

20140313-NTA-BRT

Mr Hugh Creegan  
Director of Transport Investment and Taxi Regulation  
National Transport Authority  
Harcourt Lane  
Dublin 2

14.03.14

**Re: Consultation on the SwiftWay Bus Rapid Transport Proposals for Dublin**

Dear Mr Creegan,

An Taisce welcomes this consultation period on the **SwiftWay Bus Rapid Transport Proposals for Dublin** and the opportunity to make a submission.

Please acknowledge receipt of this submission and advise us further of any forthcoming consultations in relation to same. We would also welcome the opportunity to meet with you to discuss the issues outlined in our submission.

**Yours sincerely,**

**James Leahy**  
**Hon. Secretary**  
**secretary@antaisce.org**

# **Consultation on the SwiftWay Bus Rapid Transport Proposals for Dublin**

**14<sup>th</sup> March 2014**

**Prepared by James Leahy  
secretary@antaisce.org**



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## 1.0 Introduction

### 1.1 The Consultation

This submission is a response to the National Transport Authority's Public Consultation on the SwiftWay Bus Rapid Transport proposals for Dublin with a deadline of 14th March 2014 as advertised at:

<http://www.nationaltransport.ie/consultations/public-consultation-on-busrapid-transit/>

### 1.2 Comments on the Consultation Documents

The public consultation website is well laid out and informative. Having made a submission, An Taisce would like to keep a copy of the consultation documents. It would be useful if there was a link to download a .pdf report with all the information included, as it is difficult to take a copy of the website.

### 1.3 General Comments

An Taisce is strongly supportive of the overall concept of Bus Rapid Transit for Dublin, of the National Transport Authority's Draft Integrated Implementation Plan 2013 – 2018 and of the SwiftWay proposals. Detailed comments and constructive criticisms follow below. Here we will make some general comments.

If one goes back and reads the section on Quality Bus Corridor (QBC's) in the 1995 Dublin Transport Initiative report, there is a list of measures which were to be included in the QBC's. The list is very similar to the list in the current proposals, and what is generally considered Bus Rapid Transit.

Since 1995 there has been much debate about Bus Rapid Transit, QBC's and Light Rail Transit, both nationally and internationally. The concept of Bus Rapid Transit has become widely known among transport policymakers. The Luas in Dublin has been a striking success with the public and has changed the perception of what public transport can be, among a large sector of the population. The QBC's have been a mixed success. Where good priority and frequency were delivered there has been a large shift from private car use to bus use e.g. the Stillorgan, Malahide and Lucan QBC's. Other QBC's have been less successful. Many of the other high quality customer experience elements of the DTI proposals have not been delivered.

The conclusion that should be drawn is not that the QBC's have failed, but that they have been a partial success due to their partial implementation. What is needed now is to use the Luas as a local benchmark of quality, and to use international experience of BRT, to upgrade the QBC's to the same level of quality as Luas. The SwiftWay proposal will do this if done correctly.

It should also be noted that much has been achieved since 1995, which will make SwiftWay a lot easier to deliver compared, for example, to what a typical British city might face. E.g.

- Significant priority has already been claimed for QBC's especially on the Swords, UCD and Malahide corridors.
- We now have the Leap Card integrated ticket.
- We have a National Transport Authority to deliver integrated transport.
- We have built up considerable local skills through the RPA and QBN Office.
- We have the Automatic Vehicle Location system and a control centre to manage public transport and traffic.
- The College Green busgate
- The Marlborough Street bridge.
- An Integrated Journey Planner and the Google Maps planner.

The missing pieces of the jigsaw are:

- Integrated branding for urban public transport
- Integrated information and mapping for public transport
- High quality vehicles
- High quality public transport interchanges.
- Good running surfaces
- Signal priority in certain areas.

#### **1.4 Long Term Potential of BRT**

Dublin has expanded massively over the last generation into a sprawling low density city. We will never provide an integrated Paris Metro public transport system across the entire city using rail due to the size and density of the area to be served.

It is crucial to deploy our investment as widely as possible and to provide an integrated network. An Taisce has illustrated this network effect in the maps in the Appendix. It can be seen that the SwiftWay and Phoenix Park tunnel projects can for the first time provide a significant integrated network of public transport services across the city. It can be seen how many potential trips could be made by making only one transfer.

