An Bord Pleanála



Inspector's Report

Ref.: PL06D.PA0042

Development: An 8-year permission is sought for the construction of

a new Cruise Berth Facility consisting of both maritime and landside development works including Quay/Pier Structures of approximately 435m overall length, a new deep-water dredge channel and turning circle, associated facilities, and all ancillary site development and landscape works, at St. Michael's Pier/Marina Eastern Breakwater, Harbour Road, Dún

Laoghaire Harbour, Dún Laoghaire, Co. Dublin.

A separate Waste Licence, Dumping at Sea Licence and Foreshore License will be required.

An Environmental Impact Statement and Natura Impact Statement have been prepared and accompany the application.

Application under Section 37E of Planning & Development Act 2000 (as amended)

Planning Authority : Dún Laoghaire-Rathdown County Council

Applicant : Dún Laoghaire Harbour Company

Type of Application : Strategic Infrastructure Development

Submissions & Observations

Dún Laoghaire-Rathdown Co. Co.: Yes

Prescribed Bodies x 10 : Yes

Observers x 145 : Yes

Oral Hearing

Wednesday 14th Oct - Friday 23rd October 2015 Monday 2nd November - Thursday 12th November 2015

: 23rd July 2015-Princess Cruise Dublin Port **Dates of Site Inspection**

: 15th August 2015 : 2nd October 2015

Inspector: Fiona Tynan

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1.0 INTRODUCTION

1.1 This report relates to an application under S.37B of the Planning and Development Act 2000, as amended, in respect of the development of a new cruise berth in Dún Laoghaire Harbour. The application was deemed to be Strategic Infrastructure Development (SID) under the provisions of the Planning and Development Act 2000 (as amended). Under the provisions of the said Act, the development was deemed to come within the following Article as set out under Schedule 7 (2) (Transport Infrastructure) of the Planning and Development Act 2000 (as amended) for the purposes of Sections 37A and 37B of the Act:

"Development comprising of or for the purposes of

A harbour or port installation (which may include facilities in the form of loading or unloading areas, vehicle queuing and parking areas, ship repair areas, areas for berthing or dry docking of ships, areas for the weighing, handling or transport of goods or the movement or transport of passengers (including customs or passport control facilities), associated administrative offices or other similar facilities directly related to and forming an integral part of the installation)-

- (a) Where the area or additional area of water enclosed would be 20 hectares or more. or
- (b) which would involve the reclamation of 5 hectares or more of land, or
- (c) Which would involve the construction of one or more quays which or each of which would exceed 100 metres in length, or
- (d) Which would enable a vessel of over 1.350 tonnes to enter within it'.
- 1.2 The proposed development was the subject of six pre-application consultations with An Bord Pleanála, under ref. **06.PC0155**, between May 2013 and February 2015. On conclusion of these consultations, the Board served notice, on the 1st April 2015, under Section 37B(4)(a), that it was considered that the proposed development would comprise development of a nature specified under item 2(c) of the Seventh Schedule and would meet the requirements of paragraphs 37A(2)(a) of the Act. It was accordingly decided that the proposed development would comprise strategic infrastructure within the meaning of Section 37A. The current application to An Bord Pleanála is made on foot of that decision.

1.3 Application Submitted

1.3.1 The planning application was lodged on the 3rd of July 2015 and was accompanied by the following:

- Planning Application Report
- Accompanying drawings
- Environmental Impact Statement (EIS) containing 3 Volumes

EIS Volume 1:

Written Statement

EIS Volume 2:

- Appropriate Assessment Screening Statement
- Economic Impact Assessment Report prepared by DKM Economic Consultants
- Pre-application Public Consultation Information prepared by Dún Laoghaire Harbour Company (DLHC)
- Navigation Analysis Report
- Dún Laoghaire Harbour Masterplan 2011-2030
- Navigation Impact Assessment
- Marine Mammal Risk Assessment
- Benthic Survey Data
- Biotype Description
- Summary of Impact Assessment
- Records of Rare, Protected and Notable Flora and Fauna
- Winter Bird Survey
- Winter Bird Survey Peak Count Data
- Criteria for Ecological Evaluation

EIS Volume 3:

- Natura Impact Statement
- Geotechnical Factual Report
- Sediment Samples and Analysis 2015
- Sediment Samples and Analysis 2014
- Coastal Wave, Tide and Sediment Plume Modelling Report
- Dún Laoghaire Rathdown Co. Co. Guidelines on Noise Levels
- Construction Phase Noise Contours
- Operational Phase Noise Contours
- Photomontages
- Construction and Demolition Waste Management Plan
- Preliminary Operational Waste Management Strategy
- Traffic Count
- Transport Demand Assessment
- Junction Assessment
- Traffic Management Plan Queen Mary II
- Recorded historical Shipwrecks

- Recorded Monuments
- Topographical files
- Marine Geophysical Survey Report
- Dive Inspection Report
- Marine Archaeological Survey & Testing Report
- Marine Geophysical Report (Phase 2)
- Dún Laoghaire Harbour Masterplan Heritage Management Plan
- 1.3.2 An oral hearing was held over 17 days in October and November 2015 (excluding a ½ day preliminary hearing). A summary of the proceedings of the oral hearing is attached as Appendix 1 of this report. Written submissions to the hearing are contained in Pouches appended to this report.

2.0 SITE LOCATION & DESCRIPTION

2.1 Dún Laoghaire Harbour

- 2.1.1 Dún Laoghaire Harbour (DLH) is located in Dublin Bay, on the south Dublin shoreline between Blackrock and Sandycove. DLH was built between the years 1817 and 1842 as an asylum harbour to give safe refuge for ships on their way to Dublin Port who found themselves stranded at sea during bad weather or poor tide conditions. The harbour land extends for approximately 1.6km along the coastline. The form of the harbour is generated by its two breakwater arms, each over 1km long (the East and West Piers). The enclosed area of water has an area of approx. 101ha (250 acres).
- 2.1.2 In 1969, a new ferry terminal located at St. Michael's Wharf to the west of Carlisle Pier, was built. In 1995, a new terminal was established on Carlisle Pier and this served the HSS Stena Line up to 2014. In 2001, a new marina facility was developed which included construction of 2 new breakwaters within the Harbour as an engineering solution for providing the necessary calm water conditions to accommodate safe berthage for the range of boats which the Marina was to serve. The harbour consists of a number of features commensurate with its function including piers and slipways, mooring and boat storage facilities and maritime buildings. At present the harbour accommodates a range of commercial and marine recreational/leisure activities. The harbour is used by a number of clubs, organisations and groups. There are 4 principle sailing clubs which use the harbour, these are the Irish National Sailing Club, Royal Irish Yacht Club, Royal St. George's Yacht Club and National Yacht Club. Also within the harbour are the Dublin Bay Sailing Club and the Dún Laoghaire Motor Yacht Club (located on the west pier). The following map shows the location of the yacht clubs within the harbour. A lot of the focus of the oral hearing and submissions to the Board relate to the use of the harbour by the sailing clubs as their principal training/racing area and/or their transit out to the bay. Other users of the harbour include the Commissioner of Irish Lights, Naval Service, RNLI, Freight Vessels, Sail Training Vessels, Dublin Bay Cruises, Sea Scouts, Public Boatyard and Slipway, and Fishermen.
- 2.1.3 Apart from the water, the piers are also used by many walkers (1m people a year is cited) all year round. During the summer months there are often events situated on the pier such as concerts/amusements in an effort to draw more people to the local area.

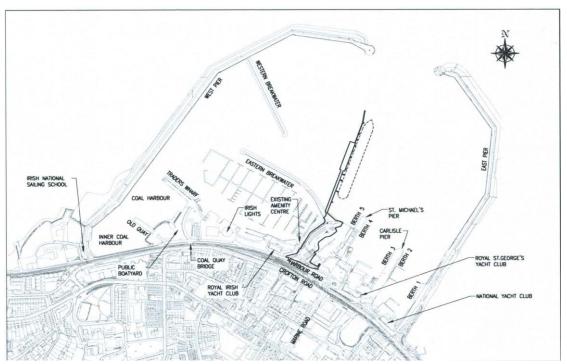


Figure 2.1: Extract taken from Section 5.1.19 of the EIS, Volume 1.

- 2.1.4 The harbour is overlooked by the town of Dún Laoghaire from the south-west. Dún Laoghaire town is situated on a gentle hill that slopes towards the harbour. Separating the harbour and the town is the N31 (Old Dúnleary Road) which continues onto Crofton Road and Queens Road, and the DART railway line. The N31 terminates inside the harbour lands and is the main access to the DLH. The harbour itself has four access routes for vehicles each spurred off the coastal road. The harbour is connected to the local public road network via three junctions which are marked 1 to 3 on Figure 2.1 as follows:
 - Crofton Bridge harbour access/Dúnleary Road/Crofton Road/Clarance Street.
 Signal controlled access to west harbour which formed the main access to the Stena ferry service.
 - Harbour Road roundabout.
 Priority controlled roundabout access to the east harbour which links the harbour to the local road network.
 - 3. Crofton Road/Marine Road/Queen's Road/Harbour access. Signal controlled junction.¹

¹ Page 5.7.17 of EIS, Volume 1.

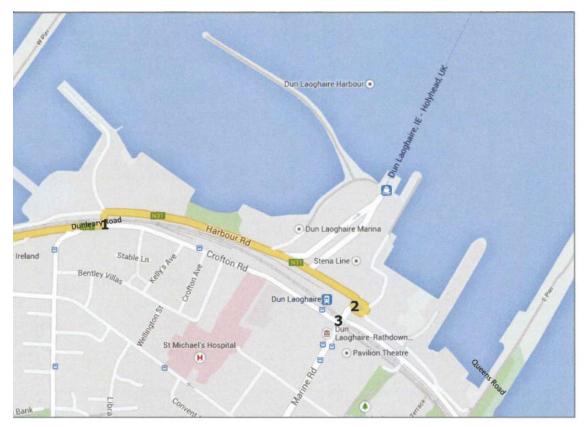


Figure 2.1: Road Network

In relation to public transport, the harbour is served by both Dublin Bus and the DART. The DART railway line is positioned below road level and therefore cannot be seen from the neighbouring Crofton Road or Harbour Road. It provides access to Howth and City Centre's Connolly Station. The DART runs frequently between Dún Laoghaire and the city centre. DLH is also serviced by a number of bus routes, namely the 46A and 7 to the city centre and the Airport, 75 to the Square in Tallaght, 45A to Kilmacanogue, 63 to Kilternan, 59 to Dalkey, whilst the DART feeder bus service provides access to Loughlinstown during peak periods. There are also a number of car parks in the vicinity of the harbour, together with on-street meter parking managed by DLHC along Harbour Road, Queens Road and Crofton Road.

2.2 Wider Area:

2.2.1 The application site is surrounded by a number of high profile buildings. The Commissioners of Irish Lights building is situated to the west of the application site. This is a circular building designed by Scott Tallon Walkers Architects and erected in 2002-8. Situated between the CIL building and the application site, is the club house of the Royal Irish Yacht Club dating from 1831. To the east of the application site is the former embarking/disembarking area of the HSS Stena Line and its Porte Cochére canopies delineating the entrance are a distinctive local feature. The most recent building into the local landscape is that of the Lexicon Library, which has received a divergence of opinion on its

architectural style. It is situated opposite the east pier and abuts the Metals in Dún Laoghaire. Extending to 29m in height, it has been compared to the scale of the cruise ships in submissions.



Figure 3.0: Image of CIL on the left and the RIYC on the right

- 2.2.2 The harbour is developed and maintained by Dún Laoghaire Harbour Company (DLHC hereafter) which is the statutory commercial body charged with developing Dún Laoghaire Harbour and established under the Harbours Act of 1996. DLHC is the applicant making the application in this instance.
- 2.2.3 The Application site is located at a centre point to the harbour directly opposite the mouth of the harbour between the east and west piers. The site of the development encompasses the existing embarking/disembarking hard surfaced area to the now disused St. Michael's Pier and the 500sq.m. trucker building, which served the HSS Stena Line, delineated by a row of canopies at the entrance. This area is presently closed off and secured. The application site also extends to include the existing Administration/Security building situated at the entrance to the eastern breakwater, the walkway to the eastern breakwater and a portion of the public car parking area associated with the terminal building. Also included within the application site boundary is an area of land abutting the Harbour Road/Crofton Road/Dúnleary Road junction. essentially a strip of land bounding the roadside. Further north, the application site also includes an area of Old Quay which is presently used as a car park for the users of the Coal Harbour. The application form with the proposal states that the site area of the application extends to 55.3ha, whilst the stated floor new works is 54sa.m. and 180sq.m. existing security/administration building is to be demolished.

2.3	Environmental Designations
2.3.1	The site is located within 15km of a number of European sites which will be outlined at a later stage of this report.

3.0 DESCRIPTION OF PROPOSED DEVELOPMENT

- 3.1 As the list of works proposed as part of the application is lengthy, I have broken down the works into the following categories, to assist the Board in their understanding of the proposal. The Applicant is seeking an 8-year permission for the construction of the berth. The principal works are highlighted as follows:
 - Suspended Piled Quay/Pier Structures of approximately 435m in overall length consisting of 120m long x 20m wide quay, 175m long x 9.1m wide access causeway, 140m long x 1.2m wide suspended metal access walkways, with a deck level +6.9m above Chart Datum (+4.39m ODM); ancillary infrastructure including piles, fenders and facing panels, 8 no. 3m diameter monopole mooring dolphins, hand railings, feature lighting, 12m high quay lighting masts, emergency access ladders, bin storage area, maritime furniture and associated development;
 - Provision of a navigation underpass beneath the proposed access causeway to cater for passage of low headroom vessels;
 - Alterations and new piling to a section of the Eastern Breakwater, with new underwater scour protection concrete mattress plus rip-rap system;
 - Minor repair of underwater masonry blocks on the West Pier Roundhead (a Protected Structure) and replacement with the parent masonry block retrieved from the sea bed, where practicable;
 - A new single storey security kiosk and office building (54sq.m.) and a new security gate on the Eastern Breakwater; Re-use of the existing motorists' building for cruise meeting point, information centre, passenger welfare facilities and bin storage area;
 - Dredging of an access channel from deep water in Dublin Bay to St. Michael's Pier/Marina Eastern Breakwater, including:
 - > an approximately 500m diameter turning circle situated outside the harbour mouth,
 - an access channel of approximately 1,150m in length outside the harbour walls, and
 - ➤ a channel of approximately 850m in length inside the harbour involving the removal of material, to a depth of -10.5m below Chart Datum (-13.01m ODM), total length of approximately 2,500m.
 - ➤ The access channel outside the harbour will have a navigable width of approximately 120m.
 - ➤ The total dredged volume is approximately 710,000 cubic metres.

- ➤ The proposal also involves the infilling of an existing underwater scour hole within the harbour with approximately 20,000 cubic metres of dredged material;
- ➤ A system of new navigation aids placed outside and within the harbour walls;
- An approximately 7m wide shared use pedestrian and private vehicle access zone located adjacent to the existing Marina connecting the Marina Eastern Breakwater to Harbour Road, together with a new approximately 5.2m wide pedestrian boardwalk with tiered seating parallel to this shared area and located between this shared area and the Marina:
- A 27 no. coach and mini-bus drop off/pick up area and taxi parking area within a dedicated section of the existing HSS ferry marshalling area including a new 6m wide raised pedestrian area;
- Demolition of certain harbour infrastructure (of 180sq.m.) including the boundary wall along the HSS Yard boundary, the motorist's administration building, a section of the Porte Cochére canopy structure, railings and gates; removal and replacement of existing pavements; removal/relocation of existing light poles and signage; and tree removal;
- Outside of normal cruise season, it is planned that the new berth could be used for a range of harbour and amenity related activities, including berthing of other vessels and boat storage.

3.2 The Quay Structure

- 3.2.1 The new quay structure will extend approximately 435m north-northwest, into Dún Laoghaire Harbour from the shore, and will comprise of three sections, the quay itself, a causeway for access and the mooring dolphins. The main quay will consist of a 120m long, 20m wide concrete deck, set at a level of +6.9m CD (the same level as the existing inner eastern breakwater). This level will provide 2.8m freeboard at mean high water springs and 6.1m at mean low water springs. The quay will be connected to the Eastern Marina Breakwater by an approximately 8.5m wide concrete access causeway, also supported on tubular steel piles. Ships will berth along the eastern side of the quay.
- 3.2.2 To provide a berthing face for a 340m vessel, a total of 8 monopiles will be required, 4 north of the quay and 4 south of the quay. The monopoles will be approximately 3m in diameter and will each support a fender on the berthing side of the pile and a mooring bollard and lighting on top of the pile. The mooring piles to the north of the quay will be accessed via a lightweight metal walkway. The mooring piles to the south of the quay are located adjacent to the access causeway and will be connected to the causeway for operational access.

3.2.3 The berth will have a connection to the public water mains, to provide fresh water supply to the berthed cruise ships, where necessary, and to provide firefighting capacity. An electricity supply will also be taken to the berth for lighting of the causeway, the guay and the monopoles.

3.3 Navigation Channel

- 3.3.1 The new approach channel from deep water in Dublin Bay to the proposed new berth will be dredged to a depth of -10.5m Chart Datum. Chart Datum (CD) is a reference level on Admiralty Charts, which approximately equates to the lowest astronomical tide, and all water depths are related to this datum. This depth has been chosen by the Applicant to allow cruise ships up to a selected class to access the new berth at all stages of the tide.
- 3.3.2 The current level of the sea bed is -7m CD outside the existing harbour, and falls to a minimum of -4m CD along the approach within the harbour. The shortest route from the berth to deep water involves turning the ship just outside the harbour and then heading in an easterly direction until -10.5m CD contour is reached.
- 3.3.3 Within the harbour the approach channel will be positioned so that the centre line of the berth is 120m to the west of St. Michael's Pier and the channel and berth will be oriented to align with the centre of the existing harbour entrance so that the cruise ship will not have to undertake any turns within the harbour itself. Rather it is intended that the cruise vessel would either turn outside the harbour and back down the channel onto the berth, or steam onto the berth and back out into the turning circle, depending on conditions.
- 3.3.4 The alignment will result in an approach channel of almost 2.5km long, with a dredged turning circle outside the harbour. A channel width of 120m is proposed and the turning circle will be 500m in diameter. Cruise ships will navigate the channel using a system of "virtual buoys". There will be two additional visible navigation aids outside the harbour. Inside the harbour, a navigation light will be added to the outermost part of the proposed structure.
- 3.3.5 The creation of the navigation channel will require dredging of approximately 710,000m³ of sand and silt from the seabed. It is proposed that dredged material will be disposed of at existing spoil grounds at Burford Banks and partly within the harbour itself in a hollow in front of the HSS StenaLine Ferry terminal. Any disposal of dredged materials offshore will be subject to the approval of a Dumping at Sea Permit by the EPA.

3.4 Supporting Works

3.4.1 In order to provide access for visiting cruise passengers, a corridor linking Harbour Road to the proposed cruise berth will be created along the western edge of the existing HSS StenaLine marshalling area, with a proposed new

boardwalk to be added facing the Marina. This will require some limited demolition, including the boundary wall between the existing Eastern Breakwater and the HSS StenaLine marshalling area, security hut and canopy (in part only) at the entrance to the existing ferry terminal. New surfacing, replacement public lighting and surface water drainage will be provided for the new corridor. Coach pick-up area will be located in the existing HSS StenaLine marshalling area. A new pedestrian footpath is proposed to run east-west parallel to Harbour Road and an overflow coach parking area proposed along Accommodation Walk running parallel to the existing train line.

3.4.2 Existing toilet facilities in the Motorists building will be retained and refurbished. Foul water from here will be pumped to Ringsend WWTW for treatment prior to discharge to Dublin Bay. Foul/waste water from the cruise liners will be treated entirely on board the cruise liner, with any residue discharged outside territorial waters. Surface water collecting on site will be managed using the existing surface water drainage on site including treatment by petrol interceptor prior to discharge into the harbour.

3.5 Schedule of Works

- 3.5.1 The dredging works are the first activity to be undertaken as part of the construction works. Its first stage will require a complete bathymetric survey of the area to be dredged, which will form the baseline of the activities and will be used to establish final volumes on completion. The sea bed will be dredged to a depth of -10.5m in the approach channel and turning circle. The total dredge volume is approximately 710,000m3, covering an area of approximately 472,000m2. The ground investigation works shows that the dredge material should comprise almost 90% unconsolidated sands with a very small amount of silt close to the HSS berth.
- 3.5.2 Two dredgers will be used during the course of the works. These are a trailer suction hopper dredger (TSHD) and a small, shallow draft vessel, plough, or barge mounted excavator for use in shallow areas, or areas inaccessible by the TSHD. The TSHD will be equipped with a GPS navigation system which is connected to a dredge computer will ensure that over excavation does not occur. Once loaded the dredger will sail to the sea disposal site, the Burford Bank in Dublin Bay located approximately 4 nautical miles distant, where the loaded material will be discharged via its bottom doors. To prevent the formation of significant high spots at the disposal site, the dredger will continue sailing at reduced speed whilst dumping. The TSHD will be supplemented with a small, shallow draft vessel, plough or barge mounted excavator for use in shallow areas, or areas inaccessible by the TSHD. This equipment would be used to move material from shallow and/or inaccessible areas to an area where it could be dredged by the TSHD. The application seeks to operate the dredger 7 days a week, 24 hours a day. Should this be permitted, the dredge

programme would be in the region of 14-17 weeks. Sound outputs from the dredger are between 51.5dB-62dB, dependent on background noise.

- 3.5.3 The piling on the project will be in the form of steel tubes filled with reinforced concrete. The main guay structure and access causeway will be supported on a grid of 750mm-1000mm diameter pile. 3m diameter monopoles will be used to take mooring and breasting loads away from the main quay area. Piling operations will be undertaken from a heavy duty crane barge moored using spud legs and anchors if required. A multi-purpose support vessel will also be used to transfer crew and materials to the barge. It is anticipated that the same equipment will be used for all pile diameters irrespective of the pile diameter. The steel piles will be manufactured off site and shipped to site. operations will commence with the installation of a piling frame to guide the piles into the correct position. Piles will be installed using a drive-drill-drive method, whereby the initial installation of the casing is by using a vibrating hammer or hydraulic piling hammer. The soil and rock within the steel tube will be removed by rotary drilling, with a final drive of the tube to achieve the required depth. The piles will be constructed from water level through the soil/water vertical profile consisting mainly of boulder clay underlain by rock at approximately -30.0mCD-the proportion of the shallow bed deposits entrained within a pile will be very small. After completion of the installation of the steel tube, the vibrating hammer and piling frame will be removed. A reinforcement cage will be inserted into the steel tube and the whole pile concreted up to the underside of the quay deck level. Appropriate protection measures will be adopted to ensure that concrete is not spilled into the harbour. The programme for piling is approximately 12 weeks with the contractor using extended working hours together with night-time working for quieter activities and deliveries.
- 3.5.4 The deck structure comprises of 2 parts:
 - (a) The main quay which will be used for berthing operations and for the embarkation/disembarkation of passengers
 - (b) An access causeway which provides access for passengers and light vehicles from the land to the quay.

Both parts of the structure have been designed to maximise the use of precast concrete elements to provide a permanent shutter and a working platform for the insitu works. The main quay structure has been designed as a two way spanning slab supported on a grid of precast beams which span approximately 8m in a longitudinal direction and 6m in a transverse direction. The concrete deck will be 500mm thick, with a solid 200mm precast concrete slab forming a permanent shutter and a 300mm reinforced insitu concrete slab. Precast beams could either be manufactured in a yard on site, or alternatively manufactured off site and transported by either road or sea, depending on the

preferences of the selected contractor. Space for a casting yard exists within the landside area and is conveniently placed to receive the normal compliment of deliveries by road, notably readymixed concrete and reinforced steel bars. The beams could be lifted into position using a heavy duty barge mounted crane. The beams will be mechanically fixed to the piles as a temporary measure and then the precast permanent shutters will be lifted into place. The whole of the deck structure, including the joints between the precast beam elements, will then have a reinforcement cage fixed in position. Embedments for bollards and fenders will also be incorporated at this stage. The final operation will be to pour an insitu concrete slab over the whole of the deck area. Concrete could be delivered using ready mix trucks travelling on the already available previously constructed deck and pumped into the final position using a concrete pump similarly situated.

3.5.5 The scour protection at the southern end of the berth when installed aims to help prevent scour and the undermining of the existing structures when the cruise ship is moving on and off the berth.

3.6 Licences/Permits Required

3.6.1 The proposed development traverses a designated European Site in the form of dumping at sea.

The following licences will be required:

- Waste Licence from the EPA
- Dumping at Sea Permit from the EPA

3.7 HSS Stena Line Infrastructure

3.7.1 As previously stated the HSS ceased operating its ferry service from St. Michael's Pier in 2014. The applicant indicates in the submitted proposal that it is their intention to have the HSS associated infrastructure removed, including the linkspan and dolphins, when the cruise berth is in place. That process is stated to be independent of the current proposal before the Board. The drawings and EIS submitted have assumed that this infrastructure will have been removed before the cruise berth is operational. I note from the DLRCC website that an exemption certificate was granted on 22/10/15 to allow the temporary removal of the east/west walkway unit (for a period of 4 weeks) to permit access to adjoining linkspan structure at Stena Terminal. At the time of writing this report, no such works had commenced.

3.8 Design Class of Cruise Ship

3.8.1 Presently Carlisle Pier can only accommodate small cruise ships, up to 150m in length and 5m in draft. This size of cruise ship typically has a passenger capacity of up to 300. The new berth is being designed to provide a dedicated berth that can accommodate cruise ships up to 340m in length (total berth

length 390m). The Applicant has indicated that the cruise berth is being designed to facilitate the Freedom Class range of cruise ships, which is associated with Royal Caribbean International. This range of ship was the largest cruise ship in the world from 2006-2009. It has a length of 338.8m, a beam of 56m at its bridge wings, a draft of 8.5m and incorporates 18 decks of which 15 are for passengers and has a capacity for 4,370 passengers.

4.0 PLANNING HISTORY

4.1 Applications/Appeals on the Subject Site:

- 4.1.1 <u>Reg. Ref. PR470/93 / ABP PL06D.093192</u>: An application was made by the Minister for the Marine for an extension and refurbishment of the existing Ferry Terminal building. This incorporated:
 - Reclamation from the sea of approx., 1.5ha to the west of the existing pier.
 - Renewal and extension of traffic marshalling areas to a total of 3.2ha.
 - Construction of a new two storey terminal building, incorporating arrivals/departures hall, tourist office and support offices (3,340m²).
 - Refurbishment of the existing two storey St. Michaels terminal building together with its extension and the addition of a 3rd storey in part to cater for departures lounge, restaurant and arrivals areas together with Port support office accommodation, and facilities (2,875m²).
 - Construction of 5 ticket booths, motorist facilities building (250m²) customs turning out building (240m²) and terminal security fencing.

Permission was granted by the DLRCC and upheld by ABP. Permission was granted on 20th July 1994.

- 4.1.2 Reg. Ref. D95A/0294: Revisions to earlier permission were granted.
- 4.1.3 Reg. Ref. D96A/0209: new first floor public entrance in the ferry terminal granted.
- 4.1.4 Reg. Ref. D97A/0751 / PL06D.107188: Refers to a grant of permission for the following:
 - The construction of a breakwater approximately 450m long and rising from the harbour bed to approximately 3.4m above high water level, incorporating a public promenade and projecting westward from the Ferry Terminal.
 - The construction of a public amenity area at the junction of the breakwater as referred to above and the Ferry Terminal
 - The construction of a breakwater approximately 370m long and rising from the harbour bed to approximately 2.5m above high water level, incorporating a crest walkway and projecting eastwards from the West Pier.

- The reclamation from the sea of approximately 0.1ha between the Ferry Terminal and the Royal Irish Yacht Club and the construction of a single storey over basement amenity and marina service building (356m2)
- The construction of a vehicular access route to the amenity building as cited above including a short stay parking area and set-down point accessed from Harbour Road between the Ferry Terminal and the Royal Irish Yacht Club.
- The construction of a single storey security building adjacent to the Boathouse at Traders Wharf (21m²).
- The construction of a marina with total capacity of approx. 680 berths in three areas.
- The construction of a single storey marina amenity building (83m²) adjoining the existing public toilets at Traders Wharf and the refurbishment of the public toilets.
- The construction of a boat hoist in the Coal Harbour adjacent to the public slipway, a boat service area and a single storey office and workshop (21m²).
- The widening and extension of the public slipway in the Old Harbour adjoining Accommodation Walk and an extension of the existing area of landfill between Accommodation Walk and the Old Pier.
- The construction of ancillary car-parking spaces at the former Coastguard Station, the Coal Harbour and the Green and the formalising of parking at Traders Wharf and the Old Pier providing a total of approximately 290 new spaces.
- Landscaping improvements to the Green and to the footpath between the Coastguard Cottages and the Commissioners of Irish Lights Depot.
- The laying of underground services on the landward portion of the West Pier.
- 4.1.5 Reg. Ref. D12A/0131: Permission granted for a 5 year temporary change of use of part of the ground floor of the terminal 237.5sq.m., in area from terminal use to exhibition use at Saint Michael's Pier.
- 4.1.6 <u>Reg. Ref. D15A/0621</u>: Permission granted to Stena Line for the removal of the east/west walkway, terminal walkways and the supporting steel and concrete structures in November 2015.

4.2 Applications within the Harbour:

Carlisle Pier:

- 4.2.2 Reg. Ref. D10A/0606 / PL06D.238335: Application made by DLHC for permission to retain: (1) demolition of business premises (former ferry terminal) of 6,376sq.m. (2) a 3 year temporary permission for retention of security fencing, railings, gates, walls, 35 no. car parking spaces formerly attached to the terminal building and now used for public pay and display parking. Also a 3 year temporary permission for 12 no. parking spaces, 37 no. additional spaces for pay and display parking and other usage of the car parking area for seasonal boat storage, cultural, social, recreational or sporting events. DLRCC refused permission which was overturned by the Board.
- 4.2.3 <u>Reg. Ref. D14A/0407</u>: A three-year temporary permission sought for continued use of the pier as a car parking facility and occasional event space and a 3-year temporary permission for retention of 40 no. existing car parking spaces, the widening of the existing south eastern gate and its use with the existing ramp for additional vehicular access to the car park. Permission was granted which allows the development to be retained until Sept. 2017.
- 4.2.4 Reg. Ref. D13A/0682/PL06D.244306: Proposal for a new urban beach and floating pool facility at Berth 1, East Pier. The proposed development consist of an urban beach containing a cage with outdoor seating and a floating, heated, treated, out-door, saltwater swimming pool. The floating swimming pool will be constructed on a recycled Barge (circa 825sg.m.) that will be moored beside Berth 1. Facilities such as changing rooms, toilet and showers will be provided on Berth 1 alongside the urban beach and café. These elements will be localised to Berth 1 and will consist of 8 single storey architectural modular pod structures with heights varying to 4.9m and awnings on metal posts varying up to 6.0m. The total gross area of the proposed structures is 290sq.m. The proposed urban beach will be overlaid on the existing reinforced concrete Berth 1 structure. The total site area is circa 4,133m² including all utility works. Permission was granted by the Council and upheld on appeal to the Board. In the reasoning it is outlined by the Board, that the proposed development, subject to compliance with the conditions would be an appropriate form of development at this location, would not seriously injure the amenities of the area, would be in accordance with the zoning objective for the site, would not detract from the character or special interest of the Protected Structure, would preserve and enhance the character of the candidate Architectural Conservation Area and would not be likely to have significant adverse effects on the environment. I note that a number of fire safety certificates have been granted as of August 2015.

5.0 PLANNING POLICY & CONTEXT

In strategic terms, there are a number of important planning policy documents which set out the framework under which Dún Laoghaire Harbour and latterly, Dublin Port is envisaged to develop over the coming years. The following section provides a summary of the main national, regional and local policies that relate to Dún Laoghaire Harbour and its environs. The main relevant points contained in these documents are set out below.

5.2 European Policy

- 5.2.1 The Trans-European Transport Network (TEN-T) Regulations, 2014, refers to a new transport infrastructure policy that connects the continent between East and West, North and South. This policy aims to close the gaps between Member States' transport networks, remove bottlenecks that still hamper the smooth functioning of the internal market and overcome technical barriers such as incompatible standards for railway traffic. Action will concentrate on those components of the TEN-T network with the highest European added value, in particular cross-border sections, missing links, multimodal connecting points and major bottlenecks, serving the objective of reducing greenhouse gas Maritime ports of the Core network must be emissions from transport. connected with the railway and road transport network by December 2030. There is one Core Network crossing Ireland which comprises the North Sea-Mediterranean Corridor that stretches from Belfast, Cork and Dublin, through the UK, Belgium, Luxembourg and France. Dún Laoghaire Harbour is not specifically mentioned as part of this Core Network. The revised TEN-T programme opens up possibilities for TEN-T ports to avail of the funding facilities to be put in place through the Connecting Europe Facility, including the proposed Project Bonds. For inclusion in the core network, ports must enjoy significant volumes of freight and/or passenger traffic, have a high level of international connectivity and, by 2030, be connected to the core European rail and road network. I have established that Dublin Port, Shannon Foynes Port Company and the Port of Cork have received funding under the TEN-T Programme.
- 5.2.2 The **EU Habitats Directive** (92/43/EEC) deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site.

- 5.2.2 The European Communities (Birds & Natural Habitats) Regulations 2011 consolidate the European Communities (Natural Habitats) Regulations 1997-2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in judgements of the Court of Justice of the European Union (CJEU).
- 5.2.3 EC Guidance on the implementation of the Birds and Habitats Directives in estuaries and coastal zones, with particular attention to port development and dredging, 2011, provides sector specific guidance on the implementation of the Birds and Habitats Directives in estuaries and coastal zones. Ports are often situated in or near estuaries which are dynamic and highly productive ecosystems and in many cases designated Natura 2000 sites; estuaries provide the necessary shelter and suitable conditions for maritime access to ports; and ports fulfil a strategic role in the development and realisation of global trade and they periodically need to expand. This document provides a number of recommendations and elements of good practice to enhance port development management in or near Natura 2000 sites. particular section 3.2 deals with spatial planning and the integrated management of ports, estuaries and the coastal zone. The document highlights that "one of the key distinctions between SEAs/ EIAs and Habitats Directive's Appropriate Assessments, apart from the fact that they measure different aspects of the natural environment and have different criteria for determining 'significance', is how the outcome of the Assessment is followed. If the Appropriate Assessment cannot ascertain that the plan or project will not adversely affect the integrity of a Natura 2000 site, the authority cannot agree to the plan or project as it stands unless, in exceptional cases, they invoke special procedures for plans or projects for which there are no less damaging alternative solutions and which are deemed to be of overriding public interest. The SEAs/ EIAs on the other hand are designed to make the planning authorities fully aware of the environmental implications of the proposed plan or project so that these are taken into account in their final decision". 2 In relation to dredging the Guidelines set out the following steps in the preparation and implementation of sustainable dredging and sediment management schemes:
 - (1) Understanding of the physical setting (morphology, hydrology, salinity, etc.) of the area concerned.
 - (2) Collecting the necessary information on the dredging operation in order to assess the environmental impact in detail.
 - (3) Proceeding with the assessment of the impacts of the dredging operation on the natural environment (on estuarine morphology and hydrodynamics, on sensitive habitats and species, in the short and the long term).

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² EC Guidance on the implementation of the EU nature legislation in estuaries and coastal zones, Page 28.

- (4) Selecting optimal practices, describing all possible solutions for mitigating adverse effects and, as a last resort, examining possible compensatory measures through the application of mitigation measures.
- (5) Implementing a monitoring programme determining the achievement of environmental objectives.
- (6) Ensuring stakeholder participation all along the process in order to avoid complaints and delaying of the procedure.

5.3 National Policy

5.3.1 The National Ports Policy was published by the Minister for Transport, Tourism and Sport in 2013. It was conceived as a roadmap for the ports sector for the next generation, setting out objectives, policies to achieve them and timelines for doing so. The aim of the NPP is to ensure that the commercial seaports make a full contribution to facilitating economic recovery and prosperity. One could argue that it is set out in a similar structure to the National Spatial Strategy setting out a tier structure and assigning levels of importance to each tier. In this regard, ports are divided into Ports of National Significance (Tier 1), Ports of National Significance (Tier 2) and Ports of Regional Significance (Tier 3). According to the NPP, Dún Laoghaire Harbour is assigned a level of Tier 2-Port of Regional Importance. The NPP states that "the remaining commercial ports are categorised as Ports of Regional Significance. This category includes the five smaller State-owned commercial port companies-Drogheda, Dún Laoghaire, Galway, New Ross and Wicklowand all other ports that handle commercial freight".3 In section 2.7.2 of the NPP, the document considers DLH in greater detail, wherein it states that it is the smallest of the State commercial port companies in terms of the overall freight tonnage handled in 2011. Nonetheless, it remains the 3rd largest passenger ferry port in the State, after Dublin and Rosslare (clearly as of 2016 with the cessation of the Stena Line- this is no longer the case). It elaborates that "in recent years, the harbour has moved away from commercial portrelated business and is increasingly viewed as a centre for marine-related tourism and recreational activities". "While the port's location in the heart of Dún Laoghaire limits its potential as a transport hub, it provides significant opportunities. It has become increasingly clear over the past decade that the long-term future of DLHC will be in terms of marine leisure, maritime tourism, cultural amenity and urban redevelopment. The Harbour Company has developed ambitious plans in this regard, these are incorporated in its 2011 The Department of Transport, Tourism and Sport is not the appropriate body to oversee these proposals, which are focused on urban regeneration, cultural amenity, marine tourism and leisure facilities rather than

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³ National Ports Policy (2013) Page 23

fulfilling national transportation objectives". Section 3 of the NPP discusses the management of ports and the direction required to drive these national assets forward. The government no longer intends to manage ports that fulfil a regional or a local need only, rather it is considered that the longer-term development of these ports is best placed within their regional and local communities. The NPP announced the intention to introduce legislation to allow for the transfer of these smaller State commercial port companies to relevant local authority control.

- 5.3.2 The NPP also referred to Dublin Port which it identified as a Tier 1 Port and therefore responsible for 15-20% of the overall tonnage through Irish Ports. Section 2.5.1 considers Dublin Port Company stating that it handles 70% of all LoLo and 85% of all RoRo trade in the State. The proposed revision of the EU's Trans European Network-Transport (TEN-T) consists of a comprehensive transport network which connects the major European urban areas by means of railways, roads, inland waterways, ports, airports and freight terminals; Dublin Port is proposed for inclusion in the TEN-T core network and the continued development of these ports is a key objective of NPP. The NPP endorses the core principles undermining the Dublin Port Masterplan (2012-204) which seek to maximise the use of existing port lands, reintegrate the port with the city and to develop the port to the highest environmental standards. The continued commercial development of Dublin Port is a key strategic objective of NPP.
- 5.3.3 As advised in the NPP, the **Harbour Bill** was adopted on the 25th December 2015. The Harbour Bill provides the necessary legal basis to allow for the later transfer by Ministerial Order of the control of the 5 ports of Regional Significance to local authority-led governance structures. Those ports listed under Schedule 1 of the 2015 Bill are Drogheda Port Company, Dún Laoghaire Harbour Company, Galway Harbour Company, New Ross Port Company and Wicklow Port Company. In addition, the bill will further enhance the corporate structures of all port companies including the five proposed transferee ports and those relevant Ports of National Significance-Cork, Dublin, Shannon Foynes and Waterford. A new provision in Section 23 of the Harbours Bill 2015 states that, if invited by the elected members of the relevant local authority, the chairperson and Chief Executive Officer of a transferred company shall appear before them and give account for the administration of the transferred company. Section 18 of the Bill considers the power to borrow money by the transferred company. The company may borrow money with the approval of the local authority chief executive by means of the issue of debentures. It is stated that the aggregate standing unrepaid amount shall not exceed such amount approved by the Local Authority Chief Executive. The amount cannot exceed €200m.
- 5.3.4 Certain Ministerial functions under the Harbours Act 1996 have been transferred to An Bord Pleanála under section 215C of the Planning and

Development Act 2000, as amended. The Board will be responsible for the making of the compulsory acquisition order and ABP has powers similar to a Local Authority in dealing with compulsory purchase order applications under the provisions of the Housing Act 1996, as amended.

