



# Masterplan Review 2017

## Consultation Paper

January 2017 | [www.dublinport.ie/masterplan](http://www.dublinport.ie/masterplan)





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# Foreword

Dublin Port Company (DPC) adopted the Masterplan 2012 to 2040 on 26th January 2012 following an extensive public consultation, stakeholder engagement and environmental assessment process.

The Masterplan provides a vision as to how Dublin Port could be developed to cater for an anticipated doubling in port volumes over the 30 years from 2010 to 2040. It provides strategic guidance and direction on land use within Dublin Port recognising that the optimal use of a scarce land and quayside resource remains an important factor against which future development of Dublin Port must be carefully planned.

Since its introduction, the Masterplan has in fact played a significant role in providing guidance and strategic context on the future of the Port not only to DPC but also to National and Local Government, statutory agencies and planning and development agencies. The Masterplan has informed National Ports Policy, Transport Policy and guided the Planning and Permitting Authorities in determining policies and specific proposals concerning Dublin Port.

It was recognised that the Masterplan needed to be kept under review to ensure that it remains relevant and achieves its central objective of providing a clear vision for the development of the Port into the future.

Changes in the demand levels for port infrastructure were recognised as the key element impacting on the timing of a review of the Masterplan. At this juncture in early 2017 it is clear that the level of demand for port infrastructure will likely be greater than originally anticipated due to a higher than originally envisaged level of growth in cargo volumes for the period to 2040. Since the Masterplan was published in 2012, there has been a number of significant developments which support this timely review of the Masterplan. These developments include:

- Economic recovery leading to a return to annual compounding growth in port volumes
- Commencement of the Alexandra Basin Redevelopment (ABR) Project which, in itself, includes about one-third of the infrastructure development options originally identified in the Masterplan
- Recovering control over 11.2 hectares of Port lands making them available for redevelopment
- Completion of a number of site redevelopments in Dublin Port to provide an additional 16.1 hectares of accessible port lands
- Redevelopment of 720m of quay walls
- Purchase by DPC of a 44 hectare site adjacent to Dublin Airport for the development of a new Dublin Inland Port facility
- Publication of the National Ports Policy, March 2013
- Publication by the Competition Authority of its report Competition in the Irish Ports Sector, November 2013
- Publication of DPC's Franchise Policy, May 2014
- Publication by NTA of its Transport Strategy for the Greater Dublin Area, 2016 to 2035
- Creation of the Dublin Bay Biosphere in June 2015 as a joint initiative by:
  - DPC
  - Dublin City Council
  - Fingal County Council
  - Dun Laoghaire Rathdown County Council
  - Department of Arts, Heritage and the Gaeltacht
  - Fáilte Ireland
- Creation of the Poolbeg West Strategic Development Zone, May 2016
- Publication by Dublin City Council of the Dublin City Development Plan 2016 to 2021

The Masterplan was originally produced in order to provide all of the Port's stakeholders with a clear view as to how the Port will be developed in the long-term.

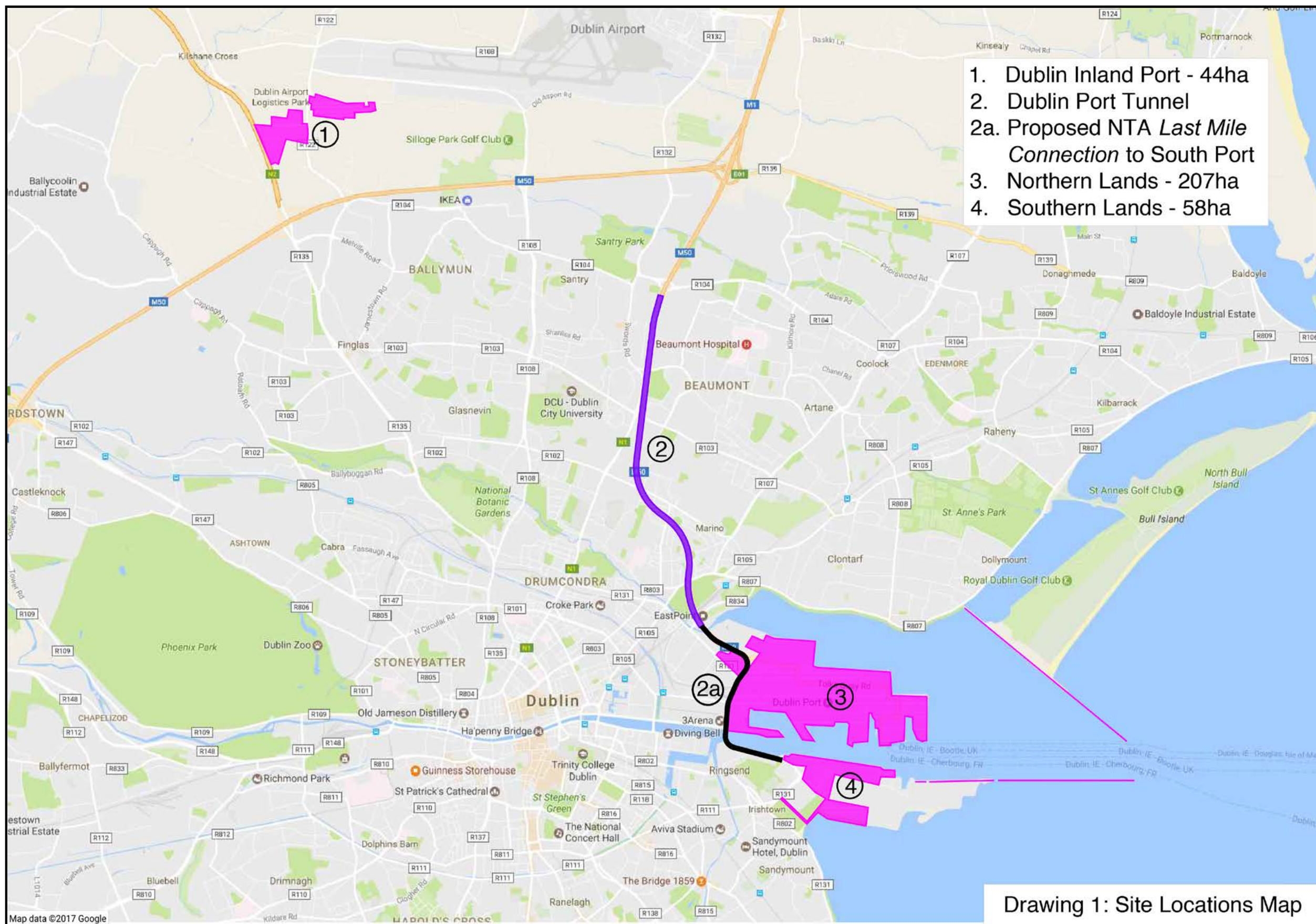
Now, five years on, there is more clarity as to how Dublin Port should be developed in order to meet the objectives set out in the Masterplan.

This review is intended to update and refine the infrastructure development options for Dublin Port and, in doing this, to ensure that the Masterplan continues to provide the best solution for the future sustainable development of Dublin Port through to 2040.

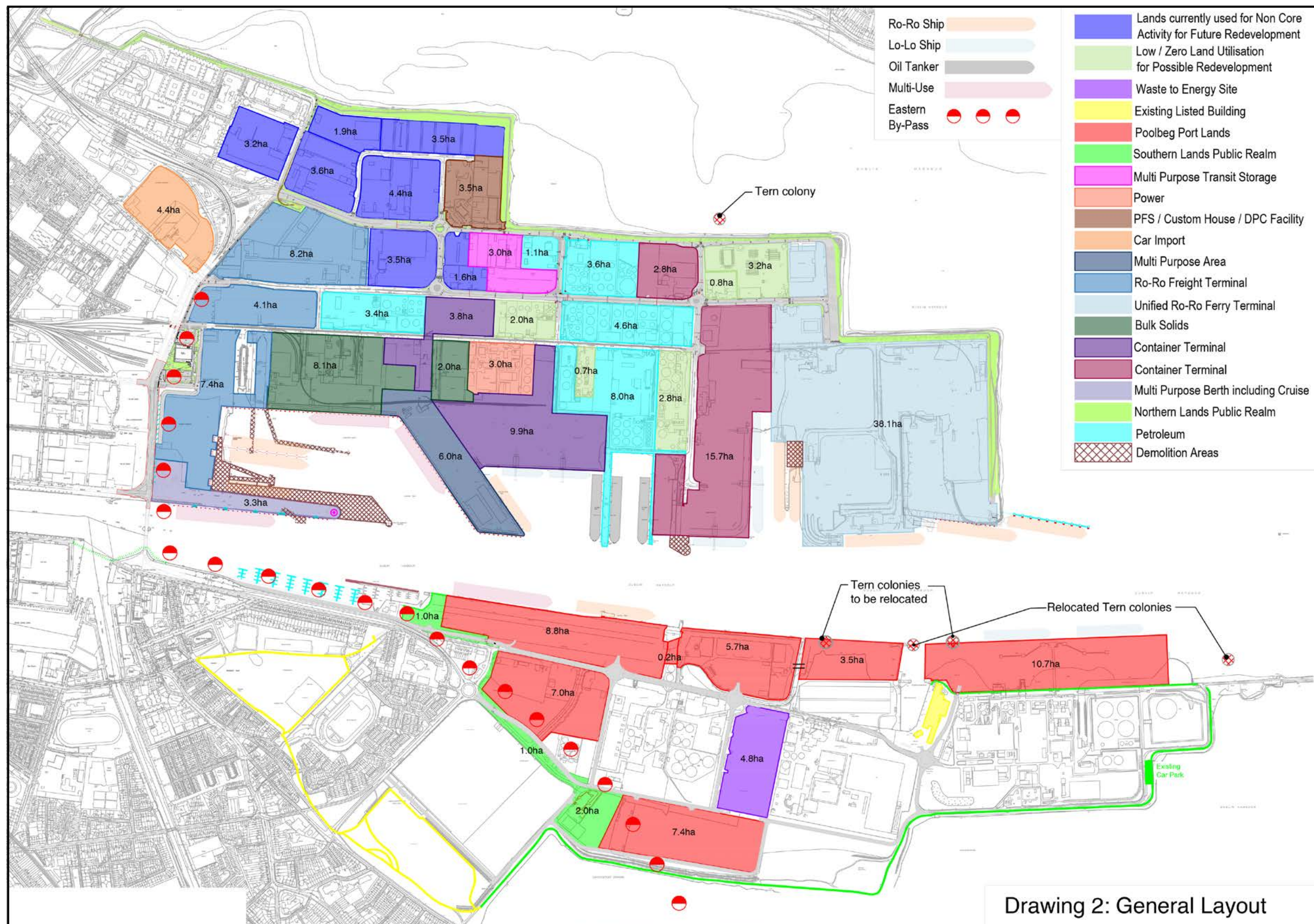
The land areas covered in this review are shown in Drawing 1 and comprise:

- Port lands on the North Side of the River Liffey
- Port lands on the Poolbeg Peninsula
- Recently acquired lands adjacent to Dublin Airport to be developed as Dublin Inland Port
- The road connections linking these three separate land areas including the Dublin Port Tunnel and the last mile connection between it and the south port area to be developed as part of the NTA's Transport Strategy for the Greater Dublin Area 2016-2035

A detailed view of the core Port lands north and south of the River Liffey is shown in Drawing 2.







Drawing 2: General Layout



# Executive Summary

1. Dublin Port remains a key facilitator of merchandise trade in Ireland handling 44% of all port volumes in the country. The Port also plays a significant role from a tourism perspective as a gateway for visitors to Ireland. The real value of Dublin Port's lands is the contribution that they make to the national and regional economy as a piece of strategic infrastructure.
2. Since its introduction in 2012, the DPC Masterplan has played a significant role in providing guidance and strategic context on the future of the Port both to DPC and to a range of external stakeholders. The Masterplan has informed National Ports Policy and Transport Policy as well as planning and permitting authorities in determining policies and specific proposals concerning Dublin Port.
3. The Masterplan provided for a review mechanism linked to changes in the demand for port infrastructure. It is clear now that the level of demand for port infrastructure will likely be greater than originally anticipated in the Masterplan. There have also been some significant developments in national and regional policies as well as progress with individual projects and initiatives which make this review in early 2017 timely.
4. This review is intended to inform the further development of Dublin Port with inputs from all stakeholders so that the vision in the Masterplan remains the best solution for the future sustainable development of the Port, the City and the Bay in the period to 2040.
5. It remains imperative that DPC takes a realistic and strategic view on the provision of additional port capacity. Port infrastructure projects need to be identified long in advance given the long permitting and construction lead times. Infrastructure development proposals need to be realistic mindful of the principles of proper planning and sustainable development.
6. DPC believes that the Port can be developed to cater for anticipated volumes through to 2040 within the Port's existing footprint and without significant major infill works. This will require the maximum utilisation of brownfield sites and adjacent river berthage.
7. There are eight Strategic Objectives which underpin both the Masterplan and this Review;
  - Port functions
  - Investment and growth
  - Integration with the City
  - Movement and access
  - Environment and heritage
  - Recreation and amenity
  - Security
  - Future review
8. An analysis of progress against each of these areas in Section 3 (Tables 3.1 to 3.8) indicates how the Masterplan continues to guide DPC in achieving the overall objective of servicing anticipated trade volumes through to 2040 in a manner that conforms with proper planning and sustainable development.

“DPC believes that the Port can be developed to cater for anticipated volumes through to 2040 within the Port's existing footprint and without significant major infill works. This will require the maximum utilisation of brownfield sites and adjacent river berthage.”



9. If the infrastructure development options outlined in the Masterplan, as revised in this review, are not brought forward for development in a timely fashion to meet anticipated capacity, DPC will need to review additional options to meet that demand.
10. A key question in reviewing the Masterplan is to determine what will be the long run growth assumption in cargo volumes to 2040. The Masterplan originally estimated that annual growth would average 2.5% from 2010 to 2040 leading to a doubling to 60m gross tonnes by 2040. Experience since 2010 leads DPC to believe that volumes will double by 2032 and that by 2040 will have grown to 77m tonnes, equating to a revised annual average growth rate of 3.3%.
  11. Within different cargo modes, the following growth profiles are expected in the period to 2040:
    - Ro-Ro is expected to grow most, increasing from 0.7m units to 2.2m units by 2040 with a particular increase in unaccompanied Ro-Ro and containers which tend to require more land.
    - Lo-Lo is expected to grow from 0.6m TEU in 2010 to 1.6m TEU by 2040.
    - Bulk liquid is likely to stabilise at about 4.0m tonnes per annum.
    - Bulk solid is likely to increase from 2.1m tonnes to 3.5m tonnes in 2040.
    - It is expected that Break Bulk volumes will be negligible in Dublin Port by 2040.
  12. It is expected that passenger volumes will continue to grow to 2040, both from ferry passenger traffic and cruise vessels. Dublin Port has the potential to become a home port for the cruise industry although this will require increased hotel capacity in the City to be viable. A growth in cruise visitors from 159,000 in 2016 to 610,000 by 2040 is seen as reasonably achievable.
  13. The infrastructure development options identified in the Masterplan remain largely valid. However, there are three interrelated factors which necessitate some changes to the options originally envisaged:
    - DPC's belief that volumes to 2040 can be met within the existing footprint of the Port without the need for the eastern infill adjacent to the north Port lands.
    - NTA proposals to improve connectivity between the Dublin Port Tunnel and the South Port open up the possibility of significant additional port capacity on the Poolbeg Peninsula.
    - The acquisition by DPC of 44 hectares of land 14km from the Port opens up the prospect of large areas of port land currently used for port related but non-core activities being redeveloped for core port activities.
  14. Section 5 of this document outlines revised infrastructure development options which have evolved from the original Masterplan proposals. This includes a summary of the original Masterplan proposals in 2012 and the updated perspective from 2017. Revised Masterplan infrastructure development options are set out and illustrated in Drawing 6.
  15. This review is supported by an accompanying Environmental Report prepared by RPS Consulting Engineers for DPC which is a detailed summary of the assessments carried out for the Masterplan and describes in some detail the permitting applications and consents secured since 2012. The Report also details the environmental monitoring and mitigation initiatives undertaken by DPC since 2012 and can be accessed at [www.dublinport.ie/masterplan](http://www.dublinport.ie/masterplan).
  16. Proposals presented by DPC in this review of the Masterplan will significantly reduce the potential environmental impact of the next implementation phase of the DPC Masterplan 2012 to 2040. These include the redevelopment of brownfield sites within the Port's existing footprint, the relocation of non-core activities to Dublin Inland Port and the absence of infill adjacent to the North Port area or further deepening of the navigation channel to below -10m CD.
  17. DPC is implementing the Masterplan by a series of six five year strategic plans, which are detailed in Table 7.1. DPC is also confident that its financial strength is sufficient to allow future projects required to meet the objectives of the Masterplan to be financed.







