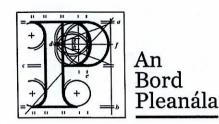
Our Case Number: ABP-314724-22



Nicholas Mansergh The Cottage Wellington Square Magazine Road Co. Cork T12 F7D4

Date: 24 January 2023

Re: Railway (Metrolink - Estuary to Charlemont via Dublin Airport) Order [2022]

Metrolink, Estuary through Swords, Dublin Airport, Ballymun, Glasnevin and City Centre to

Charlemont, Co. Dublin

Dear Sir / Madam,

An Bord Pleanála has received your recent submission (including your fee of €50) in relation to the above-mentioned proposed Railway Order and will take it into consideration in its determination of the matter.

The Board will revert to you in due course with regard to the matter.

Please be advised that copies of all submissions/observations received in relation to the application will be made available for public inspection at the offices of the relevant County Council(s) and at the offices of An Bord Pleanála when they have been processed by the Board.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: www.pleanala.ie.

If you have any queries in the meantime, please contact the undersigned. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

SM Niamh Thornton **Executive Officer** 

Direct Line: 01-8737247

Tel

The Cottage, Wellington Square, Magazine Road, Cork T12 F7D4

12 January 2023

The Secretary, An Bord Pleanála, 61-64 Marlborough Street, Dublin D01 V902

## Observation on Railway (Metrolink – Estuary to Charlemont via Dublin Airport) Order, 2022 (Case reference; NA27N.314724)

The purpose of this observation is to draw attention to the flawed manner in which the option which developed into Metrolink was selected by the *Fingal/North Dublin Transport Study* (AECOM, 2014, 2015). In the 'alternatives considered' section of the EIAR (volume 2, chapter 7), this study is put forward as the process by which the metro option was selected from a list of 25 alternatives. It was the point at which a metro proposal was readopted, and other light or heavy rail or BRT-based alternatives rejected, and subsequent development of the Metrolink project has developed from that recommendation.

Of the 25 possible schemes examined in the first stage of this study, four survived for appraisal in the second stage. The cost of the option derived from Metro North, having initially been costed at €2.5-3 billion, was then 'optimised' by reducing capacity to 12,000 per hour in each direction, shortening platforms, and bringing a previously tunnelled section between DCU and Dublin Airport above ground¹.

By contrast, its light and heavy rail competitors, initially costed at €0.5-1.05 and €1.2-1.5 billion respectively, had become more expensive in the second stage, at €2.24 and €1.83 billion, and similar to the optimised metro (€2.33bn). Their cost advantage having largely been removed, cost benefit analysis showed they had negative net benefits, while the optimised metro one had strongly positive ones (AECOM, 2015, p.49, 51, 55, 124, 134, 157, 164)

The light rail option ('LR3') followed much the same route as the metro north of the city centre, before connecting into the recently extended LUAS Green Line in Cabra. Its cost doubled between stages one and two of the study, mainly because it was decided that a 2.5 km section would need to be in tunnel in the city centre. Leaving it on street would limit trams to a three minute maximum frequency, which would leave no spare capacity by 2033 (AECOM, 2015, p.108-122).

However, if the preferred option is optimised, then so should competing alternatives, on the principle of comparing like with like. The light rail alternative can be used to illustrate how this might have been done. As with the metro option, it could have involved aligning economically achievable capacity more closely with demand. The light rail option had barely

<sup>&</sup>lt;sup>1</sup> This optimisation has subsequently been reversed, and Metrolink now has a design capacity back up at 20,000 per hour, and the surface section north of DCU has been put back underground.

adequate capacity in city centre sections, but this could have been coped with by several different forms of load sharing:

- (a) A segregated, limited access route between Swords, the Airport and the city centre already exists the Port Access tunnel and is already well used by buses connecting them. It would not be difficult to balance use of this existing route with that on a LUAS one, by periodically adjusting services and access controls on the tunnel.
- (b) The reduction in the interval between trams from one every 2 minutes possible in largely segregated suburban sections to one every 3 minutes in largely on-street city centre ones could be avoided, by splitting the line at the point where it enters the latter, with the second line running a short distance into the centre. Many urban rail services work on the terminus principle, with some passengers walking further to reach their final destination. Unlike a rail terminus, a light rail one need not take up any more space than a normal stop. In Dublin, the green line served such a terminus (at St. Stephen's Green) from 2003 to 2017. While the difference between 2 and 3 minute frequencies may seem minor, it represents a 50% increase in capacity (30 trams per hour instead of 20). Splitting the proposed line could avoid the need to put it into a tunnel under the city centre.
- (c) Direct interchange between the light rail option and the rail lines to Connolly and Docklands could have been provided for. AECOM's LR3 option required a double change at Broombridge and Cabra (2015, p.101), but few passengers would do this. More would do so with a direct interchange, diverting some passengers from trams in the city centre.
- (d) The proposed 3000 space park and ride garage on the M1 north of Swords is large enough to affect the balance between capacity and demand on a light rail line, and could be scaled back. Arguably this should be done anyway, as it will encourage 'rail heading' making those living north of Dublin more inclined to drive down the motorway to the park and ride facility, and less inclined to use existing rail stations closer to their homes.

The AECOM study might have optimised the three alternatives to the metro option, or found some other way of treating them more equally, and have then still recommended the metro, so their failure to do so does not demonstrate that their conclusion was wrong. It does however show that it was arrived at in an unsafe and unsatisfactory manner. Subsequent massive increases in the estimated costs of Metrolink cast further doubt on the study, as they imply the cost of the metro was seriously underestimated, even at 2015 costs, and that its cost estimates for the different options may be unreliable even in relative terms.

While inclusion of a statement of the alternatives considered in an EIAR is a requirement under Irish and European Law, there is no explicit requirement that they be evaluated, or that this be done in an unbiased and reliable manner. The main purpose of an EIAR is to demonstrate the environmental acceptability of a project, rather than its superiority to alternative options. Defects in the way alternatives were considered would not necessarily preclude approval for an infrastructure project of moderate scale with limited interaction with other projects.

However, Metrolink is of a different order of magnitude to a normal infrastructure project for which an EIAR would be required. Apart from the numerous large-scale effects on the

development of Dublin and its public transport system, its sheer cost is likely to have a nationwide impact, by pre-empting funding for other projects. It is difficult to see how approval of such a large megaproject with such pervasive effects, developed on the basis of such a flawed selection process, can be considered consistent with proper planning and sustainable development.

One possible way of resolving this problem would be to revisit the AECOM report. The Board could ask for further information on a limited number of specified options considered in that report, in the form which best reflected the strengths of each specific option. For each such option, the expected benefit-cost ratio could be required, with supporting calculations and upto-date costs, for comparison with those for Metrolink.

Please find enclosed a cheque for €50,

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Yours sincerely,

Nicholas Mansergh, BA., M.Phil., PhD., MIPI.