Submitted on behalf of Network Rail Infrastructure Limited
Reference: LUTN-ISP001

Network Rail's comments on Luton Rising's Rail Impacts Summary Document dated 25 January 2024

Please find below Network Rail's Passenger and Station Analysis Team's comments on Revision 2 of Document ref: 8.121 Rail Impacts Summary document (issued on 25 January 2024).

As set out in the document below, there are various areas where Network Rail still requires clarification in order to fully interrogate the assumptions underlying the applicant's analysis. It appears that much of the information relied upon by the applicant is derived from an existing station capacity report for the design of the DART system and its integration with Luton Parkway Station. This document has not been made available to Network Rail and the review process would be more streamlined if this was made available. Without the full information Network Rail remains unable to properly assess the impact on station capacity and any measures necessary to address that impact.

Please note that the representations submitted by Network Rail represent their own view and have not been informed by engagement with the relevant train operating companies. We ask that the Examining Authority ensure that they are satisfied that there has been appropriate engagement with GTR and East Midlands Railway.

Submitted by Network Rail Infrastructure Limited
Station Analysis Team's comments on Revision 2 of Document ref: 8.121 Rail Impacts Summary document (issued on 25 January 2024).

Transport assessment: technical modelling approach, assumptions, comprehensiveness, and conclusions

Principal Issue in Question	Concern held	What needs to change/be amended/be included in order to satisfactorily address the concern
Station capacity: unclear assumptions needing further clarification	Some assumptions and calculations presented in the 8.121 Rail Impacts Summary document are unclear or unknown. There is a risk that the impact of the airport expansion on Luton Airport Parkway station capacity has been underestimated: a) The report specifies that predicted AM & PM peak periods for the Luton DART system are 04:00-05:00 and PM 17:30-18:30. However, NR review of current MOIRA 2023 data indicates the rail & DART peaks are aligned (AM peak currently being 08:00-09:00, PM peak being 17:00-18:00). Clarification is sought regarding as to why the DART AM peak is predicted to shift to an earlier time. b) 04:00-05:00 and 17:30-18:00 are identified as the DART peak periods. The total patronage for Luton Parkway Station during these peak periods is requested, i.e. DART <u>plus</u> other rail users. Additionally, what are the associated peak boarding and alighting loads for these periods. c) In Table 7.1, it is assumed that 32mppa is achieved through strengthening the flight schedule in the "Early Morning" and "Interpeak" periods (these have the highest share of forecast growth of 33% and 34% respectively). Given that Table 7.1 shows higher movement to and from	Provide clarifications to the noted queries. Provide a copy of the complete Network Rail and DART Stations Capacity Report that formed the basis for the design of the DART station and its interface with the existing Network Rail Station.

		the airport in the "Interpeak", a marginally higher share of growth (34 vs 33%), and [logically] greater levels of background rail demand – how does it therefore constitute the peak period?	
		d) DART peak hour demand at 32mppa is specified as 1,792 pax. What is the assumed <u>total</u> station patronage for the same peak hour?	
		e) Clarify the assumed DART, non-DART patronage split for the peak load figures in Table 6.3. A simple 3x3 OD matrix (rail, street, DART) would be useful in this respect.	
		f) What is the total cycle time assumed for passenger lifts and the average occupancy per cycle? Where lift choice exists, what is the assumed split of demand between lifts?	
		g) Platform width and occupancy assumptions for luggage-carrying passengers are inconsistent. The DART system is based on 1.7sqm/person, which includes luggage-carrying. NR platforms are based on 0.93sqm/person, which excludes luggage-carrying. Clarification is sought regarding impacts to NR platform capacity when the assumptions are aligned.	
Station capacity: validation of Transport Assessment predictions	With the DART system operational, there is an opportunity to verify peak period assumptions against DART gateline data. It will also allow determination of the current proportion of airport generated patronage.	Provide DART gateline data as previous requests.