Applicant would set out its position on this fully in written submissions.

1.3.17 On the standard of low noise road surfacing, Mr Brownstone responded to points raised by SCC as to the reduction in noise level that could be achieved by a low noise road surface. In short, there are different levels of surfacing, including levels 2 and 3 referred to by SCC, and the Applicant is in dialogue with the SCC about what might be appropriate and in what location.

1.3.18 On vibration from road traffic, Mr Rupert Thornely-Taylor for the Applicant explained that SZC Co. has thoroughly reviewed the evidence on this subject, which is a subject that has been extensively studied in the

literature. There is often community concern that vibration might cause damage to buildings, but the evidence is in fact that the circumstances in which that will occur are very limited. It is only really where the formation of the land underneath the road is very soft that there is risk. Imperfections in road surface may cause vibration but those can be remedied. Likewise with vibration from rail freight, popular concern as to the impact on buildings often does not reflect the evidence. On the East Suffolk Line, there is rail vibration caused by joints in the rail and certain types of rail, and the Applicant is in the process of seeking to discover where those features are in the rail line and whether they can be taken out and that source of vibration removed. In short, the Applicant is alive to the concerns in respect of both rail and road and addressing them in so far as they need to be addressed.

- 1.3.19 Mr Flanagan on behalf of the Applicant observed that there is provision in Schedule 16 of the **draft Deed of Obligation** (Doc Ref. 8.17(F)) requiring the Applicant to undertake a highways condition survey of the B1122 and to fund the maintenance of the B1122 in good repair both prior to the opening of the Sizewell Link Road (SLR) and to make good any damage to the B1122 following the opening of the SLR.

d) **Operational noise at the MDS and traffic noise from the new road**

- 1.3.20 Mr. Flanagan explained that the Applicant's position was that noise limits were appropriate for those items of plant which could reasonably be controlled or limited. Accordingly, noise limits had been accepted for plant on the Associated Development sites and on the CHP at the campus. An operational noise limit was not, however, appropriate for the main power station. The power station had been designed to be as quiet as reasonably possible. It includes a large assemblage of plant and processes which are complex and highly regulated. Redesigning the power station or changing plant in order to attenuate noise further is not possible in the same way that it may be possible to select different plant at Associated Development sites for example. For that reason, a night time operational noise limit imposed by way of requirement, as sought by ESC, was inappropriate in principle. It would serve no purpose as the power station noise level cannot be significantly reduced. A requirement which serves no purpose cannot satisfy the tests for imposition of a requirement in NPS EN1 paragraph 4.1.7. Further, ESC's request for a limit does not engage with the scenario of what would happen if their limit was exceeded. It is not realistic that ESC would or should seek to stop the nuclear power station operating.
- 1.3.21 Mr Brownstone addressed the appropriate noise level if a limit on operational night time noise from the main power station was to be imposed, without prejudice to the Applicant's position that no such limit was justified as a matter of principle. A limit of 45dB LAeq 1hr measured at

dwelling facades between 11pm and 7am was imposed in the DCO for Hinkley Point C (requirement MS12). The Applicant considered that to be appropriate and it was achievable. Hinkley Point C is located in a broadly similar rural and coastal context to Sizewell C, and is the same design of power station, such that the level would be similarly appropriate. The Applicant had also discussed a figure of 40dB L_{night} with the authorities, which was broadly equivalent. The authorities' suggested level of 35dB on a rating level was however certainly not appropriate, given it was both uncertain and unachievable. It is critical that an unachievable level is not imposed on any consent for the proposed development, as that could render the development undeliverable. The Applicant will expand upon further on this issue in its written submissions.

