North Dublin Transport Study,  
National Transport Authority,  
Dun Sceine, Iveagh Court,  
Harcourt Lane,  
Dublin 2  

Submitted online at http://www.nationaltransport.ie/consultations/public-consultation-on-the-north-dublin-transport-study/  

Re: North Dublin Transport Study Public Consultation  

Dear Sir or Madam,  

Attached is a submission on the North Dublin Transport Study Public Consultation  

Yours Sincerely,  
James Leahy  
Honorary Secretary  
An Taisce – The National Trust for Ireland  
secretary@antaisce.org
An Taisce – The National Trust for Ireland

Response to National Transport Authority’s Public Consultation on the North Dublin Transport Study with a deadline of 9th January 2015 as advertised at: http://www.nationaltransport.ie/consultations/public-consultation-on-the-north-dublin-transport-study/

Prepared by: James Leahy, secretary@antaisce.org
Date: 19th January 2015
# Table of Contents

1 INTRODUCTION ........................................................................................................3

1.1 The Consultation........................................................................................................3

1.2 Background................................................................................................................3

2 COMMENTS ON METHODOLOGY ........................................................................4

3 CONCLUSIONS ..........................................................................................................5

3.1 Dart Underground in Do Minimum Welcomed .......................................................5

3.2 Conclusions broadly supported by An Taisce .........................................................5

3.3 Congestion at Dolye’s Corner, Phibsborough .........................................................5

3.4 Comments on Metro North .......................................................................................6

3.5 Technical comment on Ballymun tunnel .................................................................6

3.6 Heavy Rail should be used for tunnels ....................................................................6

3.7 Reconsider Heuston – Swords Rail Tunnel .............................................................6

4 REFERENCES .............................................................................................................7
1 Introduction

1.1 The Consultation

This submission is a response to the National Transport Authority’s Public Consultation on the North Dublin Transport Study with a deadline of 19th January 2015 as advertised at:


An Taisce welcomes the study and the opportunity to submit a submission.

An Taisce would like to be included as a stakeholder on further workshops or consultations on this subject.

1.2 Background

An Taisce has for many years been advocating for a review of transport plans for North Dublin and strongly welcomes the wide scope of this review. In particular:

- An Taisce strongly supports the Smarter Travel policy vision for transport to 2020 and has repeatedly referred to it in its planning submissions. It can be cited internationally as an best practice example of a national transport policy.

- An Taisce attended the Oral Hearing for the Metro North project and made a detailed submission on the project (Available on request). The submission said that the benefits of the project were being oversold, especially due to the end of the Celtic Tiger bubble. It criticised the way that the cost benefit analysis only compared a single low cost low benefit bus or Bus Rapid Transit option with the Metro North proposals. An Taisce has always stressed that the Metro North should have been compared to a combination of BRT routes including the Swords Road and the Dublin Port Tunnel.

- An Taisce advised the NCAD graphic designer Aris Venetikidis on his masters project on mapping of public transport in Dublin: http://www.venetikidis.com/ArisV/DUBLIN_TRANSPORT_MAP.html

This was not a detailed design, rather an attempt to illustrate how Dublin could benefit from a ‘network effect’ if it created a dense integrated public transport network. It also illustrated the potential for lower cost Bus Rapid Transit to be more widely deployed to achieve this network effect in a low-density city like Dublin. In particular note that a number of different BRT routes are shown serving Swords and the Airport rather than a single LRT or rail line. See the Dublin network diagram in the appendices.

- In September 2013 An Taisce made a submission on the Draft Integrated Implementation Plan 2013-2018. This submission was strongly supportive of the projects included in plan to 2018 and called for them to be funded. In particular it welcomed: the rail connections between Heuston and Docklands which would complement the later Dart Underground; and the decision to try BRT on three routes on five radial corridors.

http://www.nationaltransport.ie/wp-
To show support for the Integrated Implementation Plan 2013-2018 and illustrate the potential benefits for the city An Taisce published a series of schematic maps of the proposals in the plan and what they would look like with Dart Underground completed too. It can be seen that for the first time Dublin would have an integrated transport network. The maps are included in an appendix to this document.

An Taisce made submissions to the two Swiftway public consultations. These were generally strongly supportive, while including a detailed review of the proposals.

Therefore An Taisce finds itself in the happy position that it is strongly supportive of the projects in the published Integrated Implementation Plan 2013-2018 and now welcomes a fresh look at transport provision beyond 2018.