# Review of the Masterplan's Rationale and Objectives

## Introduction

The Masterplan was originally prepared in 2011 in the depths of the recession, a time of deep pessimism when it was uncertain whether and how quickly economic recovery might happen.

The challenges facing Dublin Port to have the capacity to cater for future growth in throughput volumes did not appear to be as immediate then as they do now.

With rapid growth a reality over the past four years and every prospect that growth will continue in the years ahead as it had done for decades before the recession, DPC must bring infrastructure development projects forward and secure the necessary consents for these projects if port capacity is to keep pace with demand.

The infrastructure development options originally proposed in the Masterplan are illustrated in the drawing reproduced here as Figure 3.1.

Unlike major ports elsewhere in Europe, such as Rotterdam and Barcelona, Dublin does not have a single large expansion project under development which can continually provide additional capacity in response to growing demand as and when required in the years ahead.

It is essential, therefore, that realistic infrastructure development options are identified long in advance and that these options can be brought forward for planning permission and other consents with reasonable certainty that they will succeed.

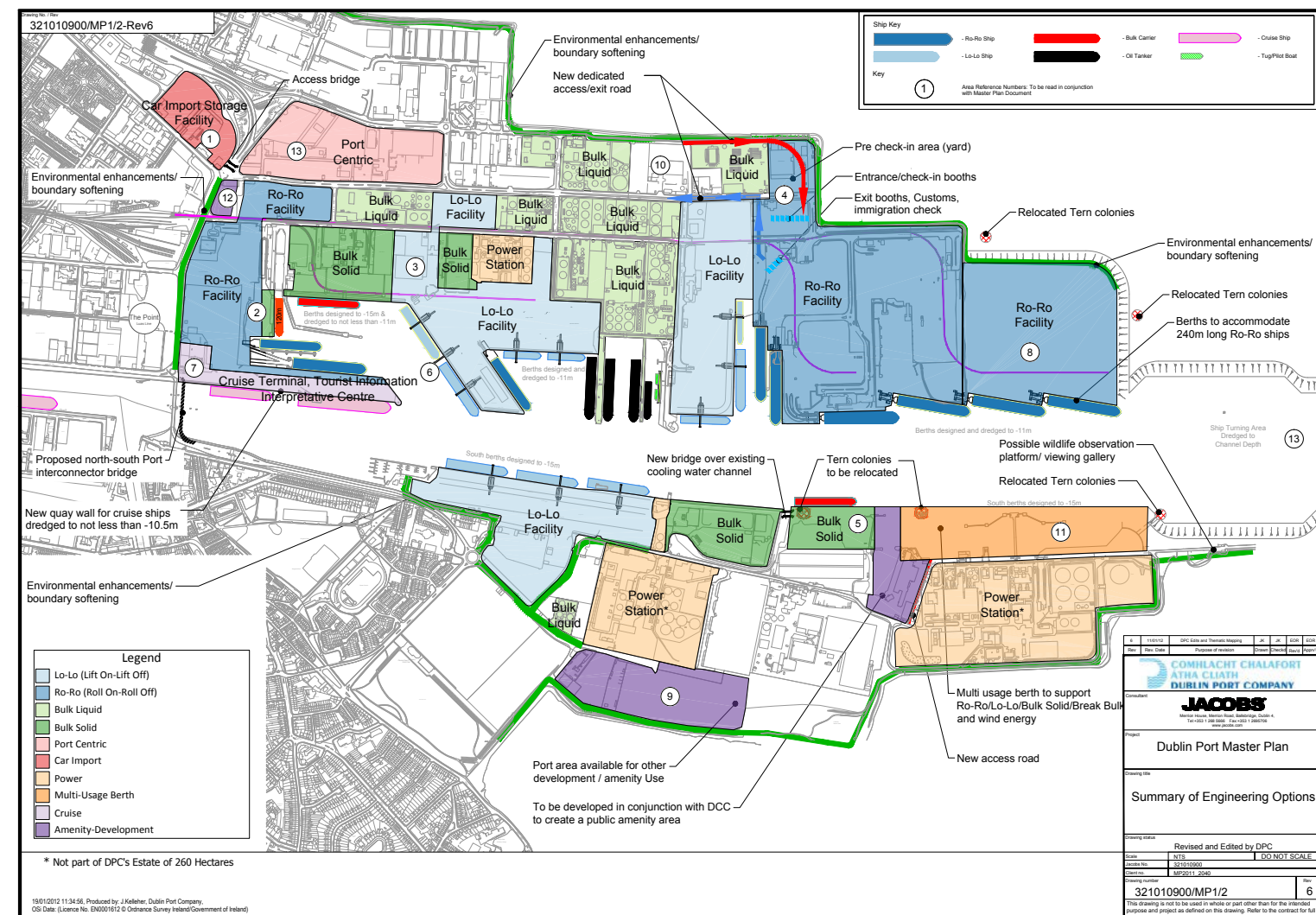


Figure 3.1: Original Masterplan infrastructure development options



# Review of the Masterplan’s Rationale and Objectives (continued)

The Masterplan infrastructure development options must, therefore, be consistent with national and local planning frameworks and with a range of national policies. Port development projects must be formulated in line with the principles of proper planning and sustainable development.

One consequence of this is that DPC should focus primarily within the existing footprint of the Port and should maximise the utilisation of brownfield sites before considering greenfield projects which inevitably involve infill and possibly development on an undeveloped and typically environmentally sensitive shoreline. DPC believes that the Port can be developed to cater for volumes through to 2040 within the Port’s existing footprint.

This review of the rationale and objectives of the Masterplan and the subsequent review of infrastructure development options in Section 5 are centred around this core concept.

## The purpose of the Masterplan

The original rationale for the Masterplan comprised five elements and all remain valid in this review:

- Growth – The Masterplan shows how Dublin Port can be developed in future years to cater for foreseeable growth.
- Land use – The Masterplan critically examines existing land use in Dublin Port to determine how it can be optimised for mercantile trade purposes.
- Investment decisions – From the perspective of DPC, its shareholder and its financiers, the Masterplan provides a coherent basis for large investments in expensive port infrastructure.
- Policies – Although non-statutory, the Masterplan provides a framework for the implementation of a range of EU, national and local policies which frame developments in Dublin Port.
- Customer certainty – The Masterplan provides customers and users of Dublin Port with some certainty about future port capacity and about developments in the Port which may impact their businesses.

The Masterplan addresses key issues around the future development of the Port by examining land utilisation at Dublin Port in the context of developments in merchandise trade and key sectors of the economy. The Masterplan retains the core objective of outlining how the Port will facilitate handling an appropriately assessed level of tonnage by 2040.

## Strategic Objectives underpinning the Masterplan & the Review

The Masterplan was originally prepared to meet key strategic objectives in eight areas:

- Port functions
- Investment and growth
- Integration with the City
- Movement and access
- Environment and heritage
- Recreation and amenity
- Security
- Future review

The tables below identify the progress made to date in each of these eight areas. They also summarise initiatives envisaged from 2017 onwards. These initiatives are explained in greater detail in Section 5.



Table 3.1: Progress on strategic objectives - Port Functions

Masterplan objectives

- Ensure the safe operation and sustainable development of the Port and its approach waters and provide appropriate infrastructure, facilities, services, accommodation for ships, goods, and passengers to meet future demand.
- Optimise the use of the lands on the Port Estate through rationalising the distribution and location of specific areas of activity such as Ro-Ro, Lo-Lo, Ferry Services, Cruise Ships, Liquid / Bulk Goods and storage areas with necessary reconfigurations of service facilities as required.
- Recover lands that are not being used for critical port activity and re-use for such activity.
- Develop quaysides adjacent to deep water to their maximum in accordance with environmental / licensing requirements.
- Use new and developing technology to increase throughput to its maximum.
- Identify configurations for extending berthage and storage that mitigate impact on adjacent environmentally sensitive / designated areas.
- Provide adequate water depth to accommodate larger / deeper draught vessels in accordance with environmental / licensing requirements.

Relevant initiatives since 2012

- ABR Project:
  - Planning permission secured from An Bord Pleanála under Strategic Infrastructure legislation (8th July 2015).
  - Foreshore consent from the Department of the Environment (12th May 2016).
  - Dumping at Sea licence from EPA (14th September 2016).
  - IED licence from EPA (29th November 2016).
- Planning permission received from DCC for ten other significant port-related developments.
- Programme of recovery of Port lands: 11.2 hectares.
- Port lands redeveloped for the transit storage of cargo: 16.1 hectares.
- Quay walls redeveloped: 720 metres.
- Land acquired for external port logistics zone: 44.1 hectares.

Initiatives envisaged from 2017 onwards

- Completion of the ABR Project.
- Completion of other projects derived from the infrastructure development options described in Section 5, including:
  - Removal of port-related but non-core activities from Dublin Port (as envisaged in the Franchise Policy) to provide additional land for the transit storage of cargo.
  - Development of a Unified Ferry Terminal to rationalise the existing three separate terminals and, in doing this, to maximise the use of Port lands.
  - Development of the Port’s container terminals to maximise their throughput capacities.
  - Development of necessary projects on the Poolbeg Peninsula to increase the Port’s Ro-Ro and Lo-Lo capacity utilising Port-owned lands for port-related purposes.

# Review of the Masterplan’s Rationale and Objectives (continued)

Table 3.2: Progress on strategic objectives - Investment and Growth

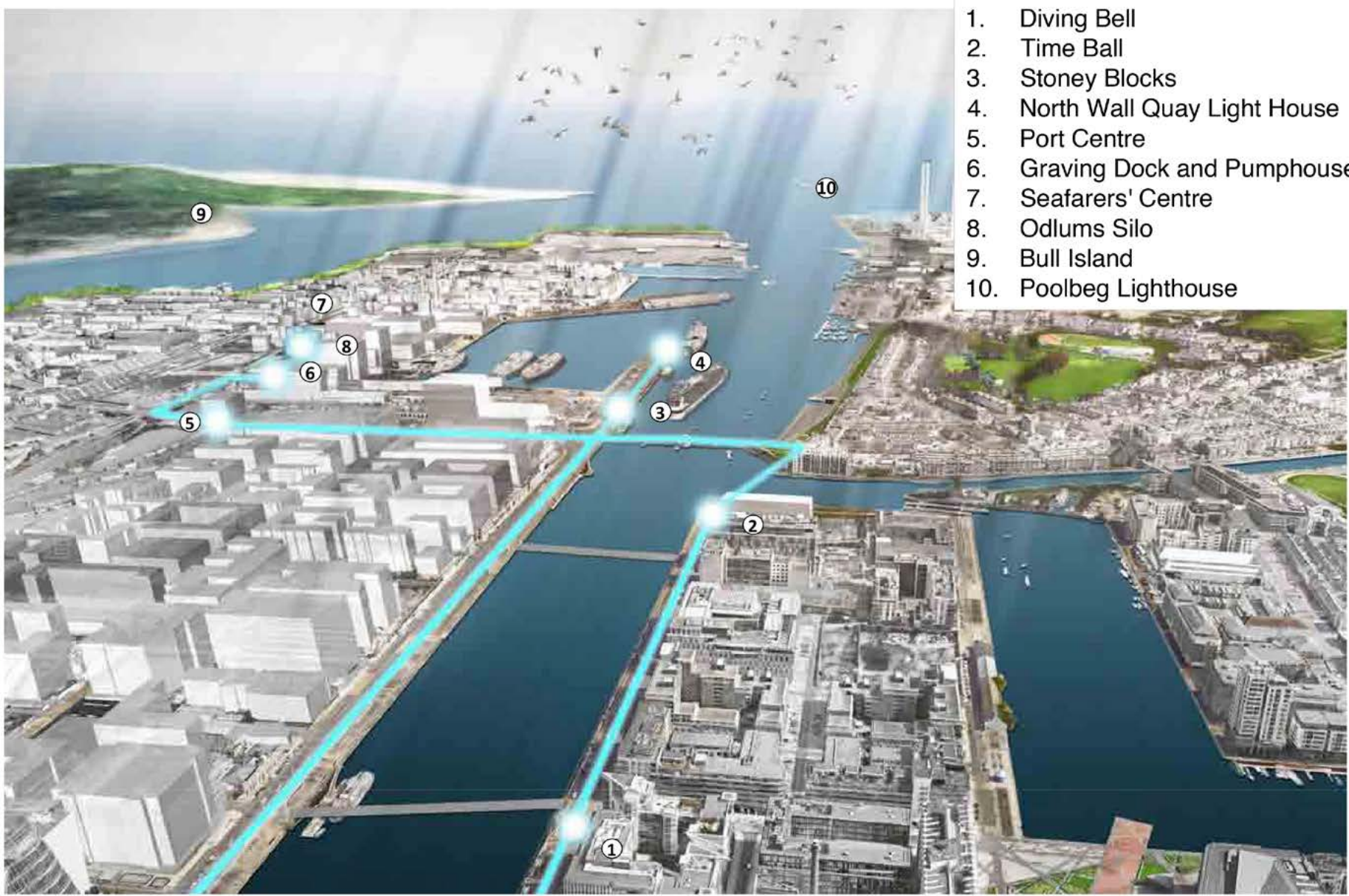
Masterplan objectives	Relevant initiatives since 2012	Initiatives envisaged from 2017 onwards
<ul style="list-style-type: none"> <li>Utilise the Masterplan as a framework for investment and growth based on the Port’s projected demand forecasts.</li> <li>Maximise throughput by means of structured charges for land usage and cargo storage.</li> </ul>	<ul style="list-style-type: none"> <li>€100m 20 year loan facility secured from EIB.</li> <li>€23m TEN-T grant secured for ABR Project.</li> <li>€50m medium-term debt facility agreed with a retail bank.</li> <li>Franchise Policy published, May 2014.</li> <li>New stevedoring licences issued.</li> </ul>	<ul style="list-style-type: none"> <li>Development of partnerships to co-finance projects to support the development of Dublin’s cruise tourism sector.</li> <li>Restructuring of port charges, particularly for unitised cargo, to encourage competition and higher utilisation of Port lands.</li> <li>Restructuring of container terminal franchise agreements to remove anomalies which discourage the maximisation of the efficiency of land utilisation.</li> <li>Development of co-operation agreements with other ports to offer alternative facilities to operations in Dublin Port which are inherently inefficient in terms of land utilisation.</li> </ul>



