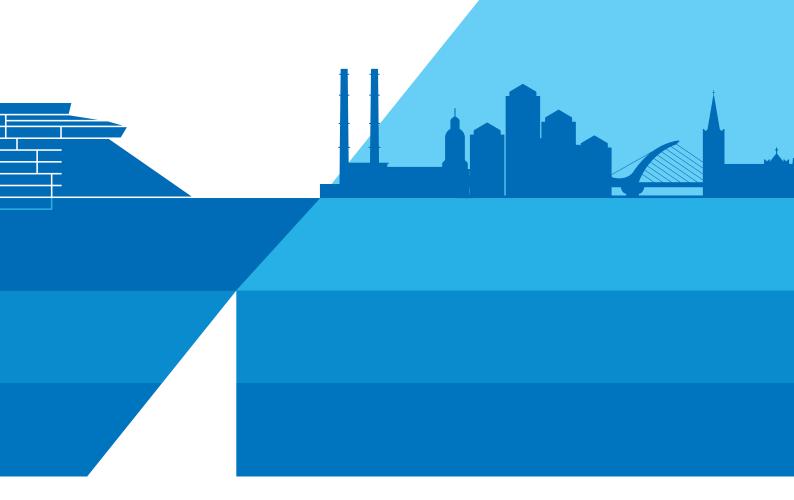


Cruise Consultation Discussion Document

October 2019



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Background

Dublin Port Company (DPC) is developing Dublin Port on the basis of Masterplan 2040. This was first published in 2012 and reviewed and updated in 2018.

The Masterplan envisages the redevelopment of North Wall Quay Extension (NWQE) to provide berths adjacent to the Tom Clark Bridge suitable for the largest of cruise ships.

Planning permission and other consents have been secured to develop these berths as part of the Alexandra Basin Redevelopment (ABR) Project.

Construction of the ABR Project is underway and the development of the new cruise berths at NWQE is scheduled to start in 2024 with the new berths available for the cruise season of 2026.

The financial challenge to DPC of the proposed cruise development was recognised explicitly in the Masterplan and this needs to be resolved if the project is to proceed.

In addition, over the seven years since DPC first set out its thinking on the development of cruise facilities in Dublin Port, a number of challenging issues have emerged which need to be resolved before DPC would proceed. These issues include air quality in Dublin and the appetite of the City to host a large cruise tourism business.

The Masterplan has two linked objectives. Firstly, it seeks to provide capacity for growth in cargo volumes up to 2040 and, in doing this, to bring Dublin Port to its ultimate capacity. Secondly, it seeks to re-integrate the Port with the City.

This consultation paper seeks the views of stakeholders on the proposed development to ensure that it would not compromise or undermine the Masterplan's objective to re-integrate the Port with the City.

Subject to the outcome of this consultation process, the next step for DPC will be to raise the finance required for the proposed development by way of a concession agreement with a cruise operator or operators.

"The Masterplan envisages the redevelopment of North Wall Quay Extension"



Recent trends in Dublin Port's cruise business

Dublin Port's cruise business has grown substantially in recent years.

The benefits of the cruise business in Dublin Port is its contribution to Dublin's tourism business. In addition, a large cruise business in Dublin supports the cruise business elsewhere in ports and cities such as Cork and Belfast.

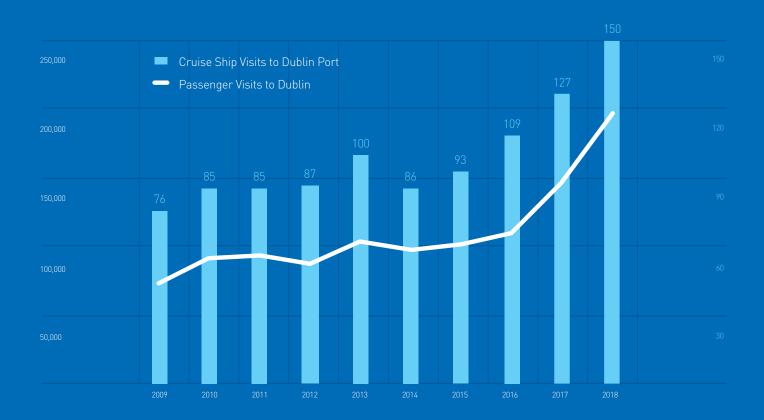
In all of these ports, the benefits derive primarily from transit visits where cruise passengers disembark for a matter of hours and visit local attractions. In the case of Dublin, however, there is a potential additional benefit from turnaround business whereby cruise ships would start and finish cruises in Dublin Port with many passengers coming from abroad. The greater the proportion of turnaround passengers, the higher the economic value of cruise.