1.4 Agenda item 3: the implications of the traffic noise from the Proposed Development during construction and operation

a) The early years

- 1.4.1 Mr Rhodes explained that when the Applicant had observed in its paper on mitigation for B1122 communities during the Early Years [REP2-112] that the impacts on the B1122 communities should continue for no longer than necessary, the Applicant was not relying on any particular guidance as to noise or other impacts so as to distinguish impacts during the Early Years period from the rest of the construction period, but rather the Applicant considered this to be an appropriate thing to do as part of limiting the impacts of the proposed development as far as practical. There was a balance to be reached in respect of progressing the SLR but also the project as soon as possible. A similar judgement had to be made at Hinkley where the Cannington Bypass was progressed but in parallel with the HPC project as a whole. The Applicant considered that the balanced judgement it had reached in the present case was the right one. This was so particularly due to the mitigation being put in place for the B1122 communities in the Early Years including an enhanced offer to mitigate all properties facing the B1122, of which there were 84, which would be around four times the number of properties that would otherwise qualify to be insulated under the NMS [REP6-015]. It would not be appropriate to suggest that this was the only mitigation proposed. Very extensive mitigation is put forward to limit traffic movements and hence road traffic noise. This includes embedded mitigation such as the Park and Rides, which serve an operational purpose in terms of delivering the project but also a mitigation purpose in taking cars off the roads. The Applicant's huge investment in rail and marine is proposed in order to reduce HGV movements and enable them to be capped, whilst bypasses are proposed for the most affected communities. It is in the Applicant's view a fair and substantial mitigation package. The start times for HGV arrivals to the main development site (MDS) had also

been put back to 7.15am, with no departures after 11pm, in recognition of the sensitivity of the B1122. In response to a question from the ExA, Ms McMullen stated that the 7.15am – 11pm timing restriction in the **Construction Traffic Management Plan** (CTMP) [REP2-054] would be clarified in written submissions and the CTMP and the wording checked to make sure it was robust. It was not the intention for HGVs to be arriving before 7.15am or departing after 11pm.

- 1.4.2 Mr Brownstone confirmed that the noise assessment had in any event been done on the robust and conservative basis that there could be night-time HGV movements, even though this would be restricted as stated above, and further that the Applicant's assessment showed that the noise impacts would be acceptable.
- 1.4.3 Mr Flanagan, in response to observations by SCC, welcomed SCC's confirmation that in SCC's view no Grampian requirement should be imposed to preclude works on the MDS until the SLR was in place. Mr Flanagan also welcomed SCC's confirmation that it was now satisfied with the revised vehicle caps in the **CTMP** [REP2-054] for the early years, whereby buses had been included, such that they were HDV rather than HGV limits.
- 1.4.4 Mr Brownstone, in response to queries from SCC's acoustic consultants, explained that a written response had already been provided to SCC's request for the number of properties that might fall within the **NMS** [REP6-015] on existing roads. This explained that the assessment methodology meant that it was not possible to provide that information at this stage, but that in any event the Applicant considered the NMS to be a fair and generous offer which went above and beyond policy by addressing the significant adverse effects of the scheme, in an EIA context, by proposing noise insulation for properties on existing roads (a proposal that Mr Brownstone suggested was without precedent). However, the Applicant would not take responsibility for impacts not caused by the project. The Applicant is not aware of any mitigation scheme offering insulation for existing roads on any equivalent project, and nor have the authorities pointed to any such precedent.
- 1.4.5 In response to a request from the ExA, the Applicant confirmed that it would provide a 'smoothed-out' HGV profile which showed what the profile would look like when it was managed so as to stay within the caps, as the Applicant had explained that it would be.

b) Traffic noise upon completion of the SLR and at the Park and Ride sites

i. Effect of shift patterns and freight management strategy

1.4.6 These two items on the agenda were dealt with together. Ms McMullen on behalf of the Applicant, in answer to a query from the ExA, explained that in the Early Years 1,500 workers had been assessed, of whom 600 would be living on the 400 pitches on the caravan park, and they would be bused to work between the caravan park and the MDS. The remaining 900 workers would be parking either at the Land East of Eastlands Industrial Estate (LEEIE) parking facility or at the MDS. Those parking at the LEEIE would then be bused to site. As a robust case, as set out in **Table 27 of Appendix 7B of the Consolidated Transport Assessment** [[REP2-046](#), electronic page 460], 400 of the 1,500 early years workforce had been assessed as working the night shift, with 320 needing to be bused from the LEEIE to the MDS (the remaining 80 workers would travel by car directly to the MDS). Assuming as a rule of thumb 40 people per bus, given 320 people that would be around 8 buses to carry the shift workers each way, although they would only be between the Land East of Eastlands and the MDS. It should be noted however that not all of these workers (and therefore buses) would travel during the 'night-time' hours (for the assessment of Noise and Vibration) of 11pm-7am.¹

