

Submission No.			271	
Organisation Name or Name of Submitter			Ruadhan MacEoin	
Item No.	Section Ref.	Page No.	Observation Statement	TII Response
Letter Re: Railway Order Application - Metro North: Estuary through Swords, Dublin Airport, Ballymun, Glasnevin and City Centre to Charlemont, Co. Dublin: MetroLink planning application, SID no. 314724				
1	Observation	1	<p>In support of this observation, please find attached four documents:</p> <p>1. A dissertation undertaken as part of a masters degree in University College Dublin in 2017, that reviewed current Dublin rail plans, previous plans, and delivery to date of proposed services found that current rail plans for Dublin are based on assessment maps in which the five kilometre line between Broombridge and Docklands was omitted (Figure from page 111 of the submission PDF), which could provide a pathway for airport trains, negating the need for the metro project to tunnel south of Cross Guns Bridge.</p>	<p>The Project's overarching objective, as established by the National Transport Authority (NTA) and Transport Infrastructure Ireland (TII) and as informed by planning policy context, is to 'provide a sustainable, safe, efficient, integrated and accessible public transport service between Swords, Dublin Airport and Dublin City Centre' (National Development Plan 2021-2030, Box 9.1). Chapter 07 (Consideration of Alternatives) presents the decision-making that has led to the development of the proposed Project, including the consideration of alternative transport options, including rail alternatives. The options assessed included for heavy rail, light rail, and Bus Rapid Transport (BRT) options in addition to combination options. Shortlisted options that met the fundamental project objectives were then subject to further analysis by way of a Multi-Criteria Analysis having regard to Environment, Economy, Safety, accessibility and Social Inclusion and Integration. The assessment identified an Optimised Metro North (LR7) as the best medium- and long-term transport project for the Greater Dublin Area for the following reasons:</p> <p>* It was the most economically advantageous scheme when compared to other options, delivering the highest benefit to cost ratio;</p> <p>* It generated the highest level of transport benefits when compared to other options, with the highest number of additional public transport trips generated in the morning peak travel period;</p> <p>* It provided a new strategic public transport corridor, avoiding reliance on either the existing heavy rail lines or the Luas Cross City line;</p> <p>* It delivered a connection right into the centre of the city;</p> <p>* It retained the opportunity to extend Luas Cross City to Finglas, which would not be feasible if the tunnelled Luas options were selected, and it avoided reducing the service level on Luas Cross City to Cabra and Broombridge;</p> <p>* Due to the high level of segregation, it was considered to significantly increase capacity to allow for potential future growth along the corridor, when compared to other options;</p> <p>* It could potentially be extended southwards in the longer term to alleviate higher travel demand on the Luas Green Line, and ultimately form a complete north south metro corridor traversing both the north and south city; and,</p> <p>* This option delivered the highest safety benefits when compared to the other options.</p> <p>As part of the assessment of the baseline traffic network in section 4.2.2.4 of EIAR Appendix A9.2 Overall Project Traffic and Transportation Assessment, the Dublin Dunboyne/M3 Parkway rail line ('Maynooth Line' operating from Connolly Station) has been included. TII cannot comment on its omission from other rail plans, however confirm it has been included within the MetroLink assessment.</p>

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2	Observation	1	<p>2. A design response to the dissertation findings - when the omitted line is included, it could be useful for providing a pathway from the city centre as far as Glasnevin for the purpose of a rail link to Dublin Airport and Swords, and separately, to bring about the objectives of DART Expansion / DART Underground. Both of these objectives are national policy.</p> <p>A second design alternative is then set out, which would see Dublin Airport and Swords instead connected by two Luas light rail lines into the city centre and beyond. This option emerges as the option of linking Luas to the airport etc. was discounted largely because one Luas line would not have the capacity needed to serve the airport. However, if an additional Luas line were to be provided, the issue of passenger capacity would be resolved. Hence, instead of the current application, for a stand-alone metro service, both of the design alternatives would result in much less construction - with no need to tunnel south of Glasnevin / Cross Guns Bridge, and so result in much less cost, disruption, and negative environmental impact as would be caused by CO2 intensive engineering required by tunnelling under the city centre.