5.4 Regional Plans

- 5.4.1 The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 provides an overall strategic context for the Development Plans of each local authority in the Greater Dublin Area (GDA). The guidelines seek to consolidate development and increase overall densities of development, which will lead to a more compact urban form, relative to the size of the population and facilitate the provision and use of a considerably enhanced public transport system. The core principles from the strategy are that Dublin as the capital city of Ireland shall grow and progress and compete with other cities in the EU whilst serving a wide range of international, national, regional and local needs. The Greater Dublin Area through its ports and airport connections will continue to be the most important entry/exit point for the country as a whole, and as a Gateway between the European Union and the rest of the world. Section 6.3.4 considers ports and states that there is a requirement for "increased port capacity in Ireland by 2025-2030 and that Dún Laoghaire has a "role to play in port capacity at a smaller scale and in relation to specialist needs". ⁴ These are to be replaced in 2018 by a new Regional Economic Spatial Strategy being introduced under the new National Planning Framework announced in Decembe4 2015.
- 5.4.2 The **Greater Dublin Area Draft Transport Strategy 2016-2035** presents the transport requirements for the Greater Dublin Area, based on principles of effective efficient and sustainable travel for the period up to 2035, insofar as this can be delivered by transport. Since the previous Draft Transport Strategy in 2011, the following has rolled out including Luas Cross City, Phoenix Park Tunnel Link and Bus Rapid Transit. Section 3.3.7 of the Draft focuses on the International gateways of Dublin Port and Dublin Airport. The Strategy supports the need to facilitate the expansion of activity at Dublin Port as both a commercial and passenger port. Dún Laoghaire Harbour is not considered in the aforementioned document.

5.5 Local Planning Context

5.5.1 During the course of the assessment of this application, the new **Dún** Laoghaire County Development Plan 2016-2022 was adopted (16th March 2016). This Plan provides the local statutory planning policy that will steer the development of the County for the plan period.

⁴ Regional Planning Guidelines for the Greater Dublin Area 2010-2022-Page 69.

- 5.5.2 The harbour area is zoned Objective "W" which is to "provide for waterfront development and harbour related uses". Table 8.3.19 sets out those uses permitted in principle: carpark, community facility, cultural use, industrial light, offices less than 200m², marine leisure facility, open space, public services, restaurant and transport depot. The pre-application consultation under the SID process with the Board, considered the proposal under the heading of "transport depot". The newly adopted Plan has brought about a number of changes to the context within which this proposal is set. There are 3 notes appended to the local zoning objective table of which 1 is directly relevant. Note 1 sets out that it is "an objective of this Plan to protect the harbour/marine entity of Dún Laoghaire Harbour by facilitating harbour-related uses, but not to confine permitted uses in the harbour to a degree that exclusively attracts those with an interest in active maritime recreation. Any development proposal should seek to ensure public accessibility to the harbour and shorefront".
- 5.5.3 The recently adopted Plan contains a number of new Specific Local Objectives which were not part of the previous Development Plan which was in force at the time of the submission of the application. These are highlighted as follows:
 - Seeks the preparation of a Dún Laoghaire and Environs LAP, which is to be expedited,
 - To allow for the continued development of the Harbour whilst the historic significance of the harbour is protected,
 - The provision of a National Watersports Centre within the Harbour
 - To review the Harbour Heritage Management Plan with a view to including the same in the newly adopted CDP.
 - It is also sought that the Council will prepare a Plan for the further development of the harbour and its curtilage.

The newly adopted Specific Local Objectives are cited in full below:

SLO 13: To facilitate continued development of the Harbour, ensuring at all times that the historic significance and natural beauty of this public amenity is protected, in advance of the preparation of the Dún Laoghaire and Environs Local Area Plan (LAP). Following the adoption of the Dún Laoghaire and Environs LAP, the future development of the Harbour will thereafter be guided by the principles and objectives of the Plan and that of Policy E14.

SLO 16: To retain the Carlisle Pier structure and to encourage redevelopment on it that will focus on the historical importance of the Pier and will incorporate uses that will bring significant cultural, social, recreational and economic benefits to Dún Laoghaire-Rathdown. Development should regenerate and enliven the waterfront, be sensitive to the setting and should include a

significant portion of cultural and amenity uses with public accessibility and permeability to the waterfront paramount. Such proposals should be carefully scaled and should be designed with variety in the massing of built elements to avoid "slab-like" infilling of the Pier. Any development should creatively re-use remaining components of the original retail sheds.

SLO77: To prepare a LAP for Dún Laoghaire and Environs.

SLO84: To protect and conserve South Dublin Bay Candidate Special Area of Conservation.

SLO93: To promote the development of the S2S Promenade and Cycleway as a component part of the National East Coast Trail Cycle Route. It should be noted that these coastal routes will be subject to a feasibility study, including an assessment of the route options. Any development proposals shall be subject to AA Screening in accordance with the requirements of the EU Habitats Directive to ensure the protection and preservation of all designated SACs, SPAs and pNHAs in Dublin Bay and the surrounding area.

SLO95: To promote Water Leisure Facilities for public use at the coastal fringe of the Gut and rear of the West Pier, subject to the appropriate environmental assessments including any assessment required under the Habitats Directive in co-operation with the relevant agencies.

SLO136: In order to promote and preserve the natural, marine and built heritage of Dún Laoghaire Harbour this Council will review the Harbour Heritage Management Plan 2011, with a view to considering same for inclusion in the County Development Plan 2016-2022, as appropriate.

SLO143: To encourage and support the Dún Laoghaire Harbour Company in the establishment of a diaspora centre within the Dún Laoghaire Harbour Area.

SLO156: In accordance with National Policy, the Council shall, within the relevant planning frameworks, formulate and implement, where appropriate and applicable, a plan for the future development of Dún Laoghaire Harbour and its curtilage.

SLO157: To support and encourage the development of a National Watersports Centre to facilitate training and participation in a varied range of water sports and activities to provide a focus for national and international watersports events. Site appraisal and analysis of the Harbour environs to identify the optimum location(s) for such a centre to be expedited as an integral part of the forthcoming Dún Laoghaire and Environs Local Area Plan (LAP).

5.5.2 Chapter 3 of the Plan considers Enterprise and Employment Strategy and specifically Policy E14 considers Tourism and Recreation. It outlines that Dún Laoghaire has been designated as a centre for marine-related tourism under

the National Ports Policy. It states that the "strong growth in cruise tourism, in the town has the potential to deliver a significant economic benefit to both the town itself and the wider County". "It is Council policy to continue to work in collaboration with other key stakeholders to implement the programmes and plans of the GROW Dublin initiative over the lifetime of the Plan to maximise the tourism potential of the County". Reference is made to the Grow Dublin Tourism Alliance which has been tasked with the role of identifying how the city and county could deliver substantial growth based on tourism by 2020 and wherein cruise tourism is identified as one of the five key sectors that offers the best potential for significant growth and the best return on investment.

5.5.4 Dún Laoghaire Harbour contains 32 protected structures. These are listed as follows:

RPS No.	Address
RPS. No. 360	Boat House Coal Quay
RPS. No. 349	Boat House Coal Quay
RPS. No. 417	Coastguard Cottage 1, Coastguard Cottages
RPS. No. 414	Coastguard Cottage 2, Coastguard Cottages
RPS. No. 409	Coastguard Cottage 3, Coastguard Cottages
RPS No. 406	Coastguard Cottage 4, Coastguard Cottages
RPS No. 403	Coastguard Cottage 5, Coastguard Cottages
RPS No. 400	Coastguard Cottage 6, Coastguard Cottages
RPS No. 396	Coastguard Cottage 7, Coastguard Cottages
RPS No. 393	Coastguard Cottage 8, Coastguard Cottages
RPS No. 599	Royal Saint George Yacht Club
RPS No. 726	National Yacht Club
RPS No. 687	George IV Monument, Queens Road
RPS No. 673	Bollards & Chains, Queens Road
RPS No. 127	West Pier Dún Laoghaire
RPS No. 307	East Pier
RPS No. 401	Old Pier/Coal Quay
RPS No. 284	Traders Wharf, Dún Laoghaire

RPS No. 102	Lighthouse East Pier
RPS No. 103	Lighthouse Complex East Pier
RPS No. 711	Bollards & Chains, East Pier
RPS No. 530	Bollards & Chains, East Pier
RPS No. 491	Bandstand East Pier
RPS No. 499	Glass Shelter East Pier
RPS No. 754	RNLI Lifeboat East Pier
RPS No. 388	Coastguard Station (former)
RPS No. 458	Royal Irish Yacht Club, Harbour Road, Club House.
RPS No. 629	Harbour Lodge Harbour Square
RPS no. 95	Lighthouse West Pier
RPS No. 90	Lightkeeper's House West Pier
RPS No. 534	Malin Railway Station (Granite flank walls)
RPS No. 564	Malin Railway Station (Railway St. & Comm. Premises)

- 5.5.5 In accordance with the DLRCC Development Plan the subject site is located within a designated Candidate Architectural Conservation Area to which the following Policy AR16 applies:
 - "It is Council policy to assess candidate Architectural Conservation Areas (cACA) to determine if they meet the requirements and criteria for redesignation as Architectural Conservation Areas".
- 5.5.3 The "Dún Laoghaire Urban Framework Plan" is included within the Appendices of the County Development Plan and therefore has a statutory context. This Plan sets out the vision for Dún Laoghaire Town Centre, the harbour and waterfront. It refers to the Harbour stating that it is "undergoing a significant period of transition as it repositions itself from its previous role as a freight port to a marine, leisure and tourism destination of international calibre that is fully integrated with the wider Town". Three themes underpin the Framework Plan, these are
 - Reconnecting the Town Centre to the Waterfront
 - Creating Vitality
 - Strengthening Links with Adjoining Areas

The Plan considers the Waterfront in greater detail, outlining the poor relationship between the Town Centre and the waterfront and how this has been hindered by the redevelopment of the ferry terminal in the 1990's. It is stated that this patently underused area (i.e. the car park) should be redeveloped to realise its full potential. The wall and lower car park that blocks the sea view should be redesigned to allow for direct access for the public to the water's edge and so promote improved engagement with the marine activities of the Harbour. It is outlined that the mix of uses considered for this area are marine, leisure, tourism and residential, which would serve to bring activity to the area during the day and night and throughout all seasons. Pedestrian footfall in the area is also discussed and would be an important focus of any proposal. Reference is made to the development of a coastal pedestrian/cycle route through this area as part of the proposed Sutton to Sandycove (S2S) Cycleway which is a component part of the proposed National East Coast Trail Cycle Route which will be sought and will aid in strengthening the cycling and walking links along Crofton Road and Seapoint Avenue. It is stated that a proposal where space permits, to help "bind" the various linear components and to create a strong sense of "place" along the Waterfront should be examined. Section 3.2 of the Framework Plan outlines that importance of the Harbour referring to it as a "Protected Structure". "It is the largest intact Victorian Harbour in Ireland and the UK. It is an objective of this Framework plan to promote this and the overall historical significance of the harbour as its unique selling points". It is outlined that "any interventions in the Harbour must at all times be of the highest design standard, maximise public access to the waterfront and be sympathetic to the historical character and fabric of the numerous Protected Structures located in the Harbour environs". The Plan outlines that different areas within the harbour are of particular character and therefore different uses may be appropriate. It is stated that "Cultural and Leisure uses will generally cluster to the east of St. Michael's Wharf-on the Carlisle Pier and along the East Pier-creating symbiotic linkages with the recently completed dlr Lexicon and the National Maritime Museum. Marine Activities and Enterprise are more likely to cluster around the Irish Lights Headquarters, Coastquard Station and Cottages and the Coal Harbour while traditional sail, fishing and coating activities will occur across the entire Harbour area".

Section 3.2.1 of the Plan considers the Central Harbour Area. It is stated that "It will be an objective of this Plan to preserve the integrity, natural beauty and historical significant of the Harbour by protecting this central area from any cruise berth that would allow cruise ships longer than 250m to come directly into the Harbour. This Plan will support and encourage the niche market of smaller cruise ships." It is further outlined that the central harbour area, i.e. St. Michael's Wharf has the greatest potential to accommodate new development. It is identified that a consistent and cohesive

palette of materials and finishes are critical to the successful redevelopment of this area.

5.6 Dún Laoghaire Harbour Masterplan 2011-2030

5.6.1 Dún Laoghaire Harbour Company prepared a Harbour Master Plan 2011-2030 in accordance with Special Local Objective 13 of the previous DLRCC County Development Plan 2010-2016. The Vision Statement of the Plan is as follows:

"DLH will be recognised as an exciting marine, leisure and tourism destination of international calibre; one which elegantly integrates the local town with an historic 200 year old harbour, and which offers a striking blend of modern amenities mixed with a traditional marine ambience in a Dublin Bay setting, making it one of the most beautiful man-made harbours in the world".

Dún Laoghaire Harbour Company sees themselves as custodians of a valuable national asset, and consequently, they have a duty to actively plan and manage the function and heritage of the harbour estate. The purpose of the Masterplan is to position the harbour as a major marine/leisure/tourism destination, to increase its attractiveness as a gateway for tourists to Ireland by offering state of the art berthing and terminal facilities to ferry and cruise operators at DLH, to maintain and enhance the recreational amenity value of the harbour in the interest of all the stakeholders, to promote investment and to secure sufficient revenue to secure the long-term future of DLHC.

- 5.6.2 The Masterplan is a non-statutory plan, however, DLHC argue that it has been cognisant of EU, national, regional and local development plan policies in particular, SLO13. It is stated in the Masterplan that a statutory LAP for Dún Laoghaire town is to be prepared by the local authority and it is DLHC's wish that the subject masterplan will form an input into this Local Area Plan.
- 5.6.3 A number of "Strategic objectives" are set out in the Plan. These objectives fall under the categories of investment and growth, harbour functions, integrating with the Town Centre, movement, communications and accessibility, heritage, recreation and amenity and environment. The specific objectives pertaining to the harbour area are repeated below:
 - 3. Ensure the safe operation and development of the harbour and its approach waters and provide such facilities, services, accommodation for ships, goods, passengers and marine leisure activities.
 - 4. Facilitate the ongoing operation of the ferry services over the period of the masterplan.
 - 5. Accommodate cruise liner facilities, having regard to the needs of other harbour users, potential environmental impacts and the feasibility of providing such facilities.

- Clearly, strategic objective no. 5 of the Masterplan, is the one DLHC are striving to fulfil by the means of this application.
- 5.6.4 In relation to recreation and amenity, the Masterplan sets out the following strategic objectives:
 - 19. Promote DLH as a major marine leisure facility and a destination for tourism and recreation, while minimising the impact upon designated habitats.
 - 20. Develop landmark attractions, including a world-class Irish international Diaspora Centre, restaurants, destination retailing and waterfront buildings and uses.
 - 22. Promote the use of the harbour by sports and sailing clubs, community organisations and other stakeholders.
 - St. Michael's Pier
- 5.6.5 The Masterplan considers St. Michael's Pier in greater detail as this constitutes both the main development area and the principal zone for the provision of ferry and potentially cruise liner facilities. It is stated that the County Development Plan stipulates that the area should be developed for mixed use, including terminal facilities and associated infrastructure, residential, hotel, office, retail, restaurants, leisure and creational uses. The Masterplan proposes the four frontages of St. Michael's site have different characters responding to their context and functions:
 - -The east facing façade to the plaza and harbour to be leisure and tourism;
 - -The west facing to the marina to be marina related activities;
 - -The north facing harbour to remain the ferry/cruise operations using Berth 5 and possibly a new Berth 6 for cruise ships along with the compacted ferry operations; and
 - -The south frontage to the station to be tourism attractions, local retail, and vehicular access to the reduced ferry standage and other functions.
 - The masterplan envisages that St. Michael's Pier will be completely redeveloped in phases. All new development will be within existing dry-land areas.
- 5.6.6 The Masterplan also included an Environmental Report, a Stage 2 Initial Flood Risk Assessment and an SEA Statement. The Masterplan and accompanying documents were provided with the application at Appendix 4.1 (Volume 2).

5.7 Dún Laoghaire Draft Local Area Plan

5.7.1 A Local Area Plan for Dún Laoghaire is currently being prepared. DLH is included within the LAP area. A pre-draft issues paper was published in 2011 and a non-statutory report was prepared and issued to the Elected Members at the May 14th 2012 Council meeting. The report was noted. There has been no further development since that date on the draft LAP. As cited in the section on the newly adopted County Development Plan, it is a Special Local Objective (No. 77) to prepare a Local Area Plan for Dún Laoghaire and Environs.

5.8 Non-Statutory Reports of Relevance

- 5.8.1 The Grow Dublin Taskforce was established in late 2012 with the aim of identifying how to bring substantial growth in tourism to Dublin city and region in the period to 2020. The taskforce developed the "Destination Dublin A Collective Strategy for Tourism Growth to 2020", a strategy for returning Dublin to growth by mobilising all stakeholders in developing and delivering a memorable visitor experience. Five sectors were identified and one category selected was "cruise visitors" who come to Dublin as part of a European cruise. The sector specific programme for cruising involves the establishment of a Cruise Dublin Forum to bring together all relevant stakeholders and develop a strategy for attracting and catering for more cruise traffic.
- 5.8.2 In reaction to a steady growth in the cruise industry in Ireland, Fáilte Ireland issued "Cruise Tourism to Ireland Research Report" (2010) on foot of a commissioned Red C Research Ltd to conduct interviews with passengers and international cruise operators during 2010. These interviews sought to identify the profile of cruise passengers to Ireland and why they choose to come to there, how satisfied passengers are with their passengers to Ireland and why they choose to come here, how satisfied passengers are with their experience at Irish ports and their level of expenditure while disembarked. The number of cruise ship passengers and crew travelling to Ireland increased by over 200% between 1994-2010 from 64,376 to 204,489 visitors. The interviews discovered that overall passengers were satisfied with the time they spent disembarked at Irish ports noting particular satisfaction with shuttle services, tours and tourist attractions. While high levels of satisfaction were reported, the look of the port in respect of Cork, Dublin and Waterford was an issue and they may need to improve their appearance in order to sustain growth in cruise tourism. It is stated that cruise operators themselves prefer a dedicated cruise berth in keeping with the luxury experience the cruise liner is creating. Given the growth of this sector and its current value of €20.3m in direct spending. Ireland should focus on attracting shorter cruises and those in the middle stage of their itinerary which offer the greatest value. It will be necessary for Ireland to develop both the port and on-shore services to maximise its appeal to international operators and cruise passengers in the future.

6.0 WRITTEN SUBMISSIONS IN RELATION TO THE PROPOSAL

6.1 Introduction

- 6.1.1 Initially a total of 145 Observer submissions were received in relation to the application in July and August 2015. This did not include submissions from Dún Laoghaire-Rathdown County Council. In addition, 11 submissions were received from prescribed bodies. The Local Authority Reports and the independent reports from the prescribed bodies are individually summarised in sections 6.2 and 6.3 below. Of the observer submissions that were received, the majority were from sailing clubs who use the harbour and residents in Dún Laoghaire who walk the Pier, and most particularly those residents whose properties overlook the harbour. A significant majority of the submissions are against the proposal and essentially argued that the size of cruise ship facilitated by the berth will permanently change the character of the harbour and inhibit or prevent the use of the harbour by sailing groups. One of the objections received was by Dublin Port whose objection is summarised below also. Three submissions were received from public representatives, 1 T.D. and the other councillors, all opposed to the proposal. The 3rd Party submissions, both for and against the development, are not summarised individually but are summarised on an issues basis in sections 6.4 and 6.5 below.
- 6.1.2 The Board is reminded that the submissions made by the Council and observers are made in the context of the 2010-2016 County Development Plan in force at that time.

6.2 Local Authority Submission

- 6.2.1 A 40-page report on the proposal was submitted by Dún Laoghaire Rathdown County Council on the 23rd September 2015, following an extension of time permitted by ABP. The following summation seeks to highlight the main points of the lengthy submission (the Board is referred to the entire submission appended to this report).
 - The LA submission considers the Dún Laoghaire Harbour Masterplan in significant detail and assesses how the objectives of the Dún Laoghaire Urban Framework Plan pertaining to the waterfront area and its connectivity with the town centre, will be achieved in potential future developments. The report considers that the submitted details highlight that the cruise berth proposal is just one element of the redevelopment of the harbour, with the overall redevelopment of the area to be delivered on a phased basis in accordance with the Masterplan. The LA seeks to ensure that any envisaged developments by the Harbour Company will not compromise the achievement of Dún Laoghaire Urban Framework Plan (CDP 2010-2016) objectives with respect to strengthening the connection between the town

and the waterfront. The LA is satisfied that this has not been compromised. The Report requests that ABP take on board the following recommendations for planning conditions with regard to connections to the town:

- (a) In the interest of the overall integrated planning of the St. Michael's Pier area, the proposed development site shall not be subdivided from the overall St. Michael's Project site as identified in Figure 4 of Section 6.12 of the submitted Planning Report.
- (b) In the interest of orderly planning, any future redevelopment of the adjacent St. Michael's Project site shall include a pedestrian route of similar purpose to the Primary Pedestrian Route shown on Figure 4 of Section 6.12 of the submitted Planning Report.
- The issues of design, heritage and conservation are considered in the report. It is stated that "Dún Laoghaire Harbour is a protected structure and is the largest intact Victorian Harbour in Ireland and the UK". The impact of the development in relation to pedestrian amenities is considered to be minimal with reference to the East and West piers. It is considered that the proposal will impact upon the Eastern Breakwater walkway. However, DLRCC considers that the attractiveness and potential use of the walkway will be improved as a consequence of the development and any adverse impact will be limited to the requirement for the temporary closure of the Eastern Breakwater to pedestrians for an approximate 4-month period to facilitate construction works.
- The LA raises concerns in relation to the proposal to use the Accommodation Walk as a proposed coach stacking area. It is argued that this will result in coach reversing manoeuvres on a public roadway adjacent to the Old Quay car park, at a point where pedestrians have to cross the public road to access the causeway leading to the "Gut" area of the harbour and the West Pier. Concerns therefore exist that these proposals would deteriorate further the pedestrian environment at a location where pedestrian facilities are already quite limited. The Transportation Department also has raised concerns from a traffic safety perspective with respect to the Accommodation Walk proposals and accordingly LA request that ABP omits these arrangements for the coach staking facility.
- In relation to visual amenities, the LA acknowledges the very significant built heritage and recreational amenity values associated with DLH. In addition to the submitted Visual Impact Assessment, the LA has also taken into account the harbour layout and the significant distance and

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⁵ DLRCC Report, Impact on Amenities-Design, Heritage & Conservation, Page 13

intervening developments between the proposed berthing quay and residential/commercial/public realm areas along Crofton Road, Queen's Road and Marine Road. Overall, the Council is satisfied that the proposal will not have any significant adverse visual impact on views to, from or within the harbour area. Whilst it is accepted that a large cruise ship will have a strong visual presence in the harbour, the proposal is considered to be in keeping with the existing harbour context and its presence is on a temporary visiting basis. On balance the LA considers it will have a positive impact.

- The Board is requested to consider the potential obsolescence of the cruise berth in the event of an economic downturn and a consequent negative visual impact. Therefore ABP is requested to take this eventuality into account and to seek proposals from the applicant for contingency plans to ensure that obsolete structures will be removed within specified timeframes.
- The report considers the impact of the proposed development on the conservation and heritage amenities of the harbour. It is noted that despite the number of protected structures within the harbour, that none are within the application site. Nonetheless, its location within a Candidate Architectural Conservation Area is noted.
- The LA note that whilst not part of the application, the removal of some of the infrastructure associated with the Stena HSS will be carried out prior to the completion of construction of the proposal.
- The Planning Authority recognises the function requirements of the proposed berthing and landside structures and developments and the associated palette of materials and finishes. It is also accepted that some of the proposed works will be temporary in nature pending the final integration of the scheme into future proposals for St. Michael's Wharf. Given that the development will form an important element of the town's public realm and given that the site is located within a candidate ACA, there are two items however, which are of particular importance to the Planning Authority. The Planning Authority expresses concerns in regard to the consistency and quality of the palette of materials chosen for the development. As this is the first stage of an overall redevelopment as envisaged I the Masterplan, it is essential that a consistent approach be adopted. The level of submitted detail and supporting information in this regard is considered poor and the Planning Authority has requested that the Board seek further detail from the applicant with respect to the final overall palette of materials and finishes including for all items of street furniture such as signage and bicycle stands.

- The Planning Authority considered the environmental implications of the proposal and requests that the Board pay particular attention to how the mitigation measures identified in both the EIS and the NIA are to be implemented and monitored during the course of the construction and operational stages of the proposed development.
- The Planning Authority highlights that the proposed S2S Cycleway Project could utilise the Accommodation Walk as an underpass for the Coal Bridge which would conflict with the proposed coach parking use. In the event that the Board considers that the HSS area be used for overflow parking, it is requested that careful consideration be given to matters with regard to the implications of an excessively large coach parking facility and the knock-on effect on future development proposals for St. Michael's Pier area and the periodic nature of its use. The absence of any cycle parking provision is highlighted and it is stated that the provision of cycle parking facilities is a potential community gain that would help encourage and promote cycle access to the proposed new amenity areas. The Planning Authority also notes that the service vehicle access to the berth is proposed via the shared walkway. In order to minimise the area of possible conflict with pedestrians and other users, the report recommends that service vehicles should be restricted to using the HSS yard rather than the shared walkway adjacent to the boardwalk. The Planning Authority requests the Board to investigate the potential for this arrangement with the applicant and to implement any revisions accordingly.
- The Board is requested to limit the development to a port of call as if it
 were to become a cruise terminal or turn around port, it would represent
 an intensification of use. Therefore, the Board is requested to condition
 accordingly.
- The Board is requested to clarify the berthing potential of the west side of the berth and to seek information on any intended or potential future uses in this regard. It is stated that that a condition of planning requiring a further grant of permission for any significant intensification of use is recommended.
- Drawings indicate that ferry services may resume at St. Michael's Pier, albeit with a smaller vessel. The Board is requested to consider a planning condition requiring the applicant, in the event of ferry services resuming, to seek prior agreement with the Planning Authority in relation to ferry service schedules and coordination with cruise traffic so as to minimise the traffic impact. The Board is requested to seek clarity from the applicant with respect to the technical or otherwise feasibility of operating ferry services when the cruise berth facility is operational.

- On the issue of community gain, the proposed development will result in a significant community gain in the form of an enhanced public realm within the harbour area. In this respect it refers to new pedestrian facilities and linkages with the town, the shared vehicular/pedestrian route and boardwalk. It is stated that these new facilities will provide a very significant upgrade to the existing pedestrian route to the eastern breakwater. The new public area proposed at the northern end of the landside part of the development will greatly enhance the attractiveness of this area as a location to linger and recreate. Whilst the application makes no reference to the proposed off-season use of the berthing structure, the Planning Authority's interpretation is that there will be public access to the berthing guay outside of when cruise ships are visiting. It is considered important that these areas are available to form part of the waterfront's public realm. The Board is therefore requested to clarify these matters with the applicant and to ensure that adequate safety measures will be in place for areas where there is public access. Likewise, during construction works, the Board is requested to clarify public access arrangements for this area of the harbour and to set out what restrictions, if any, are anticipated.
- The LA note that the repair works to the masonry on the West Pier Roundhead are outside of the site area as identified by the red line boundary shown on the submitted site location plan. In addition, as noted in the Transportation Department's report, the proposed use of Accommodation Walk for bus stacking will necessitate the removal of parking spaces as at its eastern end at a location, which also appears to be outside the site area. These matters require clarification.
- Policy Plan considers that the long term future of DLH is with opportunities in marine leisure and maritime tourism. DLRCC is fully supportive of this policy and through the CDP has sought to support and integrate the harbour area into the town. It is considered that this SID has the potential to continue this process for the better of both the town and the harbour. Whilst there are a number of items with the Planning Authority requests the Board to take into account in the overall assessment of the application, the Planning Authority is satisfied that the proposed development accords with the policies and objectives of the DLRCC Development Plan 2010-16. Furthermore, the Planning Authority considers the development of such a significant marine use within the harbour to be positive for the future development of both DLH and Dún Laoghaire Town Centre.

Appendix 2 contains the views of relevant department/personnel within Dún Laoghaire Rathdown County Council.

6.3 Submissions from Prescribed Bodies

6.3.1 Submission from Irish Water:

- There is sufficient capacity in existing water services infrastructure to cater for the proposed development both in relation to water supply and foul drainage. Irish Water has no objection to the proposed development subject to the following requirement:
 - Where the applicant proposes to connect directly or indirectly to a public water/wastewater network operated by Irish Water, the applicant must sign a connection agreement with Irish Water prior to the commencement of the development and adhere to the standards and conditions set out in that agreement.

6.3.2 Submission from the National Roads Authority:

No comment to make in relation to the proposed scheme.

6.3.3 Submission from the Railway Safety Commissioner:

- larnród Éireann should be consulted to ensure that risks associated with railway trespass are not increased in the vicinity of this development either during the works or when the works are complete, with particular regard to the road rail interfaces on access routes which may have increased flow or abnormal loads.
- The party undertaking the construction should ensure future works which may affect the safe operation of the railway are undertaken with the consultation of larnród Éireann and in accordance with RSC Guidelines RSC-G-010 (Third Party Guidance on Railway Risk Volume 1 Planning and Development-available on the RSC website). Particular care should be taken with works near the railway boundary that may increase loading on cuttings, affect stability of embankments or change the water table/drainage.

6.3.4 Submission from Dún Laoghaire Coast Guard:

- In favour of proposal.
- The improved safety of 2,000+ passengers stepping ashore rather than being tendered ashore can only be positive. A controlled managed area rather than open sea passenger transfer.
- The Berth would provide a central access point within the Harbour for the Life Boat or Coast Guard vessels crew during busy periods. The depth of water allows at any stage of the tide for the water to be accessible.

- The pier being well lit will save the necessity of setting up emergency lighting at poor locations/sights in the harbour.
- New Pier most welcome as part of its design allows us a secure safe area to base a helicopter landing area in the event of a large evacuation within Dublin Bay.
- The berth and associated large bus parking area would provide a massive landing facility for casualties from large craft in a controlled area in the event of an accident in Dublin Bay.

6.3.5 Submission from the Department of Arts, Heritage & the Gaeltacht

- The subject site is located within an area of underwater archaeological potential. The Shipwreck Inventory of Ireland lists over 100 wrecks for the DLH area, which are subject to statutory protection under section 3 of the National Monuments (Amendment) Act, 1987. It is therefore recommended that Archaeological Monitoring be carried out of all proposed seabed disturbance and dredging works to take place as part of this development. It should be borne in mind that, if significant archaeological remains are found, further archaeological mitigation may be required.
- Archaeological monitoring shall consist of the following:
 - O Applicant required to engage the services of a suitably qualified archaeologist to monitor all seabed disturbance, coring, seabed sampling and dredging works associated with the proposed development. The archaeological monitoring shall be licensed under the National Monuments Acts, 1930-2004.
 - A detailed method statement shall accompany the licence application and shall include details on the proposed works, duration of works, archaeological monitoring team proposed and a find's retrieval strategy.
 - Should archaeological material be found during the course of monitoring, the archaeologist may have to suspend works, pending a decision as to how best to deal with the archaeology. The developer shall be advised by the DoAHG with regard to any necessary mitigating action (e.g. preservation in situ or excavation). The applicant shall facilitate the archaeologist in recording any material found.
 - The DoAHG shall be furnished with a report describing the results of the monitoring.
- The results of any additional bore-holes, seabed sampling or other geotechnical data to be acquired as part of the development project should be reviewed and assessed by a suitably qualified marine archaeologist.

- A 50m exclusion zone should be established around the known location of W01966, within which no works should take place without prior permission from the DoAHG.
- It is recommended that a dive survey of the wreck site W01966 is carried out 12 months post dredging of the new channel, in order to monitor the condition of the remains and whether changes in the sea bed are having an adverse impact. This should be carried out by a qualified marine archaeologist under licence to the DoAHG.
- It is recommended that should any landward ground disturbance works exceed 0.4m in depth that archaeological monitoring be carried out. This should be undertaken by a suitably qualified archaeologist.
- In relation to marine nature conservation the following mitigation measures be applied as conditions of consent:
 - A trained and experienced Marine Mammal Observer (MMO) must be put in place during piling, dredging, dumping, and other relevant works. The MMO will scan the surrounding area to ensure no marine mammals are in a pre-determined exclusion zone in the 30-minute period prior to operations. It is suggested that this exclusion zone is 500m for dredging activities and 1000m for piling activities, considering the potential risks outlined.
 - Noise-producing activities shall only commence in daylight hours where effective visual monitoring, as performed and determined by the MMO, has been achieved. Where effective visual monitoring is not possible, the sound-producing activities shall be postponed until effective visual monitoring is possible. Visual mitigation for marine mammals (in particular harbour porpoise) will only be effective during daylight hours and if the sea state is 2-3 (beaufort scale) or less.
 - o For piling activities, where the output peak sound pressure level (in water) exceeds 170dB, a ramp-up procedure must be employed following the pre-start monitoring. Underwater acoustic energy output shall commence from a lower energy start-up and thereafter be allowed to gradually build up to the necessary maximum output over a period of 20-40 minutes.
 - Once operations have begun, operations should cease temporarily if a cetacean or seal is observed swimming in the immediate (<50m) area of piling and dredging and work should only be resumed once the animal(s) have moved away.

- Dumping of material at sea should not take place if a cetacean or seal is within 50m of the vessel.
- o If there is a break in piling activity for a period greater than 30 minutes, then all pre-activity monitoring measures and ramp-up (where this is possible) should recommence as for start-up.
- Once normal operations commence (including appropriate ramp-up procedures), there is no requirement to halt or discontinue the activity at night-time, nor if weather or visibility conditions deteriorate, nor if marine mammals occur within a radial distance of the sound source that is 500m for dredging, and 1000m for piling activities.
- The MMO will keep a record of the monitoring using a MMO form location and effort (coastal works)(or similar) available from the National Parks and Wildlife (NPWS) and submit to the Competent Authority on completion of the works, as described in the NPWS guidance (2014).

6.3.6 Submission from Dublin Port Company (DPC)

- The observation is solely regarding the approach channel and turning circle
 as described in DLHC's planning application. These observations relate
 solely to marine operations in the context of Dublin Port Company's (DPC)
 statutory responsibilities as both the relevant harbour authority and pilotage
 authority for the area.
- DPC personnel including the Harbour Master, Capt. David Dignam, have had no inputs into the design of the proposed approach channel and turning circle. Nor have they had any involvement in simulation exercises to test the operation of the proposed development.
- DPC received copies of the Navigational Analysis Report in Appendix 3.1 to the EIS after DLHC's pre-application consultation process concluded on 10th April 2015. On 3rd July 2015, Capt. Dignam sent his observations to DLHC. These are attached as an appendix to submission.
- DPC is making this submission to the Board because the proposed new approach channel and turning circle lie within DPC's harbour limits. Within these harbour limits, DPC has a statutorily defined requirement to "take all proper measures for the management, control, operation and development of its harbour and the approach channels thereto". In addition to DPC's responsibilities within these harbour limits, DPC is also responsible for pilotage in an area which includes DPC's harbour limits but which also includes those of DLHC.
- Two key issues identified by Capt. Dignam are as follows:

- Large cruise ships of the size studied by DLHC in its navigation analysis might (because of wind and tidal currents) need to steer a course into the harbour which would take them outside the 120m wide approach channel.
- Large cruise ships manoeuvring within the proposed turning circle could be vulnerable (due to the effects of wind and tidal current) to being pushed outside the basin onto shallow ground, particularly to the west.
- DPC accepts that the approach channel and turning circle proposed by DLHC are perfectly workable for some ships. However, whether they are workable for larger cruise ships of the dimensions considered in the Navigational Analysis Report and as mentioned elsewhere in the planning application is doubtful.
- An explanation is provided of the context in which decisions are taken by ships (particularly cruise ships) and by DPC regarding safe navigation within DPC's harbour limits.
- In the absence of detailed simulation exercises informed by reliable tidal current and wind data, DPC believes that the masters of large cruise ships of the types and dimensions described in DLHC's planning application would not have the confidence from a marine safety perspective to use the approach channel and turning circle identified for the proposed development.
- The master of any ship considering entering DLH via the proposed approach channel and turning circle will take account of the dimensions and characteristics of his ship in relation to the dimensions of the approach channel and turning circle, and in the context of wind and currents on the day. The aggregate of the outcomes of such considerations will set the operational limitations of the proposed development over time. Simulation exercises can predict where these limitations will lie. The DPC would welcome further simulations as suggested in the Navigation Analysis Report-"further simulations of more refined channel and terminal layouts are warranted with the input of local pilots and harbour authorities".
- 6.3.7 Appended to the submission are the comments by Dublin Port Company made directly to DLHC on the Navigational Analysis Report which DPC were furnished with prior to the submission of the application to the Board.
 - The design of the channel specifically to the characteristics of the Royal Caribbean Cruise Line may limit the long term use of the terminal should another cruise line with different characteristics call at the port.

- The simulation analysis only considered winds from the west, southwest and south as these are the most prevalent. However, winds from other directions should also have been considered, especially those from the east and southeast. During the summer months, when most cruise ships call, there can be localised stiff onshore winds from an East/Southeast direction.
- For DL the tidal stream is directly across the entrance (SE'ly during Ebb and Nw'ly during Flood) with speeds of up to 1½-2kts being experienced. Generally, when a vessel is manoeuvring at 5 kts with a tidal current acting beam on, (perpendicular) with a speed of 11/2 kts the resultant set is equal to 16.7o. To counteract the tidal stream effect a ship would have to steer 16.7o into the current. This would create a swept path of 135m on a ship with a length of 330mLOA. To maintain a course with the speed reduced to 3kts in the same current would result in having to steer 27o into the current. This would result in a swept path of 203m. In both circumstances the ships extremities (Bow & Stern) would be outside the edge of the channel. The design width of the channel is 120m.
- The navigational analysis states that the "channels were aligned with existing traffic patterns into and out of the harbour". The existing traffic patterns refer to previous calls by the Stena HSS, smaller conventional ferries and the occasional smaller cruise ships. Larger cruise ships would normally approach from the northeast as this gives the Master and Pilot a longer period to assess the total effect of the wind and tide and allows them to put in place the counter measures necessary to making the entrance or abort as the case may be. The fact that the turning basin is so close in means that there is not time to assess and counteract the external forces acting on the ship.
- The depth of water available to the west of the turning circle and entrance channel reduces sharply. As a ship is practically stopped in the water when it is swinging within the dredged turning basin, it is at that time when it is most affected by the forces of wind and tide. The proximity of the turning basin to the shallow water plus the fact it is in an area where strong currents are experienced means that there is significant risk that a large cruise ship might to be forced aground.

6.3.8 Submission from An Taisce

- The justification given in the EIS for the proposed development to locate a large cruise berth in DL is inadequate, particularly in the context of the recent Board decision to grant permission for Alexandra Basin.
- There is a lack of physical connection between the town and the proposed project. The EIS states that the connection between the town and the current proposal will be achieved through the St. Michael's Plaza Project.