1.4.7 Ms McMullen explained by reference to **Table 43, Appendix 7B of the Consolidated Transport Assessment** [[REP2-046](#), electronic page 460], that between the LEEIE and the secondary site access, 90 two-way buses had been assessed over the course of a 24 hour period and 90 two-way buses between the LEEIE and the SZB access, so that it is a 50 / 50 split.

1.4.8 In answer to a question from the ExA, the Applicant explained the approach to attenuating traffic noise prior to the delivery of insulation via the **NMS** [[REP6-015](#)]. It was a comprehensive approach that involved significant embedded mitigation, including the two village bypass and the SLR, as well as the freight management strategy generally and the investment in rail and marine. There was an obligation to survey the B1122 and fund maintenance to keep it in good repair.

1.4.9 Further work was also being undertaken to explore what could be done within the Order limits by way of landscaping which would attenuate noise, and the Applicant had written to certain stakeholders in the past week setting out potential options and describing for instance how landscaping and bunds could mitigate impacts around Farnham Hall, Mollett's Farm and

¹ Further detail on this subject is provided in the Applicant's **Written Submissions Arising from Issue Specific Hearing 8**

on the SLR and offering to work with stakeholders to work up that design. It is premature to fix these details at this stage because they need to be worked up with stakeholders before they can be submitted, post-consent, for approval. That additional screening was not something relied on by the Applicant in the ES but it could be a benefit and the Applicant would work towards optimising the detailed design. The Applicant offered to provide that correspondence with stakeholders, which was not written confidentially, to the ExA which the ExA stated would be useful.

1.5 Agenda item 4: night time rail noise

a) Whether the operation of the rail freight as proposed is an appropriate mechanism for delivery of the proposed development

1.5.1 Counsel for the Applicant said that the Applicant would take away a drafting point raised by ESC on requirement 25, in particular whether the requirement should be tied to the draft **RNMS** [AS-258] which had been submitted to the examination.

1.5.2 In response to observations from IPs, the Applicant explained that as set out by Mr Bull in ISH2, and more fully in the initial **Statement of Common Ground with Network Rail** [REP2-074], a passing loop at Campsea Ashe would require interventions at 45 level crossings, and having worked with Network Rail it was concluded that it was not a deliverable solution based on the timescales required for the project. The ruling out of a passing loop was not through any want of engagement with or by Network Rail. The engagement has been and continues to be proactive and productive but the issue with the passing loop is rather the sheer scale of interventions.

1.5.3 On night time rail noise, Mr Brownstone explained that the project complied with the policy imperative to avoid SOAEL in respect of rail noise (and all other noise sources), notwithstanding the strict approach to SOAEL taken by the Applicant. The use of rail in the freight strategy also complied with the policy in NPS EN-1 (para 5.13.10) that rail (and water-borne) transport is to be preferred over road based transport. Four trains were proposed although it is important to note that there is no complete alternative to rail and all potential strategies would involve a minimum of two trains per day, as set out in the **Freight Management Strategy** (FMS) [AS-280] (para 2.1.14 and Table 4.1). There would be four trains between 2024 and 2028 but lower numbers either side of this, as shown in Table 4.1 of the FMS.

1.5.4 The **RNMS** [AS-258] contains a raft of measures to avoid SOAEL and mitigate and minimise between LOAEL and SOAEL, including track replacement on the branch line, altering the change arrangements at Saxmundham, speed limits, and the use of quieter locomotives. All this was

secured and committed to via the RNMS and requirement 25 and because of that there was no question as to delivery of it – the Applicant is obliged to deliver the RNMS in order to deliver the project. The **NMS** [REP6-015] then comes on top of that to avoid SOAEL where it is needed to do so. Mr Brownstone confirmed that the process of doing the work to survey and then provide insulation had been carefully programmed so that it all could be done before the start of the construction work or freight movements which it was required to insulate against. It is a commitment within the NMS that insulation will be offered to be in place in good time before the activities commence which give rise to the noise effects.