Suggestions have been made in some of the maps in the Appendices for improved integration. Other maps also illustrate the long-term benefits of the Dart Underground proposals.

Another benefit of the BRT proposals is that they can be deployed quickly. If they are successful, as they have been elsewhere, a debate can be held about extending them to other areas such as Ballymun, Coolock, Finglas and Lucan. See the maps produced here by Aris Venetikidis for the longterm potential.

[http://www.venetikidis.com/ArisV/DUBLIN\\_TRANSPORT\\_MAP.html](http://www.venetikidis.com/ArisV/DUBLIN_TRANSPORT_MAP.html)

#### **1.5 Comments on Capacity**

The comments on capacity, that BRT is a mode that fits in between conventional bus and Light Rail Transport, are not valid. International guidance and examples show that BRT can provide the same capacity as Light Rail Transit. There are a variety of criteria for why one might choose between Light Rail Transit and Bus Rapid Transit. It is not a case of deciding the capacity that is required and then selecting the mode. The existing QBC's such as the Malahide, Lucan and UCD ones, have an actual delivered capacity of up to 8000 passengers per direction per hour (i.e. buses with capacities of 91 or 125 at 60 to 120 buses per hour.).

#### **1.6 Environmental Concerns**

As noted there are a variety of options for propulsion of the vehicles. Wrightbus in Ballymena manufacture efficient diesel hybrid buses. The Cristalis trolleybus BRT system from Lyon is also an option. When considering the environmental benefits it is important to consider the potential reduction in car use. E.g. A BRT system with diesel buses will still deliver a reduction in local and overall emissions due to the reduction in private car use. Furthermore the lower cost of BRT means that more if it can be deployed. The potential for emissions reduction per euro of investment should be considered.

## 2.0 Cycling

### 2.1 Bikes on Buses

There should be provision to bring bikes on the BRT buses at off-peak times, similar to what is allowed on the DART.

Bikes could be carried off peak without specific racks in the vehicles as is done on the DART. Or see the BRT vehicles with three internal bike racks per bus that WrightBus have supplied to Las Vegas.

Consideration should also be given to bike racks at the front or rear of the buses. Bike racks at the rear would need CCTV. Bike racks at the front would need bumpers etc to address designing for pedestrian impact.

### 2.2 Designing for Cycling Along Corridors

The consultation documents state that segregated cycling routes will generally be provided along the corridors. It should not be assumed that segregated routes provide a higher level of service or safety for cyclists. It is often the opposite. Instead reference should be made to the National Cycle Policy Framework and National Cycling Manual. These advocate a Hierarchy of Measures for designing for cycling.

### 2.3 Bike Parking

The BRT needs to be integrated with DublinBikes and with significant high quality parking for regular bicycles. See this example from Copenhagen:

<http://www.copenhagenize.com/2014/02/malmo-opens-fantastic-bike-parking-at.html>

### 2.3 Interaction of Cyclists with Articulated Buses

There can be issues with the interaction of the rear of turning articulated buses and cyclists. These must be addressed in the design of the routes. Consideration should be given to what will occur on the typical route and what will occur if buses need to overtake other vehicles or otherwise divert.

## 3.0 Detailed Comments on Routes

### 3.1 Urban Design

There is a need to consider a wider range of criteria when designing the system that narrow transport considerations. The routes will run along key urban corridors. For Dublin to be an attractive and competitive city for citizens and investors, we need to design streets that are beautiful and that consider all uses.

The Line 4 BRT route in Nantes is a leading international example. The design of the Luas on Harcourt Street and the Luas Red line through the City Centre are also good local examples.

The new Irish Design Manual for Urban Roads and Streets is excellent and should also be used: <http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/FileDownload,32670,en.pdf>

A good reference on integrating BRT into urban streets is the CERTU report on Bus with a High Level of Service (BHLS). It explains the need to provide a façade to façade urban design treatment. <http://www.uitp-bhls.eu> or available on request from [secretary@antaisce.org](mailto:secretary@antaisce.org)

### 3.2 Grangegorman

Consideration should be given to routing the Blanchardstown line through Grangegorman DIT Campus to avoid the significant congestion in Stoneybatter.