St. Michael's Plaza Project is a future project envisaged for DLH, not the subject of the proposed planning application and would therefore be subject to future planning application. An Taisce considers this to be a premature and uncertain solution to the issue of integration between the town and the waterfront.

- Could be argued that the proposal in an area that is valued for its heritage as well as proximity to residential areas, is contrary to Policy AR7⁶ and AR10⁷.
- The size of these cruise ships berthing in DL will undoubtedly have an impact on the built heritage and skyline of DL. Due to the scale, bulk and height of the cruise ships berthing in DLH, the proposal should take account of the Building Heights Strategy 2010-2016. Whilst a cruise ship may not be considered a building, it should be highlighted that the time that it spends berthing in DLH would, during that period, distort the historic harbour skyline and that of the surrounding area and detract from the heritage, residential and recreational uses of the area.
- The proposed jetty will visually impact on the current setting of the harbour and strong consideration with regard to detail, design, specification and construction is required in order for it to be integrated successfully within the historic harbour.
- In relation to air quality, the proposal assumes the stack height to be 45m above sea level. However, An Taisce considers it likely that the stack height would be in the region of 52-54m above water level. Based on this assumption, the EIS concludes that the proposal would comply with the recommended day and evening time noise limits set out by DLRCC. However, a potential impact of higher stacks would be that the noise can propagate over larger distances without being reflected or absorbed by the surrounding environment. Due to the fact that the harbour is proposed to be utilised for different cruise ships ranging from small to large with differing dimensions and operation parameters, An Taisce consider the analysis to be insufficient. Rather a range of scenarios should have been provided in the EIS.
- Considers the NIS to be fundamentally flawed.

⁶ "It is Council Policy to promote the retention of features of the County's coastal heritage where these contribute to the character of the area" (protection of Coastline Heritage)(DLRCC Dev Plan)

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⁷ "Within a cACA the Council will have particular regard to the impact of a proposed development on the character of the area in which it is to be placed. The preservation of the existing character of an area does not preclude all forms of development. All proposals for new development would preserve or enhance the character and quality of the environment within a cACA". (DLRCC DevPlan)

- An Taisce note that all of the European sites include either water quality or air quality or both as conditions underpinning site integrity. The NIS outlines 3 potential impacts on European sites as:
 - Noise & boat strike impact from construction works. Dredging (including dumping of dredge material) and piling operations.
 - o Accidental pollution incident during construction and/or operation
 - Release of non-native invasive species into the receiving water environment.
- The NIS fails to adequately assess the impact of water quality from cruise ships utilising the waters in order to berth in DLH. Although the NIS states that noise is a potential impact, it fails to sufficiently assess noise impacts of cruise ships during the operational phase and primarily focuses on noise during construction works from dredging and piling works. Furthermore, as previously stated, air quality is also a condition underpinning site integrity. The NIS lacks adequate information regarding emissions from ships and the impact that these would have on the integrity of European Sites in the vicinity. More detailed analysis required.
- It is mentioned in the NIS that the dredging phase overlaps with both the early and late wintering bird season and the piling phase overlaps with the late wintering bird season. Mitigation measures for each individual activity are outlined in Section 5 of the NIS. While the NIS concludes that the dredging and piling would not significantly affect the European sites as separate activities, it lacks sufficient analysis of the 4 week overlap between these two activities. Further analysis with regard to the cumulative noise and disruption impact of both activities needs to be fully assessed in order to rule out adverse impacts to the surrounding environment. It is vital that analysis of cumulative impacts on European Sites is fully assessed as the overall impact of separate impacts may be amplified when an overlap occurs.
- The EIS lacks information regarding mitigation measures for end of life cycle for the proposal or in the event that cruise tourism in DL is not economically sustainable.
- The proposed development would contribute to greenhouse gas emissions from both cruise ships and the transport generated from the development and would contravene Ireland's target under EU2020. The EIS lacks sufficient mitigation measures to curb greenhouse gas emissions as a result of the proposed project.

- Proposal would impact upon the "primary amenity of the area and which gives the town its unique sense of place" (section 4.2 reconnecting the town centre to the sea, Urban Framework Plan).
- The EIS argues that the cruise ships would exceed night time noise levels (23.00-07.00) but that given they would have departed, this would not be an issue. However An Taisce highlight that (as section 5.1.6.4) "Cruise vessels are envisaged as arriving to the harbour between 6.00am and 08.00am". Therefore, sound levels would exceed night time levels and may be disruptive to surrounding residential areas.
- Proposal may contravene Special local Objective 13 by restricting aspects of future development.⁸
- Chapter 5 of the EIS makes a comparison between the HSS Dún Laoghaire Ferry Service and a "typical" vessel that would be attracted to DL in order to assess and justify the impact of the operational phase of the development. An Taisce note that this is an unfair comparison and analysis due to the considerable difference in dimensions between the HSS and certain cruise ships as well as the significant difference in tourism traffic affecting the harbour as a result of cruise ships. However, the EIS is inconsistent with it stating that the cruise ship will be 34m wide in chapter 5 and in chapter 3 it is stated that the beam is 48m.
- It is estimated that the cruise ships generate 210,000 gallons of human sewage and 1 million gallons of grey water within 1 week. It is unclear from the EIS the impacts of such large quantities of waste on the water quality in DL and the surrounding waters and the method of disposal by different cruise ships.

6.3.9 Submission from the Geological Survey of Ireland, Department of Communications, Energy & Natural Resources,

No comments to make

6.3.10 Submission from the Commissioner of Irish Lights (CIL)

No objection.

 CIL recommend that a condition be attached to the development that the final scheme for provision of Marine Aids to Navigation during both the construction phase and the final development be agreed in advance with

⁸ Masterplan for DLH, SLO13-"To facilitate the continued development of the Harbour in accordance with a Harbour Masterplan to be prepared by Dún Laoghaire Harbour Board in close conjunction with the Planning Authority. Any approved Masterplan must adhere to the overall zonings, policies and objectives of the Development Plan".

- the CIL. This condition is required to ensure safe navigation which is critical to the proper planning and sustainable development of the area.
- The distance between the Northern end of the proposed development and the West Pier is a very important safety limit for Irish Lights as our vessel ILV Granuaile transits this area enroute to our berth. This distance as presently indicated is adequate but any further reduction should not be permitted without further consultation.
- Any marine aids to navigation proposed require statutory sanction under the 1894 Merchant Shipping Act. This is a separate statutory process and nothing in this submission should be taken as prejudging the outcome of that process which is a matter for the Board of CIL.

6.3.11 Submission from the National Transport Authority

- The Authority published its Greater Dublin Area Cycle Network Plan in 2013. That Plan contains proposals for an East Coast Trail and has identified a preferred alignment for the route on the south side of Dublin Bay, taking account of the environmental constraints within the study area. A final report is being revised at the moment for submission to the Authority and it is intended that the Authority will deliver the project with the cooperation of the relevant local authorities. The preferred route alignment runs between the railway and the coastline in this area.
- The subject application seeks to provide an overflow coach-holding area at Accommodation Walk, straddling the Old Quay Bridge. The EIS also identifies that the preferred option to deliver the Sutton to Sandycove Promenade and Cycleway Project at this location is "to avoid the Coal Bridge altogether and to provide a pedestrian and cyclist underpass". The S2S project has been renamed as the East Coast Trail Cycle Route and the siding road parallel to the railway may ultimately be used for the cycle route. Therefore, the Authority recommends that the siding road not be used as an overflow coach-holding area, and that an alternative overflow area for coaches be identified, if required.
- Cycle parking facilities need to be provided adjacent to the meeting point/information centre/passenger welfare facility building. It is essential that the cycle parking facilities provided are secure and benefit from passive surveillance by people using the building.
- Recommended that the footpaths on the southern side of the Harbour Road be upgraded i.e. the footpath at the proposed crossing point at the southwest corner of the main site that is the subject of the application.

 The proposal which includes a shuttle bus: the operation and stopping of the shuttle bus must not conflict with or delay the public bus services operating in this area. The application should include exact information on where it is intended to stop and turn around the proposed shuttle bus.

6.3.12 Submission from the Environmental Protection Agency

- Noted from the documents provided that the proposed development will require a Dumping at Sea permit from the EPA in accordance with the Dumping at Sea Act 1996 as amended. While the Agency has not yet received a Dumping at Sea permit application in relation to the proposed works, the applicant has been in contact with the Agency in this regard.
- It is not possible to determine from the documentation provided if the proposed activity will require a licence under the EPA Act 1992 as amended or the Waste Management Act 1996 as amended. The applicant has not applied to the Agency for a determination in this regard. The Agency has not received an Industrial Emissions, Integrated Pollution Control or Waste Licence application relating to the development described above.
- If a licence under the EPA Acts, 1992, as amended, is required for the activity, consultation on the planning application, licence application and EIS must be carried out in accordance with the EU (Environmental Impact Assessment) (Integrated Pollution Prevention and Control) Regulations 2012 (S.I. NO. 282 of 2012).

7.0 THIRD PARTY SUBMISSIONS ON CRUISE BERTH:

- 7.1 Of the 145 submissions received by ABP, only 5 submissions could be identified as being generally in favour of the proposed development. The submissions in favour are from the Dún Laoghaire Business Improvement District, the Dún Laoghaire Powerboat School, Fergal McCabe, Coal Harbour Users Group and Dún Laoghaire Chamber of Commerce. The comments in favour of the proposal are summarised as follows:
 - Whilst the Masterplan is non-statutory, it is supported by and consistent with the policies of the County Development Plan under its SLO13. This support has continued in the Draft CDP 2016-2022.
 - As part of the Fáilte Ireland "Destination Dublin-A Collective Strategy for Tourism Growth to 2020", a Grow Dublin Tourism Alliance was established consisting of the key stakeholders including the 4 Dublin Councils and the two Harbour Companies. A sub-working group (Cruise Dublin Forum) was set up to develop a joint strategy for attracting and catering for more cruise traffic to Dublin Bay. Recently Fáilte Ireland commissioned a Shared Strategy to Maximise the Economic Growth of Cruise Tourism across Ireland. The Dún Laoghaire BID Company and Dublin City BID have already started working together on projects to improve the cruise passenger experience when arriving in Dublin Bay.
 - The cruise ship proposal has the potential to provide a key interface between cruise ships and the Dún Laoghaire area and the potential to impact many aspects of the sustainability of the cruise tourism industry, locally and nationally. The Chamber of Commerce commends the best practice principles set out in the 2013 Report "Sustainable Cruise Tourism in the North Sea Region, Best Practice Guide", in promoting the principles of sustainable cruise ship tourism and its relevance for the development of cruise ship tourism locally and nationally.⁹
 - The community gain to be derived from the proposal will be in the form of a
 positive employment effect of the expected increase in footfall, the increase
 in ships and services and in the improved pedestrian access via the Marina
 breakwater to a superior public domain which includes seating and picnic
 areas
 - To reject the present proposal solely on grounds of conflict with the plans of Dublin Port and thereby to effectively direct all future cruise liner visits (apart from the few that will visit DL by tender) there, would represent an unbalanced response to proper and balanced regional planning and result in an underutilisation of the directly adjoining links of the proposal to the local

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⁹ www.cruisegateway.eu

and national road and rail network, and to the heritage, cultural facilities, restaurants, shops, and natural and man-made amenities available in or proximate to Dún Laoghaire and its hinterland. Consent should be granted and that both entities cooperate together (possibly under a new body managed by the four Dublin Authorities) to develop and market Dublin Bay as a port of call to rival or surpass Copenhagen, and to agree on a schedule of visits for the benefit of both.

- In terms of community gain, the DLH-Masterplan indicates the provision of a
 Marine Centre to provide toilets, changing facilities, lockers and a first floor
 meeting room. This is within the application boundary and it could be
 provided as a means of community gain.
- Proposals to develop a better shuttle bus service between the ships and Dún Laoghaire should work well with minimal cost and minimal disruption.
- Welcome a single ship entry am and leaving pm rather than ship traffic all day long. This traffic pattern would not affect the "Dún Laoghaire Powerboat School" from running training courses around the Harbour or in Dublin Bay.
- Reference is made to the previous decision on the Urban Beach at Dún Laoghaire East Pier and in particular para. 4.3 of the Inspector's Report where the Board appear to have accepted that the Harbour Masterplan provides a coherent vision for the future of the harbour, consistent with the adopted County Development Plan and that a cruise liner berth is, in principle at least, an integral part of the Masterplan.
- The Irish National Sailing and Powerboat School express full support for the proposal and consider that the development will not stop leisure sailing in DLH. Rather it will create marine opportunities for the people who can see them. The school operates 50 weeks a year and as such has a unique knowledge to comment on sailing in DLH.
- The Coal Harbour Users Group would be in favour of the cruise berth development based on the information provided by the Stakeholder Group if it is likely to be financially viable and bring in revenue to the Harbour Company and/or local authority. Financial viability is key to the proposal as without adequate funding the harbour will deteriorate, and small boat users may be expected to increase their contribution by way of higher storage and mooring fees.
- The issue of visual amenity is subjective. However, the consultants assessment of the impacts of the development as demonstrated in their 6 photomontages are professional and objective and it is agreed that most of the identifiable visual impacts are temporary and none are negative.

7.2 Submissions against the proposal:

7.2.1 A total of 142 submissions were submitted to the Board setting out arguments against the proposed development. The main arguments are set out below:

7.2.1 National Policy:

- Contrary to the National Ports Policy of 2013 by the Dept. of Transport. The NPP highlights consolidation of marine infrastructural resources which is the exact opposite of the duplication of resources which the Dún Laoghaire Cruise berth would be. DLH is identified as a Tier 3 Port and the proposal will be fully injurious to marine tourism as it will greatly diminish sailing in the harbour and the ability to attract international events which bring long stay tourists. Furthermore, it is a fundamental conflict with the National Ports Policy 2013 in the proposal to locate transport infrastructure of national scale within a regional port.
- The strategy to detour super cruise passenger ships to DL rather than proceeding to Dublin Port (Tier 1) is directly contrary to the NRA Smarter Travel Policy and objectives to minimise the demand for travel. It effectively brings passengers to a subsidiary port where a transport mode interchange to bus/taxi is necessary to transport passengers on the final part of their trip. This places unnecessary demand and pressure on congested local roads during peak travel times in the morning, mid-day and evening.
- The National Ports Policy sees Dún Laoghaire as promoting marine tourism which the Irish Marine Federation defines as "sailing, powerboats, wind surfing, site surfing, surfing, sea swimming, coastal walking, diving, angling, whale and dolphin watching, Eco-Tips, Ferry Boats Trip". 10
- The Economic Assessment Study does not meet the mandatory requirements
 of the Dept. of Finance for Capital Projects as laid down in the 2005 Guidelines.
 It fails to take adequate cognisance of the Dublin Port Cruise Berth project
 which has been approved and fails to provide operational costs for the new pier
 i.e. continual dredging, safety, fire prevention, staff costs etc.
- The Regional Planning Guidelines do not advocate the development of DLH for large scale commercial shipping facilities, such as the subject of this application.
- UNESCO has recently designated Dublin Bay as a biosphere with the goal of promoting the protection of wildlife and habitats. The applicant makes no reference to this international designation in the EIS. The EIS should be rewritten to show how the project would impact on the goals of the biosphere.

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¹⁰ Susan Spain Submission by John Spain Associates, Page 6. Referring to Steve Conlon, Irish Marine Federation http://www.sera.ie/media.Steve%Conlon Watford%20Estuary.pdf

7.2.2 County Development Plan:

- The proposed development of a new pier and quay berth measuring over 430m in length within DLH, a Tier 3 Port, represents a strategic transport infrastructure development. There is no provision for such transport objective within the Development Plan.
- Proposal fails to comply with the "single strategic vision statement" of the DLRCC Dev Plan 2010-2016. The Cruise Pier will greatly diminish the marine leisure activity in the harbour and Bay. It destroys the main unique heritage of the Borough's coastline-the Victorian harbour of 247 acres ready and willing to accept smaller craft within its sheltered confines since 1821. This is the largest harbour of this type in the world.
- DLH Masterplan contradicts Chapter 4 of the DL Urban Framework Plan 2010-2016 that sets out the framework for the regeneration of the town and contradicts DLRCC's guidance for planning where they suggest that new developments should contribute to the regeneration of the town and should reconnect to the town centre to the sea front.
- The proposed development of a new pier and quay berth measuring over 430m in length within DLH, a Tier 3 Port, represents a strategic transport infrastructure development. There is no provision for such transport objective within the Development Plan.
- The planned development is not consistent with the stated zoning objectives for the Harbour which is "to provide for Waterfront Development and Harbour related uses". The only items on the "permitted in principle" and "open for consideration" lists which might be remotely matched with this plan are "Transport Depot" and "Car Park" which are quite different structures than an enormous Jetty and a Bus Park.
- Reference to the case of attorney General (McGarry) v Sligo County Council
 wherein it was established that the development plan was in the nature of an
 environmental contract with the public and in that case the development of a
 waste disposal facility adjacent to an important archaeological site could not
 have been understood or anticipated from the Development Plan. Sligo County
 Council had materially contravened their development plan in that instance.
- The proposal to locate bus parking along the route of the Metals, an historic heritage route, would contravene a specific local Development Plan objective (No. 93) for the promotion and development of the Sutton to Sandycove promenade and cycle way along the route of the Metals in the harbour area.
- The current County Development Plan is entirely silent in respect of development of the type and scale now being proposed. However, the Draft

- DP is more supportive of sailing: "It is an objective of this Framework Plan to strengthen Harbour related uses including recreational sailing".
- Section 4.3.1 of the Urban Development Framework states that: "The height, scale and mass of any development proposals should generally reduce from the central terminal area towards the Carlisle, East and West Piers. Redevelopment proposals for the Carlisle Pier should regenerate and enliven the waterfront. Such proposals require to be carefully scaled and sensitive to their setting". In contrast the documentation accompanying the submitted application states that the proposed facility will accommodate vessels up to Freedom Class with a length of 340m and a height of 65m.

7.2.3 DLH Masterplan:

- In respect of SLO 13 it is noted that the current Harbour Masterplan 2011 had not been prepared at the time of adoption of the County Development Plan in April 2010 and therefore the development plan cannot and does not provide any form of endorsement of the Harbour Masterplan.
- The masterplan seeks to make DL a living harbour. It is already a living harbour and the proposal will seek to bring an end to existing users.
- The DLH Master Plan is proposing a €200 million commercial development of apartments, retail outlets, and offices, within the confines of the existing harbour. The application for a cruise ship berth does not contain these proposals. This is piecemeal planning. The Board should take account of the overall plan for redevelopment rather than accept an item-by-item application process that does not take into account the impact of the totality of the future proposed developments on the existing structures, the visual impact in the existing built heritage of the town, the environmental impact, and the future governance of the harbour.
- Take issue with the way the applicant is using the Master Plan to justify a project that was not described in the CDP in the first instance and where there was no indication given that project of such scale would be the outcome. The Masterplan offered a cruise business possibility without giving any indication that anything other than existing quayside facilities or anchoring off-shore would be used. This was not seen by most as objectional. The proposal therefore cannot be deemed to be compliant with the Masterplan.
- The proposal materially and significantly contravenes the objectives and vision statement of DLH Master Plan 2011. The proposed development of a new 430m quay down the middle of the harbour to facilitate mass tourism in the form of super cruise liners does not make DL a destination of international calibre, it transforms an already elegant and beautiful harbour in to an industrial

back end port area thereby destroying its very uniqueness and marine ambience.

 The reference to the fact that the "current Cruise Berth proposal is an objective of the DL Masterplan 2011-2030" is factually incorrect and misleading and undermines the entirety of the assessment process. A potential cruise pier structure is shown in the Masterplan, which is of radically different scale. There is no objective to provide a cruise berth as shown in the current form of the subject application.

7.2.4 Dún Laoghaire Harbour Company (DLHC):

- The Dún Laoghaire Stakeholders Group (the Harbour Company, the Council officials and the Town's high street shopkeepers) do not represent the full spectrum of users and stakeholders in the Dún Laoghaire harbour area.
- Strategically the DLHC needs to decide what its core purpose business is.
- There have been a number of proposals to improve facilities at Coal Harbour and Old Harbour as part of larger applications. These aspects, though approved, have never been realised (PL06D.107188 / D97A/0751 and D05A/1729).
- When Stena Sealink HSS dock was built, some 10 acres of the harbour was irreversibly filled in and lost forever. Stena have now pulled out of Dún Laoghaire, leaving nothing but this despoliation behind. Not having learned from this experience, the Harbour Company now proposes to fill in still more of the harbour, and effectively destroy the entire open-water amenity of the harbour forever.
- The DLHC does not have funds to construct the proposed berth. It will have to reply on public funds to carry out the development even if the cost projections are accurate (and this is seriously doubtful), the entire cost will revert to the state. Public money should not be used for a project that is entirely negative and destructive on the local environment.
- If development approved, it would exclude any prospect of a future ferry service for DL.
- DLHC's resources would be better focused into taking greater care of the harbour and making it more amenable to residents and visitors. This should include improvements to west piers walkways and structures, provision of walkways and bicycle lanes, development of the coal harbour for public use, policing of the harbour's use and ideally the removal of the ugly structure already built out into the harbour for the defunct HSS ships.
- The proposal by DLHC will essentially privatise the harbour.

- There is room using the existing facilities in DLH for two small cruise ships accommodating up to 150 passengers with less than 100 Cabins/Suites by using the present Carlisle Pier. The DLHC do not have to be build anything and these smaller ships do not get in the way.
- As many as 7000 persons walk the harbour piers on a fine day. Yet the two public toilet conveniences in the harbour were closed some years ago by the harbour company in the east pier and opposite the RNLI. The following is a statement from CEO Gerry Dúnne to Afloat magazine; "The Directors and staff of the Harbour Company take our role as custodians of the harbour very seriously. Out first responsibility is to make sure that the harbour is well run and economically viable. Our commitment must be to all those who use the harbour-sailors, yacht club members, anglers, ferry passengers, cruise passengers, tourist, local residents, occasional visitors, regular walks and, not least, the general public". Where is this commitment when they close down the public toilets? If they can't manage to provide that basic facility how can they ever be entrusted with taxpayer funding to embark on such a huge and ill-conceived project.
- The documentation issued by the DLHC in that the presentations made by them and the images in particular were seriously misleading in terms of scale. DLCC commissioned a scaled drawing of the extent of the super cruise liner which has been superimposed on the images issued by the DLHC as part of the Public Consultation process. It is evident from the comparison of the two images the Corrected scale and the Public Consultation image that there is a vast difference in the appreciable scale of the proposed development. The public consultation process was therefore fundamentally flawed and misleading.

7.2.5 Process of Strategic Infrastructure Development

- There is no appeal from ABP decision.
- There is no proposal in the application regarding Section 37G (7)(d) of the Planning and Development Act 2000 (as amended), which would address the construction or the financing of a facility or service that would constitute a substantial gain to the community. Section 3.3.8 of the EIS makes reference to the topic of "Community Gains", although this merely an exploration of a number of indirect benefits that may arise by virtue of the project itself, and are tenuous at best. They do not amount to what is envisaged under the Act, nor what has been proposed/required in other comparable schemes. Reference is made to Cork Harbour (PL04.PA0035), Dublin Port (PL29N.PA0034) and Galway Port (PL61.PA0033).
- DLHC ran a badly advertised public consultation process over the two weeks of the 2015 Easter holiday period. Most of the residents of the area only became

aware of it as the consultation period came to an end or after it had ended. Local democracy is not well served when the lack of adequate consultation is felt by those concerned.

- The Callaghan v An Bord Pleanála case challenges the exclusion of the public from the initial pre-application consultation process with the Board. This has significant implications for the validity of the pre-application consultation process and the decision reached by the Board in respect of this proposed development. The outcome of this case will ultimately affect the very core of the SID process.
- The breaches of the Aarhus Convention to date and the significant impacts this
 has had on delivering misinformation to the public in terms of the scale of the
 proposed development means that the public participation in the planning
 process is a flawed procedure. The basis of the SID application, the EIS and
 the NIS submitted to the Board therefore further compounds a flawed process.
- The proposed development falls within the "transport infrastructure" category for the purpose of the SID process. Whereas the established primary use of the harbour is leisure, not transport.

7.2.6 Legal Issues:

- Marina Market & Management Ltd holds a lease from DLHC for a term of 30 years from the year 2000. This lease refers to the eastern breakwater from which the proposed berth for the cruise is to be constructed.
- The DLH Masterplan which was published in 2011, has no statutory basis and has not been incorporated into the CDP or the Draft CDP. The Council intends to proceed with the preparation of an LAP for Dún Laoghaire. The public is provided therefore with aspects of an aspirational Harbour Plan in a piecemeal fashion at this time which is premature and contrary to the proper planning and sustainable development of the area.
- The proposal is non-compliant with Article 23(1)(f) wherein multiple Protected Structures are located within the immediate vicinity of the site, not least of which being the Pier Structures of the Harbour itself. The omission of basic information particular to distances, and impact on the immediate and relevant Protected Structures necessitates the Board to request further information, in addition to facilitating further 3rd party submissions in this regard.
- The Statutory Notice is incorrect in respect of dates cited therein within which submissions must be made.
- The statement as per Section 3.1 of the EIS that the DLHC is "presenting the interest of the wider Dún Laoghaire Cruise Stakeholder Group" presents issues. It is argued that the DLHC under its current statutory powers can and should

have made this application in its own right. It is considered that by admitting a role as an agent representing the interest of others who have no mandate with regard to the harbour that this application is severely compromised. To admit that it is associating with an illegal entity is rather startling in the context of a formal application for statutory consent. Requests the Board to rule on this.

- DLHC's current mandate is in respect of DLH alone as the statutory process to subsume it into the Local Authority is not yet complete (2015 Harbours Billwhich will pass control of the Tier 3 ports to their respective local authorities).
- Concern expressed at the submission of the DKM Economic Report 2015 where the Board has already determined the issue that the project is of social economic importance in circumstances where the Observer was not afforded the opportunity to rebut such a contention. Insofar as the Board has made any determination relating to the social and economic importance of the proposed development we would ask the Board to confirm at the outset that insofar as any of these issues are properly the subject matter of environmental impact assessment that it accepts that no regard can be had to any previous determinations.
- The applicants do not have sufficient interest in the land to make the application.
- The EIA Directive for the assessment of projects of this scale requires the assessment of the constituent parts of a wider project as a whole or, in other words, the cumulative impact of the development. It is submitted that the application, EIS and NIS should have included appropriate information on the likely impacts on the environment and on the relevant European sites of the proposed cruise berth infrastructure at DLH in combination with the permitted development of cruise berth infrastructure at Dublin Port and the overall likely wider effects on Dublin Bay.
- The NIS fails to have appropriate regard to the type of information that is now required following the recent judgement of the Court of Justice of the European Court and the opinion of the Advocate General in Sweetman v Ireland.

7.2.7 Alternatives:

There is nothing stated about commercial alternatives within the harbour itself.
 This runs counter to the intention of both the Masterplan and the National Ports
 Policy in that it would be expected that some attempt to test the possibilities of
 alternative development scenarios relative to marine leisure, maritime tourism,
 cultural amenity and urban redevelopment suggested for the harbour would be
 carried out.

7.2.8 Reinstatement:

Seek that condition no. 4 of the Board's decision to grant permission for the Urban Beach be imposed which required the reinstatement of the site if the development ceased to operate for a period of one year, in order to protect and maintain the amenities of the East Pier. The reinstatement of lands to their previous pre-development state, is frequently inserted in the base of proposals in sensitive sites. In the light of the amenity character of DLH, the Board is asked to consider the imposition of a somewhat similar condition. In the event of the jetty not being used by cruise liners for a period of say, 3 consecutive years.

7.2.9 **Dredging:**

- In the present application there will be a huge amount of turbulence associated with the operation of the ships' Azipods and bow thrusters. This will cause severe scouring action, as in strong winds, each end of the ship will have to have a thrust of at least 50 tonnes applied to keep the ship in the centre of the channel. The propellers providing this thrust will be down in the dredged trench directed towards the side of the trench. The sides of the dredged channel will become unstable in this turbulence. Much of the dislodged material will undoubtedly settle in the channel itself, reducing its depth, leading to a situation where there is insufficient water depth for the ship to float. This turbulence is likely to undermine the ends of the two piers to the point that they will suffer serious damage and possibly even collapse. The risk is such that the Board should refuse the proposal on the grounds that it is not safe and is likely to seriously damage a Protected Structure.
- Details of the dredged area on plans submitted, GN-102, gn-103, show that this
 is very close to the end of the piers. The effect of the strong tide past the
 entrance and severe storms should be factored into the purposed development
 with a working scape model. The 100 year storm is no longer such a rarity.
- Paragraph 5.3.2.3.2 in EIS Volume 2 refers to scouring of the sea bed within the harbour which has been caused by the high speed ferry. The area of the ferry berth has generally been scoured to a depth deeper than -11m O.D.. which is some 5m deeper than the general harbour depth, and there is a deep hole with a depth of -15.5mO.D. which is about 9m deeper than the general bed level in the middle of the harbour. It is thus, accepted that the relatively small and shallow draft HSS has caused very serious scouring of the sea bed within the harbour. There seems, therefore, to be no doubt that the scouring which is likely to be caused by the proposed very large cruise ships with their powerful Azipods and thrusters will be massive and the damage likely to be caused will probably not be restricted to the roundheads at ends of the piers but is likely to extend to much of the piers themselves. It is proposed to dredge a channel through the narrow mouth of the harbour to a level well below the level of the

pier foundations. This proposed dredging, of itself, presents an unacceptable risk of de-stablishing the two piers. The dredged channel is likely to be deepened further (possibly by as much as 9m or even more) by the scouring actions of the cruise ships' Azipods and thrusters (and propeller ships are to enter the harbour).

- There is inadequate detail about the continuous dredging which would be needed within the harbour and at the turning circle outside the harbour into the future. By comparison, the work to be carried out for cruise ship access to Dublin Port will continue for 5 years.
- There is inadequate detail about the effect of dumping and piling work on walkers, harbour users, marine and bird life.
- Inadequate consideration of the cumulative impact of three simultaneous developments in Dublin Bay of the new outfall sewage dumping, the Dublin port cruise ship terminal (dredging/dumping) and the current proposal including dredging/dumping.
- The design of the dredging works assumes slopes to the dredged areas and channels of 1 in 5. This is a very steep slope in the soft sedimentary materials-fine sand and silt. Silt materials are easily disturbed and much flatter slopes are normally assumed in design of dredging works. Dublin Port with its huge experience of dredging in these materials in Dublin Bay has adopted side slopes of 1 in 16.
- In relation to dredging the extent of further physical interventions is mentioned, but inadequately addressed in the DLH Master Plan-7.8 Environmental Report, Pg 55: "It will be necessary to make physical intervention in the fabric of the harbour. This could range from the construction of a new breakwater to making breaches in the pier walls". There is inadequate information on this issue.
- The selection of slide slopes as steep as 1 in 5 is extraordinary as it is contrary to normal design of dredging works and certainly much steeper than is likely to be stable in such loose materials as exist here. It is difficult not to conclude that side slopes of 1 in 5 were chosen in order to allow the dredging of the necessary channel through the Harbour mouth with an apparent (though in reality imaginary) safety margin on either side, allowing it to be asserted, wrongly, that there is no risk of undermining the ends of the Piers.

7.2.10 Vibration:

- The possibility of vibration impact, as outlined in the EIS Section 5.6.5.3 will impact significantly upon the adjacent Marina amenity building.
- Energy dissipation (wave drain energy) from the entry and exit of vessels from the harbour has not been addressed fully in the EIS or the application.

7.2.11 Noise:

- Reference is made to the EIS-Construction Phase Noise Contours section where it includes an illustration showing decibel levels of 70 to 100 surrounding the marina building ("Noise Contour Map", Appendix 5.6.2). Noise levels in excess of 85 decibels will obviate the necessity for the Company to remove employees from its place of work and any intended users of the marina. There are presently 350 boats berthed in the marina and enjoyed by approximately 1,275 boat users. The marina currently has 12 staff members and is operated on a 24/7 basis.
- Table 5.6.13 entitled Predicted Construction Noise Levels refers to noise sensitive receptors located at a considerable distance from the Marina building and does not reflect a true representation for this location.

7.2.12 Pier:

- There will be destruction to DLH for 2 years during construction and will change the harbour forever.
- The new pier at 435m is a permanent structure. It is unclear how this could be removed at the end of its life-cycle or if the cruise ships project proves to be uneconomical or unworkable.
- Inadequate information is provided regarding the pier and its composition.
 Concerns are expressed that the pier will have to be designed to resist
 substantial berthing forces i.e. the cruise ship. With regard to the Navigational
 Analysis Report it is argued that the assumed speed of the ship within the
 harbour is incorrect and that the actual velocity of the berthing ship at the
 moment of contact with the berth could be higher and therefore could result in
 serious damage and be a major safety issue.
- There is no sufficient electric shore power (up to 10 megawatts required), no foul sewerage outlet connection to mains drainage, no water to meet the volumes required (40 tonnes per hour), no water storage provision, no water pressure sufficient for firefighting purposes and no evidence of consultation with Irish Water. There is no refuelling capability, except for large fuel tankers on the landside dock.
- The proposed quay is an elevated structure over 6.1m over low water mark emphasising the severance within the harbour and the disruptive nature of the proposed Quay.
- Design obsolesce is an issue. The inability of the proposed facility to accommodate more than a single vessel at a time will be detrimental to the viability of the project as almost all other ports in Europe competing for cruise

liner business have the ability to accommodate more than one vessel at a time, thus being viewed as more attractive destinations by the cruise line companies.

- The berth is already obsolete in 2015 when the new generation of cruise shipsthe Quantum Class at 348m and the Oasis class at 362m are bigger than the Freedom Class at 340m.
- If a berth for a cruise liner is approved what is to stop a tanker unloading here?

7.2.13 Boardwalk:

- The proposed development provides for a boardwalk to the west of the development overhanging the rock face of the marina. It is of major concern that the safety and security of the Marina and its users may be compromised by the inclusion of the boardwalk structure.
- Public access to the waters of DLH by means of the inner Harbour slipway is obstructed by the vehicular access to the Proposed Berth Facility. Public access to the water is a vital part of the future of DLH.
- The railing to the boardwalk is not suitable for children. This is a significant health and safety issue.
- The public walkway/pavement along the waterfront between the ferry terminal and the Royal Irish Yacht Club is proposed to be removed. A pedestrian crossing and a pavement should be provided in this location. Its omission is an unacceptable health and safety issue.

7.2.14 Underpass:

- In relation to the underpass, the length of the jetty makes this a reasonable prerequisite. However, in view of the amount of traffic that currently makes this
 transit, the Observer regards this limitation in height as a hazard, since on a
 high spring tide the gap will not be adequate and those using the underpass
 may not be equipped with the tidal information to allow safe passage.
- St. Michael's Rowing Club uses a route between the breakwaters to the East Pier bandstand and back. This route is viable in strong southwest and south winds when other routes would not, due to the shelter afforded from the shore and landside structures. It is stated that this route is recognised in Section 5.1.6.3 of the EIS. The proposal would intersect this important heavy-weather training route. The circumnavigation of the proposed cruise berth in strong southwest or south winds, would place the boats in open water with significantly more "fetch" and would therefore place a gruelling pull into the wind that would otherwise have been avoided. This would lessen the days we could get our crews out training and would ultimately be detrimental to the performance and future of St. Michael's Rowing Club. Of most concern is that this would impact

most on our underage and our novice members significantly limiting their access to the water.

 The drawings of the underpass are not dimensioned online and it is not possible to determine if a rowing skiff could pass between the vertical piles.
 While the rowing skiffs are small in general, there is an 8m span between the tips of the oars.

7.2.15 Water:

- Proposal will give rise to pollution in harbour.
- Estimated that a 3,000 person cruise generates 30,000 gallons of sewage a day. It appears that there are no proposed provisions for sewage.
- Discharge from large Cruise ships or any ship is always a potential problem, be
 it either bilge, grey water or sewage, how is this to be monitored and if
 discharge should happen, how will it be addressed? Dublin Port has the
 advantage of having the River Liffey to wash it out; Dún Laoghaire does not
 have this facility.
- "16 Heavy Tankers give out more pollution than all the cars in the world".
 Award winning science writer Fred Pearce, an Environmental Consultant to New Scientist writes these ships pump out killer chemicals linked to thousands of death because of the filthy fuel they use.
- The inner Coal Harbour floor, was significantly polluted with heavy metal due to industrial activity in the past. It is not clear whether any of this contamination has migrated to other parts of the Harbour and thus whether the proposed dredging will release these contaminants. Clearly, the disposal of such spoil could create an environmental issue where the spoil is dumped.
- Under what authority will cruise ships be inspected for environmental compliance while in Irish Territorial waters? In the U.S. "Coastal rangers" are placed on cruise ships to monitor environmental compliance. The experience in North America is that discharges occur in the place with the weakest environmental and enforcement standards.
- The issue of the Polluter Pays Principle has not been considered in the EIS.
- There is no modelling in the EIS of the effect of a sewage or fuel leak on water quality in the bay. There is no modelling in the EIS of the number of shoreline amenity users (swimmers, divers, sailors, anglers) who would be affected by an unexpected massive pollution incident.

7.2.16 Air:

- While in dock, cruise ships often run diesel engines to provide electrical power to passengers and crew. The fact that Ireland is not part of the Sulphur Emission Control Area means that DLH is potentially exposed to unacceptable levels of pollution.
- The United States of America EPA estimates that a single cruise ship burning bunker fuel emits the same amount of soot as 1.06 million cars every day. (Harbouring Tourism Cruise ships in historic port communities. Report of an International Symposium held in Charleston South Carolina 2013).
- The strong odours from heavy fuel burning will be carried to residential areas around DL under many weather conditions, particularly when the wind is from the east of north.
- Section 5.7 of the EIS (Climate) for this proposal uses a methodology for air dispersal modelling that is not explained. The input variables (such as fuel consumption, number of ships and engine emissions) are not listed so that it is impossible to verify or repeat the calculations that have been carried out by the EIS authority to arrive at the conclusion that the "impact of the development is not significant".
- The previous diesel powered ferries were only a tenth of the tonnage of the proposed cruise ships, yet their engines could be smelled and heard from the pier. The applicant needs to rewrite the EIS to model the noise effect on users of the East and West piers.

7.2.17 Navigation:

- The cruise ships will find the entrance to the Harbour to be a navigational challenge especially in high winds.
- There is potential for grounding of cruise ships on the dredged channel both outside the harbour and inside, not to mention potential collision with either pier head at the entrance.
- Note that Tug boats do not form part of the Harbour company proposal. Tugs
 are essential for manoeuvring large vessels in restricted waters, they can also
 act as fire-fighting vessels in case of a fire on board a vessel. In the case of fire
 would tugs have to come from Dublin port and how long would this take?
- The Navigation Analysis Report is only concerned with the ability of the ships to carry out the necessary manoeuvres to turn and reverse into the harbour. It does not mention the effect these manoeuvres, and the large forces required to make them possible, will have on the surrounding sea bed or on the harbour walls.

