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1. What is the DART+ Programme?

The DART+ Programme is a transformative programme of projects which aims to modernise and improve existing rail services in the Greater Dublin Area (GDA). It will provide a sustainable, electrified, reliable and more frequent rail service improving capacity on the rail corridors serving Dublin. The current DART network is 50km long extending from Malahide/Howth to Greystones. DART+ Programme will increase the length of the DART network to 150km of railway corridor through the upgrade of existing lines.

DART+ Programme is included within the following Government policy strategies:

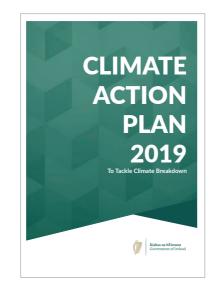
- The National Development Plan 2018 2027;
- Transport Strategy for the Greater Dublin Area 2016 - 2035; and
- The Climate Action Plan 2019.

Passenger capacity and train service frequency will be significantly increased as a result of the project. This will help to deliver a more efficient transport system, allowing more people to sustainably travel to more places than before. DART+ Programme will provide a viable, sustainable alternative to private car use, therefore helping users reduce their carbon footprint.

DART+ Programme will provide frequent, modern, electrified services to Drogheda on the Northern Line, Hazelhatch - Celbridge on the Kildare Line, Maynooth and M3 Parkway on the Maynooth/Sligo Line, while improving DART services on the South-East Line as far south as Greystones. By extending and modernising the existing network, DART capacity and frequencies can be significantly increased, creating a reliable and sustainable electrified train network that fully integrates with all other modes of public transport in the Greater Dublin Area.







2. DART+ Programme - The Facts



Increased passenger capacity for a quality alternative to private car transport



Rail improvement programme to modernise the existing network



Purchasing additional

DART style trains to support improved capacity and frequency



Integration of all heavy rail lines



Additional fleet of electric trains allowing for a reduction in CO² emissions



Significantly increase train frequencies, especially during peak hours



Help to alleviate road congestion



Integration with the existing and future public transport network - BusConnects, Luas and MetroLink

3. Why DART?

By extending and modernising the existing DART network, we can significantly increase capacity and frequencies, creating a reliable and sustainable electrified train network that

fully integrates with all other modes of public transport in the Greater Dublin Area.

DART+ Programme will be a key component of an integrated public transport network for the Greater Dublin Area. The project aims to address existing heavy rail network constraints

To Dundalk Drogheda 📛 Map Key Existing DART Line M1 M2 DART+ Coastal North ■ DART+ West М3 **─** DART+ South West ■ DART+ Coastal South M3 Parkway National Rail Network Dunboyne 📛 New DART Depot west of Maynooth Howth Junction Hansfield 🔾 Howth Maynooth M4 Connolly Pearse Mazelhatch ∕X Kildare M50 M11 Greystones

DART+ Programme Scope 2018 - 2027

and respond to increases in demand for travel by improving the utilisation of the existing transport infrastructure. It will ensure that high volumes of travellers can be moved directly to their desired destination by providing high-capacity links along existing corridors and between areas identified for higher-density employment and higherdensity residential developments.

Heavy rail already has established routes from the regions into Dublin City Centre that have the potential to be more heavily utilised.

4. Evolution of DART



23rd July 1984

The Dublin Area Rapid Transit (DART) began running between Bray in North Wicklow, and Howth in North County Dublin.

2000

Line expanded to Malahide and Greystones.

Present Day

The DART currently serves 31 stations. It carried approximately 22 million passengers in 2019. DART services are operated by electricity-powered trains and run every 10 minutes during weekdays.

Future

The DART+ Programme aims to increase peak hour capacity from 26,000 per hour per direction to circa 52,000 per hour per direction by 2027/28. The improvements will create a full metropolitan area DART network for Dublin, with new services to Drogheda, Maynooth - M3 Parkway and Hazelhatch - Celbridge from the City Centre.

5. Why do we need DART+ Programme?

Catering for population and employment growth

- The population in Dublin and the surrounding areas is growing rapidly and the city is heavily choked with traffic. Investment is needed in public transport to sustain economic and population growth around the Greater Dublin Area.
- DART+ Programme can enhance regional heavy rail access to and from the city centre supported by increased frequencies, especially during peak hours.