### 3.3 The Airport and Swords

The consultation documents state:

*The Swords/Airport to City Centre Swiftway is not intended as a substitute for Metro North. The proposed Swiftway service is the appropriate transport solution to serve the existing public transport deficit along this corridor in the short to medium term. If development occurs along this corridor as currently planned, there will be a requirement to deliver a rail based solution such as Metro North to fully serve the broad Swords to City Centre corridor in the longer term.:*

Both this and the previous Metro North proposals wilfully ignore the existence of the Dublin Port Tunnel. This is successfully carrying the 747, Aircoach and Swords Express services plus a range of longer distance services. Many of these are in effect already BRT services. Unless the National Transport Authority intends to exclude such services from the Port Tunnel then they will continue to provide fast competitive BRT type services to Swords and the Airport.

There is a need to address the Dublin Port Tunnel by designating and marketing certain services through the tunnel as BRT services. The SwiftWay Swords BRT should then be designed to compliment this. Between the two capacity can be provided to Swords and the Airport in the medium to long term.

The Port Tunnel services should be aimed towards Airport-Centre journeys, commuters from Swords and journeys to access the Docklands.

The Swords Road BRT should be aimed towards access to the Airport for employees and the significant demand between Swords, the Airport, Santry, DCU, Drumconrda etc.

### **3.4 Junction Treatment**

In more suburban areas and beyond median lane BRT routes with island platforms should be considered.

Where kerb lane BRT lanes are provided: General traffic should not be allowed enter the BRT lane beyond the junction at all. Before the junction all general traffic should generally be excluded. If traffic is allowed in, it should only be left-turning traffic. Traffic going straight-on should not be allowed in as is the present arrangement on many QBC's.

Consideration should be given to concrete, plastic or rubber physical separators to exclude general traffic.

### **3.5 Enforcement**

The legislation should be amended to allow for enforcement cameras on the front of buses. If they encounter a vehicle illegally in the bus lane they should record this allowing a fine to be posted out. This would be fair and efficient as, by definition, the illegal car would be delaying the bus.

### **3.6 Taxis**

While taxis are small public transport vehicles, in many cases the numbers of taxis cause congestion and defeat the purpose of bus lanes. They should generally be excluded from the SwiftWay lanes and should definitely be excluded from lanes in the City Centre or congested radial routes. This may require a change in bus lane legislation.

### **3.7 Luas Red Line**

Consideration should be given to running the Tallaght – Clongriffin service along the Luas Red line in the City Centre. This would maximise the use of this public transport corridor and avoid congestion on the Quays, and leave the Quays for other bus services.

### **3.8 Bendy Buses**

There appears to be a prejudice against bendy-buses in the London based media. These are run successfully in many places across the world and can be designed to work in Dublin.

The trial of bendy buses on the No. 4 a few years ago was doomed to fail from the start due to the use of bendy buses with only a single door.



## 4.0 Public Transport Integration

### 4.1 Branding

The SwiftWay branding and graphic design looks weak.

We already have good and respected brand for this type of service with the Luas brand. This brand should be used for the BRT routes too. The Luas level of quality should be used a benchmark in delivering a similar level of quality for the BRT routes.

There is also a need to rationalise and integrate branding of public transport generally in Dublin. London has Cross Rail, Underground and bus. Paris has RER, Metro and Bus. Germany has S-Bahn, U-Bahn and Bus. Spain has Cercanias, Metro and Bus. Ireland should follow this good practice. We should have a hierarchy of services based on the passenger experience not the operator or mode. We should brand the network around a hierarchy of three levels of service: DART, Luas and Bus.

- DART: Covers longer distances with greater station spacing with high capacity and a minimum frequency of 4 services per hour. Can be electrified or diesel trains or possibly an express Airport bus service through the Dublin Port Tunnel.
- Luas: Serves urban area of Dublin with medium sized distances and stop spacing and a minimum frequency of 6 services per hour. E.g. the existing Luas Light Rail services and the proposed BRT services.
- Bus: The remaining bus services which compliment Dart and Luas. See the maps by Aris Venetikidis to see how this might look in practice.
  - [http://www.venetikidis.com/ArisV/DUBLIN\\_TRANSPORT\\_MAP.html](http://www.venetikidis.com/ArisV/DUBLIN_TRANSPORT_MAP.html)

### 4.2 Interchanges

With an underground system the design of interchanges is aided by the fact that people are enclosed in a closed system. With the current proposals some of the interchanges will be on public streets. E.g. The Clongriffin-Tallaght BRT, Swords BRT, Luas Red and Luas Green lines will interchange at O'Connell Street / Abbey Street. There is a need for an imaginative urban design and information solution to facilitate interchange here. E.g. when someone gets off a service there must be a clear way to guide them onto the next service.