Table 3.3: Progress on strategic objectives – Integration with the City

Masterplan objectives	Relevant initiatives since 2012	Initiatives envisaged from 2017 onwards
<ul style="list-style-type: none"><li>• Achieve closer integration with the City and people of Dublin through a commitment to respect soft values associated with the location, operation and impact of the Port</li><li>• Promote movement linkages in the form of pedestrian and cycle routes</li><li>• Enhance the general aesthetics / visual impact of the Port around the interface with the City</li></ul>	<ul style="list-style-type: none"><li>• Soft Values Strategic Framework approved by DPC Board, September 2012.</li><li>• Completion of the Diving Bell project on Sir John Rogerson’s Quay to create a new and significant industrial heritage attraction in the City’s public realm.</li><li>• Support for the Dublin Ships art installation on the Scherzer Bridge on North Wall Quay, January to December 2015.</li><li>• Continuation of the company’s long established CSR programme to support local communities in the three areas of education, sport and community events.</li><li>• Starboard Home music commissioning and concerts in the National Concert Hall as part of the Ireland 2016 centenary programme.</li><li>• Development of Riverfest as an annual event on the river over the June Bank Holiday weekend to attract large numbers of people towards the Port:<ul style="list-style-type: none"><li>– 2013 - 36,000</li><li>– 2014 - 58,000</li><li>– 2015 - 45,000</li><li>– 2016 - 96,000</li></ul></li><li>• Commencement of projects to improve the boundary between Dublin Port and the City, notably the Opening Up Port Centre project along East Wall Road and the commencement of the project to create a pedestrian and cycle greenway on the northern perimeter of the Port overlooking the Tolka Estuary.</li></ul>	<ul style="list-style-type: none"><li>• Completion of the Opening Up Port Centre project which includes:<ul style="list-style-type: none"><li>– Public access to a new maritime garden at Port Centre.</li><li>– Commissioning of new works of art to be located in the new maritime garden.</li><li>– Installation of an old crane adjacent to Port Centre.</li><li>– Large illuminated corten steel wall feature along East Wall Road.</li><li>– Softened boundary from Alexandra Road to Sheriff Street.</li></ul></li><li>• Completion of the Port Heritage Trail as shown in Drawing 3.</li><li>• Port Perspectives visual arts project, 2017.</li><li>• Drama in the Docks theatre based project, 2018.</li><li>• Expansion of Riverfest to create an annual Tall Ships regatta in Dublin, co-ordinated with other ports (such as Belfast, Liverpool and Glasgow) as a joint initiative between Dublin Port and Dublin City Council.</li><li>• Creation of new areas of public realm on the Poolbeg Peninsula including the possible opening of access to the Great South Wall eastwards from Pigeon House Harbour.</li></ul>





1. Diving Bell
2. Time Ball
3. Stoney Blocks
4. North Wall Quay Light House
5. Port Centre
6. Graving Dock and Pumphouse
7. Seafarers' Centre
8. Odlums Silo
9. Bull Island
10. Poolbeg Lighthouse



Drawing 3: Port Heritage Trail



Table 3.4: Progress on strategic objectives – Movement and access

Masterplan objectives	Relevant initiatives since 2012	Initiatives envisaged from 2017 onwards
<ul style="list-style-type: none"><li>• Provide for a public transport route to serve passengers and those working within the Port to improve the modal transport split.</li><li>• Develop a transport plan for the Port Estate in conjunction with the National Transport Authority and Dublin City Council.</li><li>• Promote non-motorised sustainable transport modes, including cycling and walking.</li><li>• Maximise the use of rail transport for goods to and from the Port.</li><li>• Promote the provision of future transport infrastructure that facilitates shipping and related Port activities.</li><li>• Enhance existing infrastructure to provide dedicated access / exit routes to Port facilities.</li></ul>	<ul style="list-style-type: none"><li>• Planning permission secured (DCC 3084/16) for a project to redevelop the Port's internal road network including:<ul style="list-style-type: none"><li>– Increasing the capacity of the Port's road network to cater for projected volumes to 2040</li><li>– Building of a new 4 km long pedestrian and cycle greenway on the northern perimeter of the Port overlooking the Tolka Estuary.</li><li>– A pedestrian and cycle cable-stayed bridge across Promenade Road.</li><li>– Dedicated cycle ways throughout the Port to facilitate safe and sustainable transport options.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Completion of the project to redevelop the Port's internal road, cycle and pedestrian network as shown in Drawing 4.</li><li>• Provision of cycle lockers at Port Centre (as part of the Opening Up Port Centre project) to facilitate workers in the Port to use public transport.</li><li>• Development of an innovative and environmentally friendly (e.g. electric or hydrogen fuelled) bus operation to service the Port estate, including passenger ferry terminals, and to link the Port to Dublin City's public transport networks.</li><li>• Development of a partnership with Dublin City Council and the Irish Nautical Trust to re-establish a Liffey ferry service using Ferry Number 11 (the last remaining ferry).</li><li>• Closing of port access along East Wall Road and the opening of a new access at Sherriff Street to service Port Centre and the river berths where cruise ships will berth.</li><li>• Co-ordination with Dublin City Council to complete the Point Roundabout Scheme to improve the public road network at the junction between the Tom Clarke Bridge, East Wall Road and North Wall Quay.</li><li>• Co-ordination with NTA and DCC to complete the project to develop the road link connecting from the southern end of the Dublin Port Tunnel to the South Port area to serve the South Port and adjoining development areas.</li></ul>



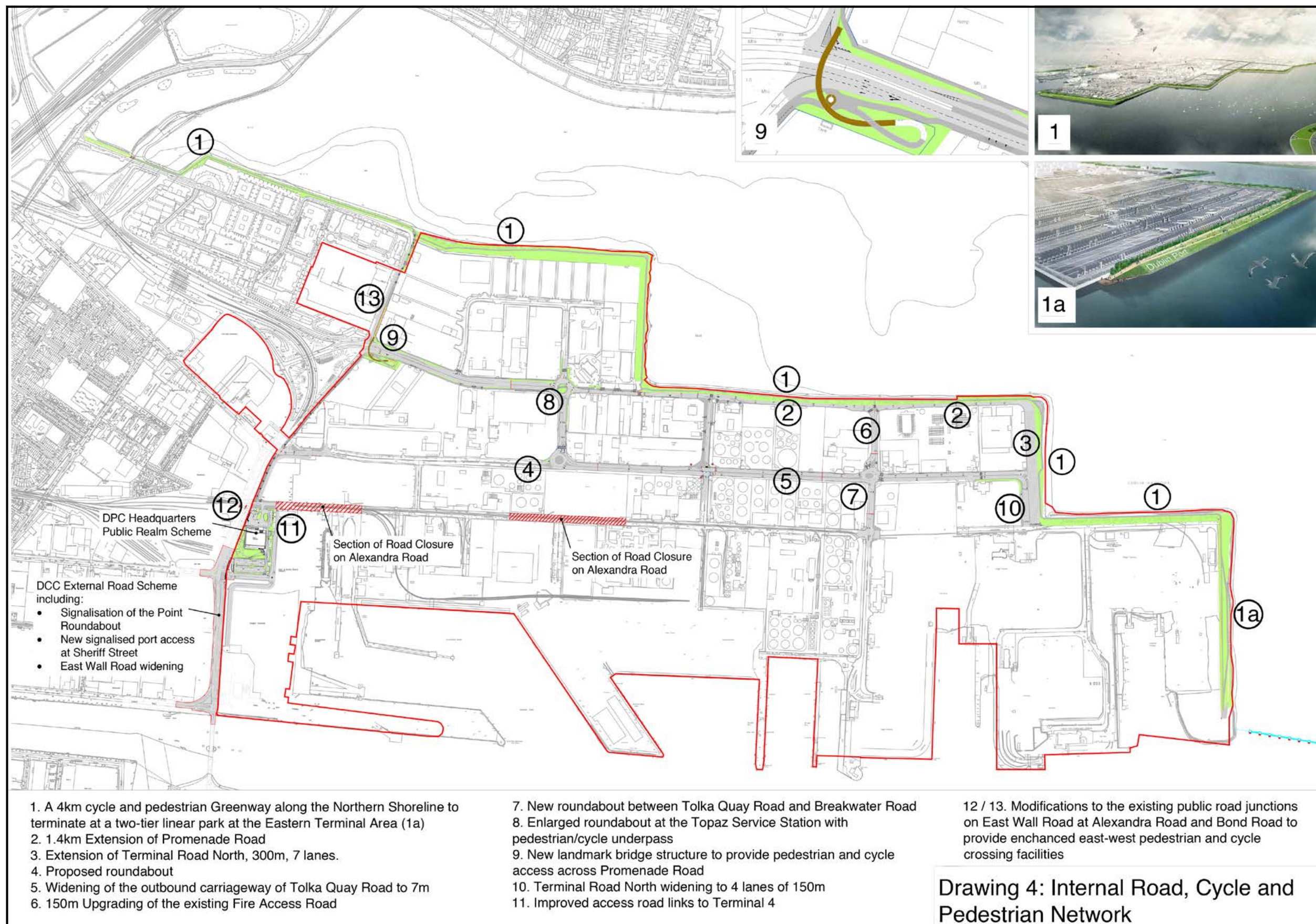


Table 3.5: Progress on strategic objectives – Environment and heritage

Masterplan objectives

- Ensure a development framework that is compatible with the adjoining areas with particular regard for areas in Dublin Bay which are designated under the Habitats Directive and the Birds Directive. This development framework will also take account of the recommendations and mitigation measures arising from the SEA, AA and other relevant plans for the protection of natural resources, including the protection of water resources, designated and non-designated sites, aquatic ecology and protection against flood risk.
- Integrate new development with the built and natural landscapes of the surrounding area.
- Promote sustainable design in the natural and built environment.
- Secure the preservation of all Protected Structures within the Port Estate.
- To promote in the development of future port facilities the principles of Universal Design to make environments inherently accessible for those with and without disabilities.
- A promotion of excellence and focus on good quality in design where possible.

Relevant initiatives since 2012

- Annual Sustainability Report first published in respect of the year 2013.
- Founding member of Dublin Bay Biosphere along with local authorities, NPWS and Fáilte Ireland
- Partnership with BirdWatch Ireland to establish the Dublin Bay Birds Project, 2014 to 2016.
- Preparation of a Tern Colony Management Plan as part of which two floating tern nesting platforms were deployed, one in the Tolka Estuary and one in the River Liffey.
- Development of the Diving Bell installation on Sir John Rogerson's Quay, 2015.

Initiatives envisaged from 2017 onwards

- Development of a Time Ball installation on Britain Quay as an industrial heritage project complementary to the Diving Bell.
- Erection of an old crane on North Bank Quay as an industrial heritage project.
- Continuation of the Dublin Bay Birds Project into 2017 and beyond.
- Refurbishment of the Kittiwake Lightship for use as a mobile exhibition / entertainment venue on the River Liffey.
- Redevelopment of buildings on the Odlums site for industrial heritage or port interpretative purposes.
- Development of a Natural Capital policy to provide a framework for projects and initiatives which improve the natural environment and increase biodiversity in and around Dublin Port.
- Linking of the range of industrial heritage projects to create the Port Heritage trail illustrated in Drawing 3.



# Review of the Masterplan’s Rationale and Objectives (continued)

Table 3.6: Progress on strategic objectives – Recreation and amenity

Masterplan objectives	Relevant initiatives since 2012	Initiatives envisaged from 2017 onwards
<ul style="list-style-type: none"><li>• Promote Dublin Port for recreation and amenity by highlighting walks and cycle routes offering facilities for bird watching and viewing wildlife as well as views of the bay and the wider environment as well as the activity within the Port.</li><li>• Develop landmark attractions such as a Port Heritage Centre.</li><li>• Maximise public access to the waterfront and enhance the public realm by landscaping and by high cleanliness standards.</li></ul>	<ul style="list-style-type: none"><li>• Planning permission secured for a major development of Dublin Port’s internal transport networks including the provision of a 4 km pedestrian and cycle greenway overlooking the Tolka Estuary.</li><li>• New Seafarers’ Centre opened on Alexandra Road in an old refurbished canteen building to provide appropriate facilities for the Mission to Seafarers and Stella Maris to provide services to seafarers.</li><li>• Promotion and support of river-based leisure and sporting activities including long established events (such as sailing and rowing galas and the Liffey Swim) and ad hoc regattas attracting leisure boats into the River Liffey.</li><li>• Installation of 220m of publicly accessible pontoon ramps for leisure craft on North Wall Quay.</li></ul>	<ul style="list-style-type: none"><li>• Creation of large new areas (circa three hectares) of public realm on the Poolbeg Peninsula.</li><li>• Contribution to the opening up of Pigeon House Harbour to provide permeability from the Poolbeg Peninsula to the River Liffey.</li></ul>

Table 3.7: Progress on strategic objectives – Security

Masterplan objectives	Relevant initiatives since 2012	Initiatives envisaged from 2017 onwards
<ul style="list-style-type: none"><li>Ensure that key areas of the Port retain good security provision in accordance with ISPS requirements.</li></ul>	<ul style="list-style-type: none"><li>Initial discussions with the Office of Public Works and with An Garda Síochána regarding the need for enhanced State facilities in Dublin Port.</li></ul>	<ul style="list-style-type: none"><li>Co-ordination with State bodies to design border requirements post Brexit which minimally impact on the efficient use of port lands and on ferry operations.</li><li>Development of a single project to meet the requirements of a variety of State agencies in respect of Dublin Port’s status as a Border Inspection Post, for immigration control and for State security purposes.</li><li>Delivery of this project as part of the development of a new Unified Ferry Terminal.</li></ul>



# Review of the Masterplan’s Rationale and Objectives (continued)

Table 3.8: Progress on strategic objectives – Future review

Masterplan objectives	Relevant initiatives since 2012	Initiatives envisaged from 2017 onwards
<ul style="list-style-type: none"><li>Identify a strategy for future review of the Masterplan against underlying assumptions and performance of the Port business and also assess how the Masterplan is achieving its objectives and targets.</li></ul>	<ul style="list-style-type: none"><li>First review process initiated January 2017.</li></ul>	<ul style="list-style-type: none"><li>Second review planned for between seven and ten years hence (2022 to 2027).</li><li>Development of key performance indicators in conjunction with IMDO and EU initiatives (such as Portopia) to facilitate the long-term planning and operation of port infrastructure.</li></ul>

### The Masterplan and the future development of Dublin Port

DPC believes that there is a sufficient range of infrastructure development options to allow Dublin Port to cater for anticipated growth for the lifespan of the Masterplan to 2040 and to do so largely within the Port's existing footprint. These options were outlined in the Masterplan and are revised and updated as part of this current review document.

The infrastructure development options continue to be based on achieving development outcomes within the Port which do not involve the prospect of further infill of Dublin Bay. It remains the intention of DPC to continue to develop Dublin Port within its current footprint to the maximum extent possible before any major infill works might be undertaken. Specifically, DPC no longer believes that the capacity of the previously mooted 21 hectares infill Dublin Gateway project is needed to cater for the volumes projected up to 2040.

If the infrastructure development options outlined in the Masterplan, as revised in this review, are not brought forward for development in a timely fashion to meet anticipated capacity, DPC will need to review additional options to meet that demand. This is something that will be assessed in each subsequent review of the Masterplan in the context of the experience of developing planned initiatives outlined to date, given future national policy objectives and the Port's assessment of the viability of future projects from a permitting, financial and development perspective.

### Planning and environmental policy context

The Masterplan is a non-statutory plan which sets out to identify, firstly, how Dublin Port might be developed to cater for a foreseeable growth in port volumes over the period to 2040 and, secondly, how the Port can be better integrated with Dublin City and the natural environment of Dublin Bay.

In doing this, the Masterplan takes account of and in turn plays a key role in informing national, regional and local planning frameworks. It is also important that the Masterplan, when subject to periodic review, takes account of changes in relevant policies impacting on ports, transport and connectivity, land use, and sustainable planning and development.

