



DART+

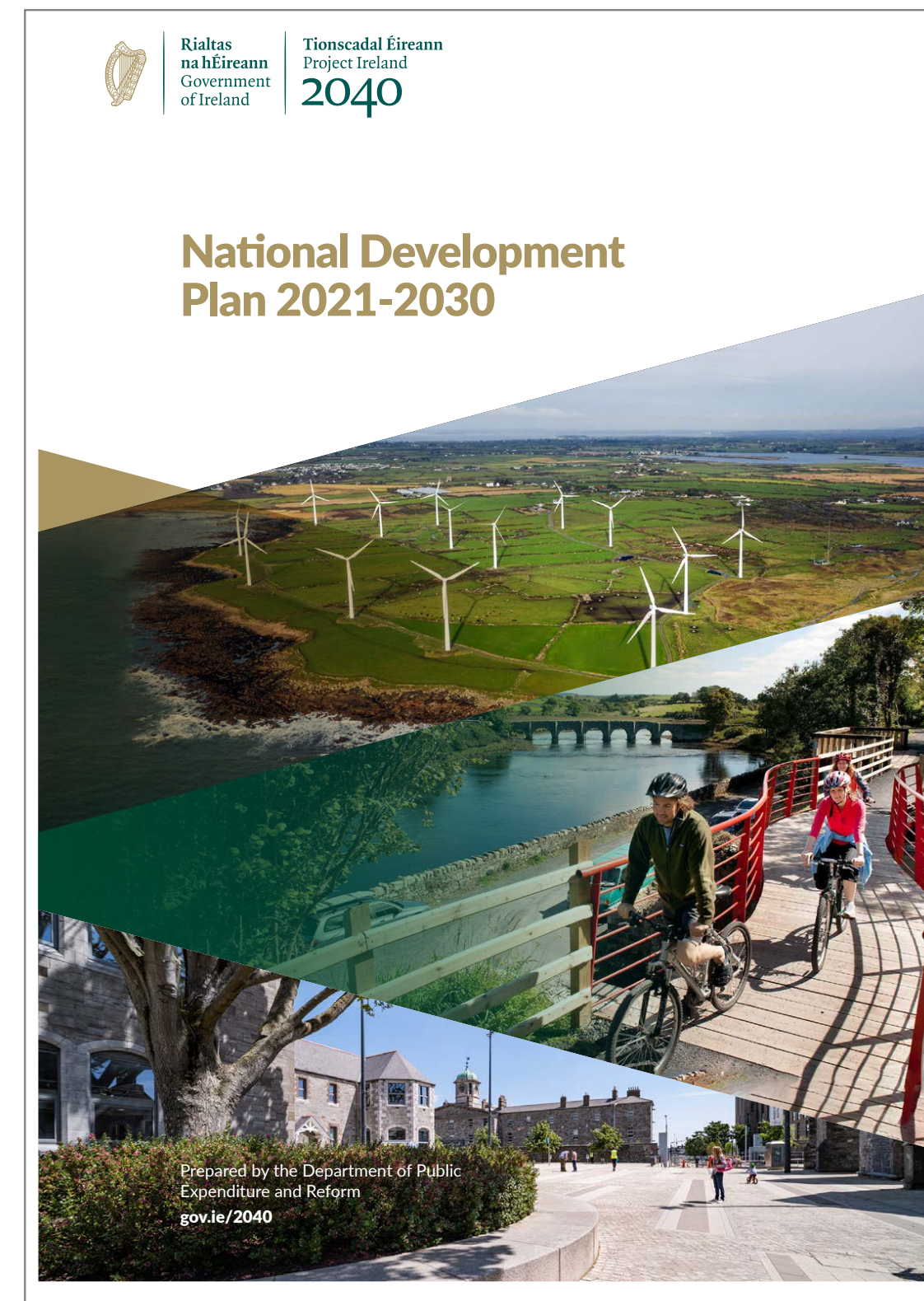
PROGRAMME

Market Update | September 2024

Introduction

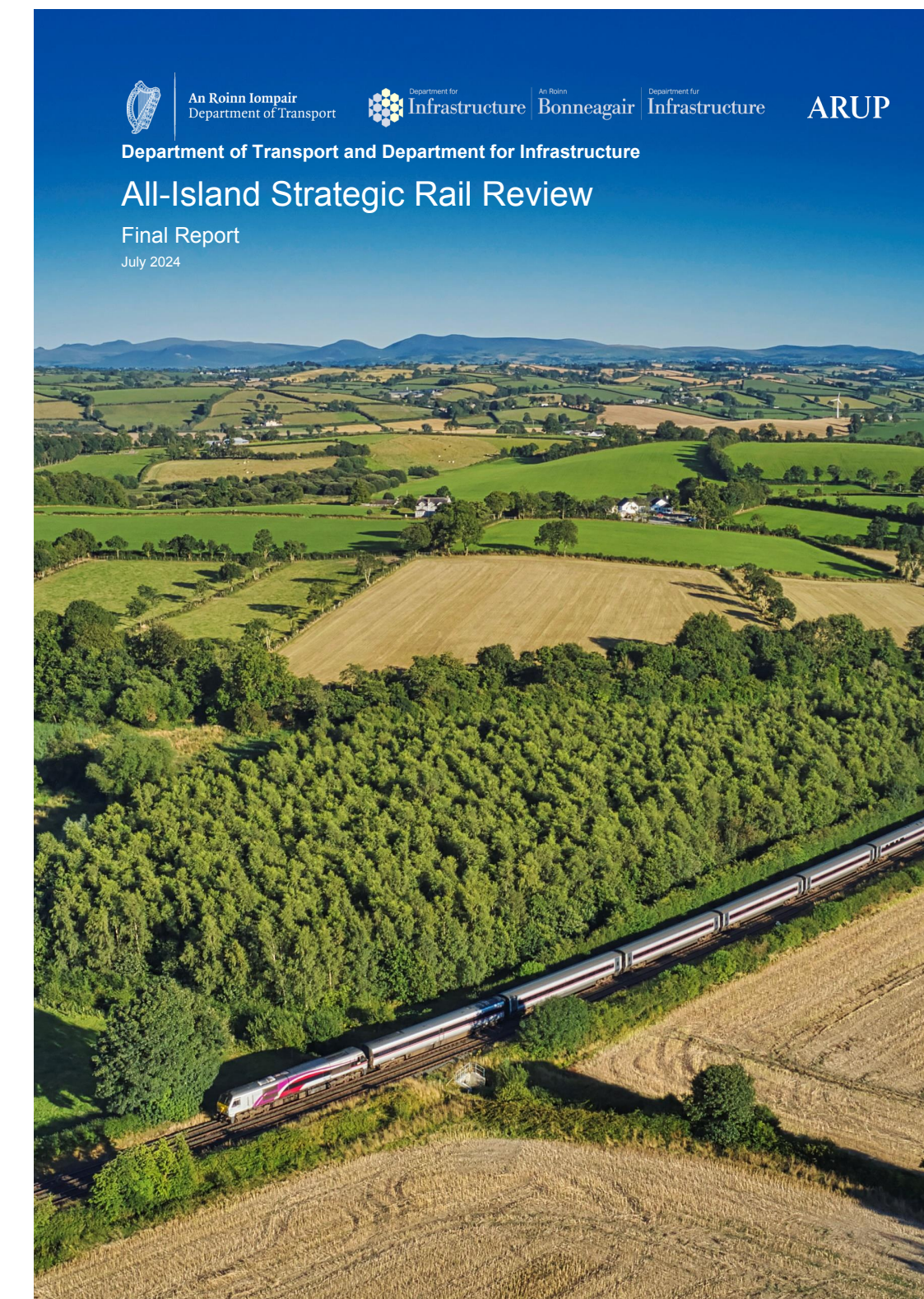
The National Development Plan (NDP) 2021-2030 for Ireland places the DART+ Programme at the centre of rail investment within the lifetime of Project Ireland 2040.

This commitment is reinforced by the Government of Ireland through the inclusion of DART+ Programme in the All-Island Strategic Rail Review report which was published in July 2024.