1.5.5 Mr Brownstone responded to a query from Ms Bateman regarding Aldhurst Farm and explained that it could be seen from **Figure 9.3.C.7** in **Volume 3, Appendix 9.3.C** of the **First ES Addendum** [AS-257] that noise levels at Aldhurst Farm were substantially below the point at which there would be a significant adverse effect. Mr Brownstone confirmed to the ExA that this detailed reference and response would be provided in written submissions.

1.5.6 Mr Thornely-Taylor responded on rail vibration issues, noting that the rail line comes close to some dwellings, in particular within about three metres in Albion Street, Saxmundham and that has resulted in a close study of the effects and issues by the Applicant. The present circumstances were unusual in that groundborne and airborne noise were usually not experienced together, but here they were and that had been reviewed in considerable depth and influenced the assessment criteria and the measures which needed to be taken to avoid SOAEL and to get as close to LOAEL as possible. It had involved commissioning trains to run up and down the branch line to be monitored and also monitoring on the East Suffolk Line. Airborne noise at a short distance can be mitigated by insulation, including alternative ventilation which may be desirable in warm weather. Groundborne noise arises from discontinuities in the rail and a significant effort is underway to identify the discontinuities with a view to moving or removing them. The other tool in the armoury is speed, as slower speeds will reduce the effect. Finally Mr Thornely-Taylor noted in response to comments from IPs that the noise experienced from the nuclear flask trains that used to run on the line would not be replicated in the Applicant's proposals because the modern wagons proposed by the Applicant, in contrast to the older nuclear flask trains, have suspension in their bogies which considerably reduces the unsprung mass, which is what really causes the effect.

1.5.7 Mr Rhodes noted that the application material makes reference to five trains per night because it had not been completely ruled out but that does not appear to be deliverable and is not being pursued. Accordingly, the Applicant will consider how a limit might be imposed.

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- 1.5.8 In response comments from IPs, Mr Rhodes confirmed that trains would not need to stop at Saxmundham due to the work on the points proposed there. That again could be confirmed in the Applicant's **Written Submissions to ISH8** (Doc Ref. 9.83).
- 1.5.9 Further, the **RNMS** [\[AS-258\]](#) at paragraph 3.4.3 provides for trains not to idle but to be shut down when they are held on the line.
- 1.5.10 On the programme for track improvement, Mr Rhodes explained that there were three stages. The first is survey of the line, which is necessary given there is insufficient recorded detailed information as to the location of the welds, such that surveys in person and by drone are needed. A legal agreement with Network Rail for that work should be concluded this week and it is expected that the survey will happen essentially immediately after that. Then there is a design stage and an implementation stage. Network Rail has stated this week that they expect to be in a position of sufficient knowledge by September of this year, i.e. next month, to book 'possessions' on the East Suffolk Line for the replacement works. All this would mean that it is certainly expected that track replacement can take place before the first operational Sizewell C train. The Applicant would seek to keep the ExA apprised of these ongoing discussions with Network Rail through the examination, whether by way of further Statements of Common Ground or otherwise.
- 1.5.11 In response to ESC's observation that the **NMS** [\[REP6-015\]](#) needs to be a generous scheme in light of the nature of the impacts, Mr Rhodes explained that in the Applicant's view it clearly was a generous scheme, particularly in that it applies to rail noise at a level below the SOAEL, at which it is arguably necessary and which is the statutory level for insulation from rail noise for new lines (there being no statutory entitlement to insulation for rail noise from existing lines, which further illustrates the generous nature of the NMS). The NMS allows for tailored approaches in cases where something in the construction of the building requires it. Mr Kemp's desire for the NMS to be monitored has also been addressed, for example if the insulation to a property needs to be revisited. The specification of insulation includes ventilation, enabling windows to be kept closed.
- 1.6 **Agenda item 5: mitigation and controls**
- a) The Code of Construction Practice (CoCP)
 - b) Noise Monitoring and Management Plan (NMMP)
 - c) Noise Mitigation Scheme
 - d) Rail Noise Mitigation Strategy (RNMS)
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e) Working hours