Starting in 2018 and continuing through to 2020, Dublin Port is hosting turnarounds of large cruise ships where cruises both commence and finish in Dublin. In the order of 3,500 passengers board these cruises with many flying into Dublin and spending time in the country before or after their cruise.

"there is a potential additional benefit from turnaround business whereby cruise ships would start and finish cruises in Dublin Port"

	2019*	2018	2017	2016
# cruise ship calls	151	150	127	109
Transit passengers	177,375	158,841	141,639	104,682
Turnaround passengers	25,678	38,058	4,790	5,202
Total passengers	203,053	196,899	146,429	109,884

^{*} To September



These turnaround operations have been facilitated by the erection of large temporary structures to act as cruise terminals. This approach mirrors the approach followed in other ports, notably Copenhagen, where temporary facilities proved the viability of turnaround operations before investment was made in permanent cruise terminal buildings.

The potential to establish a significant cruise business in Dublin, including a large turnaround business with cruise ships based in Dublin Port, has now been established. This has been done using cargo berths particularly in Alexandra Basin.

As cargo volumes grow, however, the availability of these berths for cruise calls will diminish.

If Dublin is to have a large cruise business, the proposed berths at NWQE are needed.

The scale of Dublin's current (2018) and projected (2040) cruise business is shown below in comparison to Copenhagen and Barcelona.

If the proposed berths for cruise ships cannot be built at NWQE, the scale of Dublin Port's cruise business will diminish over time to about 80 cruise calls per annum, all transit calls.

Copenhagen 2012



		Dublin	Copenhagen	Barcelona
	2018	2040	2018	2018
# cruise ship calls	150	183	342	830
Transit passengers	158,841	408,434	458,000	1,375,196
Turnaround passengers	38,058	210,406	412,000	1,666,767
Total passengers	196,899	618,840	870,000	3,041,963
% turnaround	19.3%	34.0%	47.4%	54.8%



Dublin 2018



The proposed development

"The shortening of the quay is required to create a large turning area ships in Dublin Port. The current maximum length ship which can turn in Dublin Port is 300 metres"



The proposed development involves the shortening of North Wall Quay Extension and the deepening of berths on the north and south side of the quay.

The shortening of the quay is required to create a large turning area for ships in Dublin Port. The current maximum length ship which can turn in Dublin Port is 300 metres.

DPC had originally proposed in Masterplan 2012-2040 to create a large turning area to the east of the Port. This option was ruled out in the review of the Masterplan in 2018.

The large turning area at the entrance to Alexandra Basin is required not only for ships longer than 300 metres. It is also required to provide an additional safety margin for the more frequent turning and manoeuvring of smaller ships as Dublin Port becomes busier. Shipping activity in Alexandra Basin will greatly increase in 2021 when a large volume of Ro-Ro freight business (more than twice

the total annual throughput of Rosslare Harbour) moves into a new terminal in Alexandra Basin which is being developed as part of the ABR Project.

Based on DPC's experience of construction works elsewhere on the ABR Project, the estimated capital cost of developing NWQE is €172m.

The part of the proposed works required to increase the width of the entrance into Alexandra Basin is estimated at €64m. These works will proceed even if the balance of the work to build the berths for cruise ships does not.

These works would provide new deep berths both on the south side (500 metres) and on the north side (377 metres) of NWQE and would cost €108m.

The proposed development would not include terminal facilities (either temporary or permanent) for cruise turnarounds.

