Our Case Number: ABP-314724-22

Planning Authority Reference Number:

An Bord Pleanála

Dublin Cycling Campaign
Tailors Hall
Back Lane
Dublin 8
D08 X2A3

Date: 26 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.

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Yours faithfully,

pp EM

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Dublin Cycling Campaign
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2nd June 2022

RE: MetroLink Railway Order (Case: 314724)

1.0 Introduction

Dublin Cycling Campaign is a registered charity that advocates for better cycling conditions in Dublin. We have a vision for Dublin that is a vibrant city where people of all ages and abilities choose to cycle as part of their everyday life.

We have been engaging with the applicant, Transport Infrastructure Ireland, throughout all stages of this project including the multiple rounds of public consultation, the EIAR scoping, and through one to one meetings. We thank them for taking our feedback into account in certain areas.

We support this project and hope ABP decides to approve it. However, we request two modifications via condition.

2.0 Responses to Earlier Feedback

Throughout the EIAR development process TII have listened to our feedback. They have changed designs or provided mitigation measures in the submitted EIAR.

1. We were concerned about the potential closure of the Royal Canal Greenway during the construction period at Glasnevin station. It's a key active travel route in GDA Cycle Network and forms part of the Dublin to Galway National Cycling Route. Dublin Cycling Campaign supports the proposed mitigation measures described in EIAR A5.5 Glasnevin Construction Report section 6.3.1 for a temporary bridge over the canal. Note: the diversion for cyclists is shorter than described in Figure 6.1, as Leinster Street North allows for contra-flow cycling.

2. We were concerned that the northern surface sections near Swords could cause community severance by providing only a small number of places where people walking and cycling could cross the track. That has been addressed by the design and analysed in EIAR Chapter 10 (Human Health) and Chapter 11 (Population and Land Use).
3. We were concerned about the lack of provision of cycle parking as part of the proposed metro. Cycle parking is a key element to the integration between cycling and public transport. We are happy with the proposed levels of cycle parking at the Swords metro stations. There is adequate provision and a good combination of cycle parking options to suit all needs. However, we still have concerns about the provision of cycle parking at some city centre locations, which is discussed below.

3.0 Requested Conditions

We request that ABP consider two modifications via condition for this project:

1. To increase the levels of bike parking provided at five stations: Northwood, Ballymun, Collins Avenue, Glasnevin and Tara Street
2. The second to require the hundreds of HGVs required at each construction site to be direct vision vehicles, which have no major blind spots - see https://tfl.gov.uk/info-for/deliveries-in-london/delivering-safely/direct-vision-in-heavy-goods-vehicles. This will significantly reduce the traffic hazard to the most vulnerable road users: pedestrians and cyclists.

3.1 Increase Cycle Parking Provision at City Centre Stations

The levels of cycle parking proposed at each station is described in Chapter 4 (Description of the MetroLink Project). Appendix A4.1 described the Methodology for Potential Cycle Demand. We are happy with the methodology used for predicting the potential cycling demand in the 'Opening Year (2030)' as it provides a more reasonable approach than a fixed calculation method.

Below is Figure 4.9 from Chapter 4. It shows the predicted demand in 2030 (Opening Year) and shows what percentage of the predicted demand will MetroLink cater for in the opening year. The provision at many stations falls well below the predicted demand. In particular of note are Northwood (38%), Ballymun (45%), Collins Avenue (37%), Glasnevin Metro + Rail (43%), Tara Metro + DART (13%). While we're disappointed at the under-provision at O'Connell Street, Stephen's Green and

Charlemont there are understandable space constraints at those locations that makes the provision of adequate cycle parking extremely tricky.