- (With reference to Drawing no. SA-1018 & SA-1019A) As proposed in the design of the approach channel, large cruise ships approaching or leaving the Harbour would be compelled to make a sharp turn of 70 degrees within the turning circle, or 110 degrees if reversing into the Harbour. (A reversing approach is envisaged in EIS Vol 1 Technical Summary 2.8.3). manoeuvres are only possible at very low speeds, during which time the large vessel is subject to sideways displacement by wind and tidal streams that must necessarily be resisted by extensive use of powerful side thrusters or rotating propellers. Unlike Dublin Port, the ebb and flood tidal streams immediately outside the Harbour accelerate and always run across the Harbour mouth. Thus, there will be a significant force acting perpendicular to a cruise ship reversing into the Harbour-a force which appears to have been completely ignored in the Navigation Analysis Report. That such manoeuvres are at the very least challenging in this location is confirmed by the acknowledgement in the EIS, section 6.4, that such proposed movements must be restricted with a limit of 15 knots wind speed for vessels with conventional propulsion fixed shaft propellers, or 25 knots for vessels with Azimuth rotating propellers(Azipods).
- The Navigation Impact Assessment (EIS Vol. 2, section 009 Appendix 5.1.1) contains risk assessments for various risks including "risk of collision between a berthing cruise ship and the completed structure". The ratings are on a scale of 0 to 5. However, tidal currents have not been considered at all, the probability rating is probably too low. The tidal regime just inside the harbour mouth will be guite different to that outside the harbour where the ship is exposed to a lateral pressure pushing it sideways. The tide flows in and out of the harbour and with the hull of the ship taking up much of the harbour entrance there can be expected to be an effect on the forward progress of the ship. Inside the harbour the tide has a quite complex circular flow and its action on the ship will be quite different from the sideways push applied outside the harbour. The changing conditions as the ship enters the harbour will be such that there will have to be constant, and perhaps rapid, adjustment of the power being provided by the Azipods and bow thrusters of the ship. Also there would be far bigger waves than have been assumed, particularly in strong north-easterly winds. Taking these into account the Observer considers that the probability rating of a collision with the structure, particularly the mooring dolphins should be higher.
- In Dublin Port all vessels over 70m LOA entering the Dublin Pilotage District (effectively the channel through Dublin Bay into Dublin Port) are required to take on a Dublin Port Pilot. The pilots, who are highly trained, go on board each vessel and take over the navigational control of the vessel and control the turning, reversing and berthing of the vessel. Dublin Port also has two tugs to assist vessel as required. There is no "fear factor" for masters of large ships reversing into Dublin Port as the pilot is in control and is responsible.

- Weather station information included in the EIS, is based on information collected at Dublin Airport. Such information is not relevant in Dublin Bay as Dublin Airport is located too far north of the city to experience summer sea breezes. Thus all information in relation to wind is flawed and based on incorrect information.
- According to the Navigation Analysis Report EIS Vol. 2, Section 007, Appendix 3.1 by Moffat & Nichol, the wind data from Jan 1996-July 2014 (page 18) is such that large cruise ships without Azipods would be prevented from entering DL 23.5% of the time, a very significant limitation for the proposed usage of the cruise berth and one which would cause cruise ship owners to be very wary scheduling berthing. Such a limitation is not acknowledged in the DKM "Economic Impact of proposed DLH Cruise Berth".
- The Navigation Analysis Report fails to acknowledge the effect of tidal streams on navigation and it considers the side slopes of the dredged channel only as they might cause resistance to the ship movements, the so-called "bank induced forces on the vessel". The analysis was based on side slopes of 1 in 3 but points out that on the flatter side slopes of 1 in 5 the effect would be less. There is however no mention of the effect that the side thrusters of Azipods are likely to have on side slopes of fine sand silt.
- While the base of the proposed channel is 120m wide, the 3m deep dredged channel is apparently expected to maintain 1 in 5 side slopes. This leaves only a presumed 40m distance from the top of the side slopes to the near vertical wall of each Roundhead above the surface and an even shorter distance of 20m for the foundations of the Pier Heads.
- What happens if a ship enters when the wind is 20 knots, but when she is leaving the wind is blowing at 30 knots? Cruise ships are regimental at adhering to their advertised programmes.

7.2.18 Sailing:

- The Water Wags who have been sailing in the harbour since 1887 will now have to sail outside the harbour in conditions they are not designed for.
- There are 41 Water Wags and not 27 as stated in the EIS. The membership of the class is 80.
- The making of this application is akin to proposing to build a commercial building on a public space, such as St. Stephen's Green, and should be considered in that light. If the Board were to grant permission for the proposed Berth Facility, the benefit of the open water space would be severely compromised with the resultant loss of public amenity.

- The correct vision for the future of the Harbour is as a recreational facility with a place for suitable sympathetic and compatible commercial usage. The application is so dominant in favour of commercial usage to the complete detriment of leisure usage.
- The Water Wags note that the DLHC implicitly acknowledge that the quay would render the Harbour useless for racing when, at page 5.1.73 of the EIS it is stated that they are willing to consider the feasibility of removing the two catwalks at the end of the quay thus providing an extra 70m of unobstructed space to facilitate frostbite racing in the winter. This is of no assistance to the Water Wags, as firstly, they sail in the summer and not in the winter, and secondly, they would presumably not remove the supports for these catwalks, which would remain as obstructions, and thirdly, the main part of the quay would remain still dividing the Harbour in an unacceptable manner.
- DLH is a world class sailing resource (ISAF). The ambition is to host a major international sailing event in DL every 2 years. The planned approach is to secure pinnacle events like the ISAF World Championships worth €25m to the host country and to bid for the youth Olympic Games 2022.
- Dun Laoghaire Combined Clubs have 500 members, with 700 keep boats and 1000 dinghies. Club racing takes place 3-4 evenings per week, during the April to October season. This involves up to 400 boats and 2,500 people per week.
- The Cruise Liner Berth will cut right across any racecourse, apart from only one specific wind direction.
- Health and Safety issue with a cruise ship and small craft movements giving rise to potential collision.
- The Cruise ships are enormously high. There will effectively be no wind on the leeward side of the ship (at the West Pier side) for the entire day the ship is berthed in DLH and the wind pattern on the wind ward side of the ship (the East Pier side) will be greatly disturbed, as to render useless any hope of fair racing or sailing in a steady wind in the Harbour.
- It is factually incorrect to state that the "wind shadow will not prevent sailing training or racing" (as in the EIS).
- The harbour is an amphitheatre viewable from all sides. It is among the best locations to handle the fast growing spectator friendly forms of the sport. Most other locations only provide one dimensional viewing from a shore line.
- Concerns expressed for the safety of swimmers and small fishing boats along the coastline from Bullock Harbour to Seapoint Bay being subjected to waves and wake from large liners arriving and departing from DLH.

- DLH is the main centre for youth sail training on the east coast and will be destroyed by this proposal. The berthing of such large ships will effectively put a halt to any worthwhile sailing in the harbour, this will include Junior sailing, special needs and disabled sailing and one design sailing such as the Waterwags and lasers and the recently developed sailing craft, the MOTHS.
- Since 2005 and every 2nd year since the four waterfront clubs come together to organise and run what is now called the Volvo Dún Laoghaire Regatta (VDLR), this event is now the second largest sailing event outside the annual Cowes regatta in the UK. In 2015, this event attracted approx. 3000 competitors from 65 different clubs across Ireland, NI and the UK. If the proposal is permitted, the exclusion zones to be put in place around the Cruise ships and their entry and exit times that the presence of such a large vessel in the middle of the harbour would be highly detrimental to such an international event and would possibly sound the death knell of the VDLR and other smaller events.
- Dún Laoghaire Flying Fifteen Fleet have used the Dublin Port plan layout for their cruise ship facility and superimposed the Dún Laoghaire proposal onto this 2D model. It is argued that the result post-construction of the berth shows how the harbour will be in no way compatible with the laying of sailing courses for racing purposes, and merely enough for small groups of training boats.
- There is nothing in the proposal to demonstrate that there has been adequate consideration of the overall operation of the harbour area and the interaction between other harbour users in order to reconcile the Marine Leisure and the Marine Tourism sectors as requested by ABP during the PAC of Oct 2014.
- It is disappointing that despite a plethora of digital studies to do with waves, currents etc. no digital model was prepared to analyse the blanketing effect of the ship. If the aspiration of the proposal is realised there will be a 17 storey ship 340m long in the middle of the harbour from 8am to 6pm virtually every day for the whole summer. In the prevailing westerly wind there will be no wind whatsoever to the east of the ship across to the pier wall. It will not be possible to sail within that zone. The impact on dinghy sailing in particular will be quite severe.
- The time of the cruise ships entering and leaving the harbour will clearly affect Tuesday and Thursday evening racing by the Dublin Bay Glens.
- DLH is the largest amenity area in South Dublin and one of the most important highly frequented amenity areas in Ireland. DL Yacht and Boat Clubs have approximately 5,000 members.
- The applicant has misconstrued the use of the central area of the harbour by reference to the Mariner's Notice and the priority afforded to commercial

- vessels. This area of the harbour is and always has been critical and essential and enjoyed ongoing intensive use for sailing and leisure marine activity.
- The applicant has failed in the Application to carry out a full investigation of the boat traffic movements through DLH mouth. During the day there is a steady flow of cruising yachts, fishing vessels, training vessels passing through the Harbour mouth in summer. E.g.
 - On Tuesday and Thursday evenings in summer between 17.30hrs and 19.00 hrs, there is a steady flow of up to 100 vessels passing out through the Harbour mouth as part of the Dublin Bay Sailing Club activities. These boats return into the Harbour between the hours of 20.00hrs and 22.00hrs.
 - On Saturdays in summer there is a steady flow of up to 100 vessels passing out through the Harbour mouth between 09.00 and 14.00 hrs as part of the Dublin Bay Sailing Club activities and ISORA activities. These boats return into the Harbour between the hours of 16.00hrs and 18.00hrs.
 - The scale of winter movements is much reduced but, of course, this is the period when the Proposed Berth Facility would not be used.
- The former HSS terminal is an ideal location for a National Sailing Centre of Excellence (similar to Weymouth and Pwllheli in the UK) instead of a very large commercial cruise ship facility.
- The 2015 Mariner Notice is no reflection of the historic use of the Harbour for sailing. In the absence of any HSS ferry activity within the Harbour there has been an opportunity for sailing to blossom and go from strength to strength. The 2015 Notice seeks to restrict the "north Bight, westwards of a line from the West Pier Lighthouse to the Marina Breakwater" for sailing and racing within the harbour.

7.2.19 Transport & Traffic:

- Proposals too big for DL, will give rise to traffic congestion.
- When the HSS used to dock at DL, traffic chaos ensued on Crofton Road and Harbour Road.
- The local roads are not capable of carrying the 40-50 coaches required to carry
 the passengers of these ships and the log jams they will cause as they wind
 their way into Dublin or down to Wicklow.
- 75% of commuters leave home going to work, colleges and schools at these peak hours between 7am and 9am. So the cruise ship traffic will have the

severest impact during these busiest hours. On their return after excursions at 4.30 to 6pm these coaches will again have the severest impact on persons travelling home.

- National projects of national economic social importance are set out clearly in the Infrastructure and Capital Investment Programme 2012-2016. The proposed cruise berth infrastructure for DLH is not included.
- The proposed transport infrastructure dominates the scale of the entirety of the waterfront dominating the land use character and urban design and permeability objectives contained in the Masterplan.
- The traffic counts were undertaken in December 2013. The ferry traffic and the arrival and departure times of the ferry traffic by reference to the previous planning permission for the HSS infrastructure were planned to avoid peak traffic periods on the overall road network. Traffic peaks in DL during the summer season as a result of day trippers to the harbour, promenade etc. which coincides with the proposed cruise ship season. Therefore, the worst case scenarios have not been considered.
- The provision of taxi spaces would appear to seriously underestimate the
 potential demand from over 3,000 passengers. When cruise ships came to DL
 this year (2015), up to 20 taxis were in demand at any given time. According to
 the EIS there will be demand for 378 taxis per ship within 20 years. The
 application is defective in not making adequate provision for taxi's.
- Pedestrian pathways not sufficient in size to accommodate present traffic.

7.2.20 Visual Amenity

- The harbour company's own website records: "The harbour was built between 1817 and 1842 and is widely recognised as one of the finest man-made harbours in the world".
- The Royal Princess is described as being 217ft high, with 17 decks, the Queen Mary 2 is 236ft with 17 decks, and the Splendida has 18 decks. The tallest buildings along the coast of DL are 7/8 stories high, the tower of historic town hall is 120 ft. tall. It is questioned whether a building of this scale would be permitted?
- Visually, the presence of super-sized cruise liners in the Harbour, if planning permission is granted, will look monstrous and hideous given that when docked they will stretch almost from the shoreline to the harbour mouth and will dwarf all buildings and other structures in the area. The unique elegance of DL's Victorian harbour, a protected structure, and the scenic beauty of the adjacent coastline should not be undervalued.

- The consultants have chosen to assess the impacts that the proposal may have at 6 well visited viewing points in the public domain. These do not include the views from Crofton Road which are designated for protection in the CDP. It is stated that the proposal will not appear in the Crofton Road view but a montage that demonstrates that would be helpful. The Board might consider requesting this view.
- The proposed development of some 453m in length is being undertaken to cater for cruise ships of up to 340m in length and up to 60-70m in height. For a scale comparison, the new Dún Laoghaire Library is 120m in length and 35m in height.
- Visually, the presence of super-sized cruise liners in the Harbour will look monstrous and hideous given that when docked they will stretch almost from the shoreline to the harbour mouth and will dwarf all buildings and other structures in the area.
- The "Allure of the Seas" is equal to 12 Liberty Halls side by side (refer to image in Save our Seafront submission)
- The Landscape Visual Impact has assumed the removal of the HSS infrastructure whose removal would be subject to a separate planning process and therefore such assumption has resulted in an unsound methodology.
- Figure 5.8.8 is seriously deficient in analysing the near views and leaves out the entire section of the piers from beyond the marshalling yard to the lighthouses.
- There are no views from the sea.
- The long distant view from Killiney Hill is from lower down the Hill and not from the highest point where the full extent of the sculptural form of the harbour piers is evident.
- The location of extensive waste refuse areas on the quayside in prominent view is not mentioned. The function of the quay as a service road for the cruise ships is not mentioned and the visual impact of traffic within the inner sanctum of the harbour open areas are is not addressed.
- The appendix of the EIS has a view from Killiney Park (view 01C) which shows the ship clearly being taller than the tower of Dún Laoghaire Co.Co. offices at the bottom of Marine Road. As Killiney Park is over a mile away, the massive size of the ship is not so much of a problem and it appears to be shown accurately. However in view 03C, which is taken from the crossroads near the bottom of Marine Road, the ship appears to have shrunk and it is significantly lower than the Co. Co. tower.

7.2.21 Heritage:

- DL-Harbour is a 200 year old harbour.
- Originally built as a harbour of refuge and totally unsuitable for the subject proposal.
- The proposal will interfere with the access of existing boat users which go back to the very beginning of the building of the Harbour itself.
- No additional infrastructure should be built in DLH as it will bisect the harbour.
- The development is totally contrary to Architectural Conservation Area Protection requirements and the Harbour is a nominated ACA.
- The DLHC makes no reference to the 2013 study by Lauren Perez Hoogkamer of Columbia University, New York on the adverse heritage impact of Cruise liners in historic ports, such as Charleston South Carolina and Venice.
- A couple of centuries back some very clever engineers built this amazing harbour, which has remained intact ever since, apart from the damage in recent years to the seabed done by the HSS when turning. It is shameful that our generation has been intent on filling it in. The Council allowed a huge terminal to be built for high speed ferries, which is no longer viable. The Council allowed a marina to be built which is still only partly in use, obstructing views and access to the harbour. And now DLHC is hoping to fill it in some more with a terminal stretching right into that safe harbour, effectively cutting it in two.
- In 1828 Dublin Regatta held the first major yachting event in the Harbour and since that time sailing of all descriptions has taken place in the harbour and outside in the bay. All through these years both the recreational and commercial activities have co-existed in the harbour even when the Mail-boats at their peak were operating from both sides of the Carlisle pier. The proposal to build a new 400m pier out from the Marina pier towards the Harbour entrance will after 180 years change forever what has been an harmonious relationship and create a gulf between the DLHC and the recreational users of the Harbour.
- The new buildings are not in keeping with or in any way sensitive to the Victorian architectural heritage of Dún Laoghaire.
- Concerns expressed regarding potential damage to the East and West Piers, particularly at the roundheads at each end, either through underwater erosion of their foundations during construction or operation or by accidental damage from a manoeuvring liner.

- 13.5.2. states Where a formal relationship exists between a protected structure and its ancillary buildings or features, new construction which interrupts that relationship should rarely be permitted....New works should not adversely impact on views of the principal elevations of the protected structure (Architectural Heritage Protection Guidelines for Planning Authorities published DAHG).
- The cut stone piers of the harbour, magnificent battery and monuments have been listed for their outstanding architectural value, craftsmanship, technical, social and cultural value. It is unique historic building. The rare combination of so many aspects of significance increases the overall significance and therefore the listing category.
- The open water enclosed within the harbour forms the main area of curtilage to the harbour piers. It is the area immediately associated with the pier structures and there is a direct functional and historical relationship.
- The proposed relocation of a monument (the Boyd Memorial) which at present stands at the site of the heroic deed which it commemorates.

7.2.22 Leisure Amenity:

- DLH as a leisure amenity must not be jeopardised.
- DLH is a public amenity and should not be dominated by a commercial enterprise.
- DLH is used to maximum capacity with outdoor activities. A cruise liner will disrupt and possibly destroy one of Dublin's treasures enjoyed by thousands of Dubliners and visitors at present.
- DLH has held world renowned sailing events annually. The proposal is likely to obstruct this.
- Use of the Harbour will be restricted as an exclusion zone of 200m will be enforced around the berthed ship.
- In the case of Water Wags, it will put an end to their 128 + years of Wednesday night racing in the Harbour. The Water Wag (c. 14ft) is the biggest One Design class in Dublin Bay. It is also possibly the fastest growing. The racing fleet record to date is 26 boats racing on a Wednesday (52 sailors). The Water Wag is not suitable for racing outside the harbour.
- One million people walk on both piers of the harbour throughout the year.
 Insufficient consideration given to the visual impact of the cruise ships upon these users, the air and water quality deterioration and the noise levels from the cruise ships.

- The enjoyment for many is the experiential value of walking "a mile" out along the piers which yields a sense of openness and a perspective looking back to Dún Laoghaire that will fundamentally alter if the proposed development is permitted.
- The proposal will mean that the "Harbour" will no longer be available at all times for boats seeking necessary refuge. This requirement is real, indeed the positioning of the lifeboat within DLH environs as opposed to Dublin port accentuates the strategic nature of the shelter of the harbour.
- The option if developing the Harbour as a State Marine Park would be gone.

7.2.23 Coastline

 Concerns expressed regarding the impact of cruise ships on the foreshore, which includes the amenities of Bullock Harbour, Sandycove Harbour and the Forty Foot. The direction by which the cruise ships will approach the harbour could also affect Dalkey Island, Coliemore Harbour and Killiney Bay.

7.2.24 Marine Life

- The proposal will have a permanent effect on the habitat of the sea creatures and birds, as well as a lasting effect on sea-plants and that once in operation, the noise and water disturbance of the visiting cruise ships will have a negative impact on what marine life has survived the development phase.
- This plan needs to be preceded by robust environmental impact assessments that take into account rising sea levels and impact on marine ecology and bio diversity.
- There is no way of knowing what long-term damage may be caused to the rich wildlife along this area of coast, whose unique ecological habitat and biological diversity was formally acknowledged by UNESCO's recent designation of it as a Biosphere Reserve.
- The project has been proposed in isolation from the port development at Dublin Port and therefore the cumulative effects of the proposed development within the wider context of Dublin Bay and the likely combined effects on the designated Rockabill to Dalkey SAC in particular have not been considered contrary to the requirements of the EIA Directive and the Birds and Habitats Directives.
- Porpoises rely on echolocation for foraging, orientation and communication and would be significantly disturbed by the noise of constant machinery and piledriving 24 hours a day for months.

- Turbidity-lack of clarity in the water-will impact negatively on our native flora and fauna, reducing the amount of sunlight filtering the water column and resulting in their death.
- There is the distinct possibility of accidentally introduced species from ballast tanks that could be invasive or disrupt the balance and biodiversity of our native flora and fauna.
- Birds of Conservation Concern in Ireland would be adversely affected by the noise and works of building the cruise berth.
- The EIS found 83 species of invertebrate marine life on the sea floor. There is
 no assessment of whether any of these species are endangered. It is merely
 assumed by the EIS that all are locally plentiful and that removing 1 million
 tonnes of habitat is a low impact event.
- The impact on fish, mammals and birds is also considered by the EIS.
 However, there is no account taken of the impact of sewage disposal three
 nautical miles from shore as permitted by the MARPOL convention. The
 applicant should model this effect.

7.2.25 Marine Safety:

- The possibility exists of the Dún Laoghaire lifeboat being unable to provide emergency life- saving services during the movements of these ships.
- There are no comprehensive major incidents and disaster planning assessment included in the EIS. Incidents, such as the "Costa Concordia" running aground in shallow water, collisions with harbour walls, accidents with small pleasure craft, fuel spills and ship fires or emergencies have not been comprehensively addressed in the EIS.
- There is no disaster-planning infrastructure for fires, fuel spills or possible collision with the harbour walls (Costa Concordia) or collision with small craft in the Harbour or at the approaches. This proposal seems reliant for safety at sea on the RNLI Lifeboat, a voluntary institution.
- Major Accidents Directive should be applicable to proposal.
- No discussion of the impact of the proposal upon the permitted Urban Beach proposal.

7.2.26 Commercial:

• No commercial advantage for Dún Laoghaire.

- Any expenditure on a facility in DL will, by its very nature, be over exposed to a single entity market. Whereas this will not be the case for Dublin Port where the berthing space could be used for other traffic.
- The DKM Report has been submitted as part of the Application but in the footnote at the bottom of page 2 of the introduction it accepts that the "Do Nothing Scenario may be overstated as larger vessels have been accommodated in Dublin Port thereby offering an alternative to the tendering of passengers into Dún Laoghaire. This is likely to lead to a reduced growth in the number of vessels opting to use the tendering facility at DLHC". So the report already accepts that the do nothing scenario is overstated so by implication so are the Central and the Copenhagen scenarios. This undermines the whole credibility of this submission by DLHC as the assumptions on which they based their plan no longer apply. In effect they have themselves determined that the niche market at which they were aiming is no longer there and what they should have done was to abandon the idea completely instead of wasting more money and peoples valuable time on a project that had no commercial future.
- Provision for 42 parking spaces indicates how the majority of these cruise visitors will be transported elsewhere.
- Alternative forms of income stream to support the harbour must be pursued.
 Such projects must be to the benefit of the town/community and its current users.
- The proposal will impede and/or bring an end to the various regattas hosted by one or more of the Yacht Clubs. The DL Regatta Week sponsored by Volvo is probably the best example where yachts come from all over Ireland, the UK and other countries.
- Proposal unlikely to alleviate the problem of so many closed shops in Dún Laoghaire's George's Street and elsewhere.
- The proposal to allow 300m Cruise ships at 65m high to berth in DL will allow the commercial interest to dominate to the point where many of the leisure interests will simply die away.
- Argues that the Business Interest District of Dún Laoghaire's involvement in the stakeholder group of this application illustrates that the real impetus for this application and not those using the harbour. The expectation that all commercial traffic will go to Dublin Port and that all Cruise traffic will be directed Dún Laoghaire as a result of the National Ports Policy is delusional thinking.
- DLHC justifies this proposal as if it were the lead port (and not Dublin Port as reflected in the National Ports Policy) and in a pre-eminent position that it

- clearly is not. The comparisons with Copenhagen are quite simply further fantasy.
- The "Copenhagen Strategy" is an invention of the proposer to create a credible argument and grandly assumes that the "proposed DLH cruise berth should provide the additional facilities needed in order to achieve the goal of following Copenhagen's success as it would be unimpeded by freight traffic". This again appears to dismiss Dublin's Ports pre-eminent position as the lead port in Dublin Bay and even implies Dublin cannot manage multiple ship movements. Comparison with Copenhagen is entirely misleading when applied to a project with a single berth in an outlying port. Copenhagen has berthing for up to 8 vessels at any one time. One berth alone is 1.1km long and capable of accommodating three 300m+ ships together. There are 3 dedicated changeover terminals all within a 3-4km from the historic city. Copenhagen has 299 cruise visits schedule for 2015. It is utterly ridiculous for Dún Laoghaire to be quoting the figures from a major turn-around port in calculating its own economic potential where it is defining its own role without consultation and agreement with other players. However an all-island approach has merit and Dún Laoghaire might neatly play a modest role as a third tier port without imposing something that is out of scale with the overall context.
- There is no Irish port specific market research demonstrated in the proposal and not even one single expression of support from a Cruise operator. A lack of confidence by cruise operators in Dún Laoghaire can be demonstrated in the fact that the MS Splendida and the MS Royal Princess have cancelled their intended 2015 visits to DLH and changed at short notice to Dublin Port. The complete collapse of the 2015 programme of visits to DLH indicates the risk inherent in and the folly of this project.
- The applicant in this instance appears to suggest that maritime tourism in relation to DLH is exclusively cruise related and conveniently ignores the impact other Maritime tourism ventures that appear to be thought of as mere Marine leisure.
- The Freedom Class Cruise Ships, which have been identified as the most suitable and able to get into the harbour, are owned by Royal Caribbean and it must be presumed that there has been some approach to that company. Yet it was not possible to model this class of ship in the simulation. To explain this, the report said "at this time, without specific involvement of Royal Caribbean, the model vessel is not available". This raises the prospect that, if this scheme was to be approved, it might be constructed at a large cost (ultimately the taxpayer) and not have any users.
- All the new cruise ships ports contain their own ships and concessions within the confines of the port area which provide an alternative for crew and

passengers to shop conveniently and easily without visiting the local town. It is concerning that this information is not shared in the planning proposal and with the local Dún Laoghaire town retail community.

- Royal Caribbean Cruises Ltd has recently availed of the recent development of a large cruise port in Falmouth, Jamaica. This \$200m port was pitched as one in which the local economy would benefit. However, the World Bank said in a 2011 report on Jamaica that as much as 80% of tourism earnings do not stay in the Caribbean region, one of the highest "leakage" rates in the world. "In all-inclusive Caribbean hotels it is common for only 20% of revenue to be returned to the local economy. In the case of cruise ships it will be much less, probably no more than 5%" said Victor Bulmer-Thomas, a professor emeritus at London University and is an expert on Cruise Ship industry.
- The Cruise ship business is highly seasonable. A Cruise Berth in DL would be unused by cruise ships for 6 months (autumn/winter) each year and as a specialised berth is unlikely to have any other commercial uses.
- The Economic Impact Report implies that these larger ships have chosen to anchor in the Bay off DL due to the current constraints on entering Dublin Port i.e. they would have to turn outside the port and reverse up the channel. The report does not mention that by anchoring in the Bay rather than entering the Port these vessels can avoid paying very substantial port dues which would be due to Dublin Port. They also avoid paying pilotage fees. The fees for tenders entering DL are much smaller. Some larger ships carry their own tenders for this purpose. This cost saving operates as a significant incentive for cruise ships to anchor offshore rather than enter the port. Even if a Cruise Berth is provided in DL some larger cruise ships may continue to opt to anchor offshore in order to avoid paying these dues and fees.
- Venice and Dubrovnik are restricting the number of Port of Call visits by cruise ships because of the lower passenger spend.
- The EIS refers (page 29) to a Welcome Programme aimed at encouraging cruise passengers to visit DL town. This involves providing Ambassadors, free shuttle buses, midday concerts, Quay Side welcome, free wi-fi, flags and bunting. However as 93% of the expenditure is pre-booked involving coach tours from the terminal, this Welcome Programme will be ineffective and a waste of effort.
- There is simply no need to commercialise the Harbour and it should be kept as a public amenity under the control of DLRCC.
- Based on the DKM Report submitted by the applicant, there is no demonstrable need or economic case for the proposed development.

- The potential for all berths to be operational at the one time highlights the cumulative impacts of the industrialisation of the harbour.
- Despite the presence of the large capacity HSS in DL for the last 10 years, the Town Centre has not benefitted commercially to any great degree from visitor/passenger traffic.
- This application will require ABP to finally adjudicate on the clear policy conflicts between the role of DLH as a "marine leisure harbour" and the DLHC Applicant's position that it is "first and foremost it is a working harbour".
- The proposal envisages an additional 247 cruise ships (page 19 of DKM economic impact document). This implies that super large cruise ships would eventually arrive and depart from DL most days of the year.
- The economic impact to DL and to the national economy, from a sailing footfall of 300,000-350,000 each year is estimated at €10 million per annum.
- The baseline numbers quoted for the DKM model for Dublin Bay commencing in 2017 just do not add up. A 24% increase in visitor numbers (passengers and crew) and a 69% increase in spend per visitor within 2 years from 2015 to 2017 is just not credible. The baseline numbers are highly questionable and the model lacks credibility.
- Fish Farming and sustainable aquaculture should be incorporated into the proposed project.

7.2.27 Dublin Port

- Facilities already exist at Dublin Port for visiting cruisers.
- Providing for unnecessary competition. Two ports competing against each other will reduce the overall financial benefit to Dublin and two state bodies should not be permitted to compete for the same Dublin business.
- This facility is less than 15km from DL. If additional cruise berth facilities are required for the country, ports on the west coast such as Limerick or Galway should be considered allowing other parts of the country to benefit economically.
- The proposal is not part of a co-ordinated plan for the reception of cruise ships in the Dublin area.
- Any decision taken by the Board regarding the future of the harbour has to be taken in the context of National Policy in relation to ports. The Harbour Bill 2015 was only published in July 2015. Its final format is still unknown. The

submission of an application for such a major development at this time is therefore premature given the lack of clarity on governance and finances which are part of the due diligence to be undertaken prior to any transfer under the proposed legislation.

- Smaller more luxurious vessels could berth at the Carlisle Pier, therefore not in direct competition with Dublin Port. The scale of this enterprise would be more in keeping with existing and future developments in DLH.
- The premise on which an application has been lodged to the Board is that "the absence of a harbour in Dublin Bay with the capacity to handle the 340m next generation cruise liners has been identified as a serious inhibitor to growing Ireland's market share in this sector". The Board recently granted permission to the Dublin Port Company to redevelop the Alexandra Basin that will include a twin berth Cruise Ship facility. This will be capable of accommodating the next generation of Cruise Ships. This project has support for co-funding from the European Investment Bank.
- The Alexandra Basin Redevelopment Project is located within a landscape character area identified as "Harbour Based Industrial Landscape". This landscape character area has been identified as having a low sensitivity to change. The magnitude of landscape resource change will be low and the significance of landscape impact will be slight negative. This contrasts significantly with the landscape character of DLH, a Candidate Architectural Conservation Area containing over 298 protected structures with the harbour water forming the curtilage to the protected structures of the harbour pier.
- Dublin Port's cruise schedule is targeting a record year in 2015 with nearly 100 cruise ships bringing 200,000 visitors to Dublin expected for the full year. This contrasts with the DL schedule which has declined to only 9 ships this season and Stena Line's seasonal passenger ferry services ended this year.
- Dublin Port only recently accommodated four cruise ships on Wednesday 22nd July 2015 (i.e. two large and two small).¹¹ This demonstrates the capacity currently available at Dublin Port without taking account of the planned additional cruise berth facilities at Alexandra Basin which were recently granted planning permission.

¹¹ http://www.irishtimes.com/news/environment/four-cruise-liners-deliver-13-000-tourists-to-dublin-port-1.2294699

8.0 ASSESSMENT

8.1 Environmental Impact Assessment

- 8.1.1 The application is accompanied by an EIS, as required for any application made under Section 37A. The EIS is laid out as follows:
 - Volume 1-Written Statement & Non-Technical Summary
 - Volume 2-Appendixes
 - Volume 3-Appendixes

In carrying out the EIA I have due regard to the legislative requirements and further guidance relating to EIA in relation to the following:

- Article 94 of the Planning and Development Regulations, 2001
- Guidelines for the information to be contained in Environmental Impact Statements (2002)(EPA)
- "Guidelines for Planning Authorities and An Bord Pleanála on the carrying out of EIA" (2013)

I have reviewed the application documentation, including the EIS, the written submission from Dún Laoghaire-Rathdown County Council, the prescribed bodies and full consideration was given to all submissions received from observers when considering environmental impact assessment. In addition, the 17-day Oral Hearing constitutes an integral part of the EIA process and contributed to the identification and assessment of the key likely significant effects arising. I am satisfied that there is sufficient information on file to carry out a full environmental impact assessment.

8.1.2 The EIS adopts a grouped format and assesses likely significant effects on the environment under the following headings: human beings, flora and fauna, soils and geology, coastal processes, water, air, climate, landscape and visual, material assets (Waste & Transportation), archaeological heritage and architectural heritage. Under each heading, the EIS describes the receiving environment, characteristics of the proposal, potential impact of the proposal, ameliorative, remedial or reductive measures and the predicted impact of the proposal. Chapter 6 of the EIS identifies the interactions of the above topics, in-combination effects and chapter 7 considers any technical difficulties encountered in compiling the information. In accordance with Article 94(c), there is a summary of the EIS in non-technical language (chapter 2.0 of the written statement, volume 1). With regard to the requirements of Article 111 of the regulations, I consider that the EIS and further related submissions are

generally in accordance with the requirements of Article 94 of the Planning and Development Regulations 2001, as amended.

8.2 Alternatives

8.2.1 Alternative locations for the cruise berth were considered as part of the EIS and are contained within Chapter 3 therein. Six options were considered which are identified below:

Option 1: East Pier: North of Berth 1

Option 2: Carlisle Pier East: Berth 2/3 extension

Option 3: Carlisle Pier West: Berth 2/3 extension

Option 4: St. Michael's Pier East

Option 5: St. Michael's Pier HSS

Option 6: Proposed Cruise Berth, Harbour Mouth Orientation

Each option was assessed based on the following

- Accommodating the required ship and berth dimension
- Protecting the existing structures by maintaining a clearance distance on plan
- Required dredge channel outline on plan necessary
- Harbour mouth orientation of berth on plan.
- 8.2.2 The EIS considered that the constraint of dredging so close to the harbour, which on berths 1-5 would necessitate strengthening works, therefore the proposed berth (no. 6) at St. Michael's Pier is favoured. In addition, it is stated that berth no.6 would demand a less onerous maintenance dredging regime. Other constraints identified are the operational constraints of the cruise ship, where oblique entry to the harbour mouth would limit the lateral clearance to the existing roundheads and would not be a sensible aviation strategy. It is subsequently argued that ship transit paths to Berths 1-4 would be more difficult and consequently slower. Other issues considered include the visual impact, continuity of operation of the berth concerned for other uses and construction impact. The cruise berth as submitted presented the least impact with the shortest construction time considered.

8.3 Socio-Economic Impacts-Human Beings

8.3.1 Chapter 5 of the EIS relates to human beings and the socio-economic impacts of the development and was supplemented by information presented on this topic by Annette Hughes, of DKM Economic Consultants. An analysis of the

economic impact of the proposal is not contained within Volume 1 of the EIS, rather it is a supporting paper prepared by DKM. It was argued at the oral hearing that the inclusion of the paper by DKM as a supporting document rather than within the EIS analysis meant its exclusion from the interaction with other environmental impacts of the proposal. Whilst I consider this to be a valid argument, I will consider the interaction of environmental impacts at a later point in this report.

- 8.3.2 From an economic perspective, the likely significant impacts are stated to be 70-250 no. permanent jobs arising from the proposal over a period of 20 years. There was some debate at the oral hearing as to the validity of those numbers as it was argued that the basis on which the numbers were projected was incorrect. This was strongly disputed by DKM. In my opinion it would appear appropriate to argue that upwards of 70 no. jobs would be created. The nature of the proposal is such that the bulk of employment would be created during the construction phase, and significantly less so will be associated with the operational phase.
- 8.3.3 The impact on the harbour users was the focus of much of the attention in the oral hearing. The EIS states that the proposed cruise berth and associated activity will have a neutral impact on all of the users of the Harbour (i.e. ferry service, Commission on Irish Lights, Naval Service, RNLI, Dublin Bay Cruises, Sea Scouts, and Rowing Clubs) as all of these boats would be able to enter and exit the harbour as they do presently. It is acknowledged that sailing clubs will find the east-west training route being severed; however, the EIS states that another sailing course is achievable within the harbour. The EIS also outlines that there is a potential negative impact associated with the proposal for youth sailing/training as a cruise ship would give rise to wind shadow within the harbour. This issue is reiterated for the Water Wags and the following racing events: Friday Night racing, the Frostbite series and the September Series.
- 8.3.4 The EIS considers the avoidance, remedial or reductive measures to be implemented and in relation to the Yacht Clubs, it is acknowledged that the dredging operations will have implications, however, it is argued that the boats will be able to launch and pass by the dredger. In relation to youth sailing/training, it is stated that the movement of recreational craft will have to be carefully managed, whilst the ability of clubs to train east/west across the harbour will be curtailed. The remedial measures cited include finding an alternative training course. Mitigation measures are also considered during the operation phase. These are:
 - The Harbour Master will ensure that scheduling of arrivals and departures of the cruise ship does not conflict with a ferry service,
 - The use of Notice to Mariners.

- Provision made within the access causeway structure to provide a 1.5m high underpass sufficient to accommodate motor launches between the yacht clubs and marina, and
- There will always be an area of the harbour affected by the "wind shadow" (sheltered) side of the ship, with the exception of up close to the ship.
- 8.3.5 In acknowledgement of the likely significant impact of the proposal upon the Water Wags, it is set out in the EIS that the operation of the cruise berth will not prevent the Water Wags continuing to race their fleet of 27 boats on Wednesday evenings and Saturday afternoons. Rather the area of water left after the proposal still amounts to 37.7ha. It is acknowledged that the location of the cruise berth will result in the need for alternative racing courses to be considered if racing is to be continued in the harbour. However, it is argued that there is no significant potential impact arising from the operation of the cruise berth on the ability of the Water Wags going to race in the bay and therefore transiting through the harbour, as a consequence there are no avoidance, remedial or reductive measures required during the operational phase. Likewise with Friday Night Racing. It declares that the operation phase will have no impact on Sail-ability, a disabled sailing group. With regard to regattas and competitions, it is stated that this will remain possible where they are mostly held in the bay, whereas regattas for the more junior sailors will also be capable of being accommodated within the harbour. In terms of the impact on the users of the harbour who include the ferry service, Commissioners of Irish Lights, Naval Service, RNLI, Sail Training Vessels, freight vessels, marina activity centre, Dublin Bay Cruises, Sea Scouts, Rowing Club, Diving Club, Public Boatyard and Slipway, Fishermen, Dún Laoghaire Marina and Yacht Clubs, it is stated the impact is short term neutral impact. Likewise during the operational phase, all are declared to experience a neutral impact, with the exception of the Yacht Clubs where a permanent neutral/slight impact is predicted for reasons of wind shadow and impact on race courses.
- 8.3.6 During the course of the oral hearing, the issue of the likely significant impact of the development upon sailing within Dún Laoghaire harbour and Dublin Bay gave rise to considerable debate. At the outset, the DLH Harbour Master clarified that all attempts are currently made and will continue to be exercised to facilitate sailing by clubs within the harbour subject to the Notice to Mariners (NtM) ^{12.} As per the NtM, sailors are advised of expected arrivals and departures of ships, to which they must give way. Traditionally, it was only the Water Wags who sailed consistently within the harbour. However, with the recent decline in the HSS ferry services and the ultimate closure of the

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¹² Notice to Mariners (NTM) advises mariners of important matters affecting navigational safety, including new hydrographic information, changes in channels and aids to navigation, and other important data. Source: Wikipedia.