Since its publication the Masterplan has been cited in a number of important national, regional and local policy documents, as well as being referenced by statutory agencies with relevant powers impacting on the Port's operations. These key references include:

**1. National Ports Policy 2013 (Department of Transport)** – this important statement of National Policy underpinning the development and operation of Ireland's Ports references the Dublin Port Masterplan and specifically states:

*The Government endorses the core principles underpinning the company's Masterplan and the continued commercial development of Dublin Port Company is a key strategic objective of National Ports Policy. (Page 24)*

**2. Dublin City Development Plan 2016 – 2022** – the recently adopted City Development Plan makes a number of specific references to the Dublin Port Masterplan, noting that it is the Policy of Dublin City Council;

*To support and recognise the important national and regional role of Dublin Port in the economic life of the city and the region and to facilitate port activities and development having regard to the Dublin Port Masterplan 2012 – 2040. (Policy SC 9 on Page 46)*

*To recognise that Dublin Port is a key economic resource, including for cruise tourism and to have regard to the policies and objectives of the Dublin Port Masterplan. (Policy CEE 23 (iii) on Page 83)*

**3. Article 4 (c) of SI 279 of 2016, which establishes Poolbeg West as a Strategic Development Zone**, specifically states that one of the factors taken into account in the consideration of the designation of the development zone was the Dublin Port Masterplan 2012 – 2040.

**4. National Transport Authority Rail Review 2016** - comments that the principle of moving freight by rail aligns with National Ports Policy, the Dublin Port Masterplan and the emerging National Low Carbon Roadmap. (Paragraph 3.4, page 24)

The Masterplan was prepared following the adoption of the National Spatial Strategy (2002) and the Regional Planning Guidelines (2010) and was informed by the key principles underpinning both documents. These strategies are currently being reviewed through the National Planning Framework (NPF) and the Regional, Spatial and Economic Strategy (RSES) of the Eastern and Midlands Regional Assembly. The NPF will be the successor to the National Spatial Strategy, 2002. Its planning horizon to 2040 coincides exactly with that of Dublin Port's Masterplan 2012 to 2040. Likewise, the RSES for the Dublin and Midlands Region will be the successor of the existing Regional Planning Guidelines for each of the three Regional Authorities in the former Eastern and Midland Region. The NPF and the RSES will be finalised in parallel during 2017.

Separately, Dublin City Council will be finalising a draft Planning Scheme for the Poolbeg West SDZ during 2017. Half of the lands of the SDZ are owned by DPC.

As has been the case with other national and regional strategies, the Masterplan will work to inform the development of the NPF, the RSES and the Poolbeg West SDZ Planning Scheme as they are brought to conclusion during 2017.

The Dublin Port Masterplan 2012 -2040 has also informed statutory authorities in the context of specific development applications, including Dublin City Council, An Bord Pleanála, the Environmental Protection Agency and the Department of Housing, Community and Local Government.

The Masterplan has also been cited by the European Investment Bank and by the European Commission in their positive assessment of requests by DPC for financial support for the ABR Project.



# Review of Forecasts to 2040

## Introduction

Dublin is a gateway port for the national economy. It is located at the centre of the largest concentration of population. By comparison with most other east coast ports, Dublin Port has relatively deep water capable of handling the size of ships needed to efficiently service the needs of the Irish economy.

Cargo volumes through Dublin Port are directly related to economic activity which, in turn, is strongly driven by population. Just as the National Planning Framework is being prepared to cater for an increase in population of one million, for 0.5m additional homes and for a working population of 2.2m, all by 2040, so also Dublin Port must plan to provide the port infrastructure which such levels of growth will require.

Historical trends over long periods and the belief that the underlying drivers of economic activity will grow in the years to 2040, suggest that the only safe assumption for DPC to plan on is that the demand for port infrastructure will increase exponentially in the years to 2040 as it has over many decades up to 2010.

Within this assumption, there is an important safety valve. Port development projects take a long time to deliver. It can take up to five years to get the necessary consents and a further five years to build a major port project. If, over a decade, the assumptions of future growth turn out to be over optimistic, the construction phase of major projects can be deferred.

On the other hand, if projects are not planned in advance of economic growth, capacity delivery will be too late to cater for demand and there will be inevitable negative economic consequences for the country.

The key question in reviewing the Masterplan is to review the long-run growth assumption to 2040.

The original assumption was that volumes would grow from 28.9m gross tonnes<sup>1</sup> in 2010 to 60.0m gross tonnes by 2040. This is equivalent to an average annual growth rate of 2.5% over 30 years. The question to be answered now is whether the 2.5% assumption should be revised or not.

## Cargo volume forecasts

The defining characteristic of Dublin Port is that volumes grow inexorably year on year.

Figure 4.1 below shows that the average annual growth in the 30 years from 1950 to 1980 was 3.2%. In the following 30 years to 2010, growth accelerated to 4.7%.

The Masterplan originally assumed average annual growth of 2.5% each year from 2010 to 2040 resulting in a doubling to 60.0m gross tonnes by 2010.

We now believe it more likely that volumes will double by 2032 and that, by 2040, will have grown to 77m gross tonnes. This would be the outcome of an annual average growth rate to 3.3%.

“Cargo volumes through Dublin Port are directly related to economic activity which, in turn, is strongly driven by population.”

<sup>1</sup> Five year rolling average

Table 4.1: Summary of Dublin Port’s past and projected future growth

30 year time period	Average annual growth rate	Starting volume	Ending volume
		Gross tonnes (five year rolling averages)	
1950 to 1980	3.2%	2.9m	7.3m
1980 to 2010	4.7%	7.3m	28.9m
2010 to 2040 (original)	2.5%	28.9m	60.0m
2010 to 2040 (revised)	3.3%	28.9m	77.2m

An average annual growth rate of 3.3% is unremarkable by comparison to the rates seen in the 30 years to 1980 and in the following 30 years to 2040.

The figure of 3.3% is the result of the actual growth rates from 2010 to 2016 (as shown in Table 4.2) and of relatively modest projections thereafter to 2040 (as summarised in Table 4.3).

Table 4.2: Year on year growth rates from 2010 to 2016

Year on year growth rate	
2010	6.1%
2011	-0.1%
2012	-0.3%
2013	3.0%
2014	7.0%
2015	6.4%
2016	6.3%

Table 4.3: Year on year growth rates projected from 2017 to 2040

Year on year growth rate	
2017 to 2019	5.0%
2020 to 2029	4.0%
2030 to 2040	3.0%



# Review of Forecasts to 2040 (continued)

Figure 4.1 below puts the projected growth rates from 2017 to 2040 into context by showing the trend in Dublin Port's volumes over the 30 years from 1980 to 2010 and, subsequently, from 2010 to 2016. The most remarkable feature over this period is the long sustained period of growth post the dock labour restructuring of 1992 when, for a period of 15 years, each and every year was a record year peaking at 30.9m gross tonnes in 2007.

Following the economic collapse in 2008, volumes reached a floor of 26.5m gross tonnes in 2010. However, growth resumed in 2013 and the record year of 2007 was equalled in 2014 with subsequent record years in both 2015 (32.3m gross tonnes) and 2016 (34.9m gross tonnes).

Against this background, the original 2.5% projection in the Masterplan appears now to be too conservative and should be revised.

“The most remarkable feature over this period is the long sustained period of growth post the dock labour restructuring of 1992 when, for a period of 15 years, each and every year was a record year peaking at 30.9m gross tonnes in 2007.”

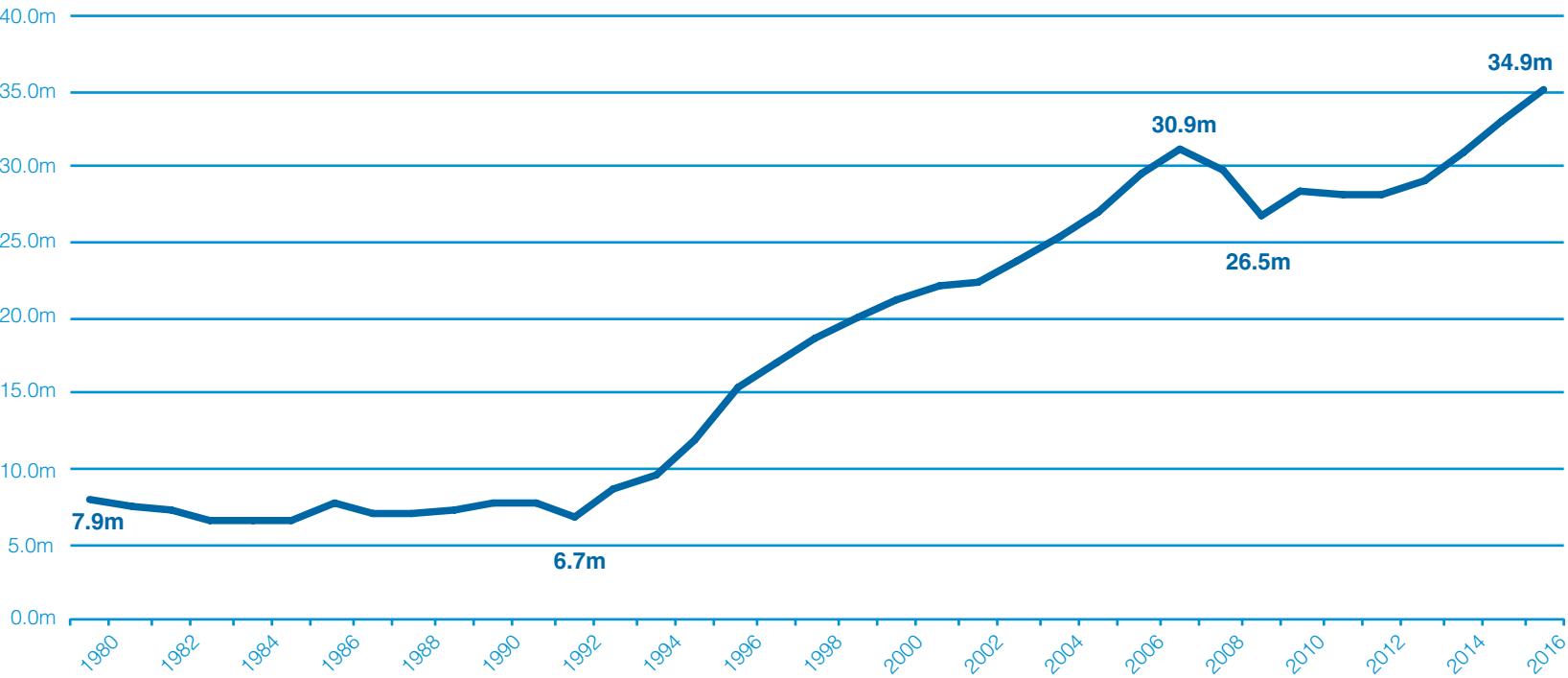


Figure 4.1: Trend in Dublin Port volumes, 1980 to 2016

Figure 4.2 below compares the actual trend in port volumes since 2010 by comparison with the original trajectory projected in the Masterplan.

Whereas the actual trend undershot the Masterplan trajectory in the early years of the Masterplan to 2013, growth has accelerated since then and the gap between actual and projected has begun to close.

Over a long planning period, the effect of a relatively small change in the growth rate assumed (from 2.5% to 3.3%) is large in terms of the capacity required.

Based on the evidence of recent years (2013 to 2016) it appears more likely than not that annual growth will remain higher than 2.5% in future years.

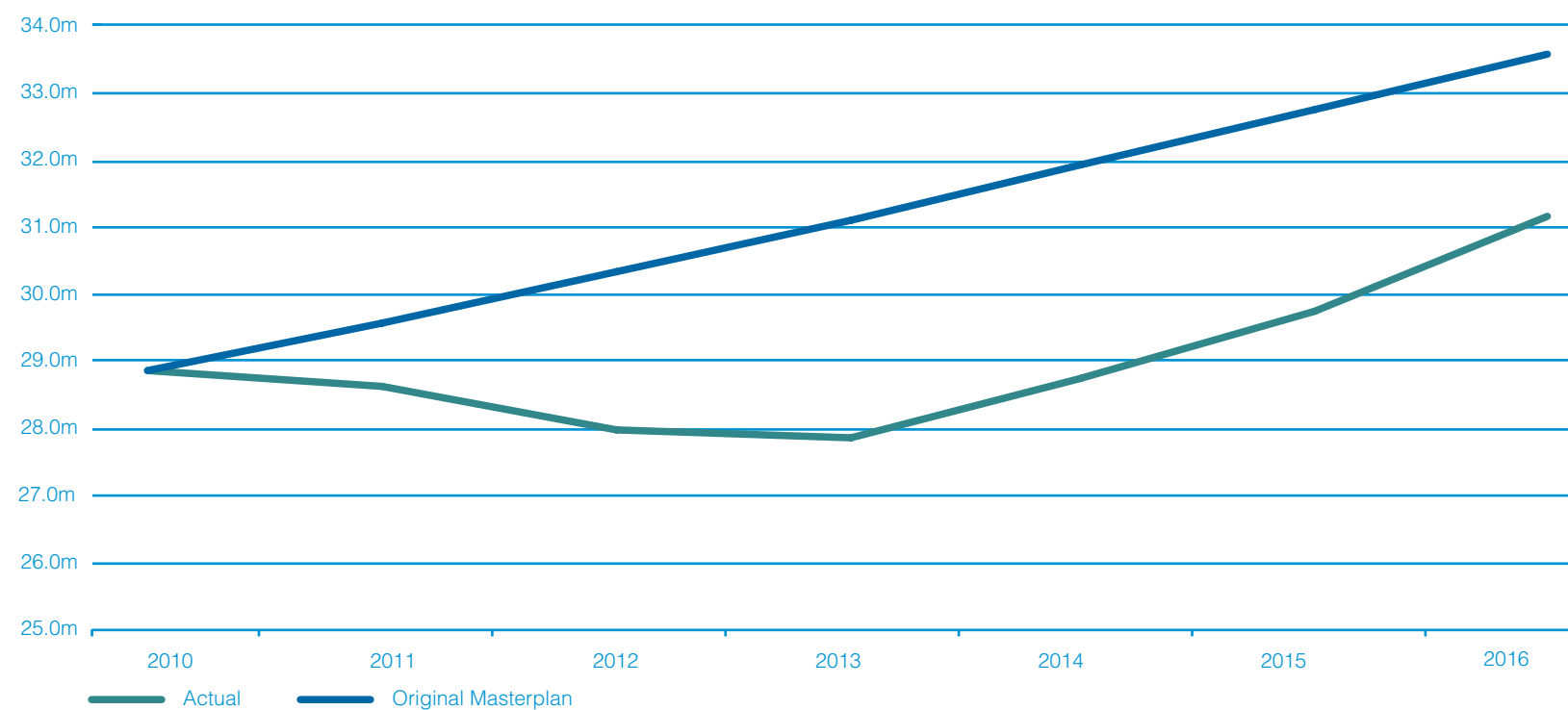


Figure 4.2: Actual and projected gross tonnes, 2010 to 2016 (five year rolling averages)



# Review of Forecasts to 2040 (continued)

## Cargo volume forecasts by cargo mode

Table 4.4 below disaggregates the overall revised growth rate of 3.3% to 2040 into the five cargo modes.

Dublin Port is the largest port in the country and handles 44% of all port volumes. However, in the higher value and faster growing unitised modes (Ro-Ro and Lo-Lo), Dublin handles 79% of the country's total volume. Growth is projected to occur much more in these unitised modes rather than in the bulk modes.

Ro-Ro is projected to grow the most with volumes increasing from 0.7m units in 2010 to 2.2m units by 2040. Ro-Ro is split between accompanied Ro-Ro and unaccompanied Ro-Ro and also increasingly includes containers. Unaccompanied Ro-Ro and containers require more land and the high growth in Ro-Ro will generate a requirement for more and more of the Port's lands at the expense of less urgent requirements.