[gov - National Development Plan 2021-2030 \(www.gov.ie\)](http://www.gov.ie)

National Development Plan 2021-2030 (NDP)



[gov - All-Island Strategic Rail Review \(www.gov.ie\)](http://www.gov.ie)

All-Island Strategic Rail Review
31 July 2024

DART+ Programmes Objectives and Benefits

DART+ Programme is being developed and promoted by Iarnród Éireann and National Transport Authority (NTA) to meet the aims of the National Development Plan (NDP) and the All Ireland Strategic Rail Review. The overall aim of the DART+ Programme is a sustainable, electrified, reliable and more frequent rail service, improving capacity on rail corridors serving Dublin. The benefits of delivering the DART+ Programme are as shown by Figure 1.

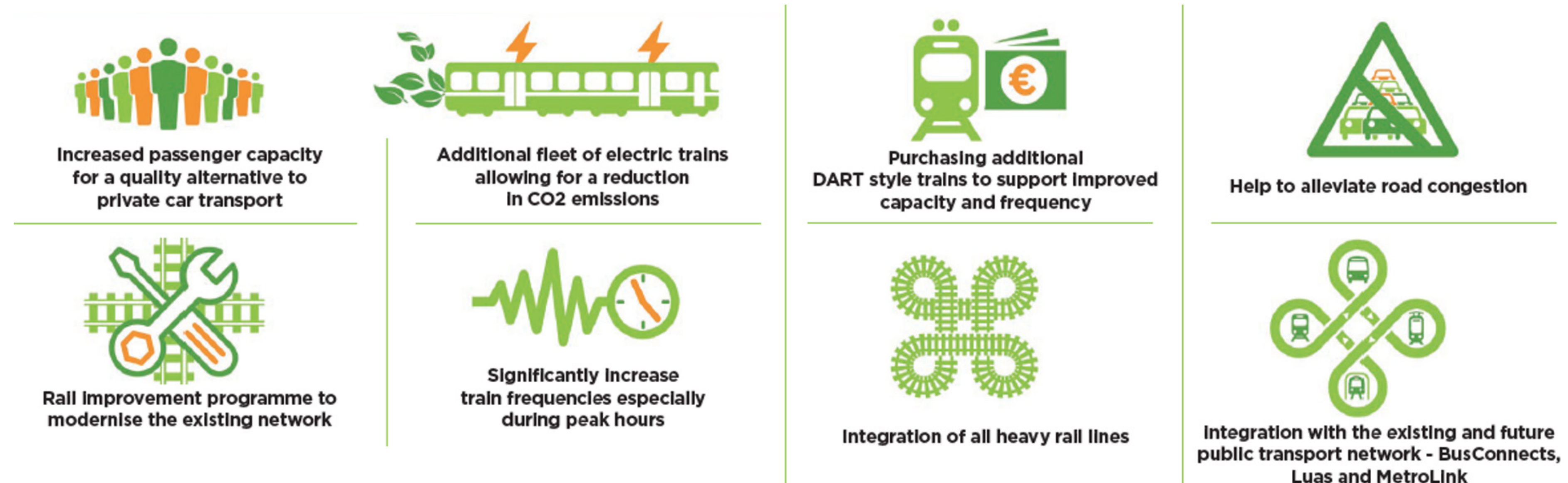


Figure 1: Benefits of delivering DART+ Programme

Overview of the DART+ Programme

The DART+ Programme is a series of projects that will create an integrated network for Dublin, expanding the heavy rail electrified commuter network from the existing c.50km to c.150km, with the objective to increase the capacity of the DART Network. The DART+ Programme consists of four infrastructure projects and another project relating to the procurement of new DART+ fleet.

1. **DART+ West:** Maynooth and M3 Parkway to the City Centre
2. **DART+ South West:** Hazelhatch & Celbridge to the City Centre
3. **DART+ Coastal North:** Drogheda to the City Centre
4. **DART+ Coastal South:** Greystones to the City Centre