Hollyhead to DLH ferry crossing route, this has expanded to include other clubs. It was therefore argued that it was a circumstance of the HSS departure from DLH rather than any intentional motive on part of the Dún Laoghaire Harbour Company to allow for increased sailing within the harbour. Nonetheless, DLH sought to highlight that the cruise ship schedule would be known up to 2 years in advance, therefore, in the event that regattas are planned, that this could be managed by either delaying or bringing forward a cruise ship departure. I would advise the Board that the DLH Harbour Master sought to demonstrate his flexibility in relation to race events and regattas which could continue to be held in the harbour, to the extent that it was being asked how the cruise ship facility could be commercially successful with promises of delayed departure times and/or particular dates not being made commercially available due to a regatta being held.

8.3.7 It was accepted by the Harbour Master that the Water Wags, junior sailing and SailAbility have the most potential to be impacted upon by the proposal. The Water Wags is a sailing club that was founded in 1887 in Dún Laoghaire by a group of enthusiasts who were looking to find a way for persons of modest means to be able to take part in sailing races. This gave rise to the sport of one-design racing which spread from Dún Laoghaire throughout the world and is now the predominant form of sailboat racing. The Water Wags have the distinction of being the oldest one-design class in the World. 13 The Club race each Wednesday evening and Saturday evenings during the sailing season (end of April to end of Sept). The Water Wags submitted an illustration of their race courses that are set within the Harbour (and which were not disputed by the Applicant). 14 It is apparent that this race course takes up a large part of the harbour and would undoubtedly be impacted upon by the cruise berth. In relation to wind shadow it is stated that sailors could sail within another part of the harbour that is not affected by the proposal. At all points in the EIS and the Oral Hearing, it was argued on behalf of the Applicant, that Dublin Bay offers better sailing opportunities than that within the harbour. In relation to impact on the Water Wags, the EIS concludes that overall, a slight moderate permanent adverse impact is predicted. The Water Wags sought to highlight that in the last 25 years, they have sailed outside the harbour only 20 times. They stated at the Hearing that their boats can take a long time to reach the Bay and particularly in the evenings, when light is limited, they find it a more efficient use of their time to stay within the harbour. Also the design of the boat is such that if water gets in, the person sailing the boat will get into another boat whilst the other person gets the water out. Frequently, the boat would have to be towed in so as to get the water out. I am of the opinion that the proposal before the

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¹³ Further information is contained in submissions to the Board in "The Water Wags 1997-2012" by Alfred and Vincent Delany and "Dublin Bay-The Cradle of Yacht Racing" by Hal Sisk.

¹⁴ These are contained in Schedule 1 and 2 of their submission, received 25th August 2015.

Board would have a permanent adverse impact on this historic club which has been associated with DLH since its inception. Whilst I believe the DLH Harbour Master sought to accommodate the Water Wags with reference to their regattas, it is evident that the impact upon their race course would be a weekly occurrence should a cruise ship be berthed. Furthermore, the extent of the berth extending 435m out into the bay has effectively bisected the harbour into two parts and would therefore have a permanent negative impact upon the race courses laid twice weekly from April-October.

- 8.3.8 SailAbility was referred to and represented at the Oral Hearing. This is a sailing organisation for disabled persons of all ages. For safety reasons, this group of sailors stay within the harbour. The Applicant sought to point out that they can still stay within the harbour, particularly, when the proposal will incorporate the removal of moorings from the east bight which will free up this area for sailing. Likewise, Junior Sailing was referred to in the same terms, where for safety reasons they stay within the harbour until such time as they have gained the appropriate knowledge to venture further out to the Bay. I would note that the Harbour Master for DLH accepted that the best area for sailing within the harbour would be the centre of the harbour (wherein the berth is to be located). Nonetheless, the cruise berth proposal would give rise to clubs who wish to race within the harbour such as the Water Wags and Junior Sailing and the Frostbite series (which will partially overlap with the cruise season) being pushed into the fringes of the harbour where the water is more turbulent and the winds less predictable. Mr. Ronan O'Neill, Rear Commodore and Race of the Dún Laoghaire Motor Yacht Club spoke at the hearing to state that the factors which influence the need to sail within the harbour are wind strength, sea conditions, tide and wave height, time, safety and sailor's abilities. He argued on behalf of SailAbility that the ability to lay a "usable racing course" and the ability to host the Special Olympics ever again would be lost. It was further argued that the Applicant's and their experts offered an opinion that a race course could be laid for "club racing" within the harbour with no evidence. I would add that Capt. Cowman on behalf of the Applicants sought to introduce this evidence during Ronan O'Neill's questioning of the Applicant (which was near the end of the cross questioning session). This was refused by this Inspector as it was argued that this should have been presented during the Applicant's submission as this issue had already been identified repeatedly in written submissions to the Board, which the Applicant would have had sight of.
- 8.3.9 Whilst the EIS acknowledged the presence of a cruise ship would give rise to the issue of wind shadow within the harbour, no evidence of consideration by the Applicants in the EIS and/or supporting documentation was provided. This absence was acknowledged by the Applicant at the Oral Hearing. The argument was made by the Applicant that given the scale of the harbour, there would be sufficient sailing area without wind shadow remaining. In the absence

of consideration by the applicant, I consider the likely significant impact of the cruise ship at berth upon sailing within the harbour cannot be verified. I consider this to be unsatisfactory given the intensive use of the harbour by other sailing clubs, the location of the berth central to the harbour water area and intended frequencies of the cruise schedule.

8.3.10 Therefore, on the basis of the submissions available, I consider that it has not been fully demonstrated that the proposal would not give rise to likely significant impacts upon the Water Wags and the training and race courses to the extent that it would seriously undermine the possibility of establishing a race course in tandem with the presence of a cruise ship at berth. This is a permanent negative impact in the context of the sailing schedule set for the cruise berth of every second day over the cruise period. Furthermore the absence of a wind shadow analysis of a cruise ship at the berth presents difficulties as it is not possible to conclude upon the full impact upon sailors within the harbour taking account of wind shadow already present by reason of the east and west piers. In addition, the consideration of the economic impact of the proposal in a document separate to the written statement of the Environmental Impact Statement, in my opinion, makes it difficult to establish the implications and in addition, the economic impact of the proposal on Dublin Port. This is an important consideration in light of the National Port Policy.

8.4 Flora & Fauna

- 8.4.1 The EIS incorporates a very detailed analysis of the existing flora and fauna associated with the site and its surroundings. A separate NIS was also submitted which specifically evaluates the potential impact of the proposal on the integrity of Natura 2000 Sites in the vicinity. It is also supplemented by submissions made on behalf of the Applicant by Scott Cawley. The adequacy of the NIS is discussed elsewhere in this Assessment.
- 8.4.2 In the vicinity of the development are a number of sites designated as Special Areas of Conservation (SACs) and which have marine qualifying interests. These are:
 - South Dublin Bay (site code:000201)
 - Mudflats and sandflats not covered by seawater at low tide (1140)
 - North Dublin Bay (site code: 000206)
 - Mudflats and sandflats not covered by seawater at low tide (1140)
 - Annual vegetation of drift lines (1210)
 - Salicornia and other annuals colonizing mud and sand (1310)
 - Spartina swards (spartinion maritimae) (1320)

- o Atlantic salt meadows (Glauco-Puccinellietalia maritimae) (1330)
- o Petalwort (Petalophyllum ralfsii) (1395)
- Mediterranean salt meadows (Juncetalia maritime) (1410)
- o Embryonic shifting dunes (2110)
- Shifting dunes along the shoreline with Ammophila arenaria (white dunes) (2120)
- Fixed coastal dunes with herbaceous vegetation (grey dunes)(2130)
- o Humid dune slacks (2190)
- Rockabill to Dalkey Island (site code: 003000)
 - o Reeds (1170)
 - o Harbour Porpoise (Phocoena phocoena) (1351)
- 8.4.3 A number of proposed Natural Heritage Areas (pNHAs) also occur in the vicinity of the proposed development, most of which are also covered by designation as an SAC and/or Special Protection Area. These include South Dublin Bay pNHA (000210), North Dublin Bay pNHA (000206) and Dalkey Coastal Zone and Killiney Hill pNHA (001206).
- 8.4.4 The inclusion of Dublin Bay as a UNESCO Biosphere in 2015 is not referred to in the EIS.¹⁵ This was brought to the Applicant's attention during the course of the Oral Hearing, however, no reasoning was forthcoming as to its exclusion from the EIS.
- 8.4.5 In terms of impact, it is set out that the dredge spoil from the proposed works will be deposited in the dredge spoil dump site just west of the Burford Bank near the outer extent of Dublin Bay. Burford Bank is located within the Rockabill to Dalkey Island SAC. This site has been operational since 1996, receiving dredge spoil from the Dublin Bay area. It is argued that its location out in the north-south tidal current allows the spoil material to be redistributed outside the bay. It is this current which has result in a presence of a number of north-south orientated sand banks along the east coast. It is stated that the benthic community has received well from previous dredge spoil dumping events. I note also from submissions that the scale of the dumped dredged spoil is a fraction of that permitted to Dublin Port. The cumulative impact of the

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¹⁵ This designation reflects its significant environmental, economic, cultural and tourism importance, and extends to over 300 km² and comprises 50 km² of areas of high natural value. Key areas include the Tolka and Baldoyle Estuaries, Booterstown Marsh, Howth Head, North Bull Island, Dalkey Island and Ireland's Eye.

proposal in conjunction with the dumping of dredge spoil by Dublin Port was described as being difficult to assess by the Applicant on account of the lack of certainty of timeframes. At the time of the proposal, Dublin Port was not granted permission (however, it was granted permission a number of days after submission). No supplementary information in respect of this issue was provided at the Oral Hearing. Nonetheless, it is my opinion, based on the information provided that no likely significant impacts will arise from the proposal to dump dredged spoil at the site based on data provided on the composition of the spoil, its quantity and the proven ability of the Burford Bank to absorb material. I note that a separate application will be required to the EPA for a waste licence for the dumping of waste at Burford Bank.

8.4.6 Marine mammals are considered in the EIS and it is stated that the Harbour porpoise can be found in the Dún Laoghaire area. This is described as Ireland's smallest cetacean and most commonly recorded around the Irish coastline. These are listed under Annex II of the EU Habitats Directive as an animal species of community interest whose conservation requires the designation of SACs. There are two in the south west, whilst a further SAC has been designated on the east coast extending from Rockabill to Dalkey Island. Calving of the harbour porpoise takes place offshore in the period March-August, with a sharp peak in June. The mouth of Dún Laoghaire Harbour is approximately 2.5km from the boundary of the SAC. Harbour porpoises are also protected under Section 23 of the Wildlife Acts 1976 to 2012 and are listed under Annex IV of the Habitats Directive as a species requiring strict protection. The status of EU Protected Habitats and Species in Ireland report (NPWS, 2008) assessed harbour porpoises as being of Favourable Conservation Status. I note that this section of the EIS is supplemented by a "Marine Mammal Risk Assessment in relation to a Proposed Cruise Liner Berth in DLH. Co. Dublin" prepared by John T. Brophy of BEC Consultants Ltd. in May 2015, which is contained within Appendix 2 of the EIS. This MMRA arises out of the "Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters" issued by the DEHG in 2014. The sound source of the development is considered. It is stated that the operation of the dredger will generate noise that may impact upon marine mammals. The noise generated by the dredging tends to be continuous (non-pulse) and broadband in nature, mainly in a frequency range of <1 kHz. It is stated that the exact sound levels and signature depends on the dredger type, the individual dredger and the operation it is carrying out at the time. A review of the literature suggests that the sound levels of 170-190 dB re 1µPa @1m can be expected to be generated by a trailer suction hopper dredger (TSHD) while operational, with a peak frequency of 100-350 Hz. While in transit and during dredge dumping operations, the sound levels will be comparable to the operation of a normal ship of similar size. In relation to piling, it is stated that the likely impact will depend on the type of pile driving method used, with vibration piling having

considerably less of an impact on the acoustic environment than impact piling. It would appear to range from 175-204 dB re 1µPa for impact piling whilst vibration piling generates lower sound levels. The German Federal Maritime and Hydrographic Agency has set limits for pile-driving noise of 190dB (peak) and 160 dB (SEL) at a distance of 750m from the pile for the protection of harbour porpoises. The MMRA contains an assessment of risk and it is stated that there is little risk of injury to marine mammals from the dredging and drilling activities, while the potential does exist at close range where impact piling is used. It is considered that a localised, temporary disturbance is likely to be caused to harbour porpoise by dredging, while piling may have a more widespread effect. This effect will be reduced due to the location of the piling within the harbour and the small diameter of the majority of the piles. All effects are stated to be temporary in nature. The MMRA estimates that approximately 138 harbour porpoises may be affected by the piling works with the dredging works having a more limited effect. It is added that the proposed works will not disturb harbour porpoises at a sensitive location or sensitive time in their lifecycle due to the fact that breeding occurs offshore and the focus of nursery activity is north Dublin. In terms of displacement, it is stated in the MMRA that there is no indication that the open water habitat outside the harbour is a key functional area for grey seals or harbour porpoises. It is stated that some level of temporary disturbance is likely to occur in the Rockabill to Dalkey Island SAC during piling operations but the highest harbour porpoise sightings rates were around Howth Head and Dalkey Island. As a mitigation measure, the MMRA proposes to carry out dredging for 14-17 weeks over a 24 hour period. It is further stated that where impact piling is used, mitigation measures such as bubble curtains or cofferdams will be used to reduce the sound levels transmitted to the wider aquatic environment.

8.4.7 Also considered in the EIS is the Grey seal. Grey seals are listed under Annex II of the EU Habitats Directive as an animal species of community interest whose conservation requires the designation of Special Areas of Conservation and also under Annex V. 10 SACs in Ireland have grey seals listed as a Qualifying Interest, with only Lambay Island SAC located on the east coast. They are also protected under Section 23 of the Wildlife Acts 1976 to 2012. The Status of EU Protected Habitats and Species in Ireland report (NPWS, 2008) assessed grey seals as being of Favourable Conservation Status. However, 36 grey seals were recorded on Dalkey Island during the 2007 moult survey while two pups were recorded during the 2005 breeding survey. Grey seals spend more time hauled-out during the breeding season (Sept-Dec) and the moulting season (Nov-Apr) than other times of the year. The peak moult period in Ireland appears to be February to March, beginning as early as November for adult females and juveniles and continuing up to April for adult males. The aforementioned MMRA also considered the Grey seal. The MMRA estimates that approximately 20 grey seals may be affected by the piling works

with the dredging works having a more limited effect. However, it is argued that due to the time of their breeding, grey seals will not be disturbed at a sensitive time or location due to the proposed works. As previously stated, the MMRA found no indication that the open water habitat outside the harbour is a key functional area for grey seals. As a mitigation measure, dredging will be carried out for 14-17 weeks to minimise the overall duration of the disturbance and in the event that impact piling is used, bubble curtains or cofferdams will be used to reduce the sound levels transmitted.

8.4.8 The Bottlenose Dolphin was also considered in the EIS as it has been recorded regularly in the vicinity of Killiney Bay. However, it is stated that they have not been recorded since 2012. It is suggested in the EIS that the said dolphins have been recorded since 2012 in Ventry Harbour, Co. Kerry. aforementioned MMRA also considers the Bottlenose dolphin. These have been recorded all around the Irish Coast, predominantly on the west coast, though the only confirmed resident population is found in the Shannon Estuary. Three bottlenose dolphins were regularly occurring in the vicinity of Killiney Bay, Co. Dublin since 2012, and had gained "semi-resident" status, however they have not been recorded in the area since July 2012. Photo-identification has confirmed that two of these individual were recorded in Ventry Harbour, Co. Kerry, in mid-July 2012. As bottlenose dolphins are no longer regularly recorded in the study area, are considerably less sensitive to noise and human disturbance (often seeking out interaction with boats and humans) than harbour porpoises and are not a qualifying interest for any SAC on the east coast, they are not considered further in the EIS or the MMRA. I concur with this reasoning.

8.4.9 The impacts identified in the EIS are as follows:

The construction works will involve piling and the noise generated by these works can be transmitted through the air and the water column and may potentially impact on marine species. The difference between impact and vibration piling is discussed and it is stated that impact piling generates higher sound levels in the region of 201-204 dB re 1 µPa (peak) and 175-178 dB re 1µPa(SEL) at 500m in 20m deep water. It is stated that the drilling associated with piling is a non-pulse sound, with lower levels than the impact piling and so has a low likelihood of having an impact on marine mammals. It is elaborated that some impact piling is required on completion of vibration piling to ensure stability. The impact of the dredging operation is also considered and it is argued that due to the limited area of operation of the dredger, the temporary nature of the works and the sound levels expected to be generated, the dredging activities are expected to cause a temporary, slight negative impact on marine species, including marine mammals, through displacement from the immediate vicinity of the operational vessel. Harbour porpoises will move away from the dredger. It is postulated that the noise generated by this activity will be slightly above normal shipping noise and will be short-lived. Therefore, the impact on marine species from the noise generated will be temporary, imperceptible, negative.

- The dredging of the channel and turning circle will result in the disturbance to the benthic habitat, while the construction of the quay will result in the permanent loss of an area of benthic habit. The operation of the dredger will create suspended solids, which may reduce visibility in the immediate vicinity and cause smothering of adjacent benthic habitats. Given the small footprint of the quay piles in comparison to the availability of the habitat type within the harbour and the greater Dublin Bay area, this loss in habitat is considered a permanent, slight negative impact. Studies carried out in areas where aggregate extraction has occurred have shown recovery of benthic macroinvertebrate species richness within 16 months, with biomass levels taking somewhat longer to recover.
- The dumping of spoil at Burford Bank will result in an increase in the levels
 of suspended solids around Burford Bank. This will reduce visibility in this
 area, which may affect predators operating in the areas including fish and
 marine mammals. Due to the limited area affected and the time period,
 raised suspended solids is considered a temporary, slight, negative impact.
- The movement of cruise ships when operational is not considered to have a significant impact on the Harbour Porpoise due to the movement of variable levels of shipping and boat traffic through the harbour.

8.4.10 The following mitigation measures are identified:

- The construction period will be kept to a minimum in order to minimise any potential disturbance to marine mammals
- Noise generated by the piling noise can be minimised by the use of vibration piling. Where impact piling is necessary, mitigation measures such as bubble curtains or cofferdams will be used to reduce the transmission of noise into the water column.
- Little can be done to reduce dredging noise. It is proposed that dredging operations be carried out 24/7 during summertime (March-Sept) in order to minimise the length of the dredging operations. This will require a deviation from full adherence to the DAHG (2014) guidance in that some dredge operations will commence at night-time, when a pre-start scan cannot be operated (full adherence to the guidance requires that dredging operations only commence during daylight hours when a pre-start scan can be completed). With 24/7 operation, dredging is expected to take 14-17 weeks,

whereas if only done during daylight hours, it is anticipated that it would take 32 weeks. Thereby minimising the overall duration of the disturbance.

- Operational measures in relation to the safe keeping of fuels, oils and hydraulic fluids away from the water in bunded containers.
- Compliance with the provisions of the NPWS publication "Guidance to manage the risk to marine mammals from man-made sound sources in Irish Waters" (DAHG, 2014) with the appointment of a qualified marine mammal observer.

8.4.11 The following cumulative impacts are identified:

- None are anticipated as the Urban Beach permitted development is expected to be completed by Summer 2016 and are limited to landside, with no significant sources of impact on the marine environment.
- There will be a 4 week overlap between the dredging and piling works. It is stated that due to the temporary duration of these works, combined with the localised effect of the dredging operation, the significance of the cumulative impact of these two operations will not exceed those related to piling alone.
- The cumulative impact of the Alexandra Basin works at Dublin Port and the Dublin Array Wind Farm were stated to be difficult to assess as the timeframe for these works are unknown. It is stated that the sound generated by impact piling on all 3 projects will result in some level of disturbance to harbour porpoises within, and inshore of, the Rockabill to Dalkey Island SAC. The principally small diameter piles used in the works proposed to DLH and the very short piling period (12 wks) means that this project would have the lowest impact on the sound environment of the area of the three considered, and a negligible in-combination effect. It is not expected that the Dublin Array will have commenced construction works before the piling works are completed for the DLH cruise berth, meaning there will be no cumulative effect through overlapping works. 16 distance between the three projects also means that the likelihood of a measurable negative effect is low, with the sound levels attenuating with distance.

¹⁶ Dublin Array is an offshore wind farm that is being developed by Saorgus Energy. It is located on the

Array. The Environmental Impact Statement and Natura Impact Statement from these applications are now available in a number of public venues in counties Dublin and Wicklow for viewing by the public (for further details see **www.dublinarray.com**).

Kish and Bray Banks in the Irish Sea approximately 10 km to the east of the coasts of Dublin and Wicklow. The wind farm will consist of 145 turbines arranged in rows four to five deep that run north-south along the banks. With a potential installed capacity of 520 MW, Dublin Array will generate enough green electricity to meet the demands of over 450,000 homes. Dublin Array has secured a connection to the Irish national grid for 364 MW. Two foreshore lease applications have been lodged with the Department of the Environment, Community and Local Government for permission to construct Dublin

- The EIS also considered the cumulative effect of dumped spoil at Burford Bank by the Alexandra Basin Redevelopment (ABR) project and the current proposal. It argues that the quantity of spoil (5,900,000m³) over a 6 month period is far greater than that of DLH (710,000m³). Consequently, the effect in terms of length of time and spoil volume, will not be significant.
- 8.4.12 At all times during the discussion of the proposal whether it be in the EIS, the supporting documentation and at the Oral Hearing, the Applicant sought to highlight that a mitigation measure of the development is that a 24/7 operation will ensure that the dredging/piling operation will be completely quickly and therefore reduce impacts in terms of noise, displacement within the harbour and upon marine mammals. However, clearly night time operations of a dredger cannot anticipate the presence of a harbour porpoise or a grey seal. In this context, I note the submission of the Department of Arts, Heritage and the Gaeltacht, who have recommended that "noise producing activities shall only commence in daylight hours where effective visual monitoring, as performed and determined by the MMO has been achieved. Where effective visual monitoring is not possible, the sound-producing activities shall be postponed until effective visual monitoring is possible. Visual monitoring for marine mammals (in particular harbour porpoise) will only be effective during daylight hours and if the sea state is 2-3 (beaufort scale) or less". Therefore, I consider that the proposal to incorporate dredging and piling operations as a 24/7 operation, which the Applicant has identified as a mitigation measure, would have a likely significant impact upon the conservation interests of the Harbour Porpoise and the grey seal.
- 8.4.13 Scott Cawley were commissioned by the Applicant to carry out an Ecological (Terrestrial Ecology and Ornithology) Impact Assessment of the proposed development in DLH. This survey identified the presence of Bats (roosting site unknown), otters and their possible resting area close to the Stena Line ferry berth, 58 no. bird species which included Annex 1 species, 18 SCI species for nearby SPAs, 7 red listed and 30 Amber listed species. In terms of the potential impact of the proposal, the EIS identifies the following:
 - In relation to habitats, it is stated that as the landward side of the existing site is almost entirely comprised of built land and coastal structures (habitat types of a low ecological value) with limited vegetated areas, the proposed development will not result in any significant impacts due to habitat loss. The impact of the proposed development on habitats on the landward side of the proposed development is considered to be neutral. I concur with this assessment.
 - In relation to Bats, it is stated that the night-time construction, the increased night-time activity, human disturbance and temporary security lighting of the construction site has the potential to impact on bats feeding in the area.

Given the existing use of the proposed development site as a working harbour and ferry terminal, any bats using the area would be habituated to some level of night-time activity, human disturbance and some lighting of the area. Bat activity recorded in the vicinity of the proposed development was low and existing buildings and structures within and in the immediate vicinity of the proposed development were deemed to be of low bat roost potential. The potential impact of the proposed development is considered to be temporary, imperceptible and to have no negative impacts on bats at a local level. Having regard to the detail contained within the EIS on bats, and having regard to the earlier conclusions in relation to night-time working, it is considered that the impact of the proposed development upon bats would be lessened by removing the requirement for significant lighting for construction works at night-time.

- On the issue of Otters, it is stated that no holts (breeding places) or couches (resting places) were confirmed by the survey. High levels of otter activity were recorded along the seaward facing rock armour of the Eastern Breakwater, a habitat potentially providing suitable conditions for a holt. Construction works will involve temporary lifting of the rock armour of the Eastern Breakwater within the development footprint and has the potential to directly impact on an unconfirmed holt if present. Any disturbance and/or destruction to same could constitute an offence under the Wildlife Acts and the Birds and Natural Habitats Regulations and would have to be permitted via a derogation licence from the NPWS. The impact is considered a probable temporary negative impact at a county level. Having regard to the foregoing, I would recommend that in the event of a grant of permission that an MMO be employed for the duration of construction works such that if otters are present that works can cease until such time as they are at a sufficiently safe distance. The requirement to obtain a derogation licence from the NPWS will ensure that interventions into the habitat of the otter are kept to a minimum. Therefore, I consider that the proposed development would not have a likely significant impact upon the local otter population.
- In relation to birds during the winter season, noise and vibration from dredging and piling during construction works have the potential to result in temporary disturbance to and displacement of winter birds from the harbour and environs into the wider Dublin Bay area. As piling will be carried out within the confines of DLH, the transmission of noise into the wider water column will be reduced, however the piling programme may overlap with the winter bird season in part. Likewise for the dredging programme. It is stated in the EIS that the birds in the area have likely become habituated to a high degree of disturbance and background noise given the location within a working harbour and proximity to the Dublin Port shipping lane. Therefore, the impact of noise and vibration from dredging and piling during

construction works is not considered significant. As generally the numbers of birds occurring were low, this can be classified as a temporary slight negative impact at an international level. The same assessment is made in relation to non-SPA SCI species. I am satisfied that the birds in the area of the development would be habituated to the noise and activity given the recent operation of the Stena line ferry and the on-going arrivals and departures of other boats within the harbour. Therefore, I consider that the proposal would not have a likely significant impact on birds.

- There is potential indirect effect of piling noise on fish prey of fish eating wintering birds such as Black Guillemot and Razorbill. Adopting a precautionary approach, the maximum effect piling works would have on fish is considered temporary, slight negative impact at a county level for wintering species. However, as wintering birds can feed outside the harbour, the impact of a temporary decrease in fish prey is not considered significant. I find this assessment to be reasonable.
- There is a potential indirect effect of dredging on fish eating wintering birds as they use their eyes to catch prey, e.g. Cormorants. The operation of the dredger will create suspended solids which may reduce underwater visibility. However, reduction in underwater visibility in the vicinity of the dredging operations is not considered significant as high suspended solids are common in shallow waters close to the coastline. Also, suspended solid concentrations from dredging operations will disperse to negligible levels within 2km.
- Small numbers of breeding terns, have historically been observed feeding within the harbour during summer months (May –Sept). On one occasion in Sept 2014, this number (8) increased to 125. From the EIS, it is evident that there is a lack of clarity as to whether these terns were breeding terns. A precautionary approach is adopted in the EIS and it is assumed that they are the SCIs of these SPAs (Dalkey islands, South Dublin Bay & River Tolka Estuary Spa, other SPAs designated for terns). Due to the small number of terns concerned, the impact is described as not significant, but could result in a temporary imperceptible negative impact at an international level. I note that given the time of year which this application was lodged (Jul 2015) no more up to date survey information was made available at the time of submission. I consider this unfortunate as it would be helpful to establish whether the survey results of September 2014 are establishing a new trend for this bird. Whilst the cruise season would overlap with the breeding bird season (March-August), the ship movements are generally restricted to morning and evening only. Presumably the birds are already habituated to a degree of ship movement within the harbour. Furthermore, there is an alternative foraging habitat in the wider Dublin Bay area.

Therefore, I do not consider that the proposal would have a likely significant impact.

- Nest holes of Black Guillemots, breeding within the harbour during the 2014 season were located, at the closest point, a distance of ca. 300m from the proposed development. However, it is argued that any disturbance to this bird will be mainly limited to the cruise liner movements on arrival and departure to the harbour in the morning and evening. The EIS describes the impact as not significant, but that it may result in a slight temporary negative impact at a county level. Having regard to the cruise schedule and the current activity within the harbour, I do not consider that the proposal would have a likely significant impact upon Black Guillemots.
- 8.4.14 The following mitigation measures are set out in relation to Terrestrial Ecology and Ornithology in the EIS:
 - Best practice will be employed to ensure that water quality standards in Dublin Bay are maintained. A project specific Construction and Environmental Management Plan (CEMP) is established by the Contractor and maintained by the contractors during the construction phase of the proposed development to prevent release of hydrocarbons, polluting chemicals and sediments. This will cover all potentially polluting activities and include an emergency response procedure.
 - Should bats be found on site during the demolition or construction works, works will cease immediately in that area and local NPWS Conservation Ranger will be contacted. The bats will be removed by hand by a suitably qualified and licenced bat surveyor, under licence from the NPWS. Any external lighting to be installed to facilitate night time working or security lighting on the site should be sensitive to the presence of bats in the area.
 - In relation to otters, it is stated that if a holt is encountered prior to or during construction works, works will immediately cease in that area and the NPWS will be contacted to obtain a derogation licence. In the event that the disused ferry pontoon acting as a possible otter resting place (located to the southeast of the Stena Line Ferry Berth) requires movement prior to or during construction works, a qualified ecologist should be consulted in advance of works and the requirement for resurvey discussed.
 - In relation to measures to prevent impacts on water quality in receiving waterbodies, it is stated that the cruise vessels will operate under the International Convention for the Prevention of Pollution from Ships (MARPOL) which sets out the minimum standards ships must adhere to in order to protect water quality.

- The lighting plan for the proposed development will be reviewed by a competent bat ecologist who shall if necessary recommend adjustments to directional lighting to ensure that the light plan is sensitive to the presence of bats and otter in the area.
- 8.4.15 The EIS states that with the implementation of the recommended mitigation measures, it is considered that the proposed development will not result in any significant negative residual impacts. As previously identified, it is recommended that the 24/7 dredging and piling operation not be permitted in the interests of protecting the harbour porpoise species who frequent the harbour and other species such as the otter and seal. I note also that the light pollution associated with the night-time construction would also impact upon bats in the harbour area, thus they too would be protected by the said omission of works at night time. The proposal put forward by the Applicant that an MMO will be employed to monitor marine activity clearly cannot operate at night-time and therefore, its presentation as a mitigation measure is not practical. I note also the Applicant's argument that operating the dredging and piling at nighttime ensures a speedy completion of this work. I agree the timescale offered by the applicant of 14-17 weeks is far more amenable than the 6 months alternative. However, the Harbour porpoise should be afforded this protection having regard to its identification as a qualifying interest of the nearby Rockabill to Dalkey Island SAC. Therefore, in the event of a grant of permission being considered, it is recommended that a restriction on the operating hours be attached.

8.5 Soils & Geology:

The Applicant is proposing to provide dredged slopes of 1:5 at the edge of the navigation channel. The Applicant advised that this channel will require maintenance dredging to ensure the stability of this slope. Maintenance dredging was discussed at the Oral Hearing. However, it was not known as to how often this would be required. It was argued by Observers at the Hearing that during the first easterly gale of the summer months that the side slopes of the turning circle would destabilise and give rise to slopes of 1:10 or less. Whilst the Applicant was not of the belief that the slopes would destabilise to that degree, it was accepted that maintenance dredging would be required to maintain the slopes as planned. Mr. Cronin, a former Maritime Inspector to the Dept. of Marine, spoke at the hearing on behalf of those opposed to the project. He stated that the Minister when assessing a foreshore lease application must ensure that the development will not have a detrimental impact on navigation, fisheries and the environment. He argued that this application has not adequately addressed these issues. Furthermore, the proposed slopes of 1:5 are suitable for seabed composition assuming no induced environmental or ship forces (i.e. still water) whereas in this instance slopes of 1:10 minimum would be appropriate. However, a slope of this degree cannot be provided by

the Applicant in this instance without undercutting the roundheads at the end of the east and west pier. Having listened to the submissions made at the oral hearing and considered the EIS as submitted, I consider that there is reasonable doubt that dredging of the navigation channel and the required maintenance dredging will not destabilise the roundheads at the end of each pier and therefore have a likely significant impact on these protected structures.

8.5.2 Also discussed at length at the oral hearing is the actual composition and bedrock of the roundheads. The Applicant argued that the roundheads are constructed on underlying Upper Boulder Clay, which the two nearest boreholes have determined is -15.5mCD, which is 5m below the bed of the dredged channel. Therefore, the Applicant argues that there is no risk whatsoever to the stability of the existing stone piers. It is elaborated that the loose marine sediments which lie on top of the boulder clay do not support the roundheads and are likely to undergo localised erosion on the sea bed and side slopes of the dredged channel. Mr. O'Connell, on behalf of the Applicant, stated that even in the most extreme and improbable case of complete erosion of the sediments adjacent to the roundheads, their stability would be unaffected. counter arguments sought to highlight that no investigation was done of the roundheads (which the Applicant deemed too invasive) as to their depth, their base structure and composition. Dr. Eric Farrell was introduced by the Observers as a recently retired Senior Lecturer from the Dept. of Civil, Structural and Engineering in Trinity College Dublin as an expert in this area (refer to page 61 of Oral Hearing Record). Dr. Farrell's presentation to the hearing focused on the base structure of the roundheads and he sought to highlight that there is no evidence as to whether the Roundheads at the end of Dun Laoghaire Piers were constructed on top of the original sand and silt soils or whether 9m deep excavations were formed to take the foundations to the top of the boulder clay which is understood to be at approximately -15.5mCD. The Report submitted by the Applicant on "Geotechnical Site Investigation Report for Proposed Cruise Facility" was assessed by Dr. Farrell. He argued that the roundheads were built in stages with dissipation of excess pore water pressures at each stage, with each stage being consolidated on top of the lower level. Dr. Farrell argued that this was a more likely approach than the dredging option put forward by the Applicant given its erection date between 1817 and 1842. The Applicants argued that this method would cause differential settlement in the roundheads, which is not visible, to which Dr. Farrell argued that such settlement would be in the order of 0.5m only. Whilst I understand the Applicant's reasoning for failing to undertake a more indepth investigation of the composition of the roundheads (for fear of disturbing the protected structures), nonetheless the proposal which will involve the cruise ships expelling 200,000 tonnes of water by the thrusters of the cruise ships at a distance of 55m from the roundheads, would affect their base structure by reason of the mobilisation of sediment which would over time destabilise the historic integrity of the roundheads. The impact of the thrusters

on the roundheads was argued to be significant if they are constructed as Dr. Farrell construed. In this context, it is my opinion that there is insufficient evidence presented by the Applicant to demonstrate that the proposed movement of cruise ships through the harbour mouth and the associated use of their thrusters would not destabilise the base structures of the roundheads, identified as protected structures in Dún Laoghaire-Rathdown's County Development Plan.

8.5.3 The issue of scouring was also raised in respect of Dublin Port at the Oral Hearing where scouring has been experienced on the Ocean Berth, where cruise ships are presently received. Capt. Brittan, Assistant Harbour Master at Dublin Port spoke at the hearing to state that at Ocean Pier in Dublin Port, where the cruise ships normally berth, scouring of some 1m-1.5m in depth has occurred due to the Azipods of the ships. In terms of turbulence from the boat, which can only be visualised on the surface, but which occurs throughout the water column, it is stated this dissipates out about 100m from the ship, which is linked to the horizontal point of the propulsion of the ship. The Applicant sought to dispute this evidence arguing that this scouring has arisen due to the ship Ulysses, (a Ro-Ro freight and passenger ferry, the largest ship to berth in Dublin Port) using this berth. It was acknowledged that some scouring had occurred by reason of the HSS Ferry which would be infilled as part of this proposal. I would note that no impact assessment was carried out by the Applicant with regard to the potential effect of the thrusters upon the roundheads. In the absence of a detailed investigative study of the roundheads at the end of the piers and their foundation construction, it is difficult to deduce the potential impact of the use of the navigation channel located 55m away and the impact of the thrusters displacing up to 200,000 tonnes of water from the side of the cruise ship will have upon the proposed cruise berth and roundheads. In the absence of such clarity, it is my opinion that the Board cannot issue a favourable decision.

8.6 Coastal Processes

8.6.1 The Navigational Analysis and the ABPmer Report submitted by the Applicant with the EIS were discussed at length during the Oral Hearing. The Navigational Analysis (NA) sought to provide planning stage validation of the proposed layouts from a navigational standpoint and to offer any additional recommendations to the planning configurations and operations. The design vessels considered in the NA are a large 350m length overall (LOA) non-Azipod (fixed propeller) cruise ship and a smaller 300m LOA two Azipod cruise ship. The Freedom Class falls in between the two modelled vessels. The applicant was unable to get the permission of Royal Caribbean to simulate the Freedom Range of cruise ship. Clearly this is unhelpful given that the berth is of particular dimensions and the channel is being dredged to a certain depth to facilitate this specific class of ship. It is argued in the NA that this allows the preliminary planning study to provide a channel that can accommodate a range of ships.

The NA highlights that there are differences between the fixed propeller ship modelled and the Freedom Class of ship with the Freedom Class giving rise to higher displacement and thereby reduced manoeuvrability of the vessels, but with additional directional stability and greater availability of thrust from the Azipods and bow thrusters. The NA argues that the differences are not significant enough to change the conclusions.

- 8.6.2 The NA outlines that all metocean conditions have not been analysed in detail and only serve in the initial planning stages of the project. As a preliminary navigational assessment and verification of the initial channel design, a speed of 15 knots was simulated in the navigational analyses, with winds of 25 knots being tested only in those simulations utilising vessels equipped with Azipod propulsion system. Wind directions modelled were from the west, southwest and south. It was assumed that for hourly winds greater than 25 knots that vessels would not approach the terminal and would wait for lighter air. No current data was collected or applied to the navigation simulations as part of the study. Wave data was used based on measurements listed on DLH website. It is stated in the NA that further studies would warrant wave measurement collection and modelling to establish more concrete ambient and more energetic operational conditions for these manoeuvres. It is recommended in the NA that "local data collection is either conducted or retrieved from another source at the site to develop a more accurate understanding of wind, wave and current fields". The NA assumed a 120m channel width and a 500m idealised turning basin diameter and slopes of 3:1. A number of simulated runs are provided in the NA with a summary of their tested manoeuvres and typical manoeuvre paths. simulations illustrated that the 350m fixed propeller ship experienced some difficulties in four of its six runs, where the NA states that it would benefit from widening the channel and/or turning circle, whilst the 300m Azipod ship experienced no difficulties. It is stated in the conclusion that "results in this report are derived from an engineering standpoint, further simulations of more refined channel and terminal layouts are warranted with the input of local pilots and harbour authorities". 18
- 8.6.3 Subsequent to this, ABPmer were commissioned by the Applicant to carry out a Wave, Tide and Sediment Plume Modelling" Report (contained in the EIS, Appendix 3). The ABPmer report clarified that winds in the study area are predominantly from the westerly or south-westerly directions. Intermediate strength winds can also frequently come from south-easterly and north-easterly directions. It is stated that strong gradients in wave height can develop near to the entrance to DLH under certain conditions due to the wave sheltering from the breakwaters and the position of the coastline to the south. It is stated that the

¹⁷ Navigational Analysis, EIS, Volume 2. Page 82.