Lo-Lo is projected to grow from 0.6m TEU in 2010 to 1.6m TEU by 2040. Whereas this growth will also create a demand for more port land, this demand can in part be met by increasing the utilisation of container terminal lands by decreasing the dwell time of containers.

Within the bulk modes, Bulk Liquid (which primarily comprises petroleum imports) is projected to stabilise at about 4.0m tonnes per annum. Terminals for petroleum products occupy 34 hectares of lands on the north side of Dublin Port. If built from new and by today's standards, this area could be reduced to perhaps 15 hectares. Over the period to 2040, therefore, Dublin Port will not seek to facilitate the growth of petroleum products. Beyond this, DPC will seek to reduce the land area occupied by petroleum facilities and instead use the land freed up for unitised cargo.

Bulk Solid comprises a range of commodity types and the projected growth from 2.1m tonnes in 2010 to 3.5m tonnes by 2040 is assumed to be driven largely by a combination of construction commodities and by biomass for power generation.

Break Bulk is the hungriest cargo mode in terms of land demand and has all but disappeared from Dublin Port. Commodities such as loose steel and timber are now mostly unitised and, where still shipped in break bulk, use other smaller east coast ports. By 2040, it is projected that the volume of break bulk cargo using Dublin Port will be negligible.

“Ro-Ro is projected to grow the most with volumes increasing from 0.7m units in 2010 to 2.2m units by 2040. Ro-Ro is split between accompanied Ro-Ro and unaccompanied Ro-Ro and also increasingly includes containers. ”

Table 4.4: Original and revised Masterplan projections, 2010 to 2040

	2010 '000 gross tonnes	2040 '000 gross tonnes		AAGR
	Actual	Original	Revised	Revised
Ro-Ro	16,403	41,920	54,287	4.1%
Lo-Lo	6,317	10,480	15,270	3.0%
Bulk Liquid	4,009	4,000	4,000	0.0%
Bulk Solid	2,054	3,500	3,500	1.8%
Break Bulk	96	100	100	0.1%
Total tonnes	28,879	60,000	77,157	3.3%
Ro-Ro ('000 units)	701	1,737	2,249	4.0%
Lo-Lo ('000 units)	377	635	926	3.0%
Totals	1,078	2,372	3,174	3.7%
Lo-Lo ('000 TEU)	641	1,080	1,574	3.0%

2 Five year rolling averages



# Review of Forecasts to 2040 (continued)

## Passenger volume growth

In addition to growth in cargo volumes, DPC believes that there will be growth in passenger volumes, both on ferry services (particularly to the UK) and on cruise ships. Figure 4.3 below shows the trend in ferry passenger volumes from 1991 to 2016. Dublin Port believes that ferry passenger numbers will increase as the frequency of Ro-Ro ferry services increases in future years, particularly to Holyhead.

As regards Dublin Port’s cruise business, there is potential to greatly increase volumes in future years. Table 4.5 below summarises projections for cruise volumes under three scenarios.

“Dublin Port believes that ferry passenger numbers will increase as the frequency of Ro-Ro ferry services increases in future years, particularly to Holyhead.”

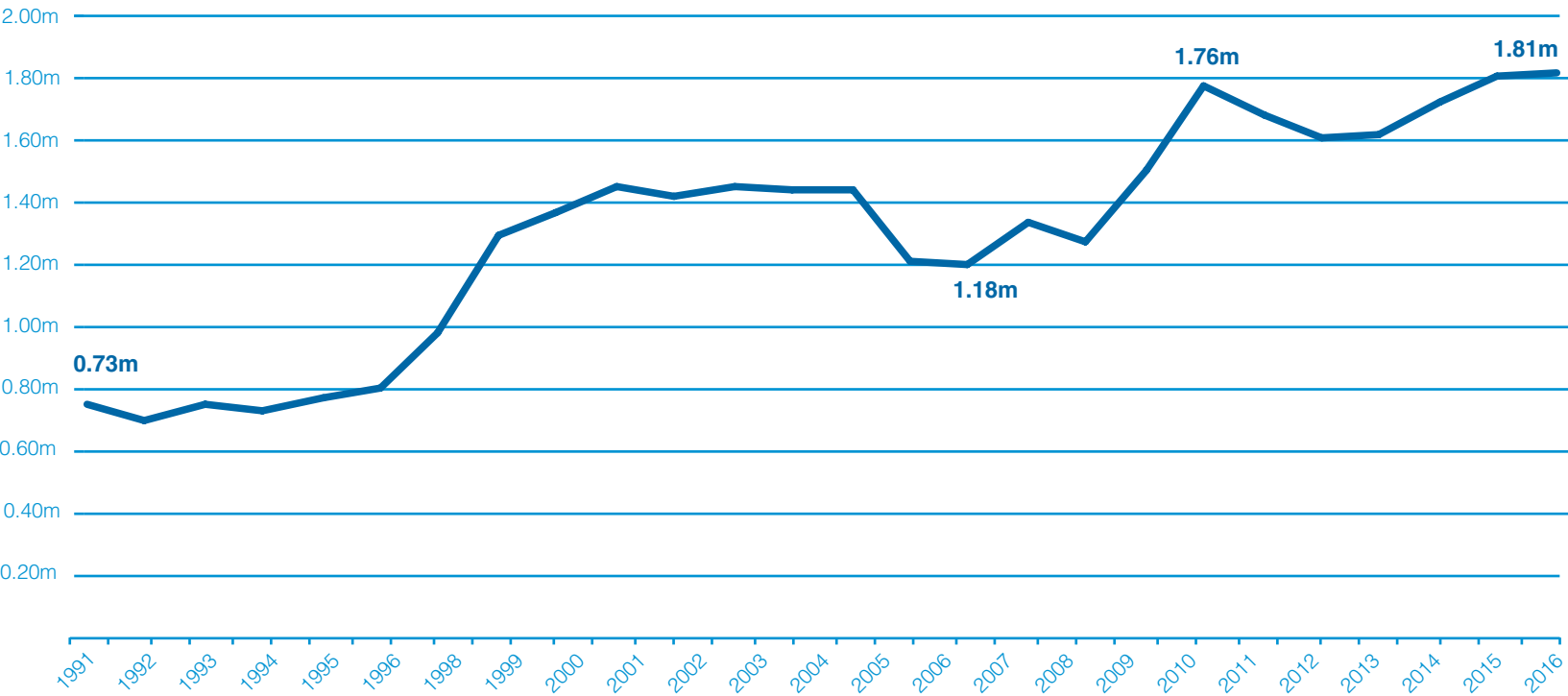


Figure 4.3: Ferry passenger numbers, 1991 to 2016

Table 4.5: Cruise volumes, 2010 to 2016

	2016	2040		
		Low	Target	High
# cruise calls	109	115	159	196
# visitors	159,124	400,614	610,070	776,475
Aggregate GT <sup>3</sup>	4,354,130	8,895,122	12,284,192	15,199,016
Average GT	39,900	77,300	77,300	77,300

Where growth in cargo may reasonably be assumed to be driven by economic growth and where ferry passenger numbers will likely be a function of service frequency, the drivers for Dublin Port’s cruise business are more variable.

In general, the cruise industry is supply led. As cruise lines build and deploy new ships, new markets are created. There are 74 new cruise ships with an average size of 114,300 GT on order for delivery over the ten years from 2017 to 2026<sup>4</sup>. Cruise lines will seek homeports for these new large ships and Dublin has the potential to become a cruise turnaround homeport.

The proximity to the City Centre of the berths for cruise ships to be built as part of the ABR Project, the proximity of Dublin Port to Dublin Airport and the extensive network of destinations serviced by airlines from Dublin Airport support the development of Dublin as a turnaround port.

Indeed, even before the cruise berths are built, there is interest from major cruise operators such as Celebrity Cruises to use Dublin as a turnaround port. In 2018, the Celebrity Eclipse will be based in Dublin for a mini-season comprising five cruises to locations such as Norway, Iceland and France.

<sup>3</sup> Gross Tonnage  
<sup>4</sup> Source: Cruise Industry News, Orderbook Data 1998-2017



Review of Forecasts to 2040 (continued)

The development of a large cruise business will require an increase in hotel beds in Dublin.

In addition to there being a need for increased hotel capacity in Dublin, the high cost of building port infrastructure which can be used by cruise lines is an issue. Most of the financial benefit of cruise ship operations in Dublin accrues to operators of varying kinds in the

tourism sector and a means for DPC to attract co-financing for the development of the required berths is needed.

Subject to the issues of hotel capacity and co-financing being addressed, a growth in the number of cruise visitors from 159,000 in 2016 to 610,000 by 2040 (as shown in the Target Scenario in Figure 4.4) seems reasonably achievable.

“Most of the financial benefit of cruise ship operations in Dublin accrues to operators of varying kinds in the tourism sector and a means for DPC to attract co-financing for the development of the required berths is needed.”

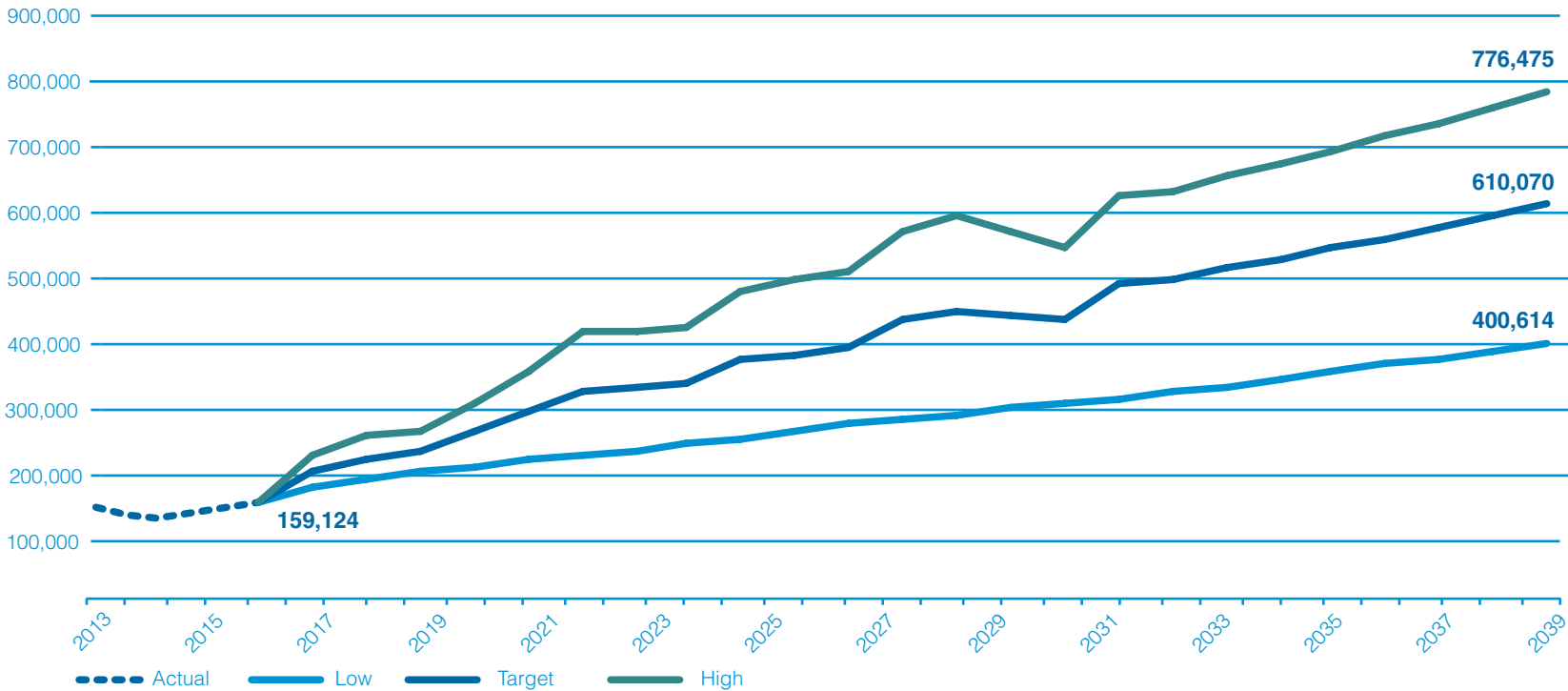


Figure 4.4: Cruise volume scenarios (number of visitors) projected to 2040

The average size and capacity of the international fleet of cruise ships are increasing and taking account of ship size trends, Figure 4.5 projects the number of cruise ship arrivals in Dublin Port to 2040 for each of the three scenarios.

Under the Target Scenario, the number of cruise ships would increase from 109 in 2016 to 159 by 2040. Assuming a six month cruise season, this would imply an average utilisation of 44% for the two

multi-purpose berths to be built at North Wall Quay Extension as part of the ABR Project.

Within the projected visitor number of 610,070 in the Target Scenario for 2040, there are 99,620 turnaround passengers. Based on a 2014 study of the economic impact of cruise business in Barcelona, each turnaround passenger generated 2.6 bed nights in local hotels. Using this as a guide, the projections for 2040 are that Dublin Port's cruise business could generate about a quarter of a million bed nights.

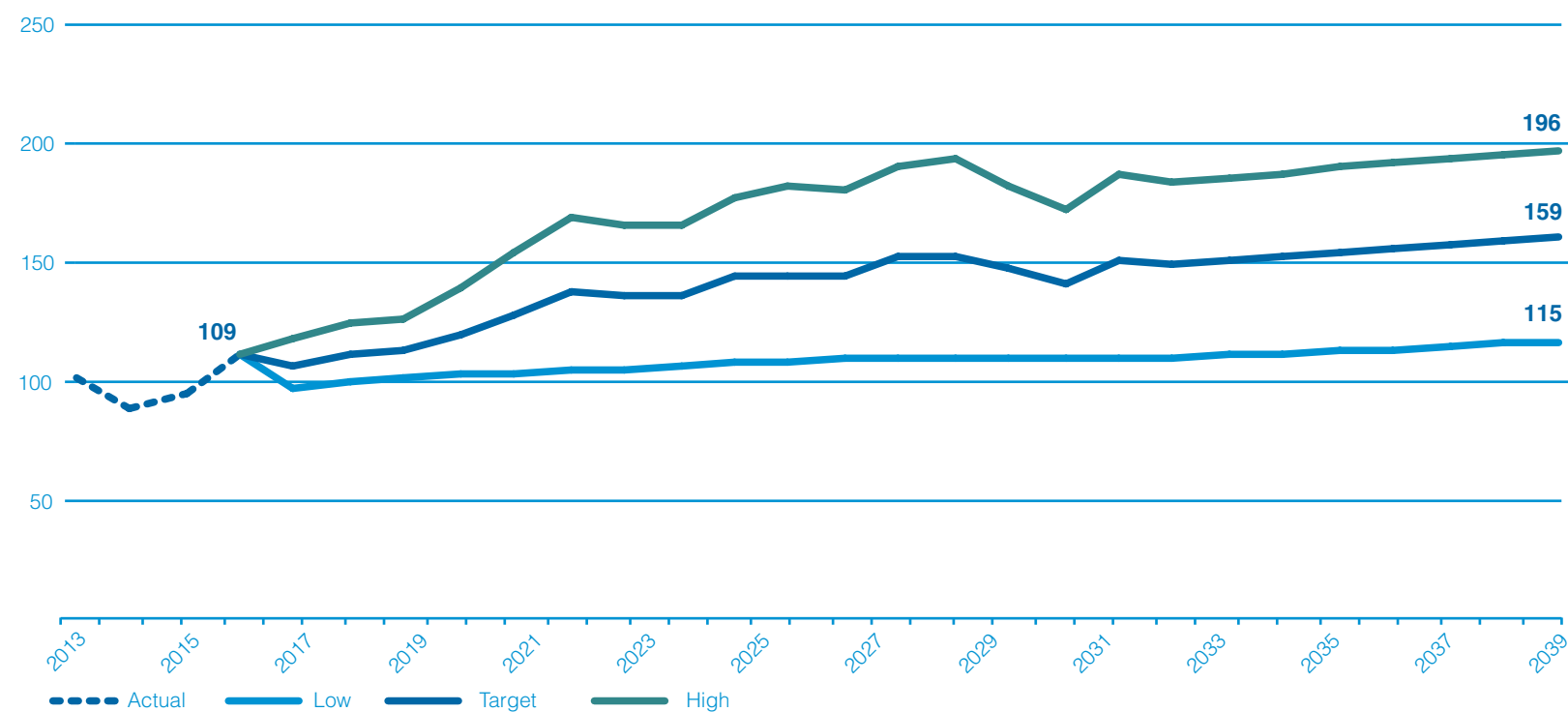


Figure 4.5: Cruise volume scenarios (number of cruise calls) projected to 2040



# Review of Forecasts to 2040 (continued)

## Ship arrivals

Making allowance for an increase in ship sizes, Table 4.6 below shows the number of ship arrivals in Dublin Port in 2016 compared to the projected numbers in 2040.