The economic benefits of Dublin Port's cruise business

"Indecon's study identifies a Base Case scenario under which the number of cruise passengers in Dublin Port would treble over the period to 2040"

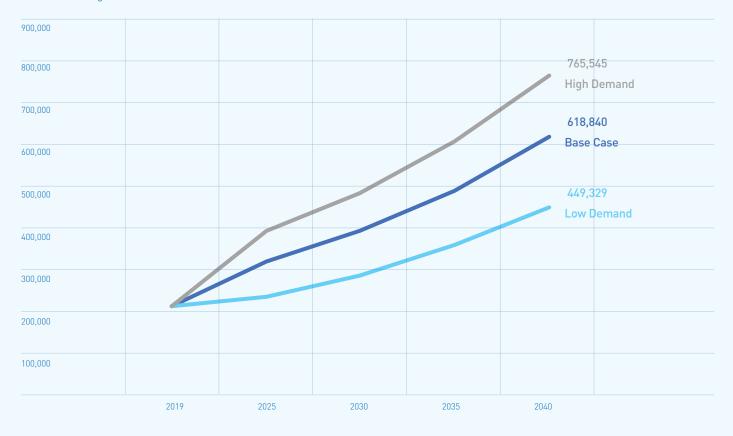
DPC commissioned Indecon Economic Consultants to carry out an economic cost benefit analysis study of the proposed investment. Indecon's study was based on market analysis and projections produced by Bermello & Ajamil. It was also informed by analysis commissioned by Fáilte Ireland during 2019 of expenditure by cruise passengers in Dublin.

Indecon's study identifies a Base Case scenario under which the number of cruise passengers in Dublin Port would treble over the period to 2040.

DPC agreed with Indecon that its economic cost benefit analysis should be carried out in accordance with the Public Spending Code which applies to exchequer funded capital investments.

The central objective of Indecon's work was to estimate the net economic contribution the proposed investment of €108m would make. This is expressed as the Gross Value Added or GVA. The estimated GVA as a result of the investment is a measure of its contribution to GDP.

Cruise Passenger Numbers Under Different Forecast Scenarios



The economic benefits of Dublin Port's cruise business

The key assumptions and framework to Indecon's analysis are as follows:

Only 50% of cruise turnaround passengers were assumed to come from abroad. The balance were assumed to be from Ireland and, on this basis, their contribution to GVA would be zero.

Each of these overseas turnaround passenger was assumed to spend €184 based on the Fáilte Ireland research.

Only 77% of transit cruise passengers were assumed to disembark in Dublin and, based again on the Fáilte Ireland research, they were assumed to spend €54.

5% of crew members were assumed to disembark and spend €54.

The aggregate expenditure benefits were adjusted to take account of the import component of the expenditure to give a measure of GVA.

No net economic benefit was assumed from the labour inputs in the €108m construction costs on the basis that there is no shortage of projects to provide employment for construction workers.

A shadow cost of public funds of 130% was applied to the €108m thereby increasing the cost against which the benefits were appraised.

The analysis was carried out over a 25 year period from 2019 to 2044.

All cost and expenditure values were discounted back to 2019 levels at a rate of 4%.

The infrastructure provided by the NWQE investment was assumed to have an economic life of 50 years.

All benefits were marginal benefits in that they were over and above the benefits that would accrue from the smaller cruise business that would exist in Dublin Port if the €108m investment were not made.

The key findings of the Indecon analysis was that the investment of €108m would generate a net economic benefit of €211m (at 2019 values) equivalent to a benefit to cost ratio (BCR) of 2.83.

In all of the scenarios analysed, the economic return was positive and the lowest level the BCR fell to was 2.14.

The positive outcome from Indecon's analysis is a necessary (but not sufficient) precondition if the investment of €108m is to proceed. It is additionally necessary that the investment can be financed and that the proposed development is welcomed and supported.

Indecon subjected its core findings to sensitivity analysis looking at different values of key assumptions including:

Discount rates of 3% and 5% instead of the assumed 4%

Low and High demand projections instead of the Base Case projection

Lower and higher levels of disembarkation for transit passengers

Differing levels of spend by cruise passengers

Higher and lower levels of cruise volumes in the event that no investment is made

Higher levels of capital cost

Financing the proposed development

DPC is a relatively small company (with a turnover of €90m in 2018) implementing a large ten year (2019 to 2028) capital investment programme of €1 billion. The focus of this capital programme is the provision of additional capacity to cater for projected cargo growth in accordance with Masterplan 2040. Given Dublin Port's scale within the Irish port system, this investment programme is an essential component of Project Ireland 2040.