¹⁸ As above. Page. 83.

breakwaters surrounding DLH present an obstruction to both flood and ebb currents that would otherwise flow parallel to the adjacent coastline. deflection of this flow offshore results in flow acceleration outside the entrance to the harbour, extending to the north and east. Current speeds near to DLH entrance are typically <0.35 to 0.5m/s on a mean spring tide, or <0.2 to 0.35 m/s on a mean neap tide. It was stated at the Oral Hearing by Mr. O'Connell on behalf of the Applicant, that the information on tides collated in the ABPmer report was not available to the Moffat & Nichol at the time of writing their Navigational Analyses. However, these studies were made available to M&N and they indicated that currents of about 1 knot would not affect the findings of the navigation analysis and the information of tidal currents did not warrant rerunning the simulation at this time. Nonetheless, it was accepted that the navigational analysis did not examine the combination of peak tidal flood currents and strong winds from an easterly direction, which would tend to push ships towards the western half of the turning circle. However, it was at all points argued by the Applicant that there was adequate information on file to indicate that the approach channel and turning basin as proposed are acceptable for similar cruise vessels to those used in the simulations and are more than sufficient for the purposes of making an application. It was accepted that further navigation simulation work, both via desktop modelling systems and at the NMI full-bridge simulator in Cork with the Dublin Port pilots would be necessary if plans for the cruise ship facility advance, to agree on the operational and environmental limits of the approach channel and turning circle with the pilots for a range of vessel sizes and classes. It was also argued by the Applicant that it is normal practice for cruise line masters to undertake simulations prior to attempting to enter a new berth facility, or before attempting to take bigger ships into a facility, to confirm the best approach to the berth indeed. It was stated that it was such a simulation that allowed Dublin Port to receive ships over 300m long in the summer of 2015 by reversing the ships up the Liffey.

8.6.4 Observers at the Oral Hearing argued that the evidence, as presented before the Board in the NA and ABPmer Report, is incomplete as it fails to provide certainties that a cruise ship could enter the harbour safely. Under questioning, it was stated by the Applicants that some desktop simulation had been carried out in Waterford by an American Pilot and a Cork Pilot to establish the location of the berth. It was stated that for confidentiality reasons, a Dublin Port Pilot was not used. It was argued by Observers that the identification by the NA that during a 15 knot wind from the west, that cruise ships would have to wait out in the bay, provides evidence that the use of the harbour and the channel is limited to ships with Azipods, whereas boats over 300m are mostly stern propulsion. It was argued that this limitation in such a light wind is ignored in the Risk Assessment of the EIS. Capt. Coates, DLH Harbour Master, was asked if he was satisfied with the M&N Report given that it does not give limitations to the size of the ship accepted into DLH and the conditions under which cruise ships

- could traverse to the berth. He explained that provided further simulations were carried out that he as Harbourmaster would be satisfied.
- 8.6.5 Dublin Port's Harbour Master Capt. Dignam made a submission to the Board, was also in attendance at the hearing and answered some questions in relation to Dublin Ports' operations. It is important to highlight that Dublin Port Company is responsible for pilotage in Dublin Bay which includes the turning circle and its pilots would be responsible for bringing a cruise ship to the DLH berth. Capt. Dignam accepted that the approach channel and proposed turning circle as proposed would be perfectly acceptable for some ships but questioned whether it would suffice for the scale of ships as proposed. He argued that in the absence of detailed simulation exercises informed by reliable tidal current and wind data, the masters of large cruise ships of the Freedom range would not have the confidence from a marine safety perspective to use the approach channel and turning circle as identified. As previously cited, Capt. Dignam was of the opinion that during particular current and winds (SE'ly during Ebb and Nw'ly during flood) that the ship would be partially outside of the dredged turning circle and therefore it would risk being forced aground.
- 8.6.6 It is my opinion the proposal before the board is inconclusive on this issue as the berth is being proposed to facilitate the Freedom range of cruise ships, without co-operation of the Royal Caribbean and therefore the applicant has been unable to fully simulate the ability of this ship to manoeuvre and enter the harbour. Therefore, the Board has been provided with a limited navigational analysis. However, as argued this is also incomplete as it fails to consider the currents and all wind directions. Bearing in mind the scale of the Freedom Class range of ship at 338.8m, a beam of 38.6m at water line and 56m at bridge wings, I would therefore argue that the proposal before the board in relation to navigational analyses fails to provide a comprehensive analysis of the navigational aspects associated with providing a cruise berth at Dún Laoghaire. Furthermore, the detail provided to date in the NA and ABPmer illustrates the restricted market at which the cruise berth is aimed i.e. cruise ships with Azipod propulsion systems due to the restrictions which the harbour presents. Clearly, this will have a knock-on impact in terms of the economic viability of the project.
- 8.6.7 In my opinion the absence of the investigative report as to the composition of the roundheads and their ability to withstand the force of water from the type of ship that utilise Azipods and thrusters, the proximity of the roundheads to the navigation channel, the incomplete navigational analyses and the lack of simulation for the Freedom range of cruise ships, have as a consequence provided a degree of uncertainty and a lack of clarity regarding the potential impact of the proposal within the confines of this historical harbour.

8.7 Water

8.7.1 The proposed development is located within the South Dublin Bay water body which spans from Killiney Hill across Dublin Bay to Howth. The River Liffey is the main discharging water body in the study area, identified as the Liffey Estuary Lower and located approx. 4km to the north of the development. The Dodder, Camac and the Tolka also discharge to the Liffey Estuary. The remaining water-bodies in the study area are the Irish Sea Dublin (HA 09) and South Western Irish Sea-Killiney Bay (HA 10), located approx. 3.5km to the southeast. There is no significant river body in the vicinity of the site.

The following SAC's are located within the study area:

- -South Dublin Bay (000210)
- -Rockabill to Dalkey Hill (03000)

The following SPA is located within the study area:

-Dalkey Island

The following pNHA's are located in the study area:

- -Dalkey coastal Zone and Killiney Hill (001206)
- 8.7.2 A designated bathing area identified as Seapoint is located approx. 400m to the northwest of the proposed development along the coast. The water quality has been assessed in the years from 2010 to 2013 under the Water Framework and has consistently received a "Good" quality rating.
- 8.7.3 On the 23rd of September 2013, ARUP undertook a water quality analysis at two locations in Dún Laoghaire Port. Sample point A is located within the pier walls whilst Sample Point B is located outside the harbour breakwater. No pesticides were detected in either of the sample locations over the sampling round. Results from tests undertaken illustrate that there is no significant contamination or water quality issues within the harbour.
- 8.7.4 The EIS considers the following to be the possible impacts arising:
 - Risk of accidental pollution incidences.
 - Risk of discharge of waste from the Motorist Building to the existing private drainage system.
 - In terms of water supply, the proposed development will make use of the existing supply to the Motorists Building and cut off the supply to the control facility to the Stena Ferry holding area.
 - In the event of temporary malfunction of system filtration on board a ship, the Ship Master may occasionally request a fresh water supplement at ports-of-call.

• With regard to Flood Risk, the level of the proposed public boardwalk is in Flood Risk A (floor category), which is the same level as the East Pier.

8.7.5 A number of mitigation measures are identified:

- A project specific Construction and Environmental Management Plan (CEMP) will be established and maintained by the contractors during the construction phase of the proposed project.
- Prior to commencement of the construction phase on site, the existing
 drains within and adjacent to the construction site will be inspected and a
 CCTV record of the drain conditions will be made. Any repairs required will
 be carried out during the construction phase. On completion of the
 construction works, an inspection will be carried out once again to ensure
 no damage has occurred to the drainage system.
- Interceptors will be monitored to ensure that the required level of protection from accidental spillage is maintained. All chemical and fuel storage areas will be segregated within appropriate storage and bunded areas to ensure their separation from the surface water drainage system. A pollution incident management plan will be required which will detail procedures and equipment required to be maintained on site in the event that an uncontrolled discharge of construction pollutants, which may impact on the drainage system occurs.
- During the construction phase, all adjustment to the water supply and the laying of new water mains will be carried out in accordance with the DLRCC Code of Practice for water supply.
- In the event of a Ship Master requesting fresh water on board a ship, such need would normally be requested 24 hours in advance of arrival at port to allow mains pressure checks to be confirmed. Supply could be restricted to off-peak periods preferably during day-time. Supply and mains pressure would be monitored, and metered, to ensure other Harbour Users are not unduly inconvenienced.
- With respect to the flood risk of the boardwalk, it is argued that it is located in a more sheltered area inside the marine breakwater compared to the East Pier and therefore at relatively reduced risk of overtopping. Compared to the an existing recorded highest astronomical tide of +2.09 ODM the boardwalk will have a freeboard in excess of 1.0m at opening to cruise traffic, which would provide a sensible allowance for simulate change and overtopping.
- 8.7.6 Having considered the mitigation measures as cited in the EIS, I consider these to be reasonable. I would note that the reference to a pollution incident

management plan was considered at the Oral Hearing, where the Applicant conceded that no plan had been prepared as part of the EIS. However, such a plan already exists for current operations within the harbour and it is anticipated that this will be updated to take account of the cruise berth, in the event that permission is granted. This is reasonable in my opinion. I would also note that the issue of a cruise ship requiring additional water supplies upon arrival at the harbour was also debated. The Applicant cited as above that 24 hours' notice would be required in advance of arriving at the port. In my opinion this would address concerns regarding potential impact on the local water supply. Having regard to the measures proposed, I consider that these reasonably address the potential impacts and therefore I consider that the proposal would not give rise to likely significant likely impacts with regard to water.

8.8 Air

- 8.8.1 The EIS as submitted refers to the impacts of the proposal as deriving principally from the ship's ventilation points and on-board power generators when berthed, as well as the main engine exhaust noise when the ship is manoeuvring into and out of the harbour. The additional traffic generated by the development is also cited. It is also stated that there is potential for vibration at neighbouring sensitive locations during construction which would be limited to drilling and excavation works as well as vehicle /movements to and from site.
- 8.8.2 The mitigation measures in relation to ship engine noise refer to noise studies where the height of the stack has been assumed as 45m absl. It is assumed that only one engine would be run in the harbour. Noise contour maps have been prepared at a height of 4m and 8m height above ground level roughly corresponding to a standard 2 and 4 storey dwelling respectively. Engine generator noise emissions are predicted to fall in the region of 48dB L_{Aeq} at the nearest noise sensitive receptor. This level would comply with the recommended day and evening time limits set out by DLRCC. In relation to ventilation noise, two engine ventilation sources have been assumed amidships, at a height of 15m absl. Engine room ventilation noise emissions are predicted to fall in the region of 30dB L_{Aea} at the nearest noise sensitive receptor. Cumulative noises from the engine and ventilator are predicted to fall in the region of 48dB L_{Aeq} at the nearest noise sensitive receptors. This would comply with day/evening noise limits. Although this level would exceed the night time limit, it is not intended that cruise ships will generally be berthed overnight or between the hours of 23.00 and 07.00 hours.
- 8.8.3 The EIS fails to provide an assessment of the noise impact at night-time, wherein the applicant intends to carry out dredging/piling on a 24 hour basis. Rather one has to glean it from Table 5.6.13 where dredging is predicted to have a noise level of 41 dB L_{Aeq, 1 hour}. This is below the aforementioned

guidance criteria for noise levels contained in the DLRCC and EPA guidance. However, I would seek to point out that this does not incorporate the impact of piling. I note also that the sound contour maps prepared for construction and operation relate to daytime noise only. Furthermore, the EIS is contradictory in that it states that "construction will be undertaken during normal construction hours i.e. 08.00 to 18.00hrs Monday to Friday. However, it is possible that the contractor may wish to carry out certain operations outside these hours i.e. Saturday working or evening hours during long summer days. occurrences will be kept to a minimum and take place over a short timeframe and as such are unlikely to cause excessive disturbance". Likewise in the mitigation section of the report, the EIS refers to setting limits for the hours during which site activities likely to create high levels of noise are permitted. Clearly, this contradicts the Applicants statement throughout the EIS that carrying out construction work on a 24-hour basis for dredging and piling minimises the impact. However, it is my opinion that the impact of construction noise on noise sensitive locations proximate to the development site has not been comprehensively considered and consequently cannot be adequately mitigated. Having regard to earlier comments in relation to night-time construction activities, I believe that this adds further substance to restricting the hours of construction in the event of a grant of permission.

- 8.8.4 In relation to the operational impacts of the development from a noise perspective, I have had due regard to the International Maritime Organisation which requires all ships to achieve on-board noise limits of 70dBA LAeq, therefore significant noise attenuation is incorporated into the ship design. Mr. Ronan Murphy who presented information on noise and vibration on behalf of the applicant stated that all ships would be below 45dBA during docking in the early hours and at this stage the local environment would not be a low noise environment, with traffic and the DART operating. The issue of buses arriving at Accommodation Walk was also addressed and it was argued that they would not need to arrive prior to 8am at which stage it is not a low noise environment. I am therefore, satisfied that the operational noise impacts of the development have been adequately considered.
- 8.8.5 In relation to traffic the EIS determines that increases in noise arising from extra traffic will be largely inaudible and imperceptible. In the case of the harbour road, it is noted that the increase in road traffic noise would be of the order of 3dB which would indicate that road traffic noise levels would be just perceptible with a slight impact. Only one receptor is located on Harbour Road at the Irish Lights Cottages. I am satisfied that the impact of the development in relation to traffic noise would be slight.
- 8.8.6 Other mitigation measures are cited where it is stated that hours during which site activities are likely to create high levels of noise are permitted would be limited. Also ensuring communication between the contractor, local authority and

- residents is cited as a measure of controlling noise. Monitoring typical levels of noise during critical periods and at sensitive locations would ensure that any impact is kept to a minimum.
- 8.8.7 Therefore, I conclude that the noise impacts of the development would not be significant in the event that night-time construction activity in the form of dredging and piling are omitted from any grant of permission.

8.9 Climate

- 8.9.1 A number of impacts are identified in the EIS in relation to climate. It outlines that there is potential for a number of emissions to the atmosphere during the construction of the development. Construction activities may generate quantities of dust. It is stated that construction vehicles, generators etc. will also give rise to some exhaust emissions. Road traffic would be the dominant source of emissions in the region of the proposed development (with the possible exception of PM10 as this can originate from a large variety of sources including construction activities, agricultural and industrial processes, combustion of fossil fuels and wood and particles which become airborne from roads and other hard surfaces).
- 8.9.2 Mitigation measures identify compliance with EU legislation and published guidance. It is also stated that a dust minimisation plan will be formulated for the construction phase of the project, as construction activities are likely to generate some dust emissions. The implementation of operational dust control measures, including water sprays, road cleaning and compliance with emission limit values for deposition. Emissions of carbon dioxide will be mitigated by appropriate scheduling of construction activities to minimise duration and the shutting off of equipment during periods of inactivity if they do occur. It is stated that cruise ships comprise of one emission point (stack). Results from a screening dispersion model show that worst-case predicted NO² concentrations will be significantly below the annual mean and 1-hour maximum limit values at the worst-case sensitive receptors. The predicted concentrations will reach 4% and 9% of the annual and maximum one-hour limit values, respectively, for NO². This issue was further debated at the Oral Hearing and it was outlined by Mr. Edward Porter, on behalf of the Applicant, that cruise ships may have 96MW maximum capacity (for the "Oasis of the Seas"), however the power requirements whilst hoteling (at berth) will be significantly lower than this. Reference is made to the California Air Resources Board (CARB) "Emission Estimation Methodology for Ocean-Going Vessels" (OGVs) (CARB, 2011) which states that whilst the local factor (% of total power) for cruising is typically 80%, the load factor for hoteling is typically 16%. Thus, the air emissions whilst hoteling will be typically 80% less than air emissions associated with cruising.
- 8.9.3 In relation to sulphur, EU Directive 2012/33/EU has amended earlier legislation which has the effect of decreasing the sulphur content of fuel when at berth.

This was transposed into Irish Law as S.I. 361 of 2015 European Union Regulations 2015 to ensure that marine fuels with a sulphur content exceeding 0.10% by mass are not used while the ship is at berth. The AERSCREEN assessment carried out on behalf of the Applicant states that the screening assessment of emissions assumed a worst-case cruise ship hoteling continuously for a full year has confirmed ambient levels of SO², NO² and PM¹⁰/PM^{2.5} are well below the ambient air quality standards both at nearby residential receptors and in the immediate vicinity of the harbour. Dr. Edward Porter was asked in relation to EU regulations and air quality regulations, which came into force on 20th August 2015 in Ireland, where the cruise ship must use fuel of 1% fuel content whilst at berth and hoteling. He responded that immediately before leaving and whilst manoeuvring into the harbour the higher grade fuel content will be used (3% sulphur content). Mr Porter repeated that whilst the ship is moving the impact is moving and the dispersion of sulphur is also moving. The rate of emissions between manoeuvring and hoteling is actually quite minimal as the ship is at a very low speed.

8.9.4 I found the detail in relation to air quality to be satisfactory and consider that that the mitigation measures as cited above and compliance with EU regulations and air quality regulations will ensure that the impact of the development is not significant.

8.10 Landscape & Visual Impact

- 8.10.1 The landscape and visual impact assessment in the EIS was prepared based on site visits between January and May 2014 and included a photographic record of the main landscape features coupled with a record of data on landscape elements, features and characteristics. It also incorporated an assessment of the chosen viewpoints and an assessment of the visual impact of the proposed development through consideration and interpretation of the photomontages.
- 8.10.2 Six photomontages of the proposal were submitted by the Applicant as part of their submission and assessment within the EIS. The photomontage methodology is described in the EIS as being based on a number of key viewpoints that were identified in the preparation of the DLH Masterplan (which incorporated the preparation of a Strategic Environmental Assessment and an Environmental Report). It is argued that the viewpoints chosen seek to accurately represent the visual impact of the proposed development. The viewpoints chosen were:
 - -View No. 1: Adjacent to Killiney Playground at Killiney Hill
 - -View No. 2: Sandycove
 - -View No. 3: Marine Road
 - -View No. 4: West Pier

- -View No. 5: East Pier
- -View No. 6: Monkstown/Salthill Beach
- 8.10.3 I have had regard to the DLH Masterplan, the Environmental Report and SEA in order to ascertain the reasoning for selecting the aforementioned viewpoints. I did find an account of the protected views as per the Development Plan, a discussion of high value panoramic views and high value long range views. medium value long range views and medium value glimpse views and poor views. The Environmental Report also refers to the fact that there are protected views/prospects in the Fingal County Development Plan 2005-2011 from Howth/Sutton that may be of relevance and that there are other important views from Sandymount, Poolbeg and Dollymount Strand which are not specifically listed in the Dublin City Development Plan 2011-2017. However, in my review of these documents and the photomontage submitted, I failed to find an account for why the six views as identified were the selected views nor did I find a rationale for excluding views as stated in the Environmental Report that were considered of relevance. I would concur with the observations made at the oral hearing that the viewpoints chosen failed to provide a comprehensive picture of the visual impact of the proposal. With particular regard to the absence of a viewpoint from the end of the pier (or near to it) whereon 1 million pedestrians walk every year and from Crofton Terrace. Rather it would appear that the views chosen are taken from a distance, where the perspective, it could be argued, is far wider. It was argued by Mr. Dave Kirkwood, who was responsible for the photomontages that to provide a photomontage closer to the berth wherein a cruise ship would encompass all of the image, that it would be pointless and unrepresentative of the visual impact. It was argued that the scale of a docked ship would not be out of character, within such an expansive water body and its presence would affirm the purpose of the harbour. Furthermore, it is stated in the EIS that size and shadow casting are effects which will be experienced by other harbour users. These will be temporary and rarefied effects, with ships more often not docked than docked. The EIS concluded (as per section 5.8.22) that the "longer term impacts are at worst, slight and neutral-the nature of the proposed development being in keeping with the existing harbour context. The arrival of large cruise ships on a temporary "visiting" basis is on balance assessed as a positive impact'.
- 8.10.4 Whilst I am in agreement with Mr. Kirkwood that a cruise ship would not appear out of context when docked in the Harbour as it relates to the use of the harbour, nonetheless, having regard to the scale of these ships at 65m in contrast to the low-rise context of Dun Laoghaire, I am of the opinion that the proposal will be imposing and overbearing when viewed from the nearby roads of Marine Road, Crofton Road and Dun Leary Road. Furthermore, the scale of these ships will be

¹⁹ Dun Laoghaire Harbour Master Plan, Environmental Report, Page 30.

most noticeable by the stated 1m people who recreate on the east pier given its proximity to the cruise berth. I accept the transient nature of these ships, nonetheless, the cruise schedule put forward by the Applicant proposes a cruise ship at berth every second day. Taking account that these cruise ships will arrive early in the morning and depart in the evening, it is my opinion that the proposed berthing of ships at Dun Laoghaire for 6 months of the year would have a significant impact. I am of the opinion that insufficient viewpoints were selected and that those located within the town do not provide a representative account of the potential impact. I refer to the viewpoint from Marine Road where the DART station is to the forefront. I also repeat guidance in the Environmental Report of the Masterplan which referred to the importance of views from Howth and from Dollymount as being pertinent to any visual consideration of the proposal. In this context, I consider that the visual impact assessment as submitted is incomplete. Furthermore, taking account of the footfall which use the Piers on an annual basis, the grant of permission for the proposed baths off the East Pier, and the height and width of these cruise ships, it is I believe another shortcoming of the visual analysis that no shadow diagrams were submitted.

8.10.5 Having regard to the above, the proposed mitigation measures cited in the form of temporary hoarding to be used to minimise visual impact at ground level, the palette of materials to be used throughout the scheme are not capable of offsetting the significant impacts created by the berthing of these large cruise ships.

8.11 Material Assets (Waste & Transportation):

8.11.1 A number of impacts are identified under this heading in the EIS. It is outlined that the construction and demolition phase is likely to give rise to a quantity of The quantity of dredging waste anticipated during construction waste. represents a significant quantity of wastes. Comparatively the volumes of other wastes generated by the construction and demolition works will be small. Stripping and remodelling or roads will generate quantities of waste tarmacadam/concrete etc. It is estimated that the marine dredging spoil will amount to 710,000m³, concrete will account for 1,094m³, and road materials (asphalt, tar and tar products) will account for 1,078m³. It is stated that the waste dumped at sea has the potential to cause significant environmental consequences. In addition there is potential for significant litter and pollution issues on site where waste management plans not complied with. Another impact identified is the construction traffic associated with the removal of spoil from the site and that construction traffic may result in spillages of materials and mud on the road network. The proposal will also give rise to increased traffic arising from the result of the generation of additional trips, on parking provision as a result of coach tours demand and on the pedestrian facilities in the vicinity of the harbour as a result of free passengers visiting Dún Laoghaire town. It is stated that the proposal will require the relocation of one on-street parking space

- on Harbour Road and nine pay and display parking spaces at the ferry terminal plaza car park adjacent to Harbour Road.
- 8.11.2 In terms of mitigation measures the EIS outlines that a site specific Construction and Demolition Waste Management Plan and a preliminary Operational Waste Management Plan from the operation of the proposed development will be developed to ensure effective waste management and recycling of waste generated at the site. In relation to the disposal of dredging spoil to the Burford Banks, this will require consideration and a statutory consent from the EPA (dumping at sea permit). This will ensure that there will be no adverse impact from the deposition of the dredging spoil at the dumping site.
- 8.11.3 Another mitigation measure cited is that waste arising from the development will be dealt with in compliance with the Waste Management Act as amended and its associated regulations. The proposal before the Board has no proposals to deal with waste from the cruise ships. Rather it is envisaged that this will be dealt with by the on-board incinerators and/or at the turn-around ports. The issue of the MARPOL Convention-the International Convention for the Prevention of Pollution from Ships was raised by Objectors at the Oral Hearing. I note that as of 2015, 152 states representing 99.25% of the world's shipping tonnage are state parties to this convention. Annex IV which concerns the discharge of sewage from ships came into force on 27/09/2015. The discharge of sewage into the sea is prohibited except when the ship has in operation an approved sewage treatment plant or when the ship is discharging comminuted and disinfected sewage using an approved system at a distance of more than 3 nautical miles from the nearest land. The Rockabill to Dalkey Island SAC is located at 3 nautical miles from the harbour and this was acknowledged by the Applicant and its team. Sewage which is not comminuted and disinfected may be discharged at a distance of more than 12 nautical miles from the nearest land. It was also stated that the ship would have the capacity to carry sewage on board for 62 hours and that it may keep it on-board until the next port. The argument was also put forward that DLHC would not be required to provide facilities for the dumping of waste at port. It was argued that this would be provided at turnaround ports, which does not apply to Dún Laoghaire. However, I would agree with the Observer, Mr. Stewart who postulated this to be incorrect. According to MARPOL 73/78 residues, oily mixtures and garbage generated from an ocean-going vessel must be collected by port reception facilities around the world. This is so as to eliminate discharges of ship generated residues into the ocean. It is recognised by the IMO (International Maritime Organisation) that member states are still encountering difficulties in fully implementing the The current proposal before the Board has no facility or requirements. mechanism in place to comply with Marpol 73/78 which I would argue applies to any port. Therefore, any cruise ship leaving DLH will have little option but to dispose of its treated waste at 3 nautical miles from shore i.e. adjacent to the

Rockabill to Dalkey Island SAC and/or its untreated waste at 12 nautical miles from shore should its tanks be at capacity. It is my understanding that the Port of Cork has recently adopted measures to specifically comply with this Convention. In the context of the foregoing, in relation to non-compliance with the Marpol Convention which I would argue applies to Dun Laoghaire Harbour and the location of the Rockabill to Dalkey Island SAC within 3 nautical miles, the proposed development would have a significant impact on the local environment and the conservation species of the Harbour porpoise of the aforementioned SAC in particular.

- 8.11.4 This section of the EIS also considers transport. The proposed layout of the scheme has provided for coach parking of 22 in number adjacent to the walkway to the berth together with a turning circle and an area for 5 private buses to pick up and drop off. The Applicant has explained through the EIS and the Oral Hearing that tours are pre-booked on the cruise ship and those passengers signing up to a coach tour will disembark at pre-determined times to link with the appropriate tour bus. Coaches will leave as soon as their allocation of passengers is landed so there is no concentration of departing coaches. Also proposed is parking within the siding road parallel to the railway at Old Quay as an overflow area for additional buses if required.
- 8.11.5 The EIS was based on a model of 90% of passengers disembarking, whilst evidence shows that the average is 82% with a low of 60% and a high of 90%. The EIS model is based on 55% of passengers taking a coach tour, whilst the historical average is 34%. As one would expect the peak time for disembarking would be between 8-10am, whilst 16-18.00 hours would be peak for embarking. Clearly, there was some concern expressed at the Oral Hearing as to whether the local road network could facilitate the additional traffic generated by the proposal. However, the EIS demonstrates that the number of trips generated by the proposal is in fact less than that generated by the Stena Ferry (refer to Figure 5.9.15 of the EIS). In relation to mitigating transport impacts, the EIS outlines that a Transport Management Plan has been prepared by the Harbour Company and has been successfully implemented during the arrival of Queen Mary II and other vessels. An example of the Transport Management Plan is included as an Appendix to this EIS. It is stated that a specific traffic management plan will be developed to incorporate any additional requirements of management at the proposed new berthing facility. I consider that this is an appropriate mitigation measure and should be carried out in consultation with the local authority. A condition to this effect should be inserted in the event of a grant of permission. Taking account of the mitigation measure outlined, I consider that the transport impact of the proposal to be slight.
- 8.11.6 However, I consider the proposal to provide for overflow parking at the Old Quay (known as the Accommodation Walk) to be more problematic. This location is part of "The Metals". This area is within the boundaries of the Architectural

Conservation Area and is associated historically with the construction of the Harbour. It also lies within the area designated as the Sutton to Sandycove Promenade and Cycleway Project (S2S). The vision of S2S is to provide a continuous promenade and cycleway approximately 22 kilometres in length, around Dublin Bay from Sutton to Sandycove linking existing and proposed cycle and walking routes. I note that the Planning Authority also objected to the use of the Accommodation Walk for the purposes outlined. Their objection to this proposal cited that the demonstrated vehicle swept path of the harbour area indicated unsatisfactory access arrangements and potential conflict area with other users of the harbour area, which will likely coincide with high activity times. They also advise that the S2S project could use the Accommodation Walk as an underpass for the Coal Bridge which would conflict with the proposed coach parking use. The promotion of the development of the S2S promenade and cycleway has been identified as a Special Local Objective (No. 93) in the recently adopted County Development Plan for Dun Laoghaire Rathdown County In this context, it is considered that the proposal to include the Council. Accommodation Walk as an area for coach parking would have a significant environmental impact with regard to safe vehicular movements and conflict with proposed recreational routes and therefore should be omitted in the event that a grant of permission is considered by the Board.

8.11.7 During the course of the Hearing, it was evident that Mr. Opdebeeck who was addressing issues relating to the transportation module on behalf of the Applicant, was unaware of the status of the Accommodation Walk or its historical association. Furthermore, Mr. Opdebeeck indicated that it had been their intention to provide a Road Safety Audit of the proposal, but failed to do so. There was general opposition to the Accommodation Walk being used as an area for overflow parking by local residents by reason of its historical association. However, Ms. Shaffrey sought to argue that this area has been used in the past for storage of material associated with a visiting Circus and that it presently does not contribute positively to the public realm. Whilst I agree, that it presently does not contribute positively to the public realm, I am of the opinion that for reasons of its historical associations that for it to become a car park would not appear to be an appropriate use of this area and which would be detrimental to the preservation of the remainder of The Metals which DLRCC has sought to include in areas of public realm. Furthermore, the National Transport Authority, in their submission to the Board outlined that the S2S Trail has been renamed the East Coast Trail and this area may ultimately be included in that route and therefore request that it be excluded by the Board for overflow parking. At time of writing this report, no definitive route has been selected yet. The Transportation Dept. of the Council were also in opposition to the use of the Accommodation Walk for reasons of the S2S Trail as cited above and as the Swept Path Analysis showed conflict with users of the Harbour Road. Therefore, in the event that the Board considers a grant of permission is appropriate, it is recommended that the

- inclusion of the Accommodation Walk for overflow parking be omitted from the final grant of permission.
- 8.11.8 The provision of cycle parking within the proposal needs to be addressed. I note that the Transportation Dept. of the Council has recommended that cycle parking be provided adjacent to the meeting point/information centre building. It is stated that it is essential that cycle parking facilities provided are secure and benefit from passive surveillance by people using the building. Furthermore, the footpaths on the southern side of the Harbour Road (at the southwest corner of the main site) should be upgraded. In relation to the shuttle bus operation referred to in the proposal, no details have been provided as to whether this will pick up passengers and how frequently this will run. It is considered that these issues could be addressed by condition in the event that the Board are considering a grant of permission.

8.12 Archaeological Heritage

- 8.12.1 IAC Ltd conducted an archaeological assessment, a programme of marine geophysical survey and an archaeological dive inspection of specific sites within or adjacent to the footprint of the proposed development area, which are thought to possess archaeological potential.
- 8.12.2 The most sensitive archaeological resource associated with the proposed development area is that of marine archaeological remains, which for the most part, consist of the wrecks of ships. There are 165 ships recorded as sinking within or in close proximity to DLH that do not have a recorded location. 5 further wrecks are recorded within the harbour with precise co-ordinates. Of the 165 ships, 23 ships are recorded as sinking at the entrance to the harbour or close to the piers or heads of the piers, although locational information is not precise. A further 11 ships are recorded as sinking within a mile of the harbour entrance or else having wrecked on the breakwaters of the pier outside of the harbour. In addition, there are two recorded archaeological sites listed within the Record of Monuments and Places within immediate proximity of the proposed development. These consist of the site of a Martello tower (DU023-052003) and the site of a possible promontory fort (DU023-052001), which were removed during the construction of the railway.
- 8.12.3 DLH was built between the years 1817 and 1842. The construction of the harbour was an immense undertaking and a dedicated quarry at Dalkey was developed for the purpose of obtaining sufficient granite for the structure. Teams of labourers were engaged at the quarry and also to transport the stone from the quarry of the pier side. This was achieved using a system of counterweighted trolleys. This route later became known as "The Metals". Despite the protection of the harbour walls, the nature of shipping in the 19th and early 20th centuries resulted in persistent ship wrecks in Dublin Bay and also within the harbour itself. There are 165 ships recorded as sinking in Dún Laoghaire Harbour. There are

additional recorded ship wrecks in Dublin Bay, with no reference to the harbour but which may be within vicinity of turning circle and channel of the proposed development. The high number of shipwrecks recorded for the vicinity of DLH results from the harbour's status of an "asylum harbour". It was to Dún Laoghaire that ships threatened from high seas or adverse weather would retreat to.

- 8.12.4 There are two recorded ship wreck sites located in and within the immediate vicinity of the proposed dredging channel. Wreck W01967 was identified as a possible wreck site during a national sea bed survey inside of the harbour entrance at ITM 691268.381 5909582.352. This site is located within the footprint of the proposed dredge channel. Wreck W01967 was identified as a possible wreck site during national sea bed survey inside of harbour entrance at ITM 691268.381 5909582.352. This site is located within the footprint of the proposed dredge channel. During an archaeological dive inspection, the location of W01967 was located at the centre of the navigation channel at the mouth of the channel whist the location of wreck W01966 was confirmed at the harbour entrance, to the east of the immediate impact zone of the development. As the survey work did not locate Wreck W01967 where it had been recorded, following work at the chartered location, it may be concluded that there will be no impact on wreckage here, as no remains exist.
- 8.12.5 A number of impacts are outlined in the EIS. It is stated that it is possible that after the establishment of the new dredged channel, that boat wash, and thus secondary erosion, associated with the passage of vessels may impact on the remains of wreck W01966 situated 85m east of the edge of the proposed dredge channel and at the foot of the east pier rock armour. As a mitigation measure, it is recommended that a diver inspection of both the charted and identified wreck site W01966 is carried out 12 months post the dredging of the new channel in order to monitor the condition of the remains and whether changes in the sea bed are having an adverse impact on either area. This would be carried out by a qualified marine archaeologist under licence to the Dept. of Arts, Heritage and the Gaeltacht. I consider this to be a reasonable mitigation measure. In the event of a grant of permission, I recommend that should archaeological material be found during the course of monitoring, that the archaeologist may have work on or in that area suspended, pending a decision on how best to deal with the archaeology. Furthermore, the developer shall be advised by the DOAHG with regard to any necessary mitigating action. The DOAHG require that the applicant shall facilitate the archaeologist in recording any material found. The Department are also seeking a 50m exclusion zone around the known location of W01966 within which no works should take place without prior permission from the DOAHG. It is also sought that a dive survey of the wreck site W01966 be carried out 12 months post dredging of the new channel, in order to monitor the condition of the remains and whether changes in the sea bed are having an

adverse impact on either area. The EIS recommends that all marine boring and dredging works are subject to full time archaeological monitoring. Full financial and programming provision should be made for the resolution of any archaeological remains that maybe discovered, if that is deemed to be the most appropriate manner in which to proceed. I consider that the foregoing mitigation measures can be conditioned in the event that permission is considered by the Board and would reduce the impact to slight having regard to the presence of wrecks within the harbour.

8.13 Architectural Heritage

- 8.13.1 This section of the report was prepared by Shaffrey Associates Architects. The EIS gives an account of the history of the harbour. DLH was built as an asylum harbour to give safe refuge to ships on their way to Dublin stranded at sea during bad weather or poor tide conditions. The disastrous loss of up to 400 lives during a storm in 1807 resulted in a public outcry. Persistent campaigning by means of petitions to the government and to local landowners, letters to newspapers and public meetings, orchestrated in large part by a local seaman named Captain Toutcher, resulted finally in an agreement that an asylum harbour would be built. It was finally decided, by an Act of Parliament in 1815, that five Commissioners should be appointed to oversee the erection of "an harbour for ships to the eastward of Dúnleary, within the port and harbour of Dublin". The following year it was enacted that the Harbour should be built and a considerable sum of money was set aside for this purpose. The first stone of the Harbour was ceremonially laid by Lord Lieutenant Whitworth on 31st May 1817 and was completed in 1842. At the time of completion, DLH was one of the most magnificent in what was then the British Empire. The East Pier reached a length of 4231 ft. and the West Pier was 5077 ft. They enclosed an area which comprises 251 acres of water. The Applicants argued that the harbour was commercial in nature from its very inception. Whilst it was argued by Observers that the concept of "refuge" was a harbour of safety and that recreation within the harbour by sailors was always enjoyed.
- 8.13.2 In more recent times the increasing transportation of cars to and from Holyhead necessitated a reappraisal of facilities in the harbour. At the beginning of the 20th century cars could be lifted onto the Mailboat using derricks, but the maximum capacity of the ferry boats was about 25 cars. From the 1960s the need for a ferry service with drive-on and drive-off facilities became apparent. Although temporary facilities for a car ferry were located at the base of the East Pier, in 1969 a new permanent ferry terminal located at St Michael's Wharf to the west of Carlisle Pier, was built. A new pier, which absorbed St Michaels Wharf and involved the filing in of the old Depot Harbour, was built, with a customs hall, departure point and car parking facilities. However, the Mailboat continued to operate from Carlisle Pier until 1976, when this official function ceased (international mail subsequently transferred by air). When the St. Columba, a

considerably wider vessel than those that had docked at DL until then, was introduced in 1977, facilities for it were provided at Carlisle Pier and only smaller vessels used St. Michael's Wharf.

- 8.13.3 In 1989-90, the Dept of the Marine took over running of the Harbour from the OPW and established an Interim Harbour Board. This Board was responsible for commissioning the Ferry Terminal Building and associated new public plaza (constructed over a new underground car park) which facilitated the new HSS ship run by Stena. This major construction project added to the previous landfill associated with St. Michael's Wharf, creating a significant reclaimed area around, and subsuming, the original Victoria Wharf. It also involved the construction by Stena of infrastructure, including the high level linkspan structure, required to facilitate access by both vehicular and pedestrian passengers to and from the vessel. In 2001, the new marina facility was developed which included construction of 2 new breakwaters within the Harbour as an engineering solution for providing the necessary calm water conditions to accommodate safe berthage for the range of boats which the Marina was to serve. In April 2015, Stena announced its decision to discontinue its service to DL resulting in the absence of an international connection to DL for the first time since the Mail Packet transferred from Howth in 1826. While DLHC are currently seeking other ferry companies to provide a service to and from DL, nothing has been secured at the time of writing this report.
- 8.13.4 The Architectural Heritage Significance of the proposal was assessed in the EIS in accordance with all categories of architectural heritage special interest as set out in the Department of Arts, Heritage and the Gaeltacht's statutory Guidelines for Architectural Heritage, 2011. These are architectural, archaeological, historical, artistic, cultural, scientific, social and technical.

<u>Architectural Interest Criteria</u>: DLH, comprising the East and West Piers and several of the internal historic marine structures, buildings and artefacts, is of high architectural quality both in design and, foremost construction. Both structures and buildings include those designed by architects and engineers of note (both Rennies and Skipton Mulvaney, amongst others). In terms of scale and quality the Harbour can be considered of International Importance rating.

<u>Historical Interest Criteria</u>: The history of the development of the Harbour and the relationship of this to the wider Dublin Bay and Dublin region, its associated links with the railway line and consequential development of Victorian Dún Laoghaire; the association with many historic figures and events all contribute to the Historical Special Interest of the Harbour. In this regard the Harbour might be considered to be of National Importance.

<u>Archaeological Interest Criteria</u>: The archaeological special interest of the Harbour derives from its containing the site of the promontory fort which gives its

name to DL and the recorded shipwrecks which lie within and around the Harbour. Outside, and beside the Harbour is the site of a former Martello Tower, also a recorded monument. From an archaeological perspective, the Harbour is of Regional Importance rating.

<u>Artistic Interest Criteria</u>: The Harbour contains a number of fine monuments (Boyd Monument: Kind George IV monument) in addition to the artistic qualities with the late 19th century Bandstand and shelter pavilion on the East Pier. In terms of this Artistic interest, the Harbour is of Regional rating.

<u>Cultural Interest Criteria</u>: DLH became a focus for a wide range of events and activities, ranging from the sailing regattas to the quotidian practice of walking the piers. These activities contribute to the cultural interest of the Harbour which is of Regional rating.