Table 4.6: Ship arrivals in 2016 and projected for 2040

	2016	2040 <sup>5</sup>
Ro-Ro	5,684	9,696
Lo-Lo	1,025	1,066
Bulk Liquid	474	403
Bulk Solid	346	464
Break Bulk	30	50
Cruise	109	159
Other	81	200
Total	7,749	12,038

The increase from 21 arrivals per day to 33 arrivals per day by 2040 will be driven primarily by Ro-Ro ferries. Ro-Ro ferries accounted for 73% of ship arrivals in 2016. By 2040, they are projected to account for 81% of arrivals.

The majority of Ro-Ro ferry services operate on fixed time slots and, the more of these slots that are occupied, the less time during the day when other ships (particularly deeper draughted ships) can enter the Port. However, as part of the ABR Project, the ruling depth in Dublin Port will increase from -7.8m CD to -10.0m CD.

The Masterplan originally identified the possibility of a further and ultimate deepening to -12.0m CD. However, this view has been revised on the basis of anticipated requirements and it is now planned that the port will not be deepened beyond -10.0m CD. Based on this, Drawing 5 shows the envisaged lengths, widths and depths for all working berths in the Port by 2040.

Table 4.7 below shows the Port's draught handling capacity both for the current ruling depth of -7.8m CD and for the maximum of -10.0m CD currently being developed in the ABR Project.

<sup>5</sup> Five year rolling averages

Table 4.7: Draught handling capacity at -7.8m CD and at -10.0m CD

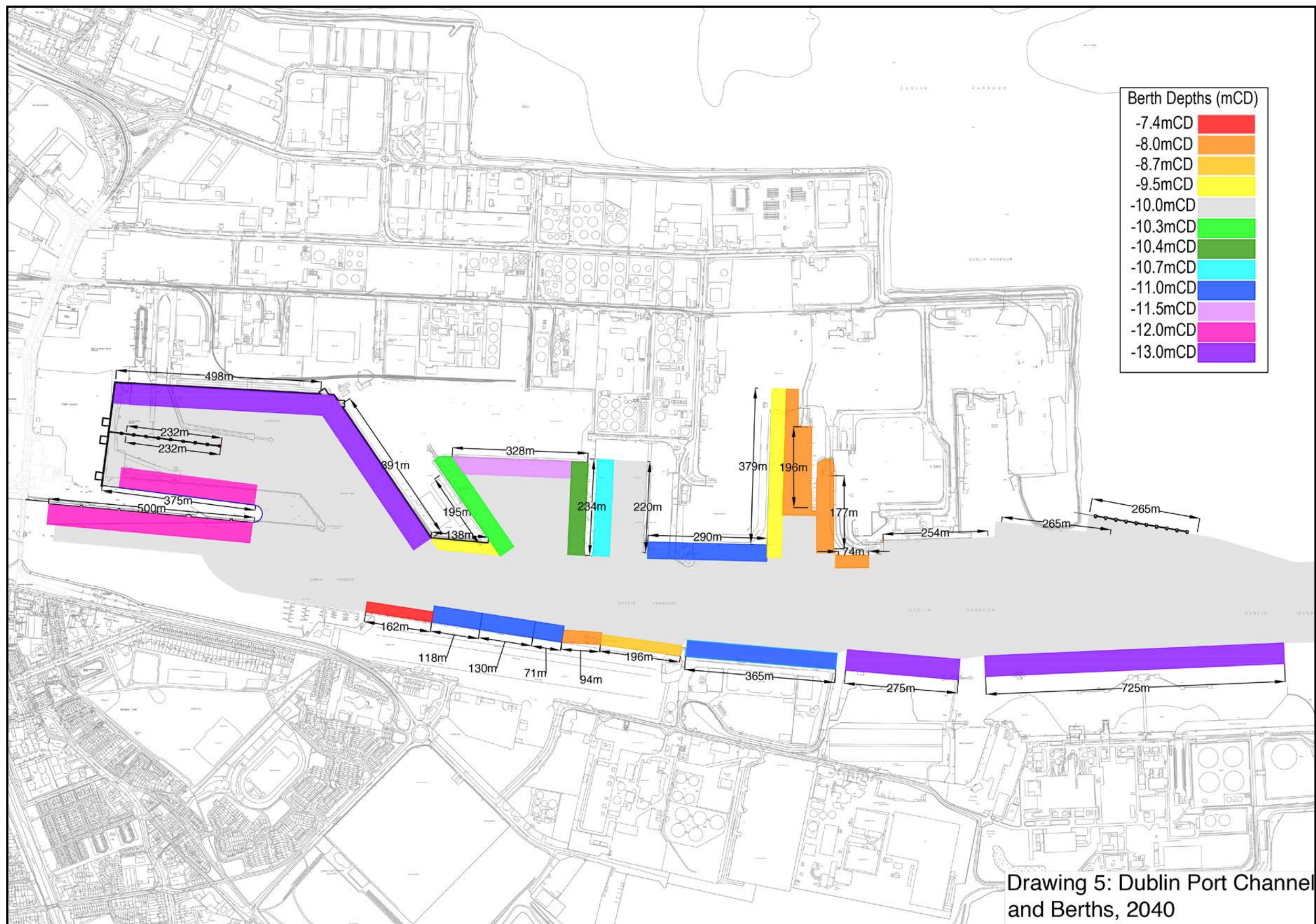
Current maintained depth: 7.8m	Mean high water	Channel depth	Max draught*	Mean low water	Channel depth	Max draught*
Spring tides	4.1m	11.9m	10.9m	0.7m	8.5m	7.5m
Neap tides	3.4m	11.2m	10.2m	1.4m	9.2m	8.2m

Planned maintained depth: 10.0m	Mean high water	Channel depth	Max draught	Mean low water	Channel depth	Max draught
Spring tides	4.1m	14.1m	13.1m	0.7m	10.7m	9.7m
Neap tides	3.4m	13.4m	12.4m	1.4m	11.4m	10.4m

\* Assumes an under keel clearance of 1.0m

The proposed increase in channel depth to -10.0m CD would increase the maximum draught of ship that could be accommodated on most days during the year to 12.4m (with a tidal restriction).

It would also allow ships with draughts of up to 9.7m enter the port at any stage of the tide on most days of the year. In practice, a channel of -10.0m CD would allow ships with draughts of up to 9.0m to enter the Port at any time on any day throughout the year.





# Review of Infrastructure Development Options

## Introduction

The infrastructure development options identified in the Masterplan remain largely valid. However, with the benefit of the experience gained over recent years, there are three specific inter-related factors which have emerged since 2012 to bring significant possible improvement to the options proposed in terms of proper planning and sustainable development:

- Firstly, in the Masterplan DPC considered that a return to the project to expand the Port by an eastern infill would be required to provide the capacity necessary for projected volumes to 2040. Now, however, DPC believes that the volumes projected to 2040 (although higher than originally assumed) can, nonetheless, be accommodated on the Port's existing footprint.
- Secondly, the commitment by NTA in its Transport Strategy for the Greater Dublin Area 2016 to 2035 to develop a road link connecting the southern end of the Dublin Port Tunnel to the South Port in combination with zoning alterations in the Dublin City Development Plan 2016 to 2022 and the provision in the Poolbeg West SDZ for port activities together open the possibility for DPC to build significant additional port capacity in the south of the Port.
- Thirdly, the acquisition of 44 hectares of land 14 km from the Port to facilitate the creation of a new Dublin Inland Port provides a pathway to redevelop large areas of port lands currently used for port-related but non-core activities.

The evolution of the Masterplan's infrastructure development options is described below, firstly, by reviewing each of the options originally proposed in 2012 and, secondly, by describing the revised set of options now proposed.

## Review of original Masterplan infrastructure development options

Section 5 of the Masterplan presented a set of infrastructure development options capable of meeting the requirements to increase port capacity to cater for a demand of 60m gross tonnes by 2040. The list of options presented were not a prescriptive menu of developments. Rather they were a set of possible options for development depending on demand and capacity, and subject to completion of the relevant planning and consents requirements.

Figure 3.1 on Page 9 shows the 13 engineering options originally identified in the Masterplan. Table 5.1 provides the original thinking behind each option together with an updated view on each option based on developments over the past five years.

# Review of Infrastructure Development Options (continued)

Table 5.1: Review of original Masterplan infrastructure development options

Ref	Original Masterplan proposal, 2012	Updated perspective, 2017
1	<p><b>Transit storage site for trade cars</b></p> <p>This 4.3 hectare site has been identified as a dedicated site for the transit storage of trade cars. It comprises port lands which were disconnected from the main port estate when the Dublin Port Tunnel was built. A new access by way of a bridge over Bond Road is proposed and car storage facilities will be developed in a manner that involves an effective use of urban land, without imposing an unacceptable impact on the visual amenity of the site. It is envisaged that this development will proceed in the early stages of the Masterplan period in order to free up lands elsewhere in the Port for longer term development for the transit storage of unitised cargo. Market requirements will determine whether this is accompanied Ro-Ro, unaccompanied Ro-Ro or Lo-Lo.</p>	<p>This project has been completed and handles the majority of the approximately 100,000 new trade vehicles imported through Dublin Port annually.</p>
2	<p><b>Reconfiguration of Ro-Ro facilities</b></p> <p>The development of new cruise facilities will require a major reconfiguration of existing Ro-Ro operations on North Wall Quay Extension. Likewise, if currently vacant lands to the north of Alexandra Road are to be used for growing Ro-Ro trade, additional berthage will be needed. Taking these factors together, it is envisaged that there will be a major reconfiguration of lands and berths in and around Alexandra Basin West. This reconfiguration will take account of the visual sensitivity of this area and have regard for landscaping and the visual impact of future uses. The elements of this reconfiguration are:</p> <ul style="list-style-type: none"> <li>• Building of a new Ro-Ro berth to replace capacity that will be lost to cruise ships on North Wall Quay Extension.</li> <li>• Removal of the existing bulk jetty used for ore loading and its replacement by alternative facilities on a new 120m berth.</li> <li>• Incorporation of currently vacant land to the north of Alexandra Road to create an additional capacity for the transit storage of Ro-Ro.</li> <li>• Removal of the existing Port Centre building.</li> </ul>	<p>These developments are part of the ABR Project and construction has commenced.</p> <p>In the Masterplan, it was originally assumed that the Port Centre building would be sacrificed to provide land area for Ro-Ro freight. However, as part of the design of the ABR Project and in keeping with the commitment to take account of the visual sensitivity of the area, it has been decided now to retain Port Centre and to redevelop the site around it so as to soften the boundary along East Wall Road between the port estate and the city.</p>

Ref	Original Masterplan proposal, 2012	Updated perspective, 2017
<b>3</b>	<p><b>Additional transit storage for unitised cargo</b></p> <p>Removal of existing warehouses and sheds and incorporation of vacant land to the north of Alexandra Road (the so-called “Texaco Yard”) into the existing Ocean Pier and Alexandra Quay East terminal facilities to create additional transit storage for unitised cargo. Market requirements will determine whether this is accompanied Ro-Ro, unaccompanied Ro-Ro or Lo-Lo.</p>	<p>This project has been completed.</p>
<b>4</b>	<p><b>Multi-user check-in area for Ro-Ro</b></p> <p>Building of a new multi-user check-in area for Ro-Ro traffic (freight and cars). This would be done as a first step with the objective of creating a new one-way route into the Ro-Ro area along the northern perimeter of the Port with a one-way exit heading west along Tolka Quay Road.</p> <p>By having a single check-in area for all Ro-Ro operators, substantial lands could be freed up in the existing terminal areas by the removal of existing internal roadways.</p>	<p>Construction of a project to redevelop the Port’s road, cycle and pedestrian routes will commence in 2017. As part of this, the new one way road along the Port’s northern perimeter will be developed.</p> <p>A further project to create a unified check-in for the three Ro-Ro terminals is proposed. As part of this project, the infilled Berth 52/53 lands will be brought into use, the existing terminal land area further increased by removal of internal roads between the three terminals and existing ferry terminal buildings will be relocated away from the working terminal areas so as to provide more land area for the transit storage of Ro-Ro freight units.</p>
<b>5</b>	<p><b>New quay wall and deepwater berth</b></p> <p>Building of a new quay wall to the east of Berth 47 to create a 300m deepwater riverside berth with a further 100m north-south berth outside the entrance to Pigeon House Harbour.</p> <p>These new berths would facilitate the relocation of some bulk traffic to the south side of the Port thereby facilitating, for example, the further development of Ocean Pier for Lo-Lo.</p> <p>Any such developments would have to take account of the impact on the natural and built heritage of this area, which would be reviewed and addressed in any specific application.</p>	<p>A preliminary project to install a road bridge over the cooling water outfall (shared by the Covanta plant and by ESB’s Synergen power plant) will proceed in 2017 to provide road access to the existing lands.</p>



# Review of Infrastructure Development Options (continued)

Ref	Original Masterplan proposal, 2012	Updated perspective, 2017
6	<p><b>Capital refurbishment of quay walls on Ocean Pier</b></p> <p>Capital refurbishment of the quay walls along Ocean Pier and the creation of deeper berths. As part of this development, additional container stack capacity would be provided on Ocean Pier to provide long-term capacity to cater for Lo-Lo (and Ro-Ro) container growth.</p>	<p>Works on this project will commence in 2017 as part of the ABR Project</p>
7	<p><b>New cruise ship berthing and facilities</b></p> <p>Deepening of the berthage on North Wall Quay Extension to provide capacity for cruise ships. Beyond this, it is envisaged that there could be a landmark development in this area which could simultaneously provide cruise terminal facilities and provide an appropriate additional step in the redevelopment of Dublin's north quays.</p>	<p>The ABR Project will deliver multi-purpose berths which, during the summer months, will be able to accommodate the world's largest cruise ships two at a time as far upriver as the Tom Clark Bridge.</p> <p>Virtually all of Dublin Port's cruise business is port of call whereby visitors disembark, visit Dublin and return to the ship, all in one day.</p> <p>The turnaround business, whereby cruise ships would start and finish tours in Dublin, is far more valuable to the economy. Dublin Port has excellent connections to Dublin Airport and the airport has a very large and growing network of international connections.</p> <p>Dublin should, therefore, be in a good position to develop as a cruise turnaround centre. This would require terminal facilities at the berths in Dublin Port. Beyond this, Dublin has a shortage of hotel capacity and a successful cruise turnaround would benefit from a large hotel capacity (more than 600 beds) close to the berths.</p>