- 1.6.1 Mr Brownstone explained, in response to a question from the ExA, that it was correct that the two village bypass and SLR were primary mitigation for the MDS, and there was also primary mitigation for the two village bypass and SLR in turn. In terms of delivery of these two associated developments, Mr Rhodes confirmed that the position was as discussed in earlier Issue Specific Hearings, to the effect that the Applicant was obliged by Schedule 9 of the draft **Deed of Obligation** (Doc Ref. 8.17(F)) to use reasonable endeavours to deliver them in accordance with the timetable in the **Implementation Plan** [REP2-044].
- 1.6.2 In response to a point regarding maintenance of the SLR and two village bypass raised by SCC, Mr Flanagan explained that article 21(3) of the **draft DCO** (Doc Ref. 3.1(G)) already provided that various works, including the two village bypass and SLR, could not be commenced until an agreement had been entered into so as to reasonably satisfy the highway authority that provision had been made regarding maintenance. Accordingly, the point had already been addressed.
- 1.6.3 As to the relationship of the bespoke mitigation plan procedure proposed by the Applicant for the **NMMP** [REP6-209] with s.61 of the Control of Pollution Act 1974, the Applicant has already dealt with the merits of this above, but in response to further queries from ESC, the Applicant explained that in no way would the procedure cut down ESC's existing powers or represent an inferior process. ESC has power to impose conditions on a s.61 consent, but the bespoke mitigation plan would require ESC's agreement, which would enable plans to be settled with terms and conditions acceptable to ESC. Works exceeding the noise threshold could not be undertaken without that agreement, such that ESC would have no less control than under s.61 and could require the bespoke mitigation plan to be amended to their satisfaction in order to agree it. The Applicant made clear that it considered the proposed bespoke procedure to be an enhancement on what was otherwise available for the reasons already given. It is hoped that this might be agreed with ESC once ESC has had time to properly digest what has been proposed.
- 1.6.4 As to Saturday afternoon working at the Associated Development sites, the Applicant explained that the programme did not strictly necessitate or rely on Saturday afternoon working, and that the **CoCP** (Doc Ref. 8.11(D)) at Part C paragraph 1.1.6 provided that where possible noisy works would be avoided on Saturday afternoons between 13:00 and 19:00. However, flexibility was left for Saturday afternoon working so that on dry afternoons, particularly in the summer months, there would be the possibility to do some

earthworks to accelerate the delivery of the Associated Development sites, as early delivery would be a benefit.

- 1.6.5 On temporary rehousing, the Applicant confirmed that it was not anticipated that the noise levels would in fact reach the levels necessary so as to require temporary rehousing. In the unlikely event it was necessary, it would only be needed as temporary short term rehousing due to construction noise, and not, in response to a query by an IP, long term rehousing for example due to road or rail noise. If temporary rehousing is required, it would be tailored to individual preference, and it is something that is tried and tested on numerous projects elsewhere.
- 1.6.6 As to IPs' observations about noise in gardens, Mr Brownstone observed that it was of course right that noise insulation could not attenuate that, but it was important to take account of the Applicant's full package of mitigation which did certainly address the issue, for example through controls on construction noise through the **CoCP** (Doc Ref. 8.11(D)).
- 1.6.7 Mr Brownstone responded to a query about borrow pits from Mr Blacklock by explaining that Annex E.5 does not apply to the borrow pits because the project is not a "long-term substantial earth moving" project, which is what Annex E.5 is concerned with. It is also impossible and inappropriate to disaggregate the borrow pits from everything else that is going on.
- 1.6.8 Mr Flanagan responded on the agenda item concerning whether the ExA should disapply the defence of statutory authority, which is contained in s.158 of the Planning Act 2008. The Applicant's position is that it would clearly be inappropriate to disapply that defence. Rather, the defence should apply in the normal way. First, the Applicant was not aware that anyone had suggested that the defence be disapplied. Secondly, a comprehensive package of controls against impacts was provided by way of the **CoCP** (Doc Ref. 8.11(D)), **NMS** [\[REP6-015\]](#) and **NMMP** [\[REP6-209\]](#) and through those the ExA could determine and control what impacts were acceptable. It was wrong for a nuisance claim to be allowed to upset that judgement as to acceptability. There is also provision for compensation under s.152 if a nuisance claim cannot succeed by reason of the s.158 defence of statutory authority, which shows how Parliament has struck the balance. The public interest weighs in favour of infrastructure projects such as the present one benefitting from the defence of statutory authority so that they can go ahead without the threat of nuisance claims, including the project being restrained by injunction.