</p>	<p>Please refer to response item (1) above in relation to the Project objective. In addition, the delivery of DART Underground has been identified in the Transport Strategy for the Greater Dublin Area for a period post-2050, and therefore its potential benefits and impacts will not be seen during all of the MetroLink's operational years. Whilst MetroLink has been developed as an independent standalone project, it has been designed as a fully integrated transport network alongside BusConnects and DART+ under the Transport Strategy for the GDA.</p> <p>Chapter 07 (Consideration of Alternatives) presents the decision-making that has led to the development of the proposed Project, including the consideration of alternative transport options. The options assessed included for heavy rail, light rail, and Bus Rapid Transport (BRT) options in addition to combination options. Shortlisted options that met the fundamental project objectives were then subject to further analysis by way of a Multi-Criteria Analysis having regard to Environment, Economy, Safety, accessibility and Social Inclusion and Integration. The assessment identified an Optimised Metro North (LR7) as the best medium- and long-term transport project for the Greater Dublin Area for the following reasons:</p> <ul style="list-style-type: none">* It was the most economically advantageous scheme when compared to other options, delivering the highest benefit to cost ratio;* It generated the highest level of transport benefits when compared to other options, with the highest number of additional public transport trips generated in the morning peak travel period;* It provided a new strategic public transport corridor, avoiding reliance on either the existing heavy rail lines or the Luas Cross City line;* It delivered a connection right into the centre of the city;* It retained the opportunity to extend Luas Cross City to Finglas, which would not be feasible if the tunnelled Luas options were selected, and it avoided reducing the service level on Luas Cross City to Cabra and Broombridge;* Due to the high level of segregation, it was considered to significantly increase capacity to allow for potential future growth along the corridor, when compared to other options;* It could potentially be extended southwards in the longer term to alleviate higher travel demand on the Luas Green Line, and ultimately form a complete north south metro corridor traversing both the north and south city; and,* This option delivered the highest safety benefits when compared to the other options. <p>EIAR Chapter 17 (Climate) presents the proposed Project's carbon emissions during both the construction and operational phase. As calculated using the TII Carbon Tool (v2.1) the proposed Project will result in total Construction Phase GHG emissions of 1,017KT CO2eq over the 9.25 year period, equivalent to an annualised total of 0.32% of Ireland's non-ETS 2030 target. Over the predicted 60-year lifespan the annualised emissions due to the initial Construction Phase and ongoing maintenance of the Proposed Project will reach at most 0.044% of Ireland's non-ETS 2020 emissions target, or 0.27% of the 2030 transport sector carbon budget.</p> <p>The significance criteria for greenhouse gas (GHG) impacts (Institute of Environmental Management & Assessment (IEMA) Assessing GHG Emissions and Evaluating their Significance, 2022) states that the impact significance must be taken from the project as a whole over its lifecycle rather than individual phases. The proposed Project sets out mitigation measures with respect to the Construction and Operational Phases in order to reduce its impact on climate related GHG emissions by implementing low-carbon energy options (see Section 17.6 of EIAR Chapter 17). Mitigation that goes above and beyond the legal requirements on the proposed Project include the Operational Phase use of at least 90% renewable power from the Opening Year.</p> <p>IEMA Guidance states a project that has a negligible impact achieves emissions mitigation that goes substantially beyond the reduction trajectory and has minimal residual emissions. The proposed Project provides an attractive sustainable form of public transport that prevents the use of the private car and therefore reduces Operational Phase vehicle emissions sufficiently enough to offset Construction Phase emissions. Residual impacts for Scenario A (the core business case scenario) are less than 0.071% of the 2030 Transport Sector Carbon Budget which is considered a minimal residual impact. The predicted potential effect to climate over the lifetime of the project for Scenario A due to the combined construction and Operational Phases, is long-term, negligible, and not significant.</p>

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3	Observation	1	3. An additional study that assesses the prospect of linking Dublin Airport with Charlemont Luas Station via the Port Tunnel by Bus Rapid Transit. A number of route options are addressed, with a prospective travel time of circa 22 minutes identified, which compares favourably to the 20 minute journey time proposed by MetroLink between these two points.	Please refer to response item (2) above in relation to the consideration of transport alternatives as part of the development of the proposed Project, including BRT options. The Project has also been designed to ensure maximum interchange with other modes, increasing its area of influence to regions such as the east side of the city near the Port Tunnel.