Each project while standalone, will tie into the existing railway network. Subject to the approval of Railway Orders (planning permissions), each infrastructure project can be advanced sequentially or concurrently. Further information on the project can be found at the DART+ Programme website:

www.dartplus.ie/en-ie/home



DART+ Future Network

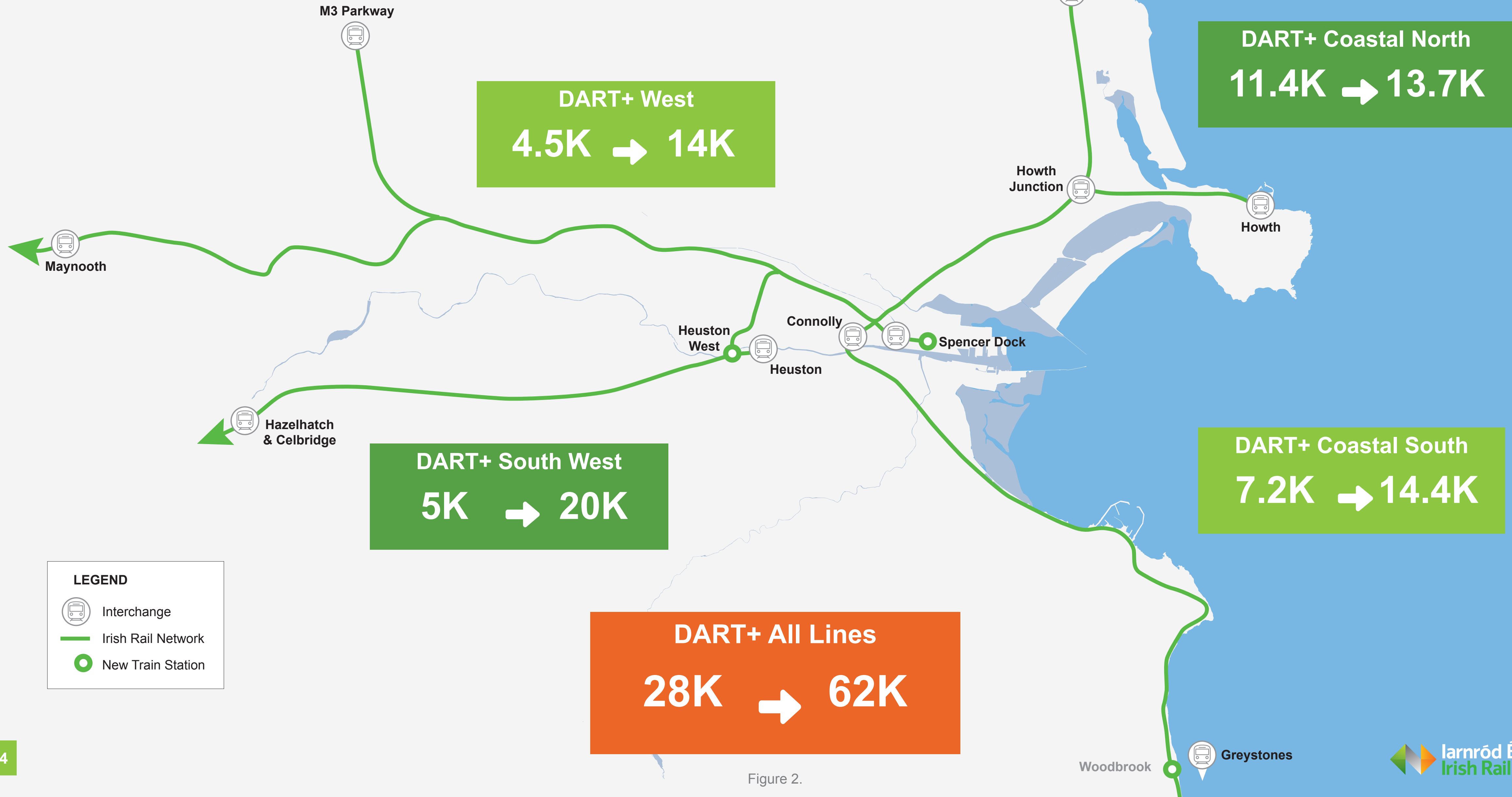


Figure 2.