<u>Scientific Interest Criteria</u>: Robinson's Anemometer and Marconi's early telegraph broadcast are two examples of scientific interest which relate to the Harbour for which the Harbour is of Regional rating.

<u>Social Interest Criteria</u>: The social interest of DLH derives most notably from the story of its construction work and workers. It can be noted that the industrial heritage of a place is often deeply linked with its social interest, in particular as it often relates to a heritage of work. The historic association with a range of social groups within the Harbour, the works within the Harbour over the years, the sailors, sea scouts, the fishermen, contributes to this interest which is of Regional rating.

<u>Technical Interest</u>: The Technical interest aspects of the Harbour relate very much to its significance as an historic harbour and port. Certainly one of the largest artificial harbours within the Western world when constructed, if not the largest, it remains impressive in scale to this day. In this regard it is of National Importance.

8.13.5 The EIS concludes that the harbour is a structure of international importance due to its scale, the quality of its construction, including the collection of significant buildings, monuments, industrial (marine) heritage artefacts and its remarkable history. It is also an area of beauty, of maritime history, a cultural centre of numerous water and land-based recreational activities, a transport hub; it is, and has been a place of work, or play and of relaxation, around which the Victorian town of Dún Laoghaire developed. It is important both in its role as a repository of historical information and cultural memory, in addition to continuing to form a fundamental component of the town of Dún Laoghaire. Its historic importance as an international working port remains a contributory factor to the Harbour's cultural value and special character.

- 8.13.6 The Burra Charter on Places of Cultural Significance (ICOMOS Australia, 2013) is applied and the EIS states that the cultural significance of DL derives from wealth of heritage values-built/cultural and natural, as associated with the place. This diverse and rich heritage combines the historic with the contemporary in creating a very distinct identity and sense of place which transcends time. Reference was made by Mr. Howley and others at the oral hearing to the proposal's non-compliance with the Burra Charter in that it fails to take sufficient account of the cultural heritage and significance of the Harbour. This was disputed by the Applicants. In the Burra Charter, which Ireland has signed up to, it is stated that "places of cultural significant enrich people's lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences". In my opinion, having read the EIS and heard the presentation by Ms. Shaffrey, I believe that account was taken of the importance of the harbour to its many users.
- 8.13.7 The EIS also gives an account of proposed repair works to the roundhead piers. The East Pier roundhead is stated to be in sound condition with ashlars stone facing intact. With regard to the West roundhead there are a small number (within the order of 6-9 no. in total) of locations where individual ashlar blocks are either missing or have been dislodged from original alignment and protruding beyond the face of wall. It is proposed that these missing blocks will be replaced (using granite blocks taken from seabed in front of roundhead) and that the blocks which have become dislodged are reset. A conservation methodology for carrying out these works will be implemented which will address identification of suitable stone to replace missing ashlar, cutting/shaping of salvaged stone and resetting same, and methodology for resetting dislodged stones. This methodology will be developed by conservation architect/engineer and specialist contractor and will be carried out in advance of dredging works.
- 8.13.8 An account is given of the predicted impacts of the proposal:
 - Physical damage to the historic East and West Piers, in particular to the roundhead Pier ends as a result of dredging works.
 - The Hobblers monument will be moved from its existing location.
 - Impact on some of the traditional functions of the Harbour, in particular sailing (cultural). This is likely to involve temporary disruption during the construction works, specifically the works associated with the construction of the new jetty.

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²⁰ The Australia ICOMOS Charter for Places of Cultural Significance (2013)

- The new jetty structure is a significant new addition to the physical harbour infrastructure, extending out into the expanse of water. The berth and the berthing of cruise ships in the harbour will have a visual impact.
- The inward and outward movement of the large cruise ships have the potential to cause damage to the historic structures.
- Once constructed and when cruise ships are operational in the Harbour, there will be restrictions on the current available access and routes for other vessels within the harbour area. This may affect the nature of current usage (cultural).
- The landside public realm works will add new public space to the Harbour and enhance an existing pedestrian route which is little used and of restricted environmental quality.
- The proposed overflow coach resting area located on a section of the former Metals route (the accommodation walk which runs alongside the railway line), may impact on the character of this area (Architectural, Technical).

8.13.9 The following mitigation measures are proposed:

- Recording in advance and ongoing
- Monitoring during works
- High quality design, specification and construction methodology for the new works
- The implementation of an integrated design supervision and monitoring approach which is conservation-informed if and as the project proceeds from planning to implementation and operation will help mitigate potential adverse impacts on the Architectural Heritage special interest character of the Harbour.
- Management during use: Ongoing review of impacts arising during use is required and these should have regard to Architectural Heritage impacts and be overseen by suitably qualified and experienced professionals.
- Ongoing reference to the DLH Heritage Management Plan policies will provide a useful guide during detail design, construction and operational phases for this proposal.
- Manage use of landside facilities to ensure orderly access and use of vehicles

- Manage use of landside facilities to ensure ongoing activity and maximise opportunities to add cultural value to the expanded public realm space
- Manage use of overflow coach parking area so no adverse impacts on the physical fabric of historic walls and other aspects which form part of the industrial heritage character relating to the former Metals.
- 8.13.10 The EIS rates the visual impact of the jetty and the berthing of cruise ships in the harbour as temporary and subjective, such impact is predicted to be neutral.
- 8.13.11 Ms. Grainne Shaffrey of Shaffrey Associates was responsible for this section of the EIS and made a presentation and answered questions at the Oral Hearing. It is very evident that Dún Laoghaire Harbour is rich in its architectural heritage with 32 protected structures on or within the close confines of the harbour. Nonetheless, the Harbour is a candidate Architectural Conservation Area in accordance with the current Development Plan. Observers to the Hearing advanced the argument that due to the number of protected structures in the Harbour, that the entirety of the Harbour should be considered a Protected Structure by reason of the term "curtilage". Unfortunately there is no definitive term for curtilage, a fact recognised by the Heritage Council. Indeed there was some confusion at the Hearing that the Harbour is often referred to as a "Protected Structure" in its entirety within the context of the then 2010-2016 Development Plan. I have noted that this reference has continued in the current and newly adopted Development Plan. In my opinion, it is arguable that the entirety of the Harbour could be considered a protected structure having regard to the number of structures that are on the RPS within the harbour. Nonetheless, it consider it would be unreasonable to determine that the sea within the harbour walls falls within the curtilage of those protected structures as it is a dynamic force, constantly moving and evolving.
- 8.11.12 Clearly, there has been an evolution in the use of the harbour since its creation and that this has taken the form of the HSS jetty, the two breakwaters and the marina within the confines of the harbour. Therefore, I am not of the opinion that the importance of DLH's architectural heritage is such that it must remain as of a particular time and state. However, there clearly is a tangible link between certain users of the harbour since its early days, which is the case with the Water Wags and indeed walkers of the Pier. Nonetheless, it is my opinion that the introduction of the cruise ship in a harbour which was created first and foremost as a place of refuge for sailing ships and since its inception has allowed commercial and recreational users to align side by side, will result in the largest intervention since its construction and give rise to a working harbour where commercial activities are favoured and where recreational users will be disadvantaged. Furthermore, the very scale of these cruise ships within the restricted and confined space of the harbour would serve to dominate the architectural scale of the harbour and its very essence. Therefore, I consider

that the impact upon the architectural heritage of this Victorian Harbour would be significant.

8.14 Effects Resulting from the Existence of the Proposed Development

- 8.14.1 Impacts during the construction phase of the development include dust, noise, traffic, restricted access to the eastern marina and restrictions on training area on the water in the harbour. The negative impacts have been appropriately mitigated and are primarily temporary in duration. During the EIA concerns were expressed regarding the effectiveness of mitigation measures for protecting the Harbour porpoise, a conservation interest of the nearby Rockabill to Dalkey Island SAC during the dredging and piling works. I believe that this has been appropriately mitigated with the recommended condition of limiting construction to daylight hours only. Clearly, this will have a knock-on effect in the length of time it will take to complete the dredging/piling works and will lengthen the duration of inconvenience upon other users within the harbour. However, on balance, I believe that the now anticipated 6 month time scale will reduce the impact from that of significant as previously assessed to slight.
- 8.14.2 In relation to the operational phase of the development, I have outlined the impact of the scale of the berth into the harbour, the presence of the cruise ship at berth and the resulting wind shadow will impact upon sailing with the harbour and the ability to lay training courses therein. Having regard to the sailing club-Water Wags and their long-term association with the Harbour and the restrictions of their sailing boat-I am of the opinion that it has not been fully demonstrated that the proposal will not give rise to likely significant impacts upon the Water Wags, their training and race courses. I do not consider that this impact has been or can be sufficiently mitigated. Furthermore, within the context of soils and geology, the issue of scouring and navigational analysis was considered. I have argued that the absence of the investigative report as to the composition of the roundheads and their ability to withstand the force of water from the type of ship that utilise Azipods and thrusters, the proximity of the roundheads to the navigation channel, the incomplete navigational analyses and the lack of simulation for the Freedom range of cruise ships, have as a consequence provided a degree of uncertainty and a lack of clarity regarding the potential impact of the proposal within the confines of this historical harbour. I am of the opinion that these have not been adequately mitigated in the EIS and without the requisite studies I am unable to recommend appropriate mitigation measures. In the absence of this, I consider that the proposal would have a likely significant impact upon the roundheads and safety within the harbour. On the issue of visual impact, I have argued that the scale of the ships vis-à-vis the historic and low rise scale of the harbour and adjoining town of Dún Laoghaire would give rise to a likely significant impact. Also arising from the operational phase of the development are concerns that the proposal will not comply with the Marpol Convention-The International Convention for the Prevention of Pollution from

Ships wherein waste facilities should be provided at port so as to avoid the discharging of waste at sea. In this instance, I have outlined that no waste facilities are proposed and that under current regulations this will permit cruise ship operators to discharge their (treated) waste at three nautical miles from the harbour, which will bring it into the boundary of the Dalkey to Rockabill Island SAC. I argue that this would have a significant impact on the aforementioned SAC and has not been adequately mitigated. Within the section of Transport, the Applicant's proposal to use the Accommodation Walk for the overflow of coaches waiting to pick up cruise visitors for day trips, would conflict with the historic nature of this site within an area identified as "The Metals" and it would potentially conflict with the Sutton to Sandcove Cycle Route. This would have a likely significant impact on the recreational and historic nature of the area. In the event that permission is considered, the Applicant should be required to submit an alternative proposal for coach overflow parking.

8.14.3 It is stated that the proposed development does not prejudice the future development of Dún Laoghaire Harbour. The proposed development is one element of a wider redevelopment of DLH as detailed in the Masterplan 2011-2030. I would argue that the proposal for a cruise berth is of significant scale such that it can be assessed in its own right without regard to the Masterplan. I would note that the previous Development Plan did not incorporate the Masterplan and thereby give it statutory backing. This is also the case for the newly adopted plan. Rather it has stated that as per SLO13 that the preparation of a Dún Laoghaire and Environs LAP will be expedited and thereafter the future development of the harbour will be guided by the principles and objectives of that plan. In my opinion this SLO disregards the present Masterplan as prepared by the Applicants. Therefore, whilst I have had regard to the Masterplan and am fully aware of the Harbour's intentions with regard to other lands within the harbour, I reiterate that I am of the opinion that the current proposal is of a scale that it can be considered independently. Nonetheless, I am cognisant, that this development if approved, would be the first site for redevelopment within the entire harbour and therefore there is pressure to ensure that it sets a high standard to be followed. In this context, I refer to the Local Authority's submission where they expressed an opinion that the palette of materials chosen by the Applicant throughout the scheme should be consistent, high quality and robust having regard to its location. The Local Authority considered the level of submitted detail and supporting information in this regard to be poor. I consider that if the Board are of an opinion to grant permission that this issue could be addressed by condition in tandem with the Local Authority and should ensure that the proposal achieves a high standard demanded by its location within the Harbour cACA.

8.15 Summary of Interactions

8.15.1 Section 6 of the EIS considers the inter-relationships in terms of their potential impacts on the environment.

<u>Human Beings/Coastal Processes</u>: In the absence of tide and wind data in the navigational analysis, certainties could not be provided that cruise ships would not run aground in particular weather conditions in the navigational channel.

Human Beings/Air & Climate: A dust minimisation plan will be formulated for the construction phase of the project, to mitigate any impact. As previously recommended construction will not be permitted at night time-therefore night time construction noise is no longer being considered as an impact. Traffic management plans will aid the movement of construction traffic and traffic associated with the cruise ship visitors. Some short-term negative impacts will occur due to the noise of the cruise ship's engines, ventilation systems and internal public address system whilst at berth. In addition, there will be some short-term negative impacts associated with air quality whilst the ship is berthing or leaving and arriving at the berth when extra engine power is required. However, these will be localised of limited duration, and can be mitigated through adherence to controls.

Human Beings /Traffic: The construction phase will generate some additional traffic flows in the surrounding road network. However, controlled construction operations will mitigate against potential impacts to human beings. In relation to the operational phase, a transport management plan will be implemented, the existing pedestrian facilities improved and an overflow car park provided; there will be no significant impact from the proposed development on traffic in the vicinity of the harbour. The Accommodation Walk shall be excluded from any grant of permission for reasons of its historic relationship to the harbour, safe vehicular movements and its potential conflict with the S2S route.

Human Beings/Landscape & Visual Impact: There will be a likely significant impact on the surrounding community by reason of the low scale nature of Dun Laoghaire, the restricted nature of the harbour with its enveloping piers versus the height of these cruise ships. Whilst the proposed berthing facility is in keeping with the nature of the harbour structures therein, it will effectively bisect the harbour given its extension out into the harbour. On balance, it is considered that the proposal will have a likely significant impact.

<u>Soil & Geology/Climate</u>: The construction activities may generate quantities of dust. A dust minimisation plan will be formulated for the construction phase of the project, to mitigate any impact. The absence of an investigative report into the composition of the roundheads and their ability to withstand the force of water from the Azipods and thrusters of these cruise ships, the proximity of the roundheads to the navigation channel, the incomplete navigational analyses and the lack of simulation for the Freedom range of cruise ships, have as a

consequence provided a degree of uncertainty and a lack of clarity. Consequently, I am of the opinion that the proposal would have a likely significant impact upon the protected structures of the east and west roundheads.

<u>Soil & Geology/Water</u>: Good management practice and adherence to environmental codes and practices can mitigate the risk of water and sediment quality impacts associated with construction operations. However, the absence of appropriate waste facilities at the harbour for visiting cruise ships does not comply with the MARPOL Convention and under these conditions, cruise ships would be free to discharge their treated waste at 3 nautical miles from the harbour, which lies within the Rockabill to Dalkey Island SAC. This would therefore have a likely significant impact upon the marine interests of this SAC.

8.16 Adequacy of the EIS

- 8.16.1 The information in the Environmental Impact Statement submitted with the application provided adequate descriptions of the proposed project including its design and scale and the measures envisaged in order to avoid, reduce and remedy significant adverse effects. It provided insufficient data in relation to the foundations of the roundheads, the failure to incorporate wind and current data in the navigational analyses and to appropriately model the type of Freedom Class range of ship for which the cruise berth is designed.
- 8.16.2 Whilst having regard to section 172(1)(H) of the Planning and Development Act, as amended, where additional reports have all been included as part of my overall EIA (i.e. from the oral hearing and reports submitted as appendixes to the EIS), in my opinion, having regard to the aforementioned assessment, the EIS fails to adequately address the purpose of the EIA Directive.

9.0 APPROPRIATE ASSESSMENT

- 9.1 The obligation to undertake AA derives from Article 6(3) and 6(4) of the Habitats Directive. AA involves consideration of whether the plan or project alone or in combination with other projects or plans will adversely affect the integrity of a Natura 2000 site in view of the site's Conservation Objectives and includes consideration of any mitigation measures to avoid, reduce or offset negative effects. Natura 2000 (also known as European) sites comprise Special Areas of Conservation (SACs), designated under the EU Habitats Directive and Special Protection Areas (SPAs), designated under the EU Birds Directive (92/43/EEC). Ireland is obliged under both national and European legislation to maintain SACs at a favourable conservation status, i.e. ensuring their ecological integrity. Under the Habitats directive, the test for this favourable conservation status of a habitat is achieved when:
 - Its natural range, and the area it covers within that range, is stable or increasing, and
 - The ecological factors that are necessary for its long term maintenance exist and are likely to continue to exist for the foreseeable future, and
 - The conservation status of its typical species is favourable.
- 9.2 Favourable conservation status is achieved for a species when:
 - Population data on the species concerned indicate that it is maintaining itself, and
 - The natural range of the species is neither being reduced nor likely to be reduced for the foreseeable future, and
 - There is, and will probably continue to be, a sufficiently large habitat to maintain the population on a long term basis.
- 9.3 The AA determination must be carried out before a decision is made or consent given for the proposed plan or project. Consent can only be given after having determined that the proposed development would not adversely affect the integrity of a European Site in view of its Conservation Objectives. Case law of the Court of Justice of the European Union as established that the assessment carried out under Article 6(3) cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of a project on a European site (Case C-258/11, Sweetman and others).
- 9.4 This section of the report considers the likely significant effects of the proposal on the European sites with each of the potential significant impacts assessed in respect of each of the Natura 2000 sites considered to be at risk and the

- significance of same. The assessment is based on the submitted Natura Impact Statement (NIS).
- 9.5 In this instance Scott Cawley prepared an Appropriate Assessment Screening Statement, submitted as an Appendix to the EIS. The information is presented in tabular format in the AA screening statement. The AA Screening Statement is supplemented with information from the following studies, carried out on behalf of the Applicant and contained within the EIS:
 - Winter Bird Survey
 - Winter Bird Survey Peak County Data
 - Sediment Samples and Analysis 2014
 - Sediment Samples and Analysis 2015
 - Coastal Wave, Tide and Sediment Plume Modelling Report by ABP Marine Environmental Research
 - Construction Phase Noise Contours (Cumulative)
 - Operational Phase Noise Contours (Ship Noise)
 - Traffic County
 - Transport Demand Assessment
 - Junction Assessment
 - Traffic Management Plan Queen Mary II

9.6 Description of Development

9.6.1 I have provided a lengthy description of the proposed development in section 3.0 of this report and therefore in the interests of conciseness, would refer the Board to this section.

9.7 The European Sites Likely to be Affected

- 9.7.1 Section 8.0 of this report identifies and describes the main likely significant effects arising from the proposed development and regard should be had to this section of the report. As outlined in section 8.4 there are numerous European Sites located within a 15km radius of the proposed works.
 - Rockabill to Dalkey Island SAC
 - South Dublin Bay SAC
 - North North Dublin Bay SAC
 - Howth Head SAC
 - Ireland's Eye SAC
 - Baldoyle Bay SAC

- Bray Head SAC
- Ballyman Glen SAC
- Knocksink Wood SAC
- Wicklow Mountains SAC
- Dalkey Islands SPA
- South Dublin Bay and River Tolka Estuary SPA
- North Bull Island SPA
- Howth Head Coast SPA
- Baldoyle Bay SPA
- Ireland's Eye SPA
- Wicklow Mountains SPA
- 9.7.2 The Screening Statement restricts itself to designated sites within 15km and does not state why this is so. I note that the DoEHLG Guidance Document on Appropriate Assessment outlines that a distance of 15km is currently recommended however, there may be a source-pathway receptor which would bring in designated sites at a greater distance than this.²¹ I have had regard to the designated sites in the wider area having regard to the potential existence of pathways for impacts (source-pathway-receptor model) and established that there was none.
- 9.7.3 Screening for appropriate assessment was carried out by the applicant and it was concluded that the proposed development could potential impact eleven of these designated sites. The remaining 6 European Sites were screened out of the process because of separation distances or lack of connectivity between the proposed development and the particular sites.
 - ➤ Howth Head SAC (7km) was screened out as it was determined that the dumping of dredge spoil at Burford Bank would rapidly disperse to negligible levels and that the proposed project would not have any impact on sediment transport and deposition in Dublin Bay. Its qualifying interest of European dry heaths are also located above the shoreline and therefore there is no hydrological connection to it.

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DoEHLG (2209) Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. "Any Natura 2000 sites within the likely zone of impact of the plan or project. A distance of 15km is currently recommended in the case of plans, and derives from UK guidance (Scott Wilson *et al.*, 2006). For projects, the distance could be much less than 15km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects. Natura 2000 sites that are more than 15km from the plan or project area depending on the likely impacts of the plan or project, and the sensitivities of the ecological receptors, bearing in mind the precautionary principle. In the case of sites with water dependent habitats or species, and a plan or project that could affect water quality or quantity, for example, it may be necessary to consider the full extent of the upstream and/or downstream catchment".

- ➤ Baldoyle Bay SAC (9km) was screened out due to distance and separation by land and significant marine open water between the two sites.
- ➤ Bray Head SAC (12km) was screened out due to distance and the combination of there being a significant marine open water buffer between the sites and in the case of European dry heaths, which lies above the shoreline, and as a result has no hydrological link to the site.
- ➤ Ballyman Glen SAC (10km) was screened out due to distance and the absence of any hydrological link to the site.
- Knocksink Wood SAC (10.6km) was screened out due to distance and the absence of any hydrological link to the site.
- Wicklow Mountains SPA (12km) was screened out. It was accepted that there was a linkage between the proposed site and the European site as mobile SCI species may use the harbour and surrounding areas for roosting and/or feeding. Significant impacts are not predicted as noise from the construction works could disturb SCI species (Merlin and Peregrine) utilising the harbour for feeding. However, given the distance between the two, it is argued that it is unlikely to be the only foraging area for the SCI species, rather the birds are likely to feed in the larger Dublin Bay area. Furthermore given the infrequency of the occurrence and the short term duration of disturbance effects, the impact of noise from dredging and piling during construction works, it is not considered significant.
- 9.7.4 It is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination that the proposed cruise berth, individually or in combination with other plans and projects would not be likely to have a significant effect on the 6 Natura 2000 sites: Howth Head SAC, Baldoyle Bay SAC, Bray Head SAC, Ballyman Glen SAC, Knocksink Wood SAC and Wicklow Mountains SPA in view of those sites' Conservation Objectives, and a Stage 2 Appropriate Assessment for those 6 sites is not therefore required.
- 9.7.5 The screening assessment therefore identifies the following seven no. sites which are subject to detailed screening assessment.
 - Rockabill to Dalkey Island SAC
 - South Dublin Bay SAC
 - North Dublin Bay SAC
 - Dalkey Islands SPA
 - South Dublin Bay and River Tolka Estuary SPA
 - North Bull Island SPA

- Howth Head Coast SPA
- Baldoyle Bay SPA
- Ireland's Eye SPA
- Wicklow Mountains SPA
- 9.7.6 Rockabill to Dalkey Island SAC (003000): The conservation objective for this site is generic. The qualifying interests are Annex I Habitats: Reefs (1170) and Annex II Species: Harbour porpoise Phocoena phocacena (1351). Screening Statement confirms that the development has the potential to impact on the SAC by reason of the dumping of dredge material at Burford Bank, which could generate noise that could impact on the Harbour porpoise and/or result in direct fatalities for example, boat strike. Significant effects on the European site cannot be ruled out in view of the conservation objectives. Accidental pollution is also cited which could carry pollutants into the local coastal waters of Dublin Bay. Significant effects on European sites cannot be ruled out in view of the conservation objectives. The dumping of material on Burford Bank has the potential to result in sedimentation of material on reef communities. However, no significant effects are predicted for reasons set out under potential for cumulative effects on European sites. Dredging of the sea bed and dumping of spoil at Burford Bank could impact on the Harbour porpoise, but no significant impacts are predicted for reasons of:
 - The Harbour porpoise feed on a wide range of fish, therefore they are not dependent on demersal fish species, which could be temporarily impacted by the dredge spoil disposal as a food source.
 - The disposal site occupies a small area within the European site with a large area of alternative foraging grounds available for exploitation.
 - The foraging habitat of the Harbour Porpoise is usually located in areas of strong tidal currents, often close to shore adjacent to islands or headlands.
 - Foul waters generated during operation will be treated at Ringsend WWTW and following treatment will be discharged into Dublin Bay. No significant effects are predicted for the reasons already set out under "Potential for Cumulative effects upon European sites".
- 9.7.7 <u>South Dublin Bay SAC (000219)</u>: The Conservation Objective is currently generic, however the qualifying interests are "mudflats and sandflats not covered by seawater at low tide" (1140). The Screening Statement confirms the source-pathway-receptor links between the site and the proposed development and states that the proposal has the potential to impact on the

SAC. Accidental pollution events during construction or in operation could carry pollutants into the local coastal waters of Dublin Bay. There is also potential for escape of plant materials, seeds/seedlings from new plant to be introduced to the receiving water environment via surface water drainage. If any non-native invasive species were to be used in the landscaping proposals this would present a risk of introduction/spread of non-native invasive species to habitats within Dublin Bay. Dredging works could also give rise to impacts during construction which could lead to re-suspension and settling out of sediments within the European site. However, no significant effects are predicted due to the findings of the dredge plume modelling where any resuspended sediments would rapidly disperse to negligible levels and that the proposed project would not have any impact on sediment transport and deposition in Dublin Bay. Foul waters generated during operation will be treated at Rinsgend WWTW and following treatment will be discharged into Dublin Bay.

- 9.7.8 North Dublin Bay SAC (000206): The Conservation Objective is currently generic, however the qualifying interests are as follows:
 - mudflats and sandflats not covered by seawater at low tide (1140)
 - Annual vegetation of drift lines (1210)
 - Salicorna and other annuals colonizing mud and sand (1310)
 - Atlantic salt meadows (Glauco-Puccinellietalia maritimate) (1330)
 - Petalophyllum ralfsii (1395)
 - Mediterranean salt meadows (Juncetalia maritime) (1410)
 - Embryonic shifting Dúnes (2110)
 - Shifting Dúnes along the shoreline with Ammophila arenaria ("white Dúnes)
 2120)
 - Fixed coastal Dúnes with herbaceous vegetation ("grey Dúnes") (2130)
 - Humid Dúne stacks (2190)

The source-pathway-receptor links are confirmed in the Screening Statement and the potential impacts are reiterated as for the South Dublin Bay SAC.

9.7.9 <u>Dalkey Islands SPA (0044172)</u>: The Conservation Objective is currently generic, however the qualifying interests are as follows:

- Roseate Tern (Sterna dougallii) (A192)
- Common Tern (Sterna hirundo) (A193)
- Arctic Tern (Sterna paradisaea) (A194)

The Screening Statement outlines that the European Site is not within the footprint of the proposed development but mobile SCI species may use the harbour and surrounding areas for roosting and/or feeding. As a consequence the following impacts may apply: noise and vibration during construction works, including dredging and pile driving could disturb or displace SCI species utilising the harbour (outside of the SPA) for feeding and/or roosting into the wider Dublin Bay area. However, no significant impacts are predicted as piling will be carried out within the confines of the harbour for a duration of 12 weeks, thus reducing the transmission of noise into the water column. It is stated that the "Common Tern" was recorded on one occasion only during bird surveys of the development site. Terns can feed outside the harbour in the larger Dublin Bay area, and given their infrequent nature within the harbour, the impact of the development is not considered infrequent. Roseate Tern and the Artic tern were not recorded within the proposed development area. Whilst the dredging period may overlap with the early winter and late winter bird season, when bird numbers are not at their peak and also with the breeding season. However, the noise emitted from the dredgers is similar to typical shipping activities and it is stated that birds using the harbour would be habituated to such noise. Therefore, the impact of dredging is not considered significant. operational the impact is also not considered significant as the cruise ships will be using the existing navigation channel to the harbour and its distance from the European site (3km).

9.7.10 <u>South Dublin Bay and River Tolka Estuary SPA (004024)</u>: The Conservation Objective is currently generic, however the qualifying interests are as follows:

- ;lkLight-bellied Brent Goose (Branta bernicla hrota (A046) (wintering)
- Oystercatcher (Haematopus ostralegus) (A130) (wintering)
- Ringed Plover (Charadrius hiaticula) (A137) (wintering)
- Grey Plover (Pluvialis squatarola) (A141) (wintering)
- Knot (Calidris canutus) (A143) (wintering)
- Sanderling (Calidris alba) (A144) (wintering)
- Dúnlin (Calidris alpina) (A149) (wintering)
- Bar-tailed Godwit (Limosa lapponica) (A157) (wintering)

- Redshank (Tringa totanus) (A162) (wintering)
- Black-headed Gull (Croicocephalus ridibundus) (A179) (wintering)
- Roseate Tern (Sterna dougallii) (A192)
- Common Tern (Sterna hirundo) (A193) (breeding)
- Artic Tern (Sterna paradisaea) (A914) (passage)
- Wetlands and Waterbirds (A999)
- 9.7.11 The Screening Statement confirms that there is a source-pathway-receptor link between the European site and that of the proposed development. Although the European site is not within the footprint of the proposed development, mobile SCI species may use the harbour or surrounding areas for roosting and/or feeding. The assessment is as for Dalkey Island SPA, with the following additional information. It is stated that Wintering SCI species were recorded within the harbour area in small numbers not exceeding 1% National Thresholds with the exception of Dúnlin and Sanderling that were recorded high tide roosting. Dúnlin were recorded regularly in the area with a peak count equating to 17% of the overall Dublin Bay population, and Sanderling were recorded on 3 occasions with a peak count equating to approximately 35% of the overall Dublin Bay population. Larger numbers were recorded at high tide roosting on the outside of the harbour walls, with the walls forming a buffer to potential disturbances within the harbour. It is repeated that the birds have become habituated to shipping noise within the harbour. The issue of sediment suspension within the harbour is considered, but due to dredge plume modelling is not considered a significant issue for the fish eating waterbirds to hunt and catch prey. It is stated that noise during operation with the cruise vessels sailing into the harbour circa 68m from the SPA boundary could result in disturbance to the SCIs species at the site. No significant effects are predicted due to the fact that the operation of the facility will be seasonal, April-September, thus largely avoiding the winter bird season, disturbance to the SCI species in the overlap period would be limited to shipping movements into and out of the harbour in the early morning and late evening and SCI species are likely to have become habituated to a high degree of disturbance. For breeding and passage species, it is stated that there are no tern colonies located within the harbour itself and any disturbance to terns within the harbour would be limited to small numbers recorded feeding or flying over the area.
- 9.7.12 North Bull Island SPA (004006): The Conservation Objective is currently generic, however the qualifying interests are as follows:
 - Light-bellied Brent Goose (Branta bernicla hrota (A046) (wintering)

- Shelduck (Tadorna tadorna) (A1048)
- Teal (Anas crecca) (A052)
- Pintail (Anas acuta) (A054) (wintering)
- Shoveler (Anas clypeata) (A056)
- Oystercatcher (Haematopus ostralegus) (A130) (wintering)
- Golden Plover (Pluvialis apricaria) (A140) (wintering)
- Grey Plover (Pluvialis squatarola) (A141)(wintering)
- Knot (Calidris canutus) (A143) (wintering)
- Sanderling (Calidris alba) (A144) (wintering)
- Dúnlin (Calidris alpina) (A149) (wintering)
- Black-tailed Godwit (Limosa limosa) (A156) (wintering)
- Redshank (Tringa totanus) (A162) (wintering)
- Black-headed Gull (Croicocephalus ridibundus) (A179) (wintering)
- Bar-tailed Godwit (Limosa lapponica) (A157) (wintering)
- Curlew (Numerious arquata) (A160) (wintering)
- Redshank (Tringa totanus) (A162) (wintering)
- Turnstone (Arenaria interpres) (A169) (wintering)
- Black-headed Gull (Croicocephalus ridibundus) (A179) (wintering)
- Wetlands and Waterbirds (A999)

The Screening Statement confirms that there is a source-pathway-receptor link between the European site and that of the proposed development. Although the European site is not within the footprint of the proposed development, mobile SCI species may use the harbour or surrounding areas for roosting and/or feeding. The assessment is as for South Dublin Bay and River Tolka Estuary above.

- 9.7.13 <u>Howth Head Coast SPA (004113)</u>: The Conservation Objective is currently generic, however the qualifying interest is as follows:
 - Kittiwake (Rissa tridactyla) (A188) (breeding)

The Screening Statement confirms that there is a source-pathway-receptor link between the European site and that of the proposed development. Although the European site is not within the footprint of the proposed development, mobile SCI species may use the harbour or surrounding areas for roosting and/or feeding. The Screening Statement informs that Kittiwake were recorded on 6 occasions during the winter bird surveys for the proposed development, with the peak count of two birds on two occasions. These birds can feed outside of the harbour in the larger Dublin Bay area and given their low numbers, it is not considered that the impact of noise and vibration from the dredging and piling operations will be significant. Comments are repeated in relation to the overlap of the dredging programme with the winter bird season as stated elsewhere and the same conclusion is reached that the impact of dredging is not considered significant. The issue of accidental pollution and suspension of sediment in the water column is as before.

- 9.7.14 <u>Baldoyle Bay SPA (004016)</u>: The Conservation Objective is currently generic, however the qualifying interest is as follows:
 - Light-bellied Brent Goose (Branta bernicla hrota (A046) (wintering)
 - Shelduck (Tadorna tadorna) (A1048)
 - Ringed Plover (Charadrius hiaticula) (A137) (wintering)
 - Golden Plover (Pluvialis apricaria) (A140) (wintering)
 - Grey Plover (Pluvialis squatarola) (A141)(wintering)
 - Bar-tailed Godwit (Limosa lapponica) (A157) (wintering)
 - Wetlands and Waterbirds (A999)

The Screening Statement confirms that there is a source-pathway-receptor link between the European site and that of the proposed development. Although the European site is not within the footprint of the proposed development, mobile SCI species may use the harbour or surrounding areas for roosting and/or feeding. The assessment is as above with the exceptions that Wintering SCI species, Light-bellied Brent Goose, Shelduck, Ringed Plover and Bar-tailed Godwit were recorded within the harbour area in small numbers not exceeding the 1% National Thresholds.

- 9.7.15 <u>Ireland's Eye SPA (004117)</u>: The Conservation Objective is currently generic, however the qualifying interests are as follows:
 - Cormorant (Phalacrocorax carbo) (A017)

- Herring Gull (Larus argentatus (A184) (breeding)
- Kittiwake (Rissa Tridactyla) (A188) (breeding)
- Guillemot (Uria aalge) (A199) (breeding)
- Razorbill (Alca torda) (A200) (breeding)

The Screening Statement confirms that there is a source-pathway-receptor link between the European site and that of the proposed development. Although the European site is not within the footprint of the proposed development, mobile SCI species may use the harbour or surrounding areas for roosting and/or feeding. The assessment is as above with the exceptions that the following birds were recorded:

- Cormorant were recorded regularly (22 occasions) within the harbour area with peak counts equating to approximately 27% of the overall Dublin Bay population, and numbers did not exceed the 1% National Threshold.
- Herring Gull were recorded regularly (24 occasions) within the harbour area with peal counts equating to approximately 11% of the overall Dublin Bay population.
- Kittiwake were recorded on 6 occasions during the winter bird surveys for the proposed development, with the peak count of 2 birds on two occasions.
- Guillemot were recorded regularly (24 occasions) with a peak count of 62.
- Razorbill were recorded 8 times with a peak count of 94.

Given that these species were not breeding within the harbour and can feed outside of the harbour, the impact is not considered significant. Comments in relation to accidental pollution and dredging works during construction and suspension of sediment are reiterated in the Screening Statement.

9.7.16 The Screening Statement concludes that it was not possible to rule out significant effects arising from the development on Rockabill to Dalkey Island SAC, South Dublin Bay SAC, North Dublin Bay SAC, Dalkey Islands SPA, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Howth Head Coast SPA, Baldoyle SPA and Ireland's Eye SPA. Therefore, a Stage 2 Appropriate Assessment and submission of an NIS is therefore required. I agree with this conclusion of the Screening Statement as these sites illustrate evidence of source-pathway-receptor linkages to the development site by means of foraging areas and/or hydrological connections.

9.8 Natura Impact Assessment

- 9.8.1 The NIA describes the proposal in detail once more. The NIA examines the potential impact of the proposed development on the integrity of those 9 European sites with respect to their conservation objectives and to their general structure and function. The submitted NIA also sets out the specific mitigation measures that will be in place to ensure that the proposed development will not have any adverse effect on the integrity of these European Sites.
- 9.8.2 Section 3 of the NIA considers the condition of each site and their present management.
- 9.8.3 Rockabill to Dalkey Island SAC: The Site Synopsis of the NPWS (2014) outlines that the reefs of Dalkey Island are subject to strong tidal currents with an abundant supply of suspended matter, resulting in a good representation of filter feeding species. It is also a key habitat for Harbour porpoise within the Irish Sea, and contains a wide array of habitats believed to be important for the species. Threats to the qualifying interests include habitat loss, sedimentation, anthropogenic impacts and barriers to movement. The conditions underpinning the site's integrity are tidal currents, water levels, erosion and deposition rates, water quality, foraging habitat, food supply, appropriate levels of disturbance and air quality. The habitat area is described as stable/increasing subject to natural processes and that its habitat distribution is also stable/increasing, subject to natural processes. To maintain the favourable conservation status of the Harbour Porpoise, the species range within the site should not be restricted by artificial barriers to site use and to minimise the level of impact that human activities have upon this mammal. The principal impact of the development is considered to be noise, boat strike impact, dredging including (dumping of dredge material) and piling operations. It is stated that the construction works, including dumping of dredge material at Burford Bank, have the potential to generate noise impact that could disturb or create a barrier to movement for the Harbour porpoise and/or result in direct fatalities of the Harbour Porpoise. The Marine Mammal Risk Assessment (MMRA) prepared for the proposed development, contained in section 5.2.4 of the EIS concludes that it is extremely unlikely that the proposed works would result in death or injury to marine mammals. It is stated that localised, temporary disturbance is likely to be caused to these marine mammals by dredging, while piling may have a more widespread effect. The effect will be reduced due to the location of the works within the harbour. All effects will be temporary in nature. aforementioned MMRA concludes that temporary of short-term restrictions of access or range do not affect Target 1 of the Conservation Objectives related to the harbour porpoise in the SAC. In relation to the dumping of dredge spoil at Burford Bank, the MMRA concludes that they avoid ships at some distance (1-1.5km) with stronger reaction at 400m and therefore will move away from the

dredger as it arrives on station at Burford Bank, minimising the possibility of any interaction between the two. It is stated that the area of Burford Bank is of lesser importance to the Harbour Porpoise than areas around Howth Head and Dalkey Island. As previously outlined, of critical importance to the effectiveness of the MMO is that they are able to monitor the presence of the Harbour porpoise and establish whether there is potential for a boat strike. Clearly, such actions will not be possible should the applicant operate the dredging works at night time. Therefore, as previously outlined, it is recommended that night time construction works not be permitted, in the event of a grant of permission. I note also during the course of the Oral Hearing that Ms. Mulcrone enquired of the Applicant's team whether the impact of dredger noise upon mammals such as the Harbour porpoise had been considered. The Applicant confirmed that no such analysis had taken place.