Ref	Original Masterplan proposal, 2012	Updated perspective, 2017
8	<p><b>New Ro-Ro Facility</b></p> <p>Subject to growth in demand in future years and subject to the Port developing towards maximum utilisation of existing land in the interim, it is envisaged that there will be a major development to the east of the Port.</p> <p>In light of the anticipated growth in demand and although DPC is committed to maximising the utilisation of all of the Port's existing lands, additional reclamation and development will be required if the Port is to ultimately cater for a demand level approaching 60m tonnes.</p> <p>Any such development will be framed within environmental and habitat parameters.</p>	<p>The expansion of the lands area available for Ro-Ro will be met, in part, by the infill of Berth 52 / 53 as part of the ABR Project.</p> <p>The further development of this area originally envisaged an eastwards extension of approximately 21 hectares including the provision of two new river berths.</p> <p>It is now believed that an eastwards extension is not required for volumes up to 2040. However, some of the additional berthage will be required.</p>
9	<p><b>Non-core port lands</b></p> <p>These lands on the south side of the Poolbeg Peninsula are not considered to be core to Port activities in the future and it is envisaged that their redevelopment for suitable alternative uses will be planned for in the early stages of the Masterplan period.</p>	<p>The view of these lands has changed and they are now regarded as being required for development for the transit storage of cargo. Any such development will provide for appropriate softening of the boundaries of the newly developed lands with adjacent non-port areas.</p> <p>The maximisation of the use of port lands on the Poolbeg Peninsula is one of the main reasons why the proposed eastwards extension discussed at Point 8 above can be obviated for volumes to 2040.</p>
10	<p><b>New oil transit / Lo-Lo transit storage lands</b></p> <p>This approximately 3.0 hectare site is currently unused. The site will be preserved for suitable Port uses in the future as demand increases. Suitable uses could include additional Lo-Lo transit storage capacity or development of new oil transit storage facilities, possibly in the context of consolidating existing capacity into a smaller area of the Port.</p>	<p>Planning permission has been granted for the relocation of other oil facilities to this site. However, such development is now unlikely to proceed for financial viability reasons and the lands, instead, will be redeveloped for Lo-Lo transit storage during 2017.</p>

# Review of Infrastructure Development Options (continued)

Ref	Original Masterplan proposal, 2012	Updated perspective, 2017
11	<p><b>New deepwater berthage</b></p> <p>There are inevitably uncertainties as to how the demand for Port infrastructure will develop over the 30 year period of the Masterplan. The possible reclamation of 12.6 hectares in front of the Poolbeg generating stations could provide 700m of deepwater berthage. Any such development would have to take account of the impact on the natural and built heritage of this area, which would be reviewed and addressed in any specific application.</p> <p>The use to which this facility might be put would depend on developments elsewhere in the Port and on market demand. At this stage, there are three possible uses which could drive the development of this site:</p> <p>The building of a new deepwater container terminal within the Port either to cater for currently unforeseen future demand or to relocate existing Lo-Lo activities should that become necessary or desirable.</p> <p>Development of a new Ro-Ro freight terminal.</p> <p>Creation of a multi-use facility for project cargoes and break bulk.</p>	<p>The preferred use of this development is to provide deepwater berths (to -13.0m CD) for a new container terminal to replace the existing MTL container terminal on South Bank Quay.</p>
12	<p><b>Reconfiguration</b></p> <p>The redevelopment of Ro-Ro facilities in the vicinity of Alexandra Basin West and to the north of Alexandra Road will likely have the effect of isolating a small area of Port land facing onto East Wall Road. This site could be used for a number of uses including:</p> <p>Portcentric warehousing / logistics.</p> <p>Transit storage of trade cars.</p> <p>Possible redevelopment for non-port uses.</p>	<p>This site has been redeveloped for the transit storage of Ro-Ro freight units.</p>



Ref	Original Masterplan proposal, 2012	Updated perspective, 2017
<b>13</b>	<p><b>Vessel Turning Basin</b></p> <p>In order to cater for increasing ship lengths and increased ship frequency, a new 400m turning basin will be created immediately at the eastern entrance to the Port’s working quays.</p> <p>Such a facility would allow, for example, the largest cruise ships to access the Port.</p>	<p>The requirement to provide a large vessel turning basin is now being realised in a different manner within the ABR Project.</p>
<b>14</b>	<p><b>Portcentric Developments</b></p> <p>These lands are currently used for a variety of activities including empty container storage yards and tank cleaning. Some plots are vacant. There are also some unused warehouses and offices. Finally, there is a 110,000 square foot modern high specification logistics facility.</p> <p>Subject to control over certain sites and facilities reverting to DPC, it is envisaged that this overall area would be devoted to Portcentric developments including warehousing, cross-docking facilities, import / export consolidation centres.</p>	<p>The Franchise Policy of May 2014 identified portcentric logistics as one category of port-related but non-core activities which could be better accommodated outside Dublin Port, thereby freeing up lands for the transit storage of cargo, primarily Ro-Ro freight. Other categories of non-core activities included empty container depots and haulier yards. All three of these non-core activities currently take place on Site 14. The Franchise Policy identifies a specific objective to relocate such non-core activities from the Port.</p>

Revised infrastructure development options

A revised set of infrastructure development options has been developed based on seven factors:

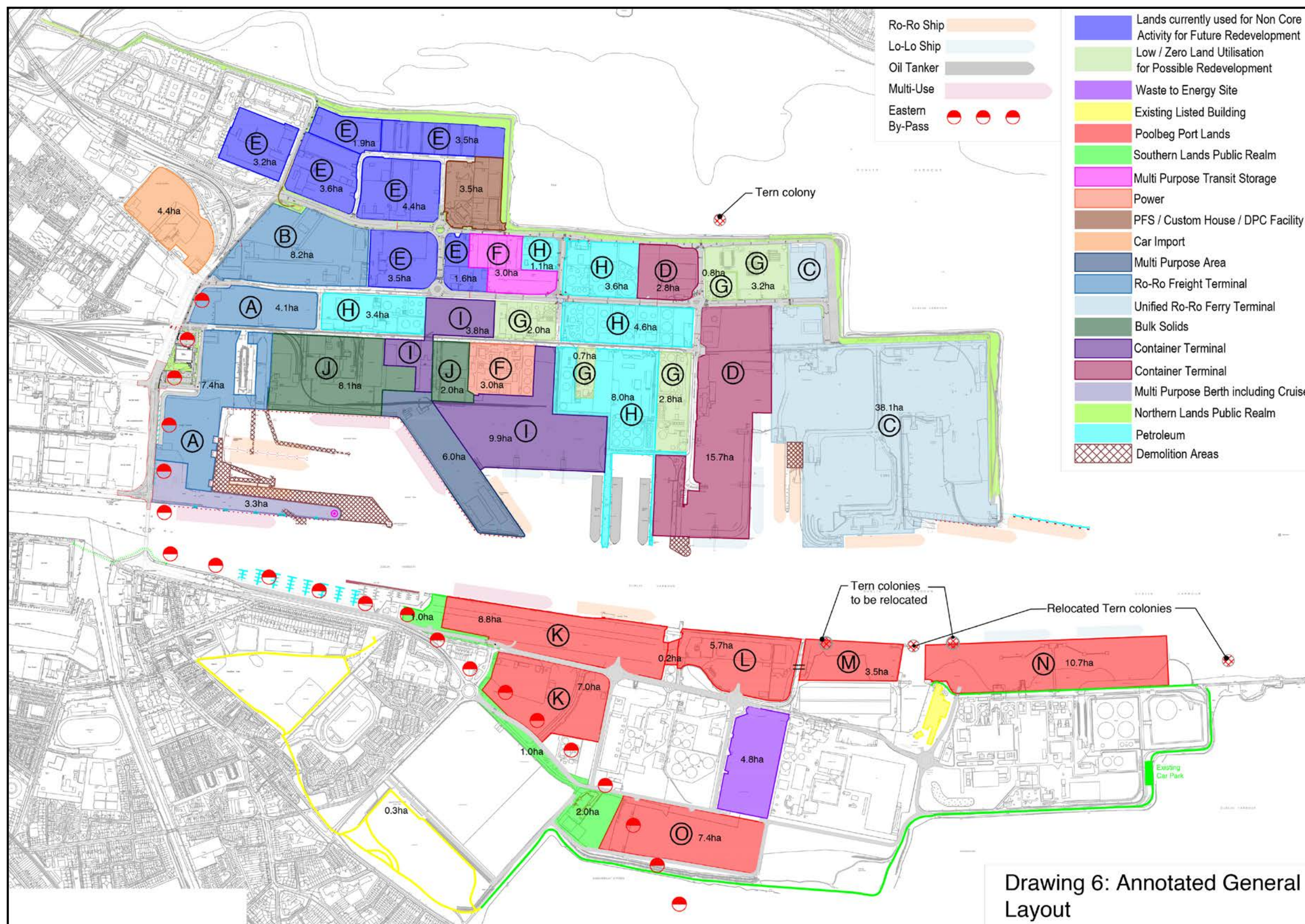
- The above review of the original infrastructure development options in the Masterplan
- The perspective gained from the experience of the first five years of the Masterplan
- The increase to 77m gross tonnes in the volume projected for 2040
- The acquisition of the 44 hectare site to create a new Dublin Inland Port
- The inclusion in the NTA’s Transport Strategy for the Greater Dublin Area 2016 to 2035 of a project to develop a road link connecting the southern end of the Dublin Port Tunnel to the South Port
- The revision of zonings on Dublin Port owned lands in the Dublin City Development Plan 2016-2022

- The inclusion of port activities and transport infrastructure among the land uses specified in the Poolbeg West SDZ

DPC has prepared the revised set of infrastructure development options shown in Drawing 6 and explained in Table 5.2 below.

As was the case with the development proposals outlined originally in the Masterplan, this is not a prescriptive menu of developments that will be carried out in Dublin Port, but rather a set of possible options for development dependent on demand, capacity and the securing of necessary permitting consents.





Drawing 6: Annotated General Layout



# Review of Infrastructure Development Options (continued)

Table 5.2: Revised Masterplan infrastructure development options

Ref	Hectares	Infrastructure development options
A	11.5	This area is the redeveloped and expanded Terminal 4 which is currently being constructed as part of the ABR Project and which will provide capacity primarily for unaccompanied Ro-Ro freight on services between Dublin and Liverpool.
B	8.2	This block of land is planned to provide additional area for Terminal 4.
C	38.1	<p>It is proposed to create a Unified Ferry terminal which would incorporate the existing Terminals 1, 2 and 5. In doing this:</p> <ul style="list-style-type: none"> <li>Existing internal roadways would be eliminated and existing buildings would be removed to create an additional three hectares of usable terminal area.</li> <li>A new unified set of in-gates would be provided north of the existing terminal areas accessed from the new Promenade Road Extension to be built as part of the project to redevelop the Port's internal road network.</li> <li>The existing Berth 51A would be lengthened and a double-tiered ramp would be installed.</li> <li>A new jetty would be built at the eastern end of the Port to provide a fifth Ro-Ro berth, all equipped with double-tier ramps</li> <li>A new ferry terminal building would be provided to the north overlooking the Tolka Estuary.</li> <li>In developing the new Unified Ferry terminal, necessary State facilities would be provided for border control across a range of headings.</li> </ul>
D	18.5	<p>This option provides for a considerable expansion of the already existing container terminal both in terms of berthage and, more particularly, storage land for the transit storage of imported and exported containers from Lo-Lo container ships. The option includes:</p> <ul style="list-style-type: none"> <li>The removal of existing buildings on the terminal which reduce the amount of usable land available</li> <li>The cessation of an existing empty container depot operation</li> <li>The infill of Oil Berth #4</li> <li>The extension of the existing river berth (Berth 50A)</li> <li>The removal of an existing bitumen facility and the incorporation of its footprint into the container terminal</li> <li>The development of a nearby yard overlooking the Tolka Estuary as a back area for the transit storage of containers</li> </ul> <p>Existing check-in facilities will be moved to a remote shared facility in Area E close to the Promenade Road entrance to the Port.</p>



# Review of Infrastructure Development Options (continued)

Ref	Hectares	Infrastructure development options
E	21.7	This area comprises seven separate blocks which will need to be redeveloped primarily for the transit storage of unitised cargo.
F	3.0	The ESB's North Wall Power Station is only used for short periods as back up when other generating plant is not available. It is unclear if the station will be required long term by ESB. If not, the site could be redeveloped to provide additional lands for the transit storage of cargo.
G	9.5	<p>There are five sites with zero or low utilisation for the transit storage of cargo. The three bitumen importation facilities have an aggregate land utilisation of about 6% of the target for lands used for Ro-Ro and Lo-Lo with no prospect of this significantly increasing in the future. There is an LPG facility which has an even lower utilisation of only 3%. Finally, there is a hazardous waste facility which could just as easily be located outside Dublin Port.</p> <p>The large aggregate land area of these five sites is such that they warrant redevelopment for the transit storage of more intensive cargo, notably Ro-Ro and Lo-Lo, over the period of the Masterplan.</p>
H	20.7	<p>There are multiple sites in five areas on the north side of the Port used for the importation of petroleum products such as petrol, diesel and aviation fuel. These sites have developed over many decades and much of the tank and other infrastructure is old. The net result is that there is in the order of six hectares more land occupied by oil facilities than would be needed if the facilities could be redeveloped with the efficiency of land utilisation as a primary objective.</p> <p>Moreover, given the need to move energy consumption away from carbon emitting petroleum products, there is uncertainty about the scale of the petroleum importation business through Dublin Port in the long-term of the Masterplan.</p> <p>As opportunities arise, therefore, Dublin Port will seek, where possible, to reduce the land area occupied by petroleum importation facilities.</p>

Ref	Hectares	Infrastructure development options
I	13.7	<p>Infrastructure development of the existing container terminal (both Ro-Ro and Lo-Lo) will be largely completed by works which are part of the ABR Project.</p> <p>Existing check-in facilities will be moved to a remote shared facility in Area E close to the Promenade Road entrance to the Port.</p>
J	10.1	<p>The use of lands in this area for Bulk Solid cargoes will be kept under review.</p> <p>In general, the Bulk Solid commodities shipped through Dublin Port are ex-growth. Some specific commodities may, over the remaining period of the Masterplan, decline to zero.</p> <p>With the possible exception of imported biomass for power generation, DPC will not seek to replace declining bulk commodities with other bulk commodities and will instead look for opportunities to redevelop bulk facilities to provide additional land area for unitised trades (Ro-Ro and Lo-Lo).</p>

Ref	Hectares	Infrastructure development options
<b>K</b>	15.8	<p>The current use of these lands for a container terminal will need to be reviewed in the context of changed land uses on the Poolbeg Peninsula.</p> <p>However, the lands adjacent to South Bank Quay provide essential port capacity and must, therefore, be retained for port uses if the objectives of the Masterplan are to be achieved.</p> <p>It is envisaged that the existing terminal will be redeveloped as a Ro-Ro freight terminal and the existing Lo-Lo container terminal will be relocated.</p>
<b>L</b>	5.7	<p>The existing South Bank Quay supports a range of bulk commodities including: petroleum coke imports; cement and cement raw materials; and scrap metal exports.</p> <p>All are businesses with low growth potential and, in the case of petroleum coke, with a future life likely shorter than the duration of the Masterplan.</p> <p>Over the remaining period of the Masterplan, Dublin Port will consider any opportunities that may arise to redevelop these lands for more intensive cargo handling activities.</p>
<b>M</b>	3.5	A new deepwater multi-purpose berth is proposed as an eastwards extension of the existing South Bank Quay.
<b>N</b>	10.7	<p>If the existing MTL container terminal is redeveloped for Ro-Ro, then the Port will have a shortage of container terminal capacity for Lo-Lo.</p> <p>It is proposed, therefore, that a new deepwater Lo-Lo container terminal be developed by the creation of deepwater berths along the River Liffey in front of the ESB's Poolbeg Power Station. In doing this, provision will be made to provide for the power station's cooling water intake and outfall and also for NORA's petroleum loading and offloading requirements.</p>
<b>O</b>	7.4	These lands will be redeveloped to support cargo handling activities at sites K, L, M and N.