1.7 Agenda item 6: Air quality

- a) Methodology of assessment and whether methods used are appropriate to ensure that the Proposed Development will meet the highest environmental standards both during construction and operation
- b) PM10 and PM2.5 and NOx Action levels, monitoring locations and reporting procedures

1.7.1 Dr Lowe for the Applicant explained that the position on the air quality assessment, monitoring and reporting was largely agreed and an updated version of the **Statement of Common Ground** recording that would be submitted at Deadline 7. *[Post Hearing Note: the Statement of Common Ground with ESC and SCC is to be submitted at Deadline 8].*

1.7.2 Dr Lowe further explained that through the measures proposed the Applicant did not consider that there was any risk of exceedance of national Air Quality Strategy objectives or standards. Nor were any significant effects predicted across air quality from the different pollutants that are potentially emitted from the different sources in terms of the specific points raised relating to the monitoring by IPs.

1.7.3 In addition to the monitoring proposed for dust, which will be deposited dust, there will also be monitoring for PM10.

1.7.4 The Applicant's position on PM2.5 monitoring was as set out at the beginning of this ISH8, namely that it was not currently proposed to undertake PM2.5 monitoring, on the basis that PM2.5 monitoring was not justified by the impacts of this proposed development. In particular, PM2.5 has not been identified as a pollutant where there is a risk of exceedance of the national Air Quality Strategy or objectives, and it is not a pollutant in respect of which the proposed development will give rise to substantial emissions. This position was agreed with ESC. The Applicant did however recognise community concern around PM2.5 as articulated in the issue specific hearing and accordingly the Applicant would include an explanation of its position and approach on this issue in its written submissions.

1.7.5 As to issues raised by IPs around baseline monitoring, the Applicant had done baseline monitoring to support the application and would be doing further baseline monitoring prior to the start of construction, which will be at various locations around areas where it is perceived there may be a potential risk of emissions. Accordingly some of the monitoring, in particular around the MDS and parts of the road network, would be undertaken by the Applicant itself. That would be confirmed in part through the outline Dust

Management Plan (ODMP). Further, the **CoCP** (Doc Ref. 8.11(D)) confirms that in respect of diffusion tube monitoring that is already undertaken by SCC at various locations on the road network, that will continue and the Applicant has made a commitment to financially support the provision of ongoing monitoring at those locations. In response to an observation from ESC, the Applicant observed that to the extent that this was not currently captured in the **draft Deed of Obligation** (Doc Ref. 8.17(F)), that would be added.

- 1.7.6 In agreement with Dr Broomfield for ESC, Dr Lowe observed that it is the annual average results that would be most relevant from an Air Quality Strategy compliance perspective and that is why longer term monitoring methods are generally being proposed, with monthly evaluation of the results. However, the PM10 monitoring proposed would allow for more instantaneous results, which would enable the Applicant and its contractors to use that to inform the approach to dust mitigation and management of dust activities on the site. This more 'real time' monitoring would be responded to accordingly.
- 1.7.7 As to the accommodation campus, this was assessed within the air quality assessment as receptor LE42.
- 1.7.8 As to construction generators, the agreed approach, as also adopted at Hinkley Point C, is that construction generators across the site will all be aggregated together. If they exceed a certain threshold, which is the 50 megawatt thermal input threshold, then the Environment Agency require an environmental permit for the regulation and control of the use of those generators. That permitting process will secure the use of those generators, the emission performance of those generators and how they are controlled and operated. Should they fall below this threshold, the generators themselves would still be captured under the Medium Combustion Plant Directive, which similarly will require permits for their operation, which will also determine their control. On top of all of that, the Applicant will be working with the Councils to agree a position whereby there is an aspiration to limit the use of diesel generators during the construction phase. There is a plan to electrify parts of the construction site, such that the use of diesel generators will be minimised and avoided. There are commitments relating to that as part of the further version of the Statement of Common Ground. *[Post Hearing Note: the Statement of Common Ground with ESC and SCC is to be submitted at Deadline 8].*
- 1.7.9 In respect of ozone, the Applicant understood that there are some community concerns on this subject, but the Applicant agreed with Dr Broomfield for ESC that ozone in the south of England is predominantly from aged plumes that take a number of days to form, such that ozone