2 Comments on Methodology

- We note the decision to use a catchment of 1000 m for rail and Light Rail Transit but 600 m for Bus Rapid Transit. 1000 m makes sense for rail. However in many cases Light Rail Transit services might only warrant a 600 m catchment while high specification BRT services may warrant a 1000 m catchment in some cases. It would be better to use 1000 m for all, use 600 m for LRT and BRT, or use 1000 m where certain standards for capacity and line speed are met. O’Connor (2014) and O’Connor (2014) shows show that people in Dublin are demonstrably walking 1000-1500m to good quality QBC’s, never mind BRT.

- The growth in cycling and the Dublin Bikes are a very significant change since previous transport reviews. Cycling should be integrated with public transport. It is generally considered that cyclists will cycle three times the walking distance to a stop, which is a area that is nine times greater. Martens (2004) http://www.sciencedirect.com/science/article/pii/S136192090400100 found that “[t]he majority of bike-and-ride users travels between 2 and 5 km to a public transport stop, with longer access distances reported for faster modes of public transport.” This is relevant in serving a large low-density area such as Swords. Note also that the long term plans for Dublin Bikes published by Dublin City Council envisage extending the scheme as far north as Dublin City University. This will increase catchments at stops in North Dublin City. The more general point worth adding here is that there ought to be cycling friendly routes from all directions within a 5km radius of every public transport stop.
• Greater benefits should be given to proposals which do more to created an integrated transport network. There is a network effect where once individual services integrated into a network the sum of the passengers on the network will be greater than the sum of the individual projects analysed in isolation (Laird et al 2005). This should be considered when comparing single routes with combination options. Increases in passengers on existing routes and stops should also be considered. By improving the transport network these proposals may make journeys involving interchange more attractive, or may facilitate people to live car-free or purchase annual transport passes. These factors can increase passengers away from the specific new stops.

• Given the changes to the rail network proposed and the significant investment in tunnelling proposed for some options the implications for the national rail network should be considered. This does not mean that the scope should go beyond the study area just that potential improvements to the national rail network should be allowed for, in particular the potential to create a direct Belfast – Dublin Airport – Dublin – Cork intercity service.

3 Conclusions

3.1 Dart Underground in Do Minimum Welcomed

An Taisce welcome the inclusion of the three Swiftway services and the Dart Underground in the Do Minimum scenario. Dart Underground must be the first priority as it integrated services across Leinster and maximises benefits of the significant existing network.

3.2 Conclusions broadly supported by An Taisce

An Taisce commends the sensible analysis of the different options and generally agrees with the one’s which have been eliminated, with the exception of the Heuston-Airport Rail option which we will discuss below. The six short-listed schemes are a sensible list and An Taisce would welcome the opportunity to be involved in the next stage of the process.

3.3 Congestion at Doyle’s Corner, Phibsborough

The conclusion that a LRT or BRT service running North South through Doyle’s Corner in Phibsborough would not work due to the congestion caused is surely true. Alternatives to avoid this pinch point should be considered. An Taisce suggests considering a cut and cover tunnel under the Royal Canal Park from Broadstone to Phibsborough to avoid Doyle’s Corner. This would have environmental impacts that would need to be mitigated sensitively. However, it would link up the four lane roads on Constitution Hill and Glasnevin. Alternatively, consider shared Bus Rapid Transit and Light Rail Transit on the Luis Cross City from Broadstone northwards to avoid Doyle’s Corner. This was illustrated in the maps by Aris Venetikidis

http://www.venetikidis.com/ArisV/DUBLIN_TRANSPORT_MAP_files/DublinCityCentre-AllModes_1.jpg
http://www.venetikidis.com/ArisV/DUBLIN_TRANSPORT_MAP.html

And in the Appendices
3.4 Comments on Metro North

Having built Luas Cross City and the Swiftway BRT to Swords the idea of running Metro North parallel to the Luas from Stephen’s Green to Parnell Square and then parallel to the Swiftway to Swords is crazy. We note that the passenger forecasts for Metro North have been reduced by the RPA to 12,000 passengers per direction per hour. In An Taisce’s submission to the Metro North Oral Hearing we called for the Metro North to be compared to three BRT routes on: the Ballymun corridor, Swords corridor and the Dublin Port tunnel. This can easily deliver 12,000 passengers per direction per hour. It would also serve both the Ballymun and Swords road corridors in Dublin City and provide fast express access to the Airport and Swords. See the Aris Venetikidis maps for illustrations: http://www.venetikidis.com/ArisV/DUBLIN_TRANSPORT_MAP.html. If a rail option is still to be considered it should server areas that do not already have a high quality BRT or LRT service and not duplicate existing investment.