Addressing capacity issues

- The existing heavy rail network has constraints that limit its passenger capacity. DART+ Programme will address those capacity constraints and allow the network to carry more passengers.
- Station capacity improvements at Connolly Station and Docklands, along with the line capacity improvements and the additional fleet, will allow for more effective timetabling and better services.

Fitting into a sustainable, integrated public transport network

- Dublin's roads are heavily congested due to over-reliance on private cars. Increasing the range of destinations served by a high quality public transport network will reduce the reliance on private cars to access employment opportunities and other essential goods and services.
- DART+ Programme aims to respond to network constraints and increases in demand by utilising existing infrastructure and developing additional interchanges with other public transport modes.

Addressing climate change

- Tackling the challenges of climate change is a priority for Ireland, as outlined in the Climate Action Plan 2019 which identified upgrading the public transport network as an important measure in achieving Ireland's targets, with DART+ Programme an identified key deliverable.
- By providing a cleaner, integrated and more reliable DART service, DART+ Programme will allow more people to make sustainable travel choices and will contribute to a reduction in emissions within Dublin while providing a reliable alternative to private cars.



6. What are the benefits of the project?



Economic Development

DART+ Programme will allow people to travel by DART to more jobs, schools, colleges and services. It also provides an opportunity for new areas to develop along public transport corridors that can support growth into the future.



Building a Sustainable City

DART+ Programme, powered by electrical traction, will positively assist in the de-carbonisation of transport sector and enable a transition away from the use of fossil fuels.



Journey Time Reliability

The project will provide improved journey time reliability and reduced waiting times especially during peak hours.





Tackling Road Congestion

Improved DART services will play a part in alleviating road congestion in the GDA.



Future-proofing our Public Transport Network

DART can act as the core spine of an integrated and sustainable pubic transport network, providing long term infrastructure to future generations.



Increasing Capacity

DART+ Programme will increase city-centre-bound capacity from 26,000 customers per hour per direction to 52,000 passengers per hour per direction during peak hours.

7. Core Elements of the Programme

DART+ Programme is a programme of work comprising several constituent projects to create a full metropolitan DART network with all lines linked and connected. The key elements of the programme are:



New DART service to Maynooth / M3 Parkway on the Maynooth / Sligo Line



DART+ South West: New DART service to Hazelhatch - Celbridge on the Kildare Line



New DART services between City Centre and Drogheda on the Northern Line

DART+ Coastal South

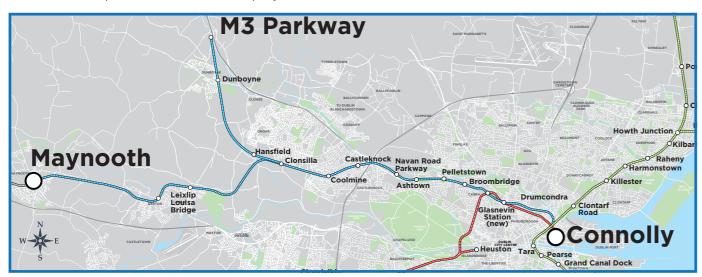
Enhanced DART service to Bray / Greystones on the South-East Line



Purchase of additional trains to support new and enhanced DART services

7.1 DART+ West

The overall scope of the DART+ West project will include:



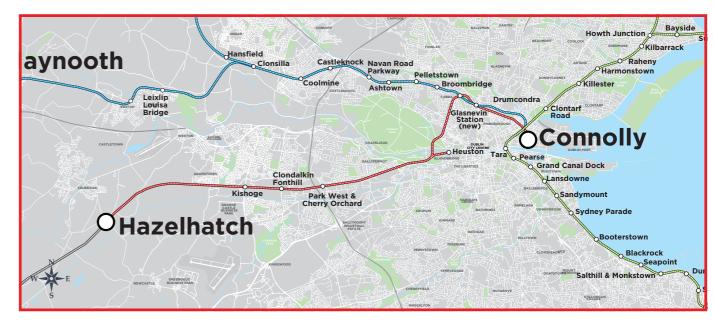
- Electrification of the Maynooth line from City Centre to Maynooth (40km approx.)
- City Centre enhancements at Connolly (platforms, junctions & station modifications) to increase train numbers per hour
- Subject to further assessment, the potential relocation of Docklands Station to a location adjacent to Spencer Dock Luas Stop to better serve all routes entering the City Centre