The consultation says that no park and ride facilities will be provided. What is the justification for this?

The BRT proposals should allow for interchange with the future Dart Underground and Phoenix Park tunnel projects. See the example maps in the appendices. These need to be considered at Cabra Road, Drumcondra, Stephen's Green, Christchurch and Connolly Station.

The station names for the proposed BRT stops should be changed to allow for future integration with other public transport services and to avoid confusion by making stop names unique. For example:

- There shouldn't be separate Killester stations on the DART and Clongriffin BRT.

- Clonliffe Road BRT should be renamed Drumcondra to match the train station with the Drumcondra BRT station being renamed to Drumcondra village or something else.
- There is an existing Luas Red station called Abbey. The BRT stations on the Swords and Tallaght-Clongriffin services should also be called Abbey to facilitate interchange.
- The Queen Street stop on the Blanchardstown BRT should be renamed Smithfield to match the Luas Red.

#### 4.3 Fares

There is a need for an integrated fare system across all public transport systems and at a minimum across DART, Luas and BRT. E.g. if someone travels from Blanchardstown to UCD on the BRT they will use one service. If they start at Blanchardstown and then transfer and finish at Rathfarnham via BRT, Dun Laoghaire via DART or Sandyford via Luas; will they be penalised?

There should be an integrated fare system using either zones or charges per km travelled.

#### 4.4 Arrangement of Services

There are benefits from beginning the system with a simple arrangement and then extending it later.

Will the system allow for other branches?

The Swords BRT terminates in the City Centre. Has a Swords-UCD or Airport UCD BRT been considered using the infrastructure which will be constructed for the Blanchardstown-UCD and Swords-City Centre BRT's?

Will the system have a mixture of BRT and conventional bus services?

How will the existing bus services be replanned to integrate with the BRT?

#### 4.5 Extensions

It can be seen from the maps in the appendices that some obvious opportunities for interchange are being missed by the places the BRT lines are being terminated. Consideration should be given to:

- Continuing the UCD BRT to the DART at Blackrock, Dun Laoghaire or Bray or continuing it to the Luas using the Blue Line proposal to Sandyford:
  - <http://www.dlrcoco.ie/aboutus/councildepartments/corporateservices/communicationoffice/pressreleases/2010/oct2010/08oct2010-bluelinedublinrapidtransit/>
- Continuing one of the Blanchardstown BRT branches to the PaceM3 train station and park and ride.
- Continuing the Clongriffin BRT to Clongriffin DART station.