DPC's approach to the development of cruise facilities is that co-financing with others would be required.

"The focus of this capital programme is the provision of additional capacity to cater for projected cargo growth up to 2040 in accordance with Masterplan 2040"

The Cruise business in Dublin Port has grown significantly in recent years. In 2017, Dublin Port attracted 127 cruise ships with 210,050 visitors. There is potential for significant further increases, particularly in light of the synergies between Dublin Port and Dublin Airport whose connectivity could facilitate the development of Dublin as a commencement port for cruises. There is interest from major cruise operators to use Dublin as a turnaround port and, in 2018, one cruise ship will use Dublin as a base for a mini-season comprising five cruises to different European locations.

Most of the financial benefit of cruise ship operations in Dublin Port accrues to operators in the tourism sector and in the retail sector. The cruise business makes a small contribution to Dublin Port's overall revenues and is not at a level to justify the Company allocating significant capital funding specifically for the development of a new cruise turnaround centre.

The Port recognises that new cruise facilities will be required to further develop this business and develop future growth prospects. As a key part of the Company's vision of integrating the Port with the City, the relocation of the cruise liners closer to the city centre provides a real opportunity to create a strong visible link. The sight of cruise liners so close to the city will provide a dramatic backdrop. It will also facilitate passengers from cruise ships accessing the city directly and ensure an increased usage of the city's public transport infrastructure. The ABR Project, which has commenced, provides for the development of multipurpose berths on North Wall Quay Extension, which can be used during the summer months to accommodate the world's largest cruise ships two at a time directly adjacent to the Tom Clarke Bridge.

DPC recognises that the development of the cruise industry is of wider strategic importance to the City of Dublin, as reflected in the Cruise Tourism and Urban Regeneration Local Action Plan published by DCC in June 2011. The development of a cruise turnaround business where cruise ships start and finish tours in Dublin is far more valuable to the economy than a port of call operation. This would require terminal facilities at the cruise berths and additional large (up to 600 beds) hotels close to the Port. A means of securing co-financing for the development of the required facilities needs to be found to realise this vision.

DPC could, however, part fund the development but additional funding would be needed from other sources. DPC will engage with DCC, Fáilte Ireland, DTTAS and other potential funders to explore how such funding could be secured to facilitate this development.

Masterplan 2020 - Reviewed 2018, Page 33

Financing the proposed development







This approach was based on the comparatively low financial benefits that would accrue to DPC by comparison with the wider economic benefits a growth in cruise business would generate.

The nature of the infrastructure to be developed at NWQE is that, if built, it would have little alternative use outside of cruise. This increases the risk of the investment from DPC's perspective as there would be very little scope to compensate for a possible future underperformance of the cruise business with alternative revenues from cargo.

In addition to looking at the economic benefits of the proposed investment, Indecon carried out a financial analysis to look at the benefit of the proposed investment from the perspective of DPC. The core finding from this was that the investment would not be viable as the estimated investment return (IRR) would be -0.8%.

Indecon additionally looked at the financial returns based on DPC having fixed and guaranteed revenues of €7m

per annum under a ten year concession agreement with an operator who would carry the risk that the future projected cruise volumes might not materialise. In this case, the IRR would rise to 2.8%. This is not much more than DPC's cost of finance.

Finally, Indecon noted that regardless of the level of financial return, DPC's ability to raise the necessary finance was a separate matter given the company's commitment to the €1 billion ten year capital programme.

Based on the above considerations, DPC has concluded that the proposed investment of €108m, if it is to be made, must be off the company's balance sheet and the development risk must be transferred away from DPC.

If the investment is to be financed off DPC's balance sheet, Government funding is ruled out by National Port Policy (2013) which states that no exchequer funding is available for port infrastructure development.

"DPC is prepared to proceed with the development on the basis of a concession agreement with a private sector operator which would provide the required funding of €108m up front"

3.5 Future funding

The policy outlined in the 2005 Ports Policy Statement that the ports sector should receive no further Exchequer funding for infrastructure development or otherwise will be maintained.

The Government is of the view that port infrastructure projects that can demonstrate stable and strong cashflows are attractive propositions for private-sector investors and lenders in the medium to long term.

