

# **Section H and I/1 Operational Noise and Vibration Monitoring Applications**

Planning Review Committee

5 October 2016

# Overview

- ▶ NR is implementing the EWR Phase 1 works in accordance with the TWA Order, planning permission and the NVMP
- ▶ EWRP1 Project has worked tirelessly with OCC over last 12 months, with fortnightly meetings to address concerns/resolve any technical issues/concerns over SoAs and monitoring
- ▶ Every SoA submission has been signed off as adequate in terms of mitigation by OCC's Independent Expert
- ▶ This includes wide ranging and appropriate environmental mitigation measures across the route
- ▶ On noise barriers and insulation alone, NR will spend upwards of £16 million, including £3.5 million in Oxford
- ▶ These applications are to confirm the arrangements for monitoring the operational performance of the installed mitigation in Oxford, 'reverting to those set out in the planning condition and the NVMP'.

# *Vibration and Noise Monitoring applications for Sections H and I/1*

## *Noise and Vibration Monitoring*

- ▶ There are 5 planning applications under review, 4 of which were approved and 1 refused by WAPC
- ▶ Officers' cover report in para 4 (reports page 12) reiterates the limited scope of the monitoring that OCC can require, within the terms of planning
  - condition 19 and NVMP
- ▶ There is **no** requirement for (i) continuous monitoring (ii) monitoring where no mitigation has been installed or (iii) measurements of residual noise or vibration levels
- ▶ The purpose is to test effective performance of the installed mitigation, principally the noise barriers

# Vibration Monitoring

## Agenda Item 4

- ▶ In Section H on plain track, NR has offered to monitor inside 3 ‘types’ of residential buildings all very close to the tracks and will report results
- √ ▶ Since this is not strictly a requirement of the PC or NVMP, this will be delivered by a unilateral undertaking given by NR

## Agenda Item 5

- ▶ In section H, no switches or crossings are less than 70m from nearest house, so no monitoring needed.

# Vibration Monitoring

## Agenda Item 7

- ▶ Vibration from EWR trains will not exceed the standards set in the NVMP and approved VSoA
- ▶ For the nearest house, 26A Stone Meadow, the predicted worst case levels are VDV's of:

∞ Day 0.16 (against threshold of 0.4)

Night 0.1 (against threshold of 0.2)

- ▶ No dwellings in I/1 are as close to the tracks as the 3 buildings to be monitored in H, so monitoring in H will be more effective.
- ▶ No monitoring is needed or proposed in Section I/1.

## Noise Monitoring

Agenda Items 6 and 8

- ▶ WAPC 13 September approved NR proposals for noise monitoring i.e. 6 and 18 months after opening in Sections H and I/1.
- - ▶ Sufficient to test mitigation performance (i.e. barriers) which have been designed and built to mitigate for expected EWR Phase 2 services
  - ▶ The measured results can be adjusted to take account of numbers and types of trains
  - ▶ NR notes the Officers' view about further monitoring after EWR Phase 2 services start (Table 1, reports page 13)

## *Conclusions*

- NR supports the Officers' recommendations in relation to all 5 applications, including the Note (Appendix 3, reports page 48) advising against the re-imposition of the previous 'train movements' condition.