4	Observation	1	4. A review of recent decisions, reports, and policies that relate to the current proposal. Essentially this review surmises the implications of the cancellation of the Galway ring road (2022), the OECD report; ‘Redesigning Ireland’s Transport for Net Zero’ (2022), Department of Transport; ‘National Sustainable Mobility Policy Action Plan (2022), International Transport Forum of the OECD; ‘Benchmarking Accessibility in Cities: Measuring the Impact of Proximity and Transport Performance’ (2019), Department of Environment; ‘National Climate Action Plan’ (2021).	<p>EIAR Chapter 03 (Background to the MetroLink Project) details the need for the Project, and how MetroLink will address challenges such as climate change and the production of CO2 emissions. As noted, private vehicles are a significant contributor to Ireland’s GHG emissions, and providing an alternative to private vehicle-based journeys is a key benefit of the proposed Project. The proposed Project will aim to be a fully sustainable and carbon neutral public transport alternative (by the Design Year of 2050), and therefore the way in which people access Dublin Airport, and other parts of the city, will be in a much more sustainable way than at present. The proposed Project, as a sustainable mobility option, will have a direct and long-lasting impact on Ireland’s transition to a low carbon economy. The proposed Project will be fully electrified, and will be able to reduce its emissions footprint as Ireland moves increasingly to green energy production.</p> <p>Based on modelling undertaken for Chapter 17 of the EIAR (Climate), it is estimated that the modal shift resulting from the provision of MetroLink will result in a reduction in GHG emissions of between 9kt and 11kt in the opening year, with the reduction expected to increase to 45kt by 2050 (Design Year). Relevant international and national guidelines and policy relating to modal shift are detailed in Section 17.3.2.1 of Chapter 17.</p>
5	Observation	2	Ultimately, it appears to me that the current proposition is based on a flawed assessment, and it seems any of the three options of linking Dublin Airport with the city centre by DART, Luas, and or BRT are likely to be more effective, require less work and capital, and be delivered sooner.	Please refer to response (1) above in relation to the consideration of transport alternatives as part of the development of the proposed Project. TII disagree that the assessment is flawed, as stated in response item (1) that the Dublin -M3 Parkway 'Maynooth Line' has been included within the MetroLink assessments.
6	Observation	2	<p>As a result, the Bord is put in a difficulty by the current proposal. Although the MetroLink is National Policy, it has been conceived without proper inclusion of existing railways, which results in the need for tunnelling south of Cross Guns Bridge. However, as it is apparent that there is no need for such a pathway, the granting of consent does not appear justifiable.</p> <p>Given this scenario, and in view of the prospect of a BRT service delivering comparable journey times between Dublin Airport and Charlemont, it appears that the inexpensive BRT option should be prioritised - with Dublin Airport linked by either DART or Luas at a later date.</p>	<p>Please refer to response item (1) above in relation to the consideration of transport alternatives as part of the development of the proposed Project. Response item (1) also confirms that the MetroLink assessment includes the Dublin -M3 Parkway 'Maynooth Line' as part of the existing rail network.</p> <p>As noted, due to the high level of segregation, the proposed Project is considered to significantly increase capacity to allow for potential future growth along the corridor, when compared to other options. MetroLink is the only public transport option to meet the future predicted passenger number requirements for the Swords to Dublin City Centre corridor. MetroLink provides capacity far in excess of any other public transport option and will facilitate compact sustainable growth along the alignment to a level not possible with other transport options, providing quality international connectivity to and from Dublin Airport. (Refer to Chapter EIAR Chapter 03, Background to the MetroLink Project).</p>
7	Observation	2	Finally, it is recommended that new stations are opened on the existing Irish Rail lines and emerging DART network in the city, at Croke Park, Cross Guns Bridge, Cabra, Zoo, Inchicore, and Ballyfermot, as this would serve over 100,000 residents within 1 kilometre walking range according to ArcGIS.	As part of the proposed Project, a direct interchange with the Irish Rail network will be provided at Glasnevin Station, at Cross Guns Bridge. The potential for additional stations on the existing Irish Rail Lines and emerging DART network are not considered within this project, and would be subject to planning, appraisal and detailed design by NTA.