- Construction of a new DART depot facility west of Maynooth Station for the maintenance and stabling of trains
- Development of an interchange station with MetroLink at Glasnevin serving both the Maynooth Line and Kildare Line
- Elimination of level crossings to reduce rail/road conflict that limits train capacity

- Provide new grade-separated pedestrian, cycle crossing and vehicle crossings as required
- All civil and bridge works as necessary to accommodate electrification, corridor widenings and increased service level
- Upgrades to signalling and communications infrastructure to improve safety, and support increased frequency and reliability

7.2 DART+ South West

The overall scope of the DART+ South West will include:



- Electrification of Kildare Line from Dublin Heuston to Hazelhatch-Celbridge
- Widening of the railway corridor and completing four-tracking between Park West Station and Dublin Heuston
- Addressing constraints within the Phoenix
 Park tunnel to support increased frequency
 of trains
- Provision for new stations at Kylemore, Cabra and Heuston West (subject to assessment)
- All civil and bridge works as necessary to accommodate electrification, corridor widenings and increased service level
- Upgrades to signalling and communications infrastructure to improve safety, and support increased frequency and reliability



7.3 DART+ Coastal North

The overall scope of DART+ Coastal North will include:

- Electrification, re-signalling and power supply from Malahide to Drogheda, to support the projected capacity increases
- Subject to modelling and assessment, station modifications to enhance train service capacity (Howth Junction, Clongriffin, Malahide & Drogheda)
- Re-configure and upgrade existing rail depots at Drogheda & Fairview
- All civil and bridge works as necessary to accommodate electrification, corridor widenings and increased service level
- Upgrades to signalling and communications infrastructure to improve safety, and support increased frequency and reliability



7.4 DART+ Coastal South

The overall scope of the DART+ Coastal South will include:

- Elimination of level crossings to reduce rail/road conflict that limits train capacity
- Provide new grade-separated pedestrian, cycle crossing and vehicle crossings as required
- Subject to modelling and assessment, station modifications at Dun Laoghaire, Bray and Greystones to enhance train service capacity
- Upgrading of Tara Station to facilitate enhanced interchange with MetroLink
- All civil and bridge works as necessary to accommodate an increased service frequency between Bray and Greystones
- Upgrades to signalling and communications infrastructure to improve safety, and support increased frequency and reliability

8. Next Steps

Preliminary Design

Design and planning work is now progressing on all parts of the DART+ Programme.
Environmental Impact Assessments will be conducted on each line and environmental information will be integrated into the design process. The culmination of the preliminary design and the Environmental Impact Assessment studies will be the submission of a Railway Order Application to An Bord Pleanála for the railway works along each line. A Railway Order Application is a planning application for railway development works and must be accompanied by plans and particulars for the works and an Environmental Impact Assessment Reports.

Environmental ImpactAssessment

During the preliminary design and the Environmental Impact Assessment Reports, Public Consultations will be conducted with statutory bodies, interest groups and the general public to gather comments and suggestions for consideration in development of an optimised design.

Railway Orders

Once a Railway Order Application is made to An Bord Pleanála, the public will also have further opportunity to make submissions. The submission of Railway Order Applications will be advertised in the press and all information will be available for review.

Fleet Procurement

In parallel with the preliminary design, a procurement process is being undertaken for the design and supply of new DART fleet. The tender process is underway with the award of the fleet contract scheduled for early 2021.

Preliminary Business Case

In line with the requirements of the Public Spending Code, a preliminary business case will be prepared that will detail all costs and benefits associated with the DART+ Programme. The Preliminary Business Case will be submitted to Government for approval in advance of the lodgement of any Railway Orders.



9. DART+ Programme Key Milestones