Table 4.9: Station Cycle Parking Predicted and Proposed

Station	2030 Predicted Demand		2030 MetroLink Proposals		
	Total Cycles	Stands	Total Cycles	Stands	% Provision
Estuary*	0	0	254	127	N/A
Seatown	433	216	480	240	111%
Swords Central	941	471	942	471	100%
Fosterstown	373	186	422	211	113%
Dublin Airport**	0	0	72	72	N/A
Northwood	538	269	204	204	38%
Ballymun	656	328	292	292	45%
Collins Avenue	1,003	502	370	370	37%
Griffith Park	248	124	176	88	71%
Glasnevin – Metro Only	185	92	120	120	65%
Glasnevin – Metro + Rail	278	139			43%
Mater	150	75	70	70	47%
O'Connell Street	215	107	0	0	0%
Tara – Metro Only	470	235	256	256	54%
Tara – Metro + DART	1,940	970			13%
St Stephen's Green	560	280	82	82	15%
Charlemont – Metro Only	544	272	162	162	30%
Charlemont – Metro + Luas	928	464			17%

* As the vast majority of passengers using this station will arrive via the P&R there are no predicted cycle demand calculations available for this station.

** As the vast majority of passengers using this station will arrive via the airport there are no predicted cycle demand calculations available for this station.

Appendix A4.1 section 3.2.2 suggests that 'Shared Mobility Solutions' (aka bike sharing) means that the provision of adequate cycle parking is not required. In particular, quoting research by TCD Associate Professor Brian Caulfield in 2018 to back up the following statement in the EIAR that "due to the short journeys usually taken by the Dublin Bikes and Bleeper Bikes, the turnover can be very high day to day, with a station turnover ratio of slightly more than 1:5 to the station capacity". No reference is provided for the paper's name.

After contacting Brian Caulfield he believes the paper they are referencing is "Effectiveness of Small Scale Bike Sharing Systems According to the Analysis of Turnover Station Ratios" (Jiménez, Nogal, Caulfield, 2018). That research paper does not support the statement in section 3.2.2 that "an assumption can be applied to this scenario whereby 1 space on a public bicycle parking rack for shared mobility could facilitate 5 shared bicycle parking events during the 3-hour peak period used for calculating the potential demand."

The applicant makes the argument that there is limited space to provide cycle parking at stations where there is underprovision. However, if you look at Griffith Park station

the applicant is specifically building an underground cycle parking space to provide the necessary space.

Adjacent to the Ballymun and Northwood stations, where the proposed cycle parking will only cover 38% and 45% of the predicted cycle demand respectively, there is ample space adjacent to the station for TII to build the cycle parking necessary to support the predicted demand in the opening year.

Our biggest concern is at Tara Street station. Again the applicant argues there is not enough space to provide the necessary cycle parking. The applicant is CPO'ing the whole block so adjacent land is within their control. The vast majority of the site post-construction is marked for "future development by others". TII could use that space for cycle parking in the interim. TII could condition the future development land to include cycle parking for the metro and train station within the new development.

TII makes unfounded arguments that shared bike schemes will lessen the need for cycle parking at stations like Tara Street. Even still, their proposals include removing the existing Dublin Bikes station outside of the Constant Markiewicz centre for construction and not reinstate it post-construction (MetroLink Structures Tara Station Proposed Street Level Design – Sheet 1).

The other option the applicant should consider is the use of two-tier cycle parking racks. They provide cycling parking at increased densities, making them more suitable for locations with limited space. Two-tier cycle parking racks are not a replacement for the standard sheffield stand so two-tier racks do not support cargo bikes, tricycles, bikes with large front baskets or rear child seats. Attached at the end of this document are two photos of a two-tier cycle parking hub in Waltham Forest, London, UK

In summary, we suggest that it is possible to comply with the predicted cycle parking demands:

- At Ballymun and Northwood provide more cycle parking in adjacent land
- At Tara Street TII will own the adjacent land and could use it to provide the cycle parking they are required to provide. Reinstate Dublin Bike stations near the station
- At all locations consider the use of two-tier cycle parking racks to increase densities where space is constrained

3.2 Direct Vision HGVs to Reduce Traffic Hazard Risks to Vulnerable Road Users

We are concerned about the level of road danger posed by the heavy good vehicles (HGVs) needed to construct MetroLink and that TII have not sufficiently mitigated the risk in their submitted outline Construction Environmental Management Plan.

