Application by National Highways for an Order granting Development Consent for the Lower Thames Crossing (Ref. No. TR010032)

Submission for Examination Deadline 4 – 19th September 2023

(Rule 8 Letter Annex A – Examination Timetable, item 20)

Emergency Services & Safety Partners Steering Group (ESSP SG):

Comments on the Applicant's Submissions at Deadline 3 (REP3-078, REP3-111)

Comments on Documents Submitted by the Applicant at Deadline 3

Changes to the dDCO at Deadline 3 (REP3-078)

- 1. The Emergency Services and Safety Partners Steering Group (ESSP SG) welcomes the changes to Requirement 20 contained in the draft DCO submitted by the Applicant at Deadline 3 (REP3-078) regarding consultation periods, and their consequent application to the Emergency Services where consulted on relevant documents.
- 2. This goes some way towards addressing the Steering Group's concerns regarding consultation, as expressed in paragraphs 16 18 of its Written Representation (REP1-338). However, this change alone does not satisfy the majority of the ESSP SG's concerns please see our comments in relation to the Design Principles (REP3-111) below; and also our separate responses to ExQ1 questions Q16.1.2 and Q16.1.4. The Steering Group is continuing to work with the Applicant to develop satisfactory consultation arrangements, but has not yet received any proposals to date which can be used to progress its Statement of Common Ground (REP1-200) at this point.

Changes to the Design Principles (REP3-111)

- 3. The ESSP SG welcomes those parts of the changes to the following design principles which confirm that consultation with the Emergency Services will be carried out on the detailed design of certain matters:
 - PR.06 suicide prevention
 - S3.20 and S9.21 Emergency RendezVous Points
 - S3.21 and S9.23 Helicopter landing areas
 - S3.22 and S9.24 Emergency muster points
 - S6.01 tunnel risk assessment and determination of cross-passage spacing, and fixed fire fighting system
- 4. The ESSP SG comments further on the Design Principles as follows.

S3.20 and S9.21 - Emergency RendezVous Points (RVP)

- 5. The ESSP SG's concerns regarding the current RVP provisions for the project have been made clear to the ExA, for instance at paragraphs 26 29 of its Written Representation (REP1-338) and paragraph 10 of its Comments on the Applicant's Relevant Representations Report (REP2-102).
- 6. The ESSP SG has held a number of meetings with the Applicant, and continues to discuss the RVP provisions. If a greater level of agreement can be reached, this will be reported to the ExA and reflected in an updated version of the draft Statement of Common Ground submitted at Deadline 1 (REP1-200). It is very disappointing that the RVP proposals presented to the ESSP SG to date are considered inadequate.

S3.21 and S9.23 - Helicopter landing areas

7. Notwithstanding the confirmation of consultation with the Emergency Services over the detailed design of the helicopter landing areas, the ESSP SG's preference is that these areas should be identified as part of the preliminary scheme design – and if not, the justification for their omission should be provided. Even if not identified on the preliminary drawings, the ESSPSG maintains that additional information should be provided at this stage regarding some basic parameters to guide their subsequent selection and design.

S3.22 and S9.24 – Emergency muster points

- 8. Similarly, the ESSPSG would prefer that the emergency muster areas were identified the on the scheme drawings at the preliminary design stage. Even if this is not done, justification for their omission should be provided, along with some basic parameters to guide their subsequent selection and design.
- 9. For both helicopter landing areas and emergency muster points, the ESSP SG is concerned that these items may not be properly integrated into the scheme design from the outset. These elements of the scheme have important relationships to other parts, such as emergency access roads and RVPs and all of these will need to be designed with emergency preparedness and procedure planning in mind.

S6.01 – tunnel cross passages and fixed fire fighting system

10. The ESSP SG continues to raise concerns about the proposals in the preliminary design which start from a position that cross-passage spacings shall be 150m. The ESSP SG has had further discussions with the Applicant, and makes the following recommendations for amendments to this design principle (this sets out proposed changes to the version of design principle S6.01 included in the Applicants document (REP3-110):

The preliminary scheme design has a 150m 100m maximum spacing between cross-passage centre lines. The spacing between cross-passages in the detailed design will be developed in accordance with DMRB CD 352 Design of road tunnels (Highways England 2020c) and supported by risk assessment. The emergency services shall be consulted on the risk assessment and determination of cross-passage spacing.

To support any cross-passage spacing greater than 100m between centre lines, a Fixed Fire-Fighting System (FFFS) will be deployed within the tunnel bore to support firefighting intervention. There shall be engagement consultation with both the emergency services and specialist tunnel fire engineering technical advisers on the type and specification of the FFFS. Without FFFS provided at 100m cross passage spacing, an increased flow of firefighting water to at least 3,000 L/min is required in the firefighting main to support protective spray 'curtain wall' nozzles as well as additional firefighting jets. No guarantee that firefighting intervention can be made until tunnel heat flux at firefighter locations (can be modelled) is less than 3 kW/m² for 25 minutes exposure or 4 kW/m² for 10 minutes exposure.