comes by the advection of air, typically from France to reach the southern coast of the UK. By that stage, the ozone is formed through the precursors. Accordingly, locally to emission sources, ozone is not formed in any substantial concentrations. Further, large concentrations of CO₂ have the effect of reducing or reacting with ozone that is present. On ozone precursors, the Applicant is committed to using the mitigation and control measures outlined to reduce the emissions from the various aspects of the development through the electrification of the site, and through the use of the Euro VI compliant engines for HDVs. In summary, ozone formation and ozone management is very much a regional issue, indeed a European wide issue, but the Applicant will seek to reduce the NO₂ emissions that may contribute to ozone formation much further downwind.

- 1.7.10 On the issue raised by Mr Sutherell regarding Yoxford school, the Applicant has assessed receptors and generally has identified the closest receptor to the road network and the closest receptors to the main development site. There are a number of receptors in the air quality chapter, including some schools, but the Applicant would confirm in written submissions whether Yoxford school had been assessed in particular. The Applicant did note however that if it has not been assessed, that is likely to be because another receptor which is closer to the road or would receive an even higher potential effect from road traffic has been used, and that would be used as a surrogate for the school.
- 1.7.11 Finally, Dr Lowe explained that in all cases the Applicant found that the background air quality in the area is already good, and the concentrations that are being generated by the proposed development and the traffic associated with the development are very low, such that there is no risk of exceedance of any Air Quality Strategy objectives or standards.
- 1.7.12 In response to a request from the ExA, the Applicant confirmed that it would either identify where in the documentation before the examination that it had responded to the detailed air quality points made by IPs, for example Mr Moss and TASC, or if a response had not already been provided then it would provide a response in writing.
- 1.7.13 On the action level for dust, the Applicant confirmed that the agreed level is 0.2g/m²/day, which the Applicant would set out in writing.
- 1.7.14 In response to a comment from Mr Collins as to how there could be a reduction in levels at the A12 / B1122 junction during the Early Years, Dr Lowe stated that it might be because of an improvement in the baseline concentration and a negligible contribution from the proposed development, but that the Applicant would check that and confirm in writing.

1.8 Agenda item 7: Dust mitigation

- a) Standard that would be enforceable, how monitored and managed to ensure standard is achieved, consequences when/if it is not

1.8.1 The Applicant explained that an outline dust management plan has been produced because at this consenting stage of the project, prior to the award of contracts, not all the detail exists to be definitive regarding the exact mitigation to be used in terms of dust control including the specific locations and durations. The ODMP is secured via the **CoCP** (Doc Ref. 8.11(D)), which itself is secured by requirement 2. A flowchart of the different management techniques has been produced which will be submitted at Deadline 7 as part of the Statement of Common Ground. There are ongoing discussions with ESC as to the detail of the ODMP which would be confirmed in the next iteration of the Statement of Common Ground.

1.8.2 Counsel for the ExA stated, in response to an observation from ESC, that if currently there is no provision in the ODMP providing that it is to be agreed before the potentially polluting works commence, then such a provision can be inserted and the Applicant would take that away for consideration.