3.2.1 Broader Context

HGVs pose a significant risk to vulnerable road users, in particular cyclists. The following people have died while cycling in Dublin after being in a collision with construction HGVs in the last few years:

- Neeraj Jain, 34, 1st November 2019. He was hit and killed at the junction of South Circular Road and Brookfield, by a cement mixer turning left to head into the National Children's Hospital construction site
- A 60 year old man, 7th March 2018. He was hit and killed on East Wall Road by a construction truck coming from a construction site in the area
- Harry Boland, 19, 18th April 2018. He was hit and killed on Stillorgan Road at the junction with Greenfield Park by a left turning HGV heading to a construction site
- Ryan McCarthy, 25, 17th November 2017. He was hit and killed by a large road sweeper on Whitechurch Road, Rathfarnham, Dublin 14
- Luby Maryori, 30s, 27th March 2017. She was hit and killed by a HGV at the R112 junction of Wellington Road and Templeville Road, in Terenure, Dublin.
- Donna Fox, 30, 6th September 2016. She was hit and killed by a left-turning HGV at the junction of Guild Street and Seville Place.
- Louise Butler, 26, 15th August 2013. She was hit and killed by a left turning HGV on the Frascati Road, Blackrock, Dublin.

Between 2013 and 2021, twenty people have died while cycling in Dublin. Seven of those were killed in collisions involving HGVs. 35% of fatalities involve HGVs even though HGVs are frequently less than 5% of traffic on the streets where people cycle. Almost all collisions have happened with turning HGVs.

3.2.2 Impact of MetroLink on number of HGVs in Urban Areas

The EIAR provides evidence on the number of HGVs required to construct MetroLink. Appendix A5.7 Construction Vehicles, Plant & Equipment outlines the type and number of HGVs expected at each construction compound during the construction phase. It

shows large numbers of HGVs required per day per construction site. For example, the O'Connell Street station requires over 50 HGVs per working day for the guts of 4 years.

Appendix A9.5 Scheme Traffic Management Plan, section 4.4.3 shows how much of an impact the HGVs required for MetroLink will increase the number of HGVs in the area. Many streets will see construction vehicle increases of 10-30% and some streets increases of over 30% (A9.5, Appendix F, Figure A.F-1 - Figure A.F-4). This will increase the risk to vulnerable road users on many city centre streets with no segregated cycling infrastructure.

3.2.3 Mitigation Measures proposed by MetroLink

MetroLink has made a number of design decisions that avoid the impacts by reducing the number of HGVs required. For example, opting for a fully automated metro system allows for shorter stations, so that less material needs to be transported to/from sites.

Appendix A5.1 Outline Construction Environmental Management Plan (CEMP) outsides the small number of mitigation measures proposed by the applicant.

Table 6.1 topic TT7 discusses the mitigation measures for people walking and cycling. Vague suggestions are made about providing temporary footpaths and cycleways around construction sites.

Table 6.1 topic TT6 says that "*Bus lanes may be temporarily converted to general traffic lanes in order to optimise the flow of traffic on the network during the Construction Phase*". In many places in the city bus lanes are the only cycle infrastructure that exists. Removing bus lanes will make cycling less safe.

Report A5.3 Construction Sequence Report shows bus lanes and cycle lanes removed during some construction phases in favour of maintaining traffic lanes.

Chapter 28 Risk of Major Accidents and Disasters notes that a serious or fatal collision involving construction traffic caused by the increase in HGVs could lead to an injury or fatality. This risk exists in all zones, throughout the life of the project. Table 28.9 ID C8 says that to mitigate this risk a number of actions are proposed including "Blind spot detection will be compulsory for HGVs in order to identify vulnerable road users".