## Appendices

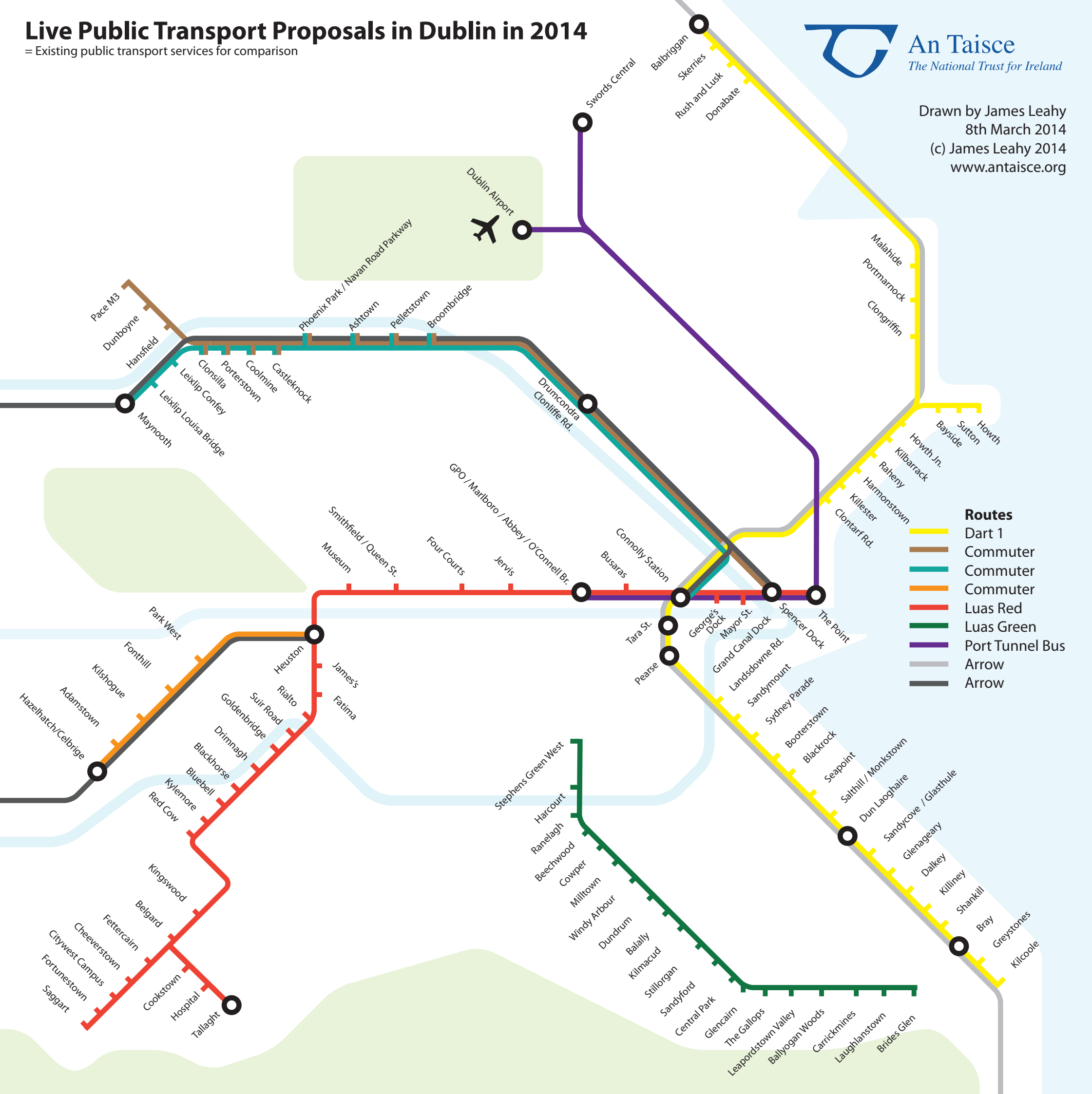
# Live Public Transport Proposals in Dublin in 2014

= Existing public transport services for comparison



An Taisce  
The National Trust for Ireland

Drawn by James Leahy  
8th March 2014  
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- Routes**
- Dart 1
  - Commuter
  - Commuter
  - Commuter
  - Luas Red
  - Luas Green
  - Port Tunnel Bus
  - Arrow
  - Arrow

# Live Public Transport Proposals in Dublin in 2014

= National Transport Authority's Draft Integrated Implementation Plan 2013-2018

With DART arrangement assumed by An Taisce.



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# Live Public Transport Proposals in Dublin in 2014

= National Transport Authority's Draft Integrated Implementation Plan 2013-2018

With alternative DART arrangement assumed by An Taisce.



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# Live Public Transport Proposals in Dublin in 2014

= National Transport Authority's Draft Integrated Implementation Plan 2013-2018

With alternative DART arrangement and BRT Extensions assumed by An Taisce.



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The National Trust for Ireland

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7th March 2014

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# Live Public Transport Proposals in Dublin in 2014

= National Transport Authority Draft Integrated Implementation Plan 2013-2018 + DART Underground



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# Live Public Transport Proposals in Dublin in 2014

= National Transport Authority Draft Integrated Implementation Plan 2013-2018 + DART Underground  
 + Phoenix Park tunnel with DART arrangements assumed by An Taisce.



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 8th March 2014  
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- Routes**
- Dart 1 (2030?)
  - Dart 2 (2030?)
  - Dart 3 (2016)
  - Dart 4 (2016)
  - Luas Red (2014)
  - Luas Green (2017)
  - BRT 1 (2018)
  - BRT 2 (2018)
  - BRT 3 (2018)
  - Port Tunnel (TBC)
  - Arrow
  - Arrow