The Government is open to a variety of mechanisms for private-sector investment in the port sector. Mechanisms already exist for this type of investment within the context of a landlord port model, but consideration will be given on a case-by-case basis for investment in future port expansion through the possible sale of equity stakes, public-private partnership-type arrangements, build-operate-transfer arrangements, or other similar proposals.

Additional funding opportunities may arise through the European Investment Bank, the National Pension Reserve Fund, NewERA or other State or European sources. However, any such investment will only be made on a commercial basis with a commercial return.

There is also the possibility that, arising from the revised TEN-T programme, there will be opportunities through the Connecting Europe Facility for those designated TEN-T ports to avail of those funding facilities.

National Port Policy, 2013, Page 40

However the €108m investment might be funded, it is a prerequisite for DPC that this consultation process demonstrates widespread and appropriate support for the proposed development. DPC would not proceed with the development if it is likely that it would not be supported and welcomed. To do so would run counter to the Masterplan's objective of reintegrating the Port with the City.

DPC is prepared to proceed with the development on the basis of a concession agreement with a private sector operator which would provide the required funding of €108m up front in exchange for the right to operate the facility (without payment of ship dues or passenger charges to DPC) for a defined period. Subject to the outcome of this consultation process, DPC will run a competition to identify a possible concession partner in such an agreement.

From the perspective of potential concessionaires, it is important for them to have reasonable certainty that their operation in Dublin Port over many years in the future would be supported by the City. It is also important that environmental constraints are clearly understood, particularly as regards air emissions.

Air emissions

Three Main Findings

- 1. Highest levels of $\mathrm{NO_2}$ are at locations with heavier traffic. This clearly shows the impact traffic has on the levels of $\mathrm{NO_2}$ in areas close to busy roads in Dublin.
- 2. There are many areas where NO_2 is problematic In particular places, NO_2 levels were high suggesting they may be over the EU limit. Some of these areas include:
 - a. certain city centre streets,
 - b. the M50 motorway, and
 - c. the entrance to and exit from the Dublin Port Tunnel.
- 3. Levels of NO_2 are well within the EU limits in many residential areas Away from busy roads the levels of NO_2 drop significantly and are well beneath the recommended EU limits in many residential areas

Next steps

The results of this assessment are an early warning – they signal the need for strong, co-ordinated action by all the relevant authorities to improve air quality in Dublin.

In order to improve the availability of real-time air quality data to the public, EPA is setting up new permanent monitoring stations in partnership with Dublin City Council and Trinity College Dublin. In Dublin this includes locations identified by this work as having the highest levels of NO_2 . One near Heuston Station is already running and a second one is being installed on Pearse St.

If further monitoring confirms that the EU limit values of NO_2 have been exceeded, local authorities in Dublin and its suburbs will be legally required to prepare air quality action plans to address the causes and provide solutions in the affected areas. The measures adopted by other European cities have included promoting the greater use of cycling, walking and public transport, low emission zones and moving to cleaner modes of public transport. Implementation of the Government's recently published Climate Action Plan will also have benefits for air quality – EPA is recommending that the proposed actions on road transport be progressed as soon as possible to improve air quality in the city.

Source: Urban Environmental Indicators: Nitrogen dioxide levels in Dublin, EPA, 2019

The EPA published a report during 2019 suggesting that NO_2 levels in Dublin are approaching problematic levels. The report's three main findings were as shown opposite.

Notwithstanding EPA clearly relating NO_2 issues to road traffic, EPA identifies the need to research emissions from shipping in Dublin Port in order to improve its modelling of air quality in Dublin.

In circumstances where Dublin is facing a challenge to address imminent breaches of EU air quality limits, DPC would not allow cruise ships to berth at the proposed new facilities at NWQE unless they turned their engines off and used shore power instead. The capital cost of providing shore power infrastructure is included in DPC's project cost estimate of €108m.

It is only in comparatively few ports (notably Los Angeles) that cruise ships are obliged to use shore power. However, there is growing pressure (particularly in Norway) for cruise ships to reduce emissions.

DPC believes that cruise and other types of ships will have to use shore power in the future and all new berths being constructed in Dublin Port make provision for this.

