

Project: M1 Luton Airport DCO
Stage: Deadline 8 (23rd January 2024)
Subject: National Highways position on the OTRIMMA (REP7-040)
On Behalf of: National Highways

1. Introduction

Further to National Highways' representation at deadlines 5 (REP5-09) and 6 (REP6-118), National Highways remains concerned that there is insufficient detail contained within the Outline Transport Related Impacts Monitoring and Mitigation Approach (OTRIMMA) provided at deadline 7 (REP7-040) to give sufficient assurance that the monitoring regime will be robust and that the thresholds at which mitigation is intended to be delivered are at a satisfactory level of detail and confidence. Detailed matters relating to the OTRIMMA are proposed to be determined following approval of the DCO, which means that they will not be secured by the DCO, creating uncertainty and risk for National Highways and the strategic road network (SRN).

National Highways' position on the updated OTRIMMA (REP7-040) submitted by the Applicant at Deadline 7 is explained in this Technical Note.

2. Outline Transport Related Impacts Monitoring and Mitigation Approach (OTRIMMA) (REP7-040)

2.1 Implications of the OTRIMMA for National Highways

National Highways has a number of concerns in relation to the proposed contents of the OTRIMMA, which it has raised in discussion with the Applicant as well as formally through the Examination. It is critical to National Highways as the physical mitigation proposed by the Applicant is supposed to be delivered under the terms of the OTRIMMA, meaning that there is a specific concern that it should be effective in delivering the mitigation in question in a timely manner. There is also an issue in that the OTRIMMA does not secure mitigation or monitoring of all potentially affected parts of the SRN or mitigation for impacts on those links and junctions.

2.2 Monitoring Proposals

2.2.1 Monitoring Level MLO

There are three levels of monitoring proposed. MLO is the baseline monitoring and will establish the baseline against which traffic volumes will be compared. Total trips starting and/or ending at airport sites will be counted yearly, using data collected from existing data sources within the airport (ML1).

Whilst this approach is supported by National Highways, traffic volumes alone will be insufficient to confirm the baseline capacity on M1 Junction 10. Additional information relating to the operational performance of the junction is required to form an accurate picture. Consequently, an accurate baseline of the junction's performance is not included within the monitoring regime (refer to Section 2.3.1 of this Technical Note for further details on the metrics that National Highways believe should be captured) as part of the OTRIMMA.

2.2.2 Monitoring Level ML1

ML1 provides ongoing monitoring of traffic entering and exiting the airport site which will enable all airport traffic to be measured. If cumulative airport traffic exceeds the maximum equivalent value from a previous year since the approval of the final OTRIMMA, ML2 will be triggered. However, impacts might be experienced even if overall volumes are static – for instance where congestion causes redistribution of trips towards the SRN.

2.2.3 Monitoring Level ML2

ML2 rely on a quinquennial survey. It will consist of a spreadsheet tool which will assign the airport traffic to the public highway network, based on the most recent information derived from the preceding quinquennial traffic distribution survey. If airport traffic reaches a pre-determined threshold of the modelled airport traffic for a particular movement/approach, ML3 will be triggered.

M1 Junctions 9 and 10 are congested in the forecast baseline (2027) and will be sensitive to any future additional or redistributed traffic, which is likely to result in significant congestion and safety issues at this key location on the SRN. The OTRIMMA indicates that monitoring (ML2) will take place at specific locations only if it exceeds ML1 thresholds and that this will take place every five years. Therefore, since ML2 is not implemented immediately, there may be a delay of some years between an impact and monitoring being initiated with an up to date quinquennial survey.

A two-week survey conducted during a neutral month every five years is currently proposed at ML2. The survey is proposed to be repeated every five years, at ML2, so that the distribution of airport-related trips can be updated. Carrying out surveys for two weeks in a neutral month poses a significant risk to the usefulness of data collection. In practice, much richer data is required if survey data is to be relied upon. There can be significant fluctuations in traffic levels week by week (train strikes, broken ATC loops/ANPR cameras/weather conditions/road closures etc). Given National Highways' concerns about capacity at this junction and its lack of resilience, it is considered that for ML2 a minimum of four weeks of monitoring would need to take place at each location at ML2, with annual monitoring being preferable, however National Highways would accept monitoring being undertaken every two years as a minimum, once ML2 is triggered.