- 9.8.4 Impact 2 is identified as an accidental pollution incident during construction During construction there will be three temporary site and/or operation. compounds located on the landside element of the proposed development. These will facilitate both construction access for landside and marine construction works including a precasting plant. Construction works will involve temporary lifting and reinstating of some surfaces within the development footprint, as well as some demolitions. Surface water run-off from the proposed development will drain to the existing surface water drainage and discharge via petrol interceptor to DLH. The operation of plant, machinery and vessels has the potential to release pollutants such as diesel and hydraulic fluid into the water column. These substances can have toxic effects on marine organisms including marine mammals and their prey. Surface water discharges from the landside construction site have their potential to release silt laden surface discharges, contaminated water discharges such as hydrocarbons or an accidental pollution incident into the harbour and environs. Dependent on the nature of the contamination and volume of water involved, this has the potential to negatively impact the QIs and SCIs habitats and species of the designated sites. It is stated that marine grade concrete will be used to fill monopoles once they are installed rather than being exposed to the water column thus there will be minimal risk to the aquatic environment. The guay deck structure has been designed to maximise the use of precast concrete, thus minimising potential for concrete spills. The scour protection feature may involve pumping of grout through a closed impermeable sock. In relation to the operation of the development, it is stated that the proposed development will provide a similar quantum of hard surface areas, with negligible change in quantities of surface water run-off from the existing site. Furthermore surface water will be treated via petrol interceptor to remove contaminants prior to discharge.
- 9.8.5 The NIS states that the impact prediction is unlikely, medium term locally to internationally significant negative impact from fuel, oil or concrete spills, dependent on the magnitude of the spill.

- 9.8.6 The NIS has failed to consider the implications of the cruise ships discharging treated waste at 3 nautical miles from shore, which lies within the boundary of the Dalkey to Rockabill Island SAC. Such actions would in my opinion have direct implications for the SCI of this SAC which are hydrologically dependent. I consider that this would give rise to a significant impact which could occur very frequently dependent on the volume of cruise traffic that Dún Laoghaire receives.
- 9.8.7 North Dublin Bay SAC is also considered and it is stated that the Natura 2000 Standard Data Form (NPWS, 2014) lists the SAC as having an excellent diversity of coastal habitats. The Dune system is one of the most important systems on the east coast, one of few in Ireland that is actively accreting. Saltmarsh habitat is well represented at the site with particularly good zonation evident. Of note is the occurrence of Petalwort, a Qualifying Interest (QI), its only known location away from the western seaboard. Threats to the site including oil pollution from Dublin Port, commercial bait digging, recreational activities and water abstraction by golf clubs. The NIS states out that the conditions underpinning the site integrity of this SAC are water quality including nutrient levels, water clarity and sediment levels, appropriate agricultural practices including grazing pressures, surface and ground water quality, appropriate levels of disturbance, water levels, air quality, tidal currents, erosion and deposition rates and the height and frequency of the tides availability of foreshore sand and the average strength of the on-shore winds.
- 9.8.8 Table 3 of the NIS sets out the detailed Conservation Objectives for this SAC. For its qualifying interest: Mudflats and sandflats not covered by water at low tide, it is stated that this permanent habitat area is stable or increasing, subject to natural processes. Another qualifying interest is the annual vegetation of drift lines and to restore the favourable conservation condition of annual vegetation of drift lines in North Dublin Bay SAC. It is stated that the habitat area is decreasing, subject to natural processes, including erosion and succession. In relation to the physical structure, it is stated to maintain the natural circulation of sediment and organic matter, without any physical obstructions.
- 9.8.9 Another qualifying interest is its salicornia and other annuals colonising mud and sand where it is stated that its habitat area is stable/increasing subject to natural processes, including erosion and succession. In terms of the presence or absence of physical barriers, its target is to maintain or where necessary restore, natural circulation of sediments and organic matter, without any physical obstructions. Other targets include maintaining more than 90% of the area outside the creeks vegetated, maintain the presence of species-poor communities listed in SMP and to ensure no significant expansion of common cordgrass, with an annual spread of less than 1%.

- 9.8.10 Another qualifying interest is the Atlantic Salt Meadows whose habitat area is stable or increasing, subject to natural processes, including erosion and succession. Its target is to maintain natural circulation of sediments and organic matter, without any physical obstructions. Other targets include maintaining its natural tidal regime, to maintain the range of coastal habitats including transitional zones. Another qualifying interest is the Mediterranean salt meadows whose area is stable or increasing, subject to natural processes. Its target seeks to maintain creek and pan structure, maintain its natural tidal regime, maintain the range of coastal habitats including transitional zones and its structural variation within sward. Another target is to maintain more than 90% of the area outside of the creeks vegetated.
- 9.8.11 Another qualifying interest is its Embryonic shifting Dúnes whose habitat area is stable or increasing, subject to natural processes. Its target is to maintain natural circulation of sediments and organic matter, without any physical obstructions, maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession. In terms of percentage cover, more than 95% of sand couch and and/or lyme-grass should be healthy.
- 9.8.12 Another qualifying interest is shifting Dúnes along the shoreline with white Dúnes whose habitat are is stable or increasing, subject to natural processes, including erosion and succession. Its target is to maintain 95% of marram grass and/or lyme-grass should be health.
- 9.8.13 Another qualifying interest is fixed coastal Dúnes with transitional zones whose habitat are is stable or increasing. Its target is to maintain natural circulation of sediments and organic matter, without any physical obstructions, maintain the range of coastal habitats including transitional zones, that bare ground should not exceed 10% of the fixed Dúne habitat and to maintain structural variation in the sward.
- 9.8.14 Another qualifying interest is Humid Dúne slacks whose habitat area is increasing. Its targets are to maintain natural circulation of sediments and organic matter, without any physical obstructions, to maintain its natural hydrological regime, to maintain the range of coastal habitats including transitional zones and that bare ground should not exceed 5% of Dúne slack habitat, with the exception of pioneer slacks which can have up to 20% bare ground, to maintain less than 40% cover of creeping willows.
- 9.8.15 Another qualifying interest is Petalwort whose target is to have no decline in its number and geographical spread of populations and no decline in the number of individuals, the area of its habitat and to maintain the hydrological conditions so that substrate is kept moist and damp throughout the year but not subject to prolonged inundation by flooding in winter.

- 9.8.16 South Dublin Bay SAC is listed by the NPWS (2014, Standard Data Form). Its habitats include transitional zones, subject to natural processes including erosion and succession as a fine example of extensive intertidal flats, of predominantly sand with muddy sands in more sheltered areas. It also hosts the largest stand of Zostera on the east coast. It provides a supporting role to important populations of wintering bird populations of Dublin Bay. Threats to the site are identified as land reclamation, oil pollution from Dublin Port, commercial bait digging and disturbance by walkers and dogs. Table 2 of the NIS identifies the conditions underpinning the site's integrity as water quality including nutrient levels, water clarity, sediment levels, erosion and deposition rates, controlling bait digging, land reclamation for industrial/infrastructure usage, maintain appropriate levels of disturbance and tidal currents. Table 3 of the NIS sets out the detailed conservation objectives for relevant European sites. Its qualifying interest is mudflats and sandflats not covered by low tide. Its targets are that its habitat area is stable or increasing, to maintain the extent of the Zostera dominated community and conserve the high quality of the Zostera dominated community and to conserve this community type in a natural condition.
- 9.8.17 Dalkey Islands SPA is identified by the NPWS (2014) as an important site for both breeding and staging Sterna terns, Common tern, Roseate tern and Artic tern. The site, along with other parts of South Dublin Bay is used by the three species as a major post-breeding/pre-mitigation autumn roost area. principle threats to nesting terns are severe weather events, predation and disturbance. Table 2 of the NIS sets the conditions underpinning the site's integrity as water quality including nutrient levels, water clarity, sediment levels, foraging habitat, food supply, appropriate levels of disturbance, water levels, tidal currents, erosion/deposition levels, freshwater influx, intertidal habitats and air quality. Section 4 of the NIS considers the potential impacts on European sites and in relation to Dalkey Island it is stated that SCI species could utilise the intertidal and estuarine habitats in Dublin Bay for feeding and/or roosting. Common Tern has been recorded utilising DLH and surrounding areas. Therefore they would be vulnerable to an accidental pollution incident either the effects of an accidental pollution either directly or indirectly. Prediction of the NIS in relation to Dalkey Island SPA is unlikely, medium term locally to internationally significant negative impact from fuel, oil or concrete spills, dependent on the magnitude of the spill.
- 9.8.18 North Bull Island SPA as per the NPWS Standard Data Form lists this SPA as one of the top 10 sites in the country for wintering waterfowl. It provides important feeding and roosting habitat for bird species listed as Special Conservation Interests for the site and supports Light-bellied Brent Goose and

Bar-Tailed Godwit. The quality of the estuarine habitats in the SPA are good to be very good, part of which overlaps with North Dublin Bay SAC. Threats are oil pollution from Dublin Port along with commercial bait digging, disturbance from activities such as sailing, walkers and dogs. Table 2 of the NIS sets out the conditions underpinning the site's integrity which are tidal currents, water levels, erosion and deposition rates, water quality, foraging habitat, food supply, appropriate levels of disturbance and air quality. Table 3 sets out the detailed conservation objectives for relevant European sites where the qualifying interests are identified. In this instance these are Light-bellied Brent Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Golden Plover, Grey Plover, Knot, Sanderling, Dúnlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Turnstone, Black-headed Gull. It seeks to maintain the favourable conservation condition and to ensure the long term population trend stable or increasing and no significant decrease in the range, timing and intensity of use of areas by all of the above named species. Another qualifying interest is wetlands where the target is to maintain the favourable conservation condition. The target is that the permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 1713ha, other than that occurring from natural patterns of variation.

- 9.8.19 South Dublin Bay and River Tolka Estuary SPA is stated by the NPWS (2014) to possess extensive intertidal flats, part of which are designated as South Dublin Bay SAC and which supports wintering waterfowl as part of the wider Dublin Bay population. The site also supports an internationally important population of Light-bellied Brent Geese, feeding on the stands of Zostera as noted under South Dublin Bay SAC. It hosts nationally important numbers of 6 species, is an important site for wintering gulls and is an autumn roosting site for a significant number of terns. The main threat to the site is land reclamation, with other threats including oil population from Dublin Port, commercial bait digging and disturbance by walkers and dogs. Table 2 of the NIS sets out the conditions underpinning the site's integrity are water quality including nutrient levels, water clarity, sediment levels, foraging habitat, food supply, appropriate levels of disturbance, water levels, tidal currents, erosion/deposition levels, freshwater influx, intertidal habitats and air quality. Its qualifying interests are the light-bellied Brent Goose, Oystercatcher, Ringed Plover, Knot, Sanderling, Dúnlin, Bar-tailed Godwit, Redshank and Blackheaded Gull. Its target is to maintain the favourable conservation condition.
- 9.8.20 In relation to Roseate Tern it is stated that the target is to have no significant decline in population and its prey biomass. Another target is to have no significant increase in barriers to connectivity. In relation to the level of impact, it is stated that human activities should occur at levels that do not adversely

- affect the numbers of roseate tern among the post-breeding aggregation of terns.
- 9.8.21 In relation to the Common Tern its target is to maintain the favourable conservation condition and to experience no significant decline in breeding population, its productivity rate, distribution of breeding colonies, roosting areas, its prey biomass and no significant increase in barriers to connectivity. It is stated that human activities should occur at levels that do not adversely affect the breeding common tern population or their post-breeding aggregation of terns.
- 9.8.22 Another qualifying interest is the wetlands, where the target is to maintain the favourable conservation condition. It is stated that the permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2192ha, other than that occurring from natural patterns of variation.
- 9.8.23 It is stated in the NIS that the Grey Plover is proposed for removal from the list of SCI's for the site so no site specific objective is included for the species.
- 9.8.24 It is stated in the NIS that a number of species would be vulnerable to the incident effects of an accidental pollution incident either directly or indirectly by affecting the habitats and food supply on which they rely for feeding and/or roosting within DLH, surrounding area and the wider Dublin Bay area. The Impact Prediction is stated to be unlikely, medium term locally to internationally significant negative impact from fuel, oil or concrete spills, dependent on the magnitude of the spill. Mitigation measures in the form of a Project Specific Construction and Environmental Management Plan to prevent the release of pollutants and sediments is proposed. If appropriately conducted and managed, this is considered reasonable.
- 9.8.25 Baldoyle Bay SPA (NPWS, 2014) has extensive intertidal sand and mud flats and salt marsh fringes of variable quality, but which are generally good. SPA supports a diversity of wintering waterfowl and internationally important populations of Light-bellied Brent Goose. Hosts nationally important populations of Shelduck, Pintalk, Ringed Plover, Golden Plover, Grey Plover and Bar-tailed Godwit. Threats to the SPA are from water pollution, bait digging, disturbance from walkers, dogs and wild fowling. Table 2 of the NIS identifies the conditions underpinning the site integrity as water quality including nutrient levels, water clarity, sediment levels, foraging habitat, food supply, appropriate levels of disturbance, water levels, tidal currents, erosion/deposition levels, freshwater influx, intertidal habitats and air quality. Table 3 identifies the detailed conservation objectives for relevant European sites in relation to lightbellied Brent Goose, Shelduck, Ringed Plover, Golden Plover, Grey Plover and Bar-tailed Godwit. Its target is to maintain its favourable conservation condition and to ensure its long-term population trend as stable or increasing. Another

target is to ensure no significant decrease in the range, timing and intensity of use of areas by all of the above named species, other than that occurring from natural patterns of variation. The stated target in relation to wetlands is to ensure that the habitat area should be stable and not significantly less than the area of 263ha other than that occurring from natural patterns of variation. Section 4 of the NIS which considers the potential impact on European sites. In relation to Baldoyle Bay SPA, it is stated that the SCI species could utilise the intertidal and estuarine habitats in Dublin Bay for feeding and/or roosting. The SCI species of light-bellied Brent Goose, Shelduck, Ringed Plover and Bartailed Godwit would be vulnerable to the effects of an accidental pollution incident either indirectly or indirectly. The Impact Prediction is stated to be "unlikely, medium term locally to internationally significant negative impact from fuel, oil or concrete spills, dependent on the magnitude of the spill". Mitigation measures in the form of a Project Specific Construction and Environmental Management Plan to prevent the release of pollutants and sediments is proposed. If appropriately conducted and managed, this is considered reasonable.

- 9.8.26 Howth Head Coast SPA according to the NPWS (2014) has important colonies of breeding seabirds, with nationally important populations of Kittiwake, Razorbill and Black Guillemot and regionally important populations of Overfishing in the local waters is a potential threat to prey availability for birds. Table 2 of the NIS sets out the conditions underpinning the site's integrity as water quality including nutrient levels, water quality including nutrient levels, water clarity, sediment levels, foraging habitat, food supply, appropriate levels of disturbance, water levels, tidal currents, erosion/deposition levels, freshwater influx, intertidal habitats and air quality. Section 4 of the NIS considered the potential impacts on European sites. In relation to Howth Head Coast SPA, it is stated that the SCI species, Kittiwake could utilise the intertidal and estuarine habitats in Dublin Bay for feeding and/or roosting. Kittiwake were recorded in utilising the harbour. This bird is vulnerable to the effects of an accidental pollution incident either directly or indirectly. The NIS states that the impact prediction is "unlikely, medium term locally to internationally significant negative impact from fuel, oil or concrete spills, dependent on the magnitude of the spill.
- 9.8.27 <u>Irelands Eye SPA</u> (NPWS, 2014) is listed as an important seabird colony with 11 species breeding regularly. It has nationally important populations of Cormorant, Herring Gull, Great Black-backed Gull, Kittiwake, Guillemot and Razorbill. A colony of Gannet Sula bassana has established on the site, one of 5 in the country. It also has regionally important populations of Fulmar, Shag, Black Guillemot and Puffin. Peregrine bred on the site in some years.

Increases in daytrippers to the island could pose a threat to nesting seabirds, as well as predation by rats. Table 2 of the NIS sets out the conditions underpinning the site's integrity as water quality including nutrient levels, water clarity, sediment levels, foraging habitats, breeding habitat, food supply, appropriate levels of disturbance, water levels, tidal currents, erosion/deposition levels, freshwater influx, intertidal habitats and air quality. Section 4 of the NIS considers the potential impacts on European sites. The NIS states that the SCI species could utilise the intertidal and estuarine habitats in Dublin Bay for feeding and/or roosting. The following SCIs have been recorded utilising DLH and surrounding areas, these are cormorant, herring gull, kittiwake, guillemot and razorbill would be vulnerable to the effects of an accidental pollution incident either directly or indirectly. The impact prediction is stated to be "unlikely, medium term locally to internationally significant negative impact from fuel, oil or concrete spills, dependent on the magnitude of the spill.

- 9.8.28 Section 4 of the NIS considers the assessment of potential impacts on European sites. It takes South Dublin Bay SAC and North Dublin Bay SAC. It is stated that the qualifying interests (these are the mudflats and sandflats not covered by seawater at low tide, annual vegetation of drift lines, Salicornia and other annuals colonising mud and sand, Atlantic salt meadows, Mediterranean salt meadows and embryonic shifting Dúnes) of South Dublin Bay SAC and North Dublin Bay SAC would be potentially at risk from an accidental pollution incident during construction and operation of the proposed development, if it was of a sufficient magnitude and duration to affect water quality in Dublin Bay. Other QI's such as the shifting Dunes along the shoreline, fixed coastal Dunes with herbaceous vegetation, humid Dune slacks and Petalwort are found above the high tide line and would therefore not be impacted by an accidental pollution in Dublin Bay. Many bird species for which SPAs are designated are also dependent on the above habitats for feeding and roosting, therefore any impacts to habitats would lead to indirect impacts on SPA SCIs bird species utilising Dublin Bay. The Impact Prediction is stated to be unlikely, medium term locally to internationally significant negative impact from fuel, oil or concrete spills, dependent on the magnitude of the spill.
- 9.8.29 A potential impact on European sites is stated to be the release of non-native invasive species into the receiving water environment. It is stated that there is potential for escape of plant materials, seeds/seedlings from new planting to be introduced to the receiving water environment via surface water drainage. If any non-native invasion species were to be used in the landscaping proposals this could present a risk of introduction/spread of non-native invasive species to habitats within Dublin Bay. Discharge of ballast waters from cruise ships also has the potential to release non-native invasive species into the receiving coastal waters of DLH and the wider Dublin Bay. However, it is stated in the

NIS that all waste from cruise ships will be discharged outside international waters. In relation to Rockabill to Dalkey Island SAC and impact 3 cited, it is stated that the reefs, (a QI) would be potentially at risk from release of non-native invasive species, either waterborne or those that could spread to land as the reefs are intertidal and subtidal. The impact prediction is stated to be "unlikely long term locally to internationally significant impact". South Dublin Bay SAC and North Dublin Bay SAC is also considered in relation to the release of non-native invasive species into the receiving water environment and it is stated that the qualifying interests would be potentially at risk. The impact prediction is stated to be "unlikely long term locally to internationally significant impact". As previously cited, in accordance with International regulations, cruise ships are permitted to discharge treated waste into the sea at 3 nautical miles from shore. Therefore the release of non-native species would occur within the boundary of the Rockabill to Dalkey Island SAC.

9.9 In Combination Effects:

9.9.1 Section 4.2 of the NIS sets out a summary of potential in-combination impacts wherein dredging carried out by Dublin Port, the Alexandra Basin Redevelopment (Dublin Port), Dublin Array wind farm and Dún Laoghaire Urban Beach is considered. It is stated that "it is difficult to assess the potential for cumulative effects owing to a lack of certainty around the timeframe for any of these projects". The current timeline for the Dublin Array is for construction to commence in 2018, however this development has not yet received consent. Similarly, the Alexandra Basin Redevelopment is proposed to commence piling works in October 2015 and continue to March 2018, with dredging to extend for a minimum of 6 years and up to 10 years. It is stated that sound generated by impact piling on all projects will result in some level of disturbance to harbour porpoises within and inshore of, the Rockabill to Dalkey Island SAC. It is stated that in the Dublin Port EIS on Alexandra Basin that their 38 month piling programme would not have any significant impacts on the marine mammals. It is consequently argued that DLH will be using small diameter piles and will have a very short piling period of 12 weeks, which would have the lowest impact on the sound environment of the area of the three considered, and a negligible in-combination effect. Based on the current timelines, the NIS believes that the Dublin Array will have commenced construction works before piling works are completed for the DLH berth, meaning that there will be no cumulative effect through overlapping works. The distance between the three projects also means that the likelihood of a measurable negative effect is low, with the sound levels attenuating with distance. It is stated that all three projects will involve the use of Marine Mammal Observers to minimise the risk of injury or hearing loss for marine mammals. However, based on the foregoing, I am not satisfied in respect of the impact of the development upon marine mammals has been adequately considered having regard to the

proposed night time operations, the absence of impact studies of dredger noise on marine mammals and the absence of waste facilities at port thereby allowing cruise ships to release treated waste into the sea at 3 nautical miles from shore. I note also that despite the applicant being aware of the NPWS submission advising the Board that night time dredging should not be permitted, and which would therefore have consequences for the length and duration of construction works, it was consistently presented as a mitigation measure that night time operations should be permitted. Having had regard to the foregoing, the impact of the said dredging works upon marine life and ornithology is such that it would now be sustained over a period of 6 months. I would argue that the employment of a Marine Mammal Observer would offer safeguards against the obstruction or injury to the likes of the Harbour porpoise or the Grey seal and it is argued that the birds frequenting the area would be habituated to a degree of disturbance within the harbour.

- Section 4.2 of the NIS also considers the issue of dredging. The Alexandra 9.9.2 Basin Redevelopment is expected to dispose of 5,900,000m³ of spoil in the course of the development works, as compared to 710,000m³ for the proposed development. It is proposed that dredging will be carried out for the Alexandra Basin redevelopment in the period October-March over a 6 year period (up to a maximum of 10), due to the presence of out-migrating salmon smolts and so it will not overlap with the DLH dredging, which is proposed to take place over one summer period (March-Sept). Given the scale of the Alexandra Basin Redevelopment in comparison to the proposed development at DLH in terms of time and quantity of dredging, that noise generated by the operation of dredging plant is similar to that emitted by regular shipping activity, that Harbour porpoise and birds in the Dublin Bay area are likely to have become habituated to a high degree of disturbance and background noise given the location with working ports, harbours and the operation of the Dublin Port Shipping Lane in through the Bay. As a consequence the NIS states that no cumulative impacts are predicted. Having regard to 9.9.1 above, I am not satisfied that the applicant has clearly demonstrated that the dredging operations will not impact upon marine mammals having regard to noise.
- 9.9.3 The NIS also considers the permitted development of the DL Urban Beach within the harbour, which will be moored off the East Pier. It is stated that construction works will be mainly landside, with some pile driving expected to last in the region of 4-10 days. No certainty is provided as to the timing of these works. Although noise generated from construction and piling works could cause disturbance to the Harbour Porpoise and wintering and/or breeding bird species, construction works will be relatively limited and piling works of very short duration. The project is expected to be completed by spring/summer 2016 therefore, the works involved will not lead to any cumulative impacts, as they will be completed before the proposed development commences and will not result in any significant effects on Harbour Porpoise breeding or wintering

birds in-combination. However, the facility will operate during the same months as that of the cruise berth, thus potentially causing disturbance to breeding birds or wintering birds if operation overlaps with the wintering bird season in part. It is argued that the East Pier is already heavily used as a recreation area, there is frequent shipping activity in the harbour and birds are likely to have become habituated to a high degree of disturbance from human presence, shipping activity and background noise. Given the location of the latter, I would agree that the local wildlife and marine life would have become habituated to the degree of disturbance already present.

9.10 Mitigation Measures

- 9.10.1 Mitigation measures are outlined in section 5 of the NIS. Mitigation Measure 1 is to implement the "Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (DAHG, 2014)" for the protection of marine mammals from potential injury due to the noise generated during piling operations. It is also proposed that the dredging will be carried out on a 24-hour basis to limit the duration of time and therefore impact. It is stated that the proposed dredging programme balances the very low risk of injury or disturbance to marine mammals of commencing some dredging cycles outside of daylight hours with minimising the overall duration of the disturbance. It is stated that egard was had to the following in proposing this course of action:
 - Sound generated by dredging is predominantly low frequency and below levels that would cause temporary or permanent injury to marine mammals.
 The soft sediment within the footprint of the works would mean the sound levels generated would be at the lower end of the range for dredging.
 - In 2008 peak harbour porpoise activity was recorded at Howth Head and Dalkey Island, with few sightings close to DLH limit. Numerous sightings have been made by members of the public outside DLH, however the number of records here is reflective of the large number of people using the piers. The majority of sightings occur in October-December, thus the proposed dredging programme will avoid the peak sightings period.
 - Harbour porpoises avoid ships at some distance (1-1.5km) with stronger reaction at 400m and will therefore move away from the dredger as it arrives on station at the harbour or the Burford Bank.

Where impact piling is used, mitigation measures such as bubble curtains or cofferdams will be used to reduce the sound levels transmitted to the wider aquatic environment. As previously stated, no noise studies were carried out or provided to determine the impacts of dredger noise on harbour porpoises. Therefore, the statements by the Applicant in relation to noise impact cannot be fully supported.

- 9.10.2 As a second mitigation measure, the NIS outlines that prior to commencement of construction, a project-specific Construction and Environmental Management Plan (CEMP) will be established by the contractor and maintained by the contractors during the construction phase of the proposed development prevent release of hydrocarbons, polluting chemicals and sediments. The CEMP will cover all potentially polluting activities and include an emergency response procedure. All personnel working on the site will be trained in the implementation of procedures. The CEMP will comply with national and international best practice guidelines. The contractor will implement mitigation measures via the CEMP for release of hydrocarbons, polluting chemicals and sediment control. As this list is lengthy and can be observed on page 62 of the NIS, I have only referred to a small number:
 - Provision of measures to prevent the release of sediment over baseline conditions to Dublin Bay during the construction work. These measures may include but not be limited to the use of silt traps, silt fences, silt curtains, settlement lagoons, filter materials. This is particularly important when undertaking any constructing/upgrading to the surface water drainage network on the development site.
 - Provision of exclusion zones and barriers (sediment fences) between earthworks, stockpiles and temporary surfaces to prevent sediment washing into the receiving water environment.
 - Temporary construction surface drainage and sediment control measures will be in place before earthworks commence.
 - 9.10.3 It is further stated that cruise vessels will operate under the International Convention for the Prevention of Pollution from Ships (MARPOL), which sets out the minimum standards ships must adhere to in order to protect water quality. The operation of the cruise ships, specifically in relation to diesel storage and usage, will be subject to an Environmental Management Plan (EMP) and relevant operational guidelines for cruise ships at port, including entering and exiting the port. Specific adherence should be given to the following:
 - Usage of diesel when in port including potential refuelling processes
 - Foul/waste water will be disposed of outside of territorial water
 - Hazardous chemicals on-board should be stored in sealed drums with relevant labels in locked chemical storage cabinets
 - Spillages on deck should be controlled with absorbent materials or "Spill kits".

I have previously set out the shortcomings of this proposal in relation to the absence of waste facilities at port and the ability of ships to dispose of their

- waste within the Dalkey to Rockbill Island SAC and therefore, do not consider this to be a mitigation measure.
- 9.10.4 A third mitigation measure is that Non-native invasive species will not be planted on the site in accordance with the Bird and Natural Habitats Regulations 2011, under which it is an offence to "cause to disperse, spread or otherwise cause to grow" the range of invasive species listed in Schedule 3 of the regulations. Planting will also have regard to the "Most Wanted" list on the Invasive Species Ireland National Invasive Species Database and will ensure that no such species are planted on the site. This is considered reasonable.
- 9.10.5 It is stated in the NIS that there is no likelihood of significant effects on any European sites, and there will be no adverse effects on European site integrity during the construction of the proposed development in combination with other plans or projects having regard to the foregoing. The NIS concludes that there is no risk of the proposed development with mitigation measures in place to result in adverse effects on Rockabill to Dalkey Island SAC, North Dublin Bay SAC, South Dublin Bay SAC, Dalkey Islands SPA, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Howth Head Coast SPA, Baldoyle Bay SPA and Ireland's Eye SPA, their Qualifying Interests/Special Conservation Interests or their conservation objectives, either alone or incombination with other impact sources.

9.11 Conclusion:

- 9.11.1 Having regard to the recent High Court judgement (Kelly v An Bord Pleanála, 2013, No. 802 JR) it is incumbent on the Board to identify, in the light of the best scientific knowledge in the field, all aspects of the development project which can, by itself or in combination with other plans or projects, affect the European site in the light of its conservation objectives. The Board must have complete precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed development on the European sites concerned having regard to the sites conservations objectives
- 9.11.2 Having regard to the range of species and habitats categorised as being qualifying interest that may be connected to it in the vicinity of the site and based on the lacunae of data as identified above in relation to the impact of dredger noise upon marine mammals, the impact of disposal of treated waste within the Rockabill to Dalkey Island SAC and therefore the potential of nonnative invasive species being released into the water of Dublin Bay, in my opinion means that there is as reasonable scientific doubt as to the likely significant effect of the proposed development, either individually or in combination with other plans and projects on a range of Natura 2000 sites in view of the sites' conservation objective, the Board cannot in my judgement conduct a full appropriate assessment. In view of the risk of the potential for

likely significant effects and adverse impacts on the integrity of a range of European sites permission must therefore be refused.

10.0 ASSESSMENT OF OUTSTANDING ISSUES

- 10.1 The proposal before the Board seeks to provide a berth to accommodate cruise ships of the Freedom Class range in Dún Laoghaire Harbour. In order to avoid repetition, I wish to focus on the following issues in this part of the assessment:
 - Planning Policy
 - Economic Report
 - Project Splitting
 - MARPOL Convention
 - Quality of Finishes

10.2 Planning Policy

- 10.2.1 The proposed development of a cruise berth at Dún Laoghaire Harbour shall be considered in the context of the EU Trans European Network-Transport (TENT). Whilst I previously noted that Dun Laoghaire is not specifically mentioned as a port within this document, it would be compatible with EU policy and guidance in relation to improving the economic productivity and efficiency of major ports and by contributing to the provision of an efficient, integrated and sustainable strategic transport network. I note also the proximity of the DART line and the Dun Laoghaire DART Station to the development. Therefore, I am satisfied that the proposed development is compatible with EU policy in relation to ports and transportation.
- 10.2.2 The National Ports Policy 2013 provides the principal policy framework for the future development of Irish ports. The NPP has categorised Irish ports into ports of national and regional significance. As previously outlined, Dún Laoghaire has been identified as a Regional Port. It stated in the NPP that "These are ports that serve an important regional purpose and/or specialised trades or maritime tourism. In the context of the long-term international trends in ports and shipping, these ports are limited in their future potential as centres of commercial shipping".²² During the course of the Oral Hearing, Mr. O'Grada on behalf of the Applicant, argued that the National Ports Policy is based on commercial cargo traffic and ignores passenger traffic and consequently is a severe omission of the NPP. Nonetheless, the NPP points to the future role of DLH in the marine, leisure and tourism sectors. Mr. O' Grada sought to highlight that the Board cited the Harbour Masterplan in its consideration of the "urban beach" proposal. I would agree that the National Ports Policy is primarily focused on commercial cargo traffic and flags marine tourism as a

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²² National Ports Policy (2013). Page 30.

potential area for development. However, I would also argue that the scale of the cruise ship (wherein 3,782 visitors on a double occupancy would be accommodated and 1,360 no. crew) and the volume of cruise ship traffic sought by the Applicant (i.e. every 2 days from April-September) is not reflective of its allocation to the 3rd tier of the NPP. Therefore, I consider that the proposal as before the Board does not comply with the National Ports Policy.

10.2.3 During the time of my assessment of this proposal, and since the Oral Hearing, Dún Laoghaire Rathdown County Council have adopted their County Development Plan (16th March 2016). As previously cited there are a number of Special Local Objectives. The effect of these objectives is to facilitate the continued development of the harbour. However, it is stated that a Dún Laoghaire and Environs Local Area Plan will be prepared expeditiously and following its adoption, all development will be guided by the principles and objectives therein. The SLO's are supportive of development within the harbour but urge a sensitivity to the setting and cultural and amenity uses within. In-depth consideration of the choice of materials for development within the harbour is also sought. The promotion of the Sandycove to Sutton Promenade as a component part of the National East Coast Trail Cycle Route is also stated to be important. This was previously cited in relation to the Accommodation Walk proposals of the scheme. SLO157 states that the County Development Plan will support and encourage the development of a National Watersports Centre within the Harbour environs. This was referred to during the course of the Oral Hearing as an objective which Elected Members were seeking to insert into the Draft Plan (at that stage). Also referred to during the course of the Oral Hearing was the proposal to insert an objective limiting ships to less than 250m within the harbour. This has now materialised in the Dún Laoghaire Urban Framework Plan, which is adopted as Appendix 12 of the Plan and therefore has statutory status. In section 3.2.1 it outlines that "it will be an objective of this Plan to preserve the integrity, natural beauty and historical significance of the harbour by protecting this central area from any cruise berth that would allow cruise ships longer than 250m to come directly into the Harbour. This Plan will support and encourage the niche market of smaller cruise ships". Clearly, the insertion of this objective into the newly adopted Development Plan has considerable implications for the assessment of the proposal before the Board. Having considered the proposed development and having regard to previously iterated concerns in respect of visual impact, I believe that the objective to reduce ships permitted to berth at the harbour to less than 250m would be more in keeping with the scale of this Victorian harbour and would allow for a greater balance in the commercial and recreational demands of the harbour. Furthermore, I believe the scale now determined by the objective is compatible with the National Ports Policy plan wherein the harbour is assigned to Tier 3 in terms of future development. However, should the Board consider a grant of permission to be appropriate

and in the national interest, it is my opinion that further submissions are warranted having regard to this objective.

10.3 Economic Report:

- 10.3.1 The economic argument put forward by the Applicant is that this development will allow them to build on an established business at DLH and which has the potential to grow significantly given an increase worldwide in those availing of cruise holidays. The basis of this argument is presented in DKM's submission "Economic Impact of Proposed Dún Laoghaire Harbour Cruise Berth".
- 10.3.2 There is clearly an economic need for DLH to diversify given that HSS Stena Line is no longer operating out of Dún Laoghaire. It is also evident that DLH has had some previous success in attracting cruise ships to tender outside the harbour, however this did not materialise to any great extent in 2015 when Dublin Port made cruise operators aware of their ability to berth within their harbour. However, the premise on which the DKM Report and its economic analysis are based is that Dublin Port must await completion of their development (Alexandra Basin Redevelopment) to fulfil their potential in the cruise market.²³
- 10.3.4 The DKM Report focuses on three scenarios for its economic forecasting. These are the Do-Nothing Scenario, Central Scenario and the Copenhagen Scenario. Briefly, the Do-Nothing Scenario sets out the conditions were there would be no new investment in DLH and that Dublin Port proceeds with its Alexandra Basin Redevelopment. In this scenario, the annual average growth rate of cruise passengers and crew arriving in Dublin Bay between 2016 and 2046 is assumed to be 3%. Under the Central Scenario, DLH will complete its cruise pier, cater for vessels over 300m by 2017 and Dublin Port will develop its cruise facilities to be operational from 2022 and that cruise passenger traffic into Dublin Bay will grow by an annual average of 4% over the next 30 years. The Copenhagen Scenario assumes that Dublin Bay will emulate Copenhagen's success with cooperation between DP and DLH and that over a 30 year horizon, the annual average growth rates of cruise visitors arriving in Dublin Bay would be 6%, twice that of Do-Nothing Scenario. As previously cited, the DKM Report refers to Dublin Port's recent hydrological studies which ascertained that cruise ships would be able to berth at Dublin Port under certain conditions. This issue is referred to as a footnote in the DKM Report where it is stated that the "Do Nothing Scenario may be overstated as larger vessels have been accommodated in Dublin Port thereby offering an alternative to the tendering of passengers into Dún Laoghaire. This is likely to lead to a reduced growth in the number of vessels opting to use the tendering facility at DLHC".24

²⁴ DKM Report, footnote 31, page 18.

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²³ Section 2.3.1 of the DKM Report-Economic Impact of Proposed Dun Laoghaire Cruise Berth, Page 9.

Therefore, it would appear that the applicant is accepting that the basis on which the "Do-Nothing" scenario and consequently the other two scenarios are based is flawed.

- 10.3.5 During the course of the Oral Hearing, there was considerable discussion on the DKM Report and in particular, criticism was aimed at the use of the Copenhagen Scenario. The Copenhagen Scenario was considered to be an unrealistic goal for DLH, where it is a turnaround port, where it can accommodate berthing for up to 8 vessels at one time, with one berth 1.1km long and where 29 number cruise visits were scheduled for 2015. DKM sought to counter argue that the reasoning for choosing Copenhagen as the best-case scenario derived from the Grow Dublin Taskforce Report, wherein Copenhagen was identified as a model most suitable to emulate. I have had due regard to this Report. The Taskforce Report was launched on 22/01/14 by Bord Fáilte and the Minister for Transport, Tourism and Sport. It sets out a roadmap for growing Dublin's tourism in the years ahead, including identifying those market segments with most promise, outlining the need for a new brand and more modern image for the city and stressing the need for all interests in Dublin to come together to ensure that tourism can fulfil its true potential. The Cruise Industry is cited as one area which has the potential to grow and develop, where over the past decade the number of cruise passengers into Dublin has tripled with an annual growth rate of 12.8%. To achieve optimum growth in visitor numbers and revenue, a Cruise Dublin Forum will be established to promote Dublin as a cruise destination to cruise operators, cruise agents and travellers planning a European cruise. Having read the Taskforce Report, it is my understanding that Copenhagen is cited as it has a fully collaborative city approach to tourism and a defined engagement structure in place. In this context, I find the basis on which the DKM report is founded upon to be unrealistic due to their failure to take account of Dublin's Ports ability to berth up to 3 cruise ships at one time and their projections based on Copenhagen's success as a turn-around port where 8 vessels can berth simultaneously.
- 10.3.6 There was much criticism at the oral hearing that the DKM report did not encompass a Cost Benefit Analysis and that this is an issue which should be incorporated as part of EIA. The Applicant sought to highlight that such a report was not required as part of EIA legislation. However, counter arguments sought to identify that DKM presented such a CBA in the Galway Harbour proposal considered by the Board in 2015. In my opinion, a CBA is not a statutory requirement of the EIA process, and would be outside of my remit to formally assess the veracity of its contents. Nonetheless, I would state that the Applicants suggestion that it would cost €18m to erect the development as proposed, was submitted without any supporting analysis or breakdown. This figure was disputed at length at the Oral Hearing by Observers to be unrealistic. I would bring to the Board's attention to the recently adopted Harbour Bill which

- will now require the Applicants to obtain the consent of Dún Laoghaire Rathdown County Council to go out to the financial markets to draw down a loan for such monies.
- 10.3.7 The Grow Dublin Taskforce Report and the DKM Report (Copenhagen scenario) was based upon optimising Cruise tourism by collaboration between the different tourist agencies, council and ports in Dublin. Yet, I would highlight that there was minimal communication between DLH and DP prior to submission of this application. It would appear that Dublin Port were given a copy of the navigation analyses in the weeks prior to submission of the application and there was no evidence of formal proposals to work together provided at the hearing. In this respect I would note that the Dublin Port Harbourmaster was present for a significant portion of the Hearing and did not at any point refer to a collaborative approach to cruise tourism in Dublin Bay between DLH and DP.²⁵
- 10.3.8 At the oral hearing, the economic report submitted by DKM was argued by Dr. Pat McCloughran, a Managing Director of PMCA Economic Consultancy to be flawed as it considered positive impacts only. ²⁶ I would concur with this argument as there is no assessment of the potential negative consequences of the proposal, even if to state that in their assessment there is none.
- 10.3.9 Therefore, to conclude on this point in relation to the Economic Impact Report as submitted by DKM on behalf of the Applicant, I consider that an incomplete analysis of the cruise tourism potential of DLH was presented and the Do Nothing Scenario on which it is based has been overtaken by developments at Dublin Port where cruise ships over 300m are now in a position to berth in the Port.

10.4 Project Splitting

- 10.4.1 This issue was raised at the Oral Hearing in the context that the Applicant has argued that the cruise berth proposal was first brought to public attention during consultation and information briefings concerning the DLH Masterplan. It was argued