Key DART+ Programme Updates

The purpose of this brochure is to provide the market with an update in relation to the procurement strategy for the DART+ Programme, and to highlight key DART+ Programme milestones achieved since previous market engagement in 2023. The Board of Irish Rail has given approval for the procurement, packaging and contracting strategy for the DART+ Programme. In relation to progressing the statutory planning process:

Procurement, packaging and contracting strategy:

- > DART+ Programme has finalised its procurement, packaging and contracting strategy

Railway Order approval:

- > In July 2024, An Bord Pleanála granted the Railway Order for the DART+ West project

Railway Order applications:

- > The Railway Order application was submitted for DART+ South West in March 2023. A decision is expected in 2024
- > The Railway Order application was submitted for DART+ Coastal North in July 2024. A decision is expected in 2025
- > DART+ Depot to form part of a new Railway Order application

Appointments:

- > AtkinsRéalis have been appointed as the Multi disciplinary consultants for the development of the tender and contract documentation for DART+ West and DART+ South West



DART+ Programme Final Contracting Strategy

There are five main D&B packages in the contracting strategy:

1. Signalling & Telecoms
2. Electrification
3. Civils & Structural
4. Enabling Works
5. Permanent Way

There are three further standalone D&B project specific contracts:

1. DART+ Depot
2. Spencer Dock Station
3. Connolly Station

As part of the delivery of the DART+ Programme, Irish Rail will undertake some of the mainline track modification works.