Monitoring every five years at ML2 means that there is an assumption by the Applicant that the distribution impacts of the proposed development and/or cumulative events on the SRN will not change within a five-year period. As previously indicated M1 Junctions 9 and 10 are congested in the baseline and are therefore sensitive to changes such as changes in traffic distributions due to congested conditions and mitigation on the Local Road Network providing additional capacity, which will impact on the distribution of trips on the SRN. Only confirming that the distribution on the SRN has not changed every five years is not frequent enough to give National Highways confidence in the monitoring results. National Highways considers that monitoring must be undertaken preferably on an annual basis, with monitoring being undertaken every two years as a minimum at ML2.

It is noted that where the airport does not show an increase in volume of traffic, monitoring will be paused at ML2 and 3. National Highways considers that the Applicant's proposal to pause monitoring if the airport is not growing (Section 3.2), is not an appropriate approach. Even if the airport throughput does not increase, there is still a requirement to monitor the impact of the airport in case there is a modal shift over time which would trigger the need for additional mitigation.

It is indicated in the updated OTRIMMA that any off-site car park, which is any car park not under the ownership or operation of the airport, is not considered an 'airport site', and is therefore excluded from the monitoring. However, this means that the number of airport related trips is underestimated at ML2 as the Applicant will only be monitoring the shuttlebus movements at the airport without considering the number of individual cars that have driven to the off-site car parks and via both the LRN and SRN to access them. Therefore, in the current approach this would mean that these trips are assumed to be background growth, when they are actually airport related trips, and won't be include in the monitoring at ML2. Consequently, National Highways reconfirms its position that either monitoring of the off-site airport car parks is required or a multiplier (for average shuttle bus occupancy) is required to be applied to give an accurate representation of the number of airport related trips using the offsite car parks.

2.2.4 Monitoring Level ML3

If ML3 is triggered for any junction at an MT1 location, the Applicant and applicable highway authority will agree the scope of any further junction-specific monitoring/assessment to be undertaken by the Applicant. This approach at ML3 is welcomed by National Highways; however, as set out in Section 2.3.1 National Highways requires more junction specific monitoring takes place at ML0 and ML2, as well as ML3. National Highways notes that including a further level of monitoring before mitigation itself is triggered would further delay the provision of mitigation. National Highways considers that it is necessary to elide early Monitoring Levels to avoid this.

2.3 Other Considerations

2.3.1 Monitoring metrics

National Highways considers that further details of the type of monitoring that will take place at ML0, ML2 and ML3 is required. It is important that National Highways be engaged in the finalisation of the monitoring proposals. At present the OTRIMMA only sets out that junction specific type of monitoring will take place at ML3. National Highways' view is that more detail concerning the junction performance, for example queue lengths, delays and journey times is required, given the complexity of movements and potential patterns of congestion at the junction. Traffic volumes alone will be insufficient to confirm whether the capacity has been exceeded and whether the junction performance has deteriorated. National Highways' view is that further details concerning the metrics that will be used to monitor the airport impacts at ML0, ML2 and ML3 are required to give National Highways appropriate assurance of the data that will be collected. These requirements should be stated now.

2.3.2 Cumulative Impact

A change in the background traffic on the SRN and its relationship with airport traffic (cumulative impact) may result in a need for mitigation so that even a constant level of airport throughput needs to be managed. The DfT Circular 01/2022, Strategic Road Network and the delivery of sustainable development, Para 51, states the Secretary of State's policy that;

"Where a transport assessment indicates that a development would have an unacceptable safety impact or the residual cumulative impacts on the SRN would be severe, the developer must identify when, in relation to the occupation of the development, transport improvements become necessary."

Further, paragraph 111 of the National Planning Policy Framework (NPPF) (dated 20 January 2021), which is an important and relevant consideration under the Planning Act 2008¹, states that:

'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'

Therefore, National Highways considers that there should be no circumstances where monitoring is paused, as the cumulative impacts of the development with other changes need to be considered.

2.3.3 Residual Impact Fund (RIF) Governance

The Residual Impact Fund proposed in the OTRIMMA is a finite fund for the mitigation of residual airport-related traffic impacts. This fund will be secured in the section 106 agreement, a draft of which has been provided at deadline 7 (REP7-074).

¹ The attention of the Examining Authority is specifically drawn to SECTION 104(2)(d) of the Planning Act 2008.

Neither the updated OTRIMMA nor the draft S106 agreement clarify how the RIF will operate in practice and be allocated (Section 4.1).

The RIF will be a finite fund for the mitigation of residual airport-related traffic impacts, but it is unclear how this fund will be allocated. As the fund is finite, it is not clear what would happen: if further mitigation was required for any additional link or junction that had not previously been identified; what would occur if the anticipated cost of any mitigation exceeded the budgeted expenditure under the fund or if a cost overrun occurred in relation to any element and this required even a little more than anticipated in terms of a financial contribution. It is not clear how this would be managed if mitigation used up a higher proportion of the fund and left limited funding available for mitigation at other times or locations. Particularly where funding decisions are made on a voting basis, each stakeholder will have their own priorities and such that the RIF could result in an unbalanced allocation of funding, with insufficient available to meet all needs and in particular the need for mitigation on the SRN.