Tourism volumes

"In Ireland,
tourism is a major
contributor to
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recovery"

In recent times, there has been high profile opposition to the impact of tourism in some specific destinations and the concept of overtourism has emerged.

In small destinations such as Palma and Dubrovnik cruise tourism has created problems by swamping the destination with large numbers of transit passengers. Elsewhere, in large city destinations such as Barcelona and Vienna, cruise tourism has become a totemic target for a general opposition to mass tourism. In Amsterdam, the number of tourists is also posing problems.

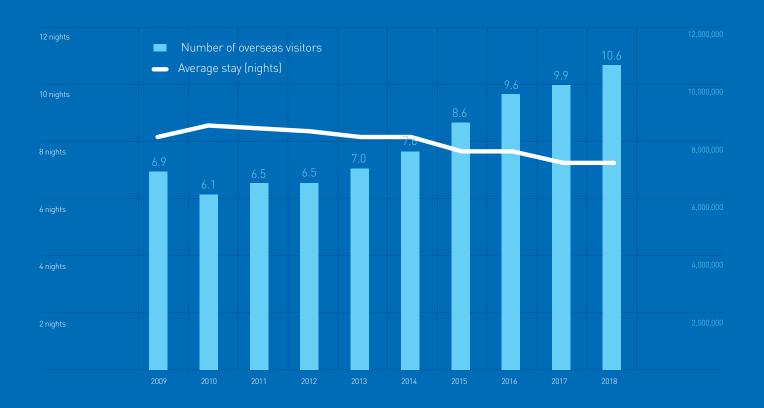
In Ireland, tourism is a major contributor to export earnings and its growth has made a significant contribution to the country's economic recovery.

Dublin is an attractive tourism destination and Fáilte Ireland says there were 6.4m visitors in 2018.

No sector can grow indefinitely and it is possible that the negative reaction to growing tourism seen elsewhere could emerge in Dublin. In recent times, for example, City Councillors voted to limit the number of hotels being built in the city (albeit as a reaction to the loss of cultural spaces rather than in outright opposition to tourist numbers).

Against a background of large and growing tourism volumes in Dublin, DPC is anxious to ensure that the additional tourism volumes which a growth in Dublin Port's cruise business would generate are not likely to become a source of contention.

It is important for DPC to understand attitudes in Dublin to a large increase in cruise tourism in the City. It would also be important for potential concessionaires to know that their investment in cruise facilities in Dublin would be welcomed.



Consultation

DPC is currently constructing the Alexandra Basin Redevelopment Project.

The final part of this project is the building of new berths suitable for the largest cruise ships at North Wall Quay Extension, immediately east of the Tom Clarke Bridge.

Construction is scheduled to start in 2024 with the new berths available for the cruise season of 2026.

The investment required is estimated at €108m.

DPC projects that this investment could treble the number of cruise tourists to 619,000 by 2040 with approximately one third of these being turnaround passengers.

The economic benefit from this investment and from the projected increase in cruise tourism has been evaluated by Indecon Economic Consultants in accordance with the Public Spending Code. This analysis suggests a Benefit to Cost ratio of 2.83.

The scale of the investment required and the level of risk are such that DPC could not finance the project itself. Government funding is not an option either.

If the project is to proceed, it will require a concession agreement with a private sector operator which would provide funding of €108m up front in exchange for the right to operate the facility (without payment of ship dues or passenger charges to DPC) for a defined period.

In advance of running a competition for such a concession, DPC wishes to confirm the level of support for the proposed development across the Port's wide range of stakeholders.

The simple question DPC wishes to answer is whether Dublin wants a large cruise tourism business?

In addition, DPC wishes to establish the level of interest among cruise companies or others in participating in a competitive process for a concession agreement based on the parameters set out in this document (notably the need to provide €108m in finance and the obligation that all cruise ships would be obliged to use shore power).

DPC would welcome responses to this consultation document by 17th January 2020 either by email to cruiseconsultation@dublinport.ie or by post to:

Cruise Consultation
Dublin Port Company
Port Centre
Alexandra Road
Dublin 1

As part of the consultation process, DPC would welcome the opportunity to meet any stakeholders, directly or through representative bodies, to discuss the issues set out in this discussion document.