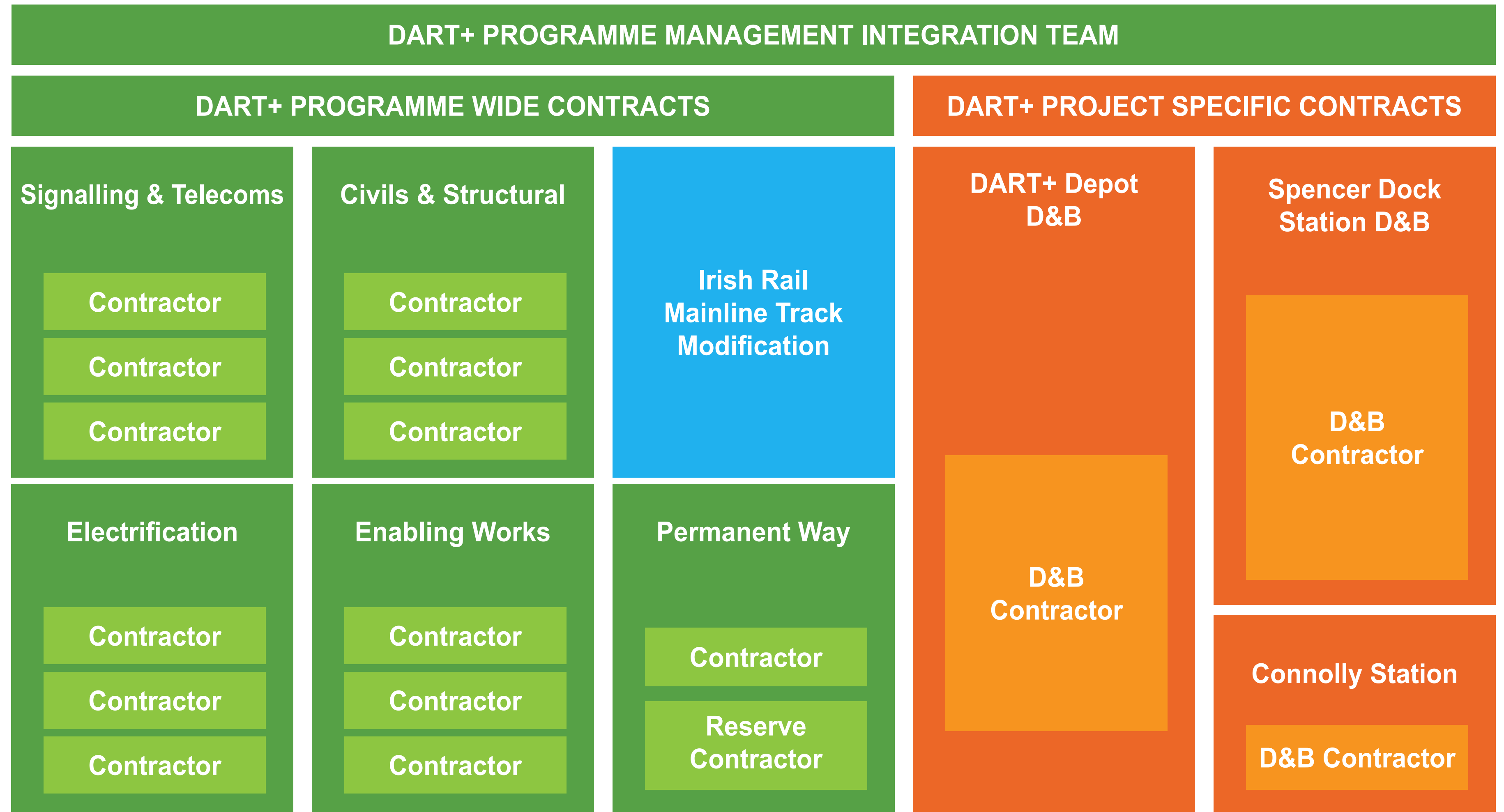


Figure 3: DART+ Programme Final Contracting Strategy

Scope of DART+ Programmes



The Signalling & Telecoms package includes:

- > Computer Based Interlocking for the DART+ areas and associated interfaces
- > New signalling system to facilitate increased capacity
- > Implementation of European Train Control Systems (ETCS) Level 1
- > New telecoms and fibre networks for signalling and electrification and connectivity to SCADA systems
- > New low voltage (LV 650v) infrastructure
- > Associated lineside equipment to facilitate new signalling and telecommunications requirements
- > Associated civil works e.g. signal foundations, equipment bases, cable management system etc.

The Electrification package includes:

- > Installation of new OHLE equipment, masts (1500V DC) and associated cabling to connect into traction substations, and lineside feeds
- > Associated civil works to facilitate connections, masts and lineside feeds
- > Electrification (traction power), construction and fit out of 25 No. 38kV substations and compound, and electricity supply interface
- > New SCADA system

The Civils & Structural package includes:

- > Bridge, platform and station reconstructions / modifications
- > Earth retaining and embankment works
- > Closure of level crossings and provision of replacement access infrastructure (road bridges and/or pedestrian and cycle bridges)
- > Interventions including track lowering / track works, bridge modifications due to insufficient clearance for OHLE
- > Modification at Heuston station to create a DART+ train station including construction of a canopy structure and access ramps
- > Construction and programme management services under consideration

Scope of DART+ Programmes continued



The Enabling Works package includes:

- > Utility diversions; route clearance works, diversion / relocation of existing cable management infrastructure and fencing
- > Minor civils works including site clearance

The Permanent Way package includes:

- > Four-tracking to Heuston station and associated civil works
- > Interventions including track lowering / track works

The Depot package, subject to planning approval, includes:

- > Construction of a new electrified railway depot and compound including associated civils, permanent way, OHLE and landscaping works
- > Systems including operational and non-operational signalling, electrification, telecoms and mechanical
- > New civils, permanent way, OHLE
- > Supply, install and commission a new 38kv traction power substation, including associated compounds and electrical interface works with energy provider (ESB)
- > Utility diversions

The new DART train station at Spencer Dock includes:

- > Construction of a new DART+ train station building with sub-surface platforms requiring secant piling to obtain below ground track alignment
- > Associated civil work for both the structure and railway systems, and landscaping works
- > Slab track leading into the station
- > Utility diversions

The Capacity Enhancement Works at Connolly Station include:

- > Refurbishment of existing historic vaults and creation of new pedestrian access to upper platform level via new station entrance

Procurement and Contracting Approach

The procurement and contracting delivery models for each package are as follows:

Package	Procurement & Contracting Delivery Model
Signalling & Telecommunications	A pre-qualification process or multi-party framework will be used to award the design and build contracts for each of the projects within the DART+ Programme
Electrification	A pre-qualification process or multi-party framework will be used to award the design and build contracts for each of the projects within the DART+ Programme
Civils and Structural	A pre-qualification process or multi-party framework will be used to award the design and build contracts for each of the projects within the DART+ Programme
Enabling Works	A pre-qualification process or multi-party framework will be used to award the contracts for each of the projects within the DART+ Programme
Permanent Way	Single supplier framework (with a reserve supplier)
Depot	Design & Build Contract (high level of design maturity)
Spencer Dock Station	Design & Build Contract
Connolly Station	Design & Build Contract