National Highways is concerned that any voting system to determine funding priorities could undermine its ability to secure mitigation for the SRN, when the number of local authorities, which may reasonably seek different competing solutions, are collectively greater in number.

There is no provision in the OTRIMMA, the proposed DCO or in the s106 Agreement (refer to National Highways' Legal Submission provided at deadline 8) that is available to National Highways in the event it disagrees with the administration of the monitoring and mitigation necessary for the protection of its asset.

2.3.4 Monitoring of M1 Junction 9 and Junction 10 South Facing Slips

At present Junction 9 is not included within the updated OTRIMMA and it is not clear that the TRIMMA will monitor the south facing slips (the southbound merge and the lane drop from five to four lanes on the northbound diverge). It is not clear if this is envisaged to be addressed by the RIF.

Following National Highways review of the 'Accounting for Covid-19 in Transport Modelling' Report TR020001/APP/8.148), a concern has arisen that there is a risk of congestion materialising at Junction 9, due to rat-running towards/from Luton and the airport. In National Highways' representation at deadline 7 (REP7-040) it was indicated that National Highways has concerns about the AM peak forecast flows on the west approach which has a volume to capacity ratio of 100% in all scenarios / forecast years. The updated OTRIMMA does not take into account that there are capacity issues on the M1 junction 9 as there is no monitoring proposed of any junctions where mitigation within the DCO is not proposed. The implications of this could be that the traffic cannot get through junction 9 and as such, large queues and delays are formed on the slip roads and mainline carriageway at junction 9, which would be a safety concern to National Highways.

Furthermore, National Highways confirmed in its deadline 7 representation that the updated VISSIM modelling still shows that there are some residual delays and queueing on the southbound on slip merge and that the VISSIM modelling shows that there are queues on the northbound mainline where there is a lane drop from five to four lanes. This gives national Highways safety concerns due to the queueing traffic in these locations. Due to the location of the cameras as set out in Figure 3.4 in the OTRIMMA it is unlikely that the cameras would be able to monitor the junction performance in these areas at junction 10. National Highways requires that a mechanism for monitoring potential airport related and cumulative impacts at junction 9 and on the south facing slips (the southbound merge and the lane drop from five to four lanes on the northbound diverge) is included with the OTRIMMA or a separate monitoring mechanism is included within the DCO.

3. Conclusions

Overall, National Highways remains concerned that there is not enough detail provided within the OTRIMMA to enable the Applicant and National Highways to accurately monitor and determine when the thresholds for mitigation are triggered at M1 Junction 10 and other at-risk locations on the SRN.

National Highways remains concerned about the robustness of the outline OTRIMMA in respect of monitoring and measuring critical airport-related traffic flows at M1 Junction 10. The submitted OTRIMMA is in outline form only and sets out the Applicant's proposed traffic monitoring regime, and is a stand-alone document which will be secured by the DCO. However, a more detailed TRIMMA with specific thresholds triggering the implementation and mitigation works is intended to be developed following approval of the DCO. The provision of a detailed TRIMMA outside of the DCO process does not provide National Highways with sufficient assurance that the monitoring regime will be sufficiently robust and that the thresholds to trigger each intervention will be at a satisfactory level.

National Highways is concerned as to how the OTRIMMA and its funding is secured and the governance that applies to its administration and disputes under it, as well as to the funds to be paid in relation to it.

4. National Highways Requirements

As set out in this Technical Note, National Highways has concerns about the implementation of the OTRIMMA.

National Highways remains concerned that there is insufficient detail provided within the OTRIMMA and that there are issues with the monitoring levels approach. The absence of a more detailed and specific proposal within the DCO process leaves National Highways with insufficient assurance that the monitoring regime will be sufficiently robust and that the thresholds will be set at a satisfactory level to provide National Highways with the assurance that a robust monitoring regime is in place to determine the impacts on the SRN. This constrains National Highways' responsibilities under its Licence.

In the absence of further details and amendment made to the OTRIMMA, National Highways is obliged to maintain its objection at the close of examination and make representations to the Secretary of State on the impacts to the SRN. National Highways would like to stress that it is willing to discuss all alternative approaches with the Applicant to assist them to provide the necessary comfort and assurance on the various matters contained herein.