### Dublin Inland Port

In addition to the lands at Dublin Port, there are 44 hectares of lands 14 km from Dublin Port to be developed as Dublin Inland Port located within the administrative area of Fingal County Council.

The Fingal County Development Plan 2017-2023 is in the final stages of consideration and the lands that will constitute Dublin Inland Port are zoned or are proposed to be zoned for General Employment (GE) with an objective to:

*Provide opportunities for general enterprise and employment.*

The vision specified by Fingal County Council for GE lands is to:

*Facilitate opportunities for compatible industry and general employment uses, logistics, warehousing activity in a good quality physical environment. General Employment areas should be highly accessible, well designed, permeable and legible.*

The specified uses which are permitted in principle explicitly include the activities envisaged by DPC for Dublin Inland Port (Road Transport Depot and Logistics).





Common terns in flight over DPC pontoon (Photo Credit: John Fox)





# Environmental Aspects Review

## Introduction

DPC's Masterplan 2012 to 2040 was supported by environmental studies presented within a Strategic Environmental Assessment (SEA) and a Strategic Natura Impact Statement (sNIS). These documents are available on the DPC Masterplan website for download ([www.dublinport.ie/masterplan](http://www.dublinport.ie/masterplan)).

This Masterplan Review is accompanied by an Environmental Report prepared by RPS Consulting Engineers for DPC comprising a detailed summary of the assessments carried out for the Masterplan and describing in some detail the permitting applications and consents secured since 2012. The Report also details the environmental monitoring and mitigation initiatives undertaken by DPC since 2012.

Mitigation measures were identified in the SEA Environmental Report to prevent or reduce any potential significant impacts on the environment. DPC is committed to implementing the necessary mitigation measures identified in the SEA Environmental Report in the context of and as relevant to any specific developments that are brought forward from the Masterplan.

Additionally, a monitoring programme was developed which is based on the SEA Objectives. The purpose of the monitoring programme was to assist in identifying whether the SEA is accurate in its predictions and whether the Masterplan is achieving its environmental objectives. By doing this, it also assists in identifying at an early stage any unforeseen effects resulting from the Masterplan so that timely and appropriate responses can be implemented.

The necessary recommendations and mitigation measures identified in both the SEA and the sNIS were reviewed and carried forward to the detailed design stage of those development proposals within the Masterplan brought forward for planning consent.

## The Alexandra Basin Redevelopment (ABR) Project planning phase

The Alexandra Basin Redevelopment (ABR) Project is the first major infrastructure project to be brought forward for planning and other consents from DPC's Masterplan 2012 to 2040. It represents approximately one-third of the total extent of the proposed developments within the Masterplan.

- The ABR Project required four separate consents:
- Planning permission from An Bord Pleanála under Strategic Infrastructure legislation (granted on 8th July 2015).
- Foreshore consent from the Department of the Environment (granted on 12th May 2016).
- Dumping at Sea licence from EPA (granted on 14th September 2016).
- IED licence from EPA (granted on 29th November 2016).

The Environmental Impact Assessment undertaken by An Bord Pleanála concluded:

*The Board considered that the environmental impact statement, supported by the documentation and various further submissions by the applicant, identifies and describes adequately the direct and indirect effects of the proposed development on the environment. The Board completed an environmental impact assessment in relation to the proposed development and concluded that, by itself and in combination with other development in the vicinity, the proposed development would not be likely to have significant effects on the environment.*

The Habitats Directive Assessment undertaken by An Bord Pleanála additionally concluded:

*The Board completed an appropriate assessment of the impacts of the proposed development on the Rockabill to Dalkey Island candidate Special Area of Conservation (site code 003000), the Lambay Island candidate Special Area of Conservation (site code 000206), the South Dublin Bay candidate Special Area of Conservation (site code 000210), the North Bull Island Special Protection Area (site code 004006) and the South Dublin Bay and River Tolka Estuary Special Protection Area (site code 004024). The Board concluded that the proposed development, in itself or in combination with other plans or projects, would not adversely affect the integrity of the European sites in view of the sites' conservation objectives.*

DPC submitted a Foreshore Licence Application for the ABR Project to the Department of Environment, Community and Local Government (DECLG) to obtain permissions for undertaking works on the Foreshore (below the mean High Water Mark) including the construction of new quays and jetties and undertaking capital dredging operations. This application was supported by the same ABR Project EIS and NIS as the planning application to ABP.

The Minister for DECLG granted the necessary consents under Sections 2(1), 3(1) and 10(1) of the Foreshore Act, 1933.

Following the granting of Planning Permission from An Bord Pleanála, DPC submitted a Dumping at Sea Permit application for the ABR Project to the EPA. This application was supported by the same ABR Project EIS and NIS which included detailed environmental appraisals of the proposed capital dredging scheme which is an integral part of the overall project.



## Environmental Aspects Review (continued)

The EPA excluded from the Dumping at Sea Permit, the loading and dumping of Class 2 sediments present in the upper reach of the navigation channel (between East Link Bridge and the Western Oil Jetty). DPC is currently evaluating engineering options for the safe disposal of this material.

DPC also submitted an Industrial Emissions Directive (IED) License Application for the ABR Project to the EPA. This application was supported by the same ABR Project EIS and NIS which included detailed environmental appraisals of the proposed treatment of contaminated sediments from Alexandra Basin West and their re-use as fill material to existing Berths 52 / 53, being an integral part of the overall Project.

### The Alexandra Basin Redevelopment (ABR) Project Construction Phase

DPC seeks to achieve the highest possible standards of environmental management during the construction of the ABR Project which commenced in November 2016. A Construction Environmental Management Plan (CEMP) has been developed to support the achievement of this goal.

### Dublin Port Road Network Improvement Project

Major road network improvements identified in the original Masterplan have also been brought forward for planning. These works comprise the construction of new roads and enhancement to existing roads within the Dublin Port estate north of the River Liffey and the provision of the shared cycle and pedestrian facility, referred to as the “Greenway”. The Greenway is approximately 4 km in length and runs along the top of the seawall along the northern shoreline of Dublin Port from East Point Business Park to Terminal 5 on the eastern edge of Dublin Port. The Greenway is bounded by the Tolka Estuary to the north, Dublin Bay to the east and Dublin Port to the south.

Road Network Improvement Project in 2016. Works are expected to commence in 2017. DPC will ensure all mitigation measures put forward in the Ecological Assessment Report and all conditions of planning are fully implemented in a similar fashion to that described for the ABR Project.

### Working to support nature conservation

The Masterplan stated that DPC would work with habitat and nature interests to ensure that the full resources that these habitats and areas provide for wildlife and for the wider public in Dublin are managed, controlled and supported. DPC has sought to establish co-operation agreements with nature interests including NGOs which involves the provision of access, some element of funding and support to these groups. Two examples are given below:

- The Dublin Bay Birds Project was established in 2013 with BirdWatch Ireland (a national NGO) to fund the three year Dublin Bay Birds Project. This project involved a professional team of ornithologists carrying out a range of survey and monitoring schemes covering the entire area of Dublin Bay from Dun Laoghaire to Sutton. The project has continued to add considerable value to existing knowledge on the distribution and movements of water birds.
- The North Bull Island Biosphere was expanded in 2015 to become the Dublin Bay Biosphere, covering Dublin Bay. Biospheres are places where nature and culture connect. They are internationally recognised for their biodiversity and are actively managed to promote a balanced relationship between people and nature. A Biosphere is a special designation awarded by UNESCO but managed in partnership by communities, NGOs and local and national governments. The Dublin Bay Biosphere is managed by way of a co-operation agreement between three local authorities (Dublin City Council; Fingal County Council; Dun Laoghaire Rathdown County Council), NPWS, Fáilte Ireland and DPC to achieve objectives in three areas:

- **Conservation:** protecting biodiversity and cultural diversity;
- **Development:** fostering a sustainable economy and society for people living and working in the area; and
- **Learning:** facilitating education, training and research to support conservation and sustainable development.

### Implementing the next phase of the masterplan

The implementation of the next phase of the Masterplan will continue to focus on achieving proper planning and sustainable development through the continued redevelopment of existing brownfield sites on Dublin Port’s existing footprint. This redevelopment focuses on core port-related activities related to the transit storage of cargo.

DPC plans to relocate port-related but non-core activities to the new Dublin Inland Port facility being developed on the lands acquired adjacent to Dublin Airport.

This initiative, combined with further Port expansion on the Poolbeg Peninsula and the development of Port infrastructure within the North Port area, have the potential to negate the need for further infill into Dublin Bay within the lifespan of the Masterplan 2012 to 2040. DPC also confirms that further deepening of Dublin Port navigation channel to lower than -10.0m CD will not be required within the period of the Masterplan 2012 to 2040. The proposed turning circle within the inner Liffey channel, identified by the Masterplan, which impinges on the South Dublin Bay and Tolka Estuary Special Protection Area will also not be required. The next implementation phase will instead focus on providing suitable depths within the Port’s basins and berthing pockets for the safe embarkation and berthing of cargo and passenger vessels using the Port.

“The implementation of the next phase of the Masterplan will continue to focus on achieving proper planning and sustainable development through the continued redevelopment of existing brownfield sites on Dublin Port’s existing footprint. ”

These decisions taken by DPC will significantly reduce the potential environmental impact of the next implementation phase of the DPC Masterplan 2012 to 2040.

Notwithstanding the approach being adopted by DPC to safeguard the environment as described above there is a number of key environmental issues identified in the Masterplan which DPC intends to address prior to the implementation of the next phase of the Masterplan. These include:

- The management of the potential impact associated with the required relocation of the tern colony located on the existing ESB Dolphin which is designated a Special Protection Area. The conservation objectives require, inter alia, that human activities should occur at levels that do not adversely affect the breeding tern population at its breeding site and which do not adversely affect the numbers of terns among the post-breeding aggregation of terns at their roosting sites.
- The potential impact on the South Dublin Bay and Tolka Estuary Special Protection Area due to the construction of a new berth adjacent to this designated site.
- The potential to improve fisheries management to offset any impact on fisheries as a result of additional quay construction and limited reclamation of the foreshore within the inner Liffey channel.
- The potential to enhance biodiversity in line with the Dublin City Biodiversity Action Plan 2015-2020.
- The future proofing of Dublin Port to climate change and negating potential impacts on flood risk taking account of planned flood defence works at Clontarf.

- The potential to improve drainage and discharges to water through the development of a strategic drainage management plan.
- The management of increased Port traffic as a result of expected growth in trade through the Port.
- The control of noise, air quality and dust levels within the Dublin Port estate.

The Masterplan recognises that mitigation measures would include the creation of alternative habitats to replace any proposed loss of Natura 2000 habitat as a result of pursuance of any of the preferred infrastructure development options in the Masterplan. DPC has been advancing the creation of alternative habitat for the tern colony located on the existing ESB Dolphin.

# Implementation Review

### Introduction

The increased clarity on the infrastructure development options necessary and sufficient to provide capacity for projected growth to 2040 and the experience gained over the first five years of the Masterplan provide the basis for a better understanding of the timing of the development projects in Dublin Port over the period of the Masterplan to 2040.

### Development Timescales

DPC is implementing the Masterplan by way of a series of six five year strategic plans. Table 7.1 below sets out for each of these strategic plans the major developments envisaged.

Table 7.1: Envisaged infrastructure development projects in each five year period from 2012

Plan no.	Period	Major developments
1	2012 to 2016	<ul style="list-style-type: none"><li>Terminal 6 trade car storage facility</li><li>Redevelopment of 11.2 hectares of Port lands</li><li>Securing of consents for the ABR Project and commencement of construction</li><li>Purchase of external lands for the development of the Dublin Inland Port</li></ul>
2	2017 to 2021	<ul style="list-style-type: none"><li>Implementation of major construction projects, notably the ABR Project</li><li>Development of Dublin Inland Port to facilitate the relocation of non-core activities from the Port</li><li>Designing, securing consents and commencing construction of the second tranche of major Masterplan projects (including a unified ferry terminal and expansion of the DFT container terminal)</li><li>Securing customer co-operation to achieve land utilisation targets for unitised cargo (containers and trailers)</li><li>Securing certainty on the long-term possibility of delivering additional port capacity on the Poolbeg Peninsula</li></ul>
3	2022 to 2026	<ul style="list-style-type: none"><li>Achievement of land utilisation targets for unitised modes</li><li>Implementation of major construction projects, primarily on the north side of the Port</li></ul>
4	2027 to 2031	<ul style="list-style-type: none"><li>Implementation of major construction projects, primarily on the Poolbeg Peninsula</li></ul>
5	2032 to 2036	<ul style="list-style-type: none"><li>Final implementation of Masterplan projects required to provide capacity to 2040</li><li>Commencement of projects to provide capacity post 2040</li></ul>
6	2037 to 2041	<ul style="list-style-type: none"><li>Completion of projects to provide capacity post 2040</li></ul>



Financing future developments

There is a direct link between growth in Dublin Port’s volumes and DPC’s ability to finance infrastructure projects necessary to support future growth.

DPC has a high operating leverage and growth in throughput translates almost proportionately into increased turnover. This in turn drives DPC’s earnings, allowing it to support the debt finance required to complete major capital projects.

Table 7.2 below shows that as port volumes grew between 2012 and 2016, so also did revenues and earnings (as measured particularly by EBITDA). Where port volumes grew by 25%, turnover grew by 23% and EBITDA by 32%.

Table 7.2: Summary of financial performance, 2012 to 2016

('000)	2012	2013	2014	2015	2016
Gross tonnes	28.0m	28.8m	30.9m	32.8m	34.9m
Turnover	€65,318	€68,375	€72,089	€77,674	€80,315
EBITDA	€39,618	€41,497	€43,243	€49,306	€52,371
Operating Profit	€29,107	€32,818	€36,141	€42,941	€44,016
Average capital employed	€287,854	€290,713	€294,284	€298,132	€320,107
ROCE	10.1%	11.3%	12.3%	14.4%	13.8%

DPC is confident that its financial strength is sufficient to allow future projects needed to meet the objectives of the Masterplan to be financed. To date, for example, €173m in finance has already been secured:

- €100m 20 year loan facility secured from EIB
- €32m TEN-T grant secured for ABR Project
- €50m medium-term debt facility agreed with a retail bank

# Invitation to Comment

This Masterplan Review 2017 Consultation Paper has been prepared by DPC. The next step is a public consultation process from 31st January 2017 to 7th March 2017. This process seeks submissions from interested parties leading to the preparation and publication of a final version of the Masterplan Review 2017. The consultation process will conclude on 7th March 2017 and it is hoped to publish the final Masterplan Review 2017 by May of this year.

In addition to publishing this draft Masterplan Review 2017 Consultation Paper, DPC is also holding a series of information events over the course of the consultation timeframe and full details will be posted on the Masterplan website and in the public domain.

DPC would welcome submissions in relation to the issues raised in this Masterplan Review 2017 Consultation Paper concerning the Masterplan and the operation of Dublin Port.

DPC would also particularly welcome submissions on the implementation of initiatives to achieve the objectives set out in the Masterplan and on future proposals in relation to each element detailed in this paper.

Specifically, DPC is keen to hear views on the infrastructure development options detailed in Table 5.2 and shown in Drawing 6. Submissions can be made in a number of formats no later than 7th March 2017

- **Online at the Masterplan Review website**  
([www.dublinport.ie/masterplan](http://www.dublinport.ie/masterplan))
- **By email to [masterplan@dublinport.ie](mailto:masterplan@dublinport.ie)**
- **In hard copy to: Dublin Port Masterplan Review, Dublin Port Company, Port Centre, Alexandra Road, Dublin 1.**