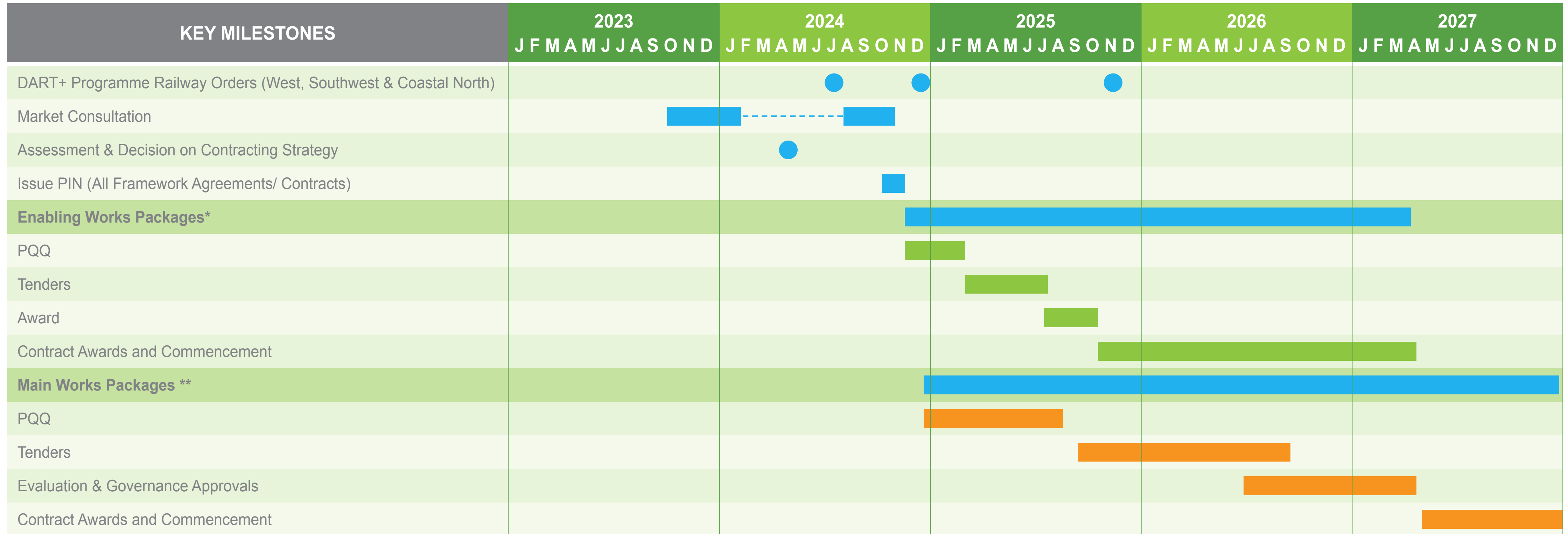
It is currently intended to establish a list of pre-qualified design and build contractors for each of the main DART+ packages. A multi-party framework agreement may be established as part of the initial tender process. Alternatively, each tender will be issued directly to those pre-qualified.

The contract type is expected to be based on the NEC4 suite of contracts. Proportionate rolldown of NEC contracts into the major sub-contractor contracts to be mandated to ensure that there is transparency of costs, collaborative behaviours, aligned terms and common incentives across the extended supply chain. Incentivisation is to be used to drive supply chain performance across the integrated suite of contracts and interfaces:

- > at contract level with pain / gain incentivisation,
- > a programme wide gain incentivisation to encourage collaboration and interface management between packages / contracts will be explored.

DART+ Programme Planning and Procurement Timeline

Following approval of the Railway Order for DART+ West, the issue of the PIN (Prior Information Notice) is planned for Q4 2024. The subsequent tendering and contract award timelines are indicated in Figure 4 below.



*Enabling Works Packages include Utility diversions; Cable management installation, route clearance works, fencing, Minor civils works including site clearance etc,

** Main Works Packages: Signalling & Telecoms, Electrification, Civils and Structural, DART+ Depot, Spencer Dock Station, Connolly Station

Figure 4: DART+ Programme Planning and Procurement Timeline

DART+ Programme
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