1.9 Agenda item 8: Stratford St Andrew and Woodbridge AQMA

- a) Assessment of baseline conditions and subsequent monitoring during construction
- b) Whether mitigation offered would ensure policy requirements are met

1.9.1 Dr Lowe explained that it was not considered that there would be any compromising of air quality in the existing Air Quality Management Areas (AQMA's).

1.9.2 Dr Lowe further explained that the Applicant had agreed with the Councils the proportion of HGVs and buses which would be required to adopt the Euro VI engine standard, which is the high performing engine standard. That is being formalised through the Statement of Common Ground and also in the **CTMP** [REP2-054] and the **Construction Worker Travel Plan** (CWTP) [REP2-055]. No more than 8% of individual vehicles on an annual basis would be exempt from meeting the Euro VI standard, and a registration scheme would facilitate that. The reasons for exemption include the availability of vehicles, but it also allows for local supply contractors to be able to support the project if they cannot meet the Euro VI standard.

1.9.3 In response to an observation from SCC to the effect that they were waiting for further information as to the potential for traffic to be diverted into

Woodbridge, the Applicant confirmed that a meeting on scenario testing for the **Traffic Incident Management Plan (TIMP)** [REP2-053] and the protocol to be put in place following an incident was scheduled with SCC. An updated TIMP would be provided, but Ms McMullen on behalf of the Applicant confirmed that it was not envisaged that there would be any diversion of traffic through Woodbridge in the event of an incident. A full update would likely be provided by Deadline 8, but the Applicant would provide an update in written submissions as to the stage that had been reached in those discussions.

1.10 Agenda item 9: Mitigation and Controls

- a) The Code of Construction Practice (CoCP)
- b) Outline Dust Management Plan
- c) Construction Traffic Management Plan (CTMP)
- d) Construction Worker Travel Plan (CWTP)
- e) Percentage of NMMP at highest standards of environmental control
- f) Percentage of HDV at highest standards of environmental control

1.10.1 The Applicant noted that there was broad agreement on these issues. On the question of Non-Road Mobile Machinery (NRMM) in particular, it has been agreed that Stage 4 compliance will be adopted, or Stage 5 compliance for larger units, and there will be an exemption limit of 15%, to be regulated through a registration scheme again. That percentage is based on a number of factors, in particular the shortage of Stage 4 compliant machinery being available at certain times for large construction projects.

1.10.2 By adopting those measures, and the other measures in the **CoCP** (Doc Ref. 8.11(D)), the Applicant is confident that any significant adverse effects can be avoided for air quality.

1.10.3 In response to a question from the ExA regarding the use of the word “300 deliveries” in respect of the HGV caps in the **CTMP** [REP2-054] (e.g. paragraph 4.4.6), whether that allowed HGVs not delivering something to escape the cap, and whether the simple words ‘arrivals’ and ‘departures’ might be better, the Applicant stated that it was certainly not the intention that the cap could be avoided in that way but that the Applicant would consider how that could be clarified and would confirm that in written submissions.

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- 1.10.4 In response to a query from the ExA on Table 3.1 of the **CWTP** [REP2-055], Ms McMullen confirmed that the reference to park and ride there was to the LEEIE park and ride, and that the Applicant would look to clarify that point in the CWTP.
- 1.10.5 The Applicant confirmed that 20% provision of electric charging points in the car parks had now been agreed which would be secured through an update to the **CWTP** [REP2-055] and the **Associated Development Design Principles** document (Doc Ref. 8.3(B)). In response to a request by the ExA, the Applicant stated that it would take away the question of what would the trigger be to utilise the further passive 20%, beyond the initial active 20%, and whether there would be a distinction between the temporary park and ride sites and the MDS.
- 1.10.6 On emissions standards for buses, the Applicant confirmed that, through the use of the phrase HDV rather than HGV, Euro VI compliance would apply to buses as well as HGVs. In response to a request from the ExA, the Applicant stated that it would confirm with SCC whether that standard aligned with what the SCC sought by way of emissions standards.
- 1.10.7 On the agenda item as to whether the ExA should disapply the defence of statutory authority in whole or part, the Applicant stated that its clear position was that the defence should not be disapplied, for all the same reasons as already given in respect of this question regarding the noise part of the agenda.