3.5 Technical comment on Ballymun tunnel.

Was a bored tunnel under Ballymun compared to the cut and cover options? Once the tunnel-boring machine (if one is used) is set up to go under Glasnevin, would it not make sense to continue it on?

3.6 Heavy Rail should be used for tunnels

If significant lengths of tunnel are proposed then heavy rail DART services should be used. The existing LRT lines have significant length of shared running through the city, which reduces the speed and the capacity of the services. Therefore the full benefits of a tunnel would not be realised if it were to be integrated with the Luas network. Meanwhile the DART network serves four corridors with segregated fast high capacity services. If any long tunnel is proposed it makes sense for it to be heavy rail DART standard to allow integration across the Greater Dublin Network. More on this follows in the next section.

Because of the points above the optimised Metro North option LR7 would appear to be a poor investment.

The LR3 option of continuing the Luas Cross City with a short tunnel under Glasnevin and then street running to the Airport might not be a bad option if the costs were low enough, but it would need to be complemented by a heavy rail or Port Tunnel BRT express service to Swords and the Airport.

3.7 Reconsider Heuston – Swords Rail Tunnel

An Taisce would like one of the eliminated options to be reconsidered, namely heavy rail HR9 Heuston to Swords via Phoenix Park Tunnel.

We note that this was eliminated due to the distance from Islandbridge to Heuston and the need to transfer to get to the City Centre Core. However, we believe one key factor has not been considered the potential benefits for the National Rail Network.

An Taisce suggests continuing the option to connect with the Northern Line at Donabate and with the Dublin City – Airport – Swords Port Tunnel BRT. This would open up the following opportunities:
• Passengers from Dublin Airport or Swords would have a direct express Port Tunnel BRT service to the City Centre.
• Passengers from Dublin Airport or Swords could also use the new Dart service and interchange at Donabate (Balbriggan DART), Broombridge (Maynooth and Dunboyne DART and Luas Green) or Heuston/Islandbridge (Kildare DART).
• It would also facilitate the potential to run an electrified national rail service from Belfast – Donabate - Dublin Airport – Broombridge – Islandbridge – Cork. In the context of planning to 2035 the national rail network must be considered. An electrified direct Belfast – Cork services is not an outlandish proposal.

See the map in the appendices, which illustrate this.

4 References


O’Connor David (2014) MALAHIDE QBC & ENVIRONS LEVEL OF SERVICE ANALYSIS Proceedings of the ITRN2014 4-5th September, University of Limerick

O’Connor David (2014) STILLORGAN QBC LEVEL OF SERVICE ANALYSIS Proceedings of the ITRN2014 4-5th September, University of Limerick
5 Appendices
5.1 Appendix A: 2015 Map by An Taisce
Projects Included on This Map by An Taisce

Existing DART, Luas, Commuter Arrow and Intercity services with some reorganisation of train services due to opportunities from new infrastructure.

Luas Cross City Green line under construction

NTA’s proposed Swiftway Bus Rapid Transit services

NTA’s proposed Navan DART rail line.

Dublin Port Bus Rapid Transit option from North Dublin Transport Study

Heuston - Airport DART option from North Dublin Transport Study with assumed stop locations and An Taisce’s proposal to extend this to the Balbriggan line.

An Taisce’s proposal to run Intercity trains from Cork to Islandbridge, then via the existing Phoenix Park Tunnel to Liffey Junction, then via a new tunnel under Glasnevin to the Airport, then overland to the Balbriggan line and on to Belfast. This would require electrification and should be allowed for in the long-term.

Advantages

Provides a long-term plan for Ireland’s Intercity Rail Network

Provides local and national connections to Dublin Airport

Maximises exiting rail and port tunnel infrastructure

The airport and Intercity line stops twice in the City Centre at Islandbridge and Liffey Junction. It includes interchanges with BRT, Luas, DART and train services at Donabate, Airport, Liffey Junction and Heuston/Islandbridge connecting the entire city and country.
5.2 2009 Map by Aris Venetikidis

See http://www.venetikidis.com/ArisV/DUBLIN_TRANSPORT_MAP.html for more.

© Aris Venetikidis.