3.2.4 Proposed Mitigation Measures for HGVs

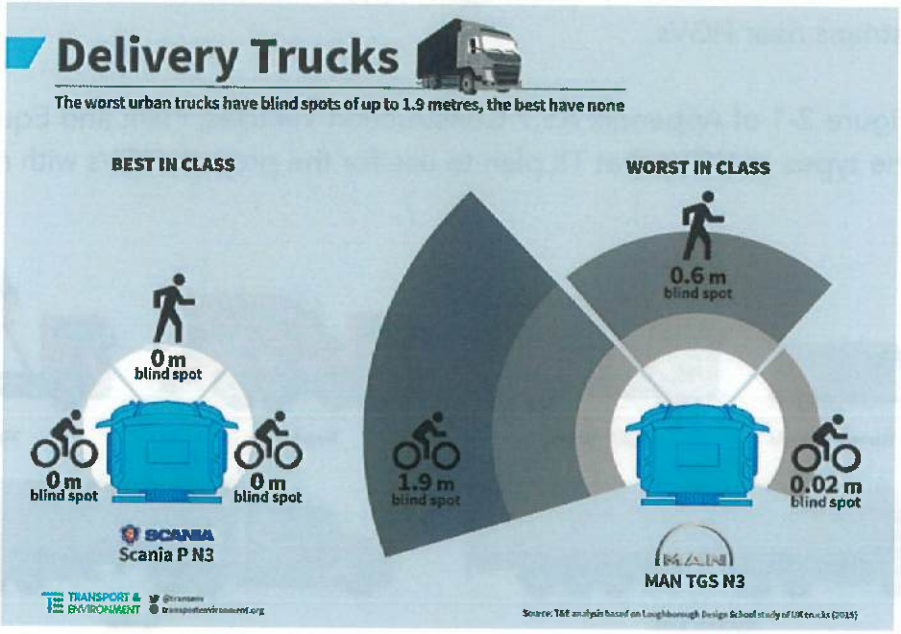
TII needs to set high standards for HGV vehicles that work on the MetroLink project. TII has a responsibility to protect vulnerable road users.

The CrossRail project in the UK set a good example. It required high standards for all HGVs. They required sensors, underrun guards and other measures to improve safety of vulnerable road users. These are much stronger requirements than those described by TII in their CEMP or in Chapter 28.

Direct Vision

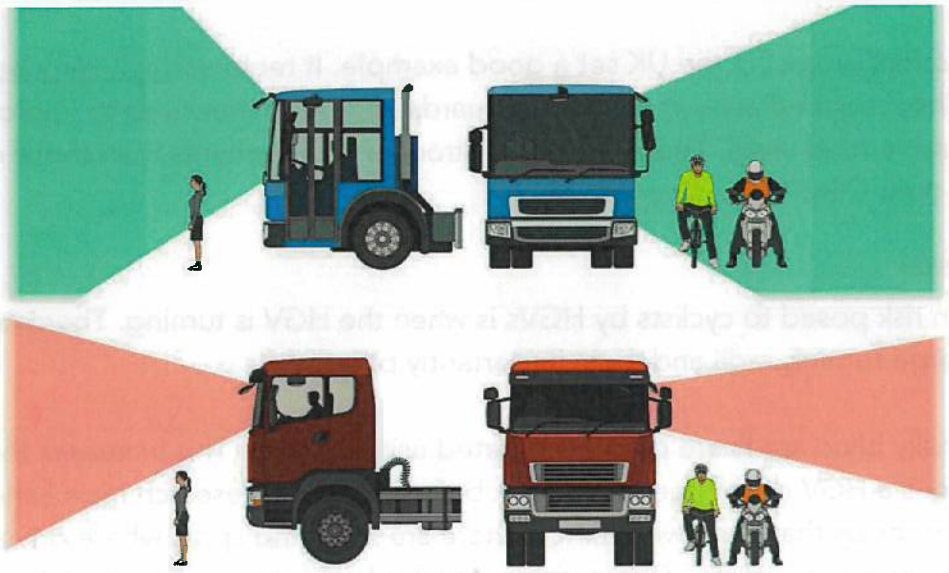
The main risk posed to cyclists by HGVs is when the HGV is turning. There are two issues: large turning radii and most importantly blind spots.

Traditionally blind spots are poorly mitigated using mirrors. This increases the number of locations a HGV driver needs to check before moving. Research from Lanesborough University shows that even with mirrors there are still blind spots where drivers cannot see pedestrians or cyclists.[1] Direct-vision standard vehicles as a comparison do not suffer from these issues and would significantly reduce the risk for pedestrians and cyclists.[2] Direct-vision vehicles have lower cabs and significantly reduced blind spots.



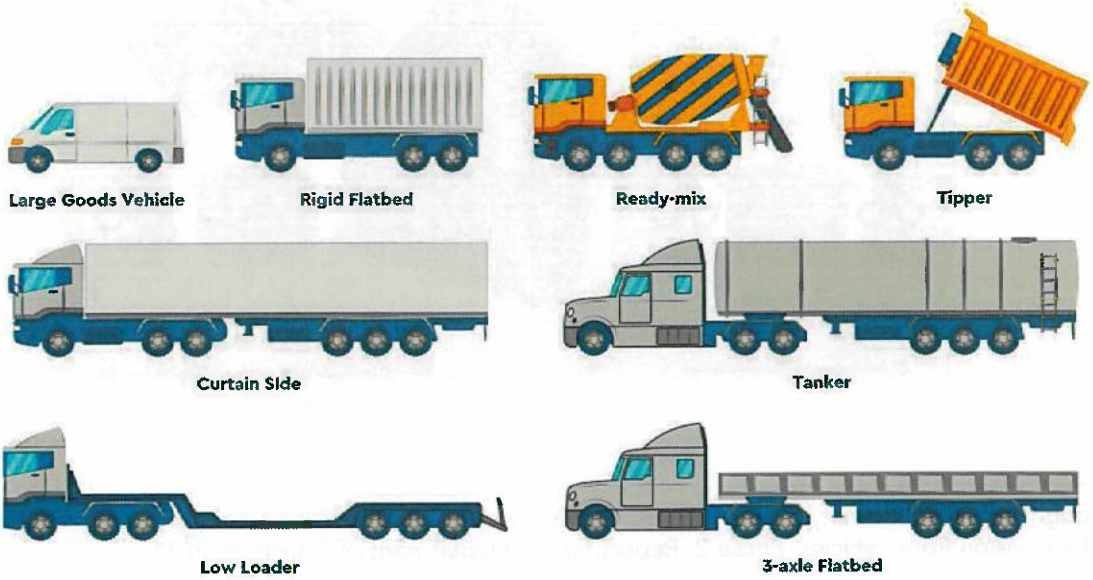
[1] Loughborough University (Cook, S.E., et. al), The development of improvements to drivers' direct and indirect vision from vehicles. Phase 2. Report for the Department of Transport, 2011.

[2] Transport Research Laboratory (Hynd, D., et. Al.), Benefit and Feasibility of a Range of New Technologies and Unregulated Measures in the fields of Vehicle Occupant Safety and Protection of Vulnerable Road Users, 2015, p. 342



Transport for London (TfL) has set direct vision standards (DVS) for all HGVs entering London. Direct vision standards assess how much a driver can see directly from their HGV cab. This is the solution to "blind-spot" issues that lead to the deaths of cyclists and pedestrians near HGVs.

Below is Figure 2-1 of Appendix A5.7 Construction Vehicles, Plant and Equipment showing the types of HGVs that TII plan to use for the project. HGVs with no direct vision.



TII's proposed mitigation measures are out of date with the best scientific evidence on how to mitigate the risk to vulnerable road users posed by HGVs. There are standards from other projects that they should implement for MetroLink.

We request that ABP ask TII for further information on how to mitigate this risk, including how cycling will be facilitated safely around construction sites. We also ask ABP to require conditions on HGVs to use the latest technology improvements to reduce the risks of blind spots.

4.0 Conclusion

We hope that ABP decides to approve this vital public transport project with the two modifications via condition.

- Increase cycle parking at the following metro stations: Northwood, Ballymun, Glasnevin and Tara Street
- Require TII to use the latest standards for mitigating the risks of HGVs to vulnerable road users by copying working standards from other European construction projects

We do not request an oral hearing on this matter.

Kevin Baker
Infrastructure Group, Dublin Cycling Campaign

5.0 Appendix Photos

Photos of cycle parking hub in Waltham Forest, London, UK. The picture cycle hub provides 80 cycle parking spots in a secure, sheltered location using high density two-tier cycle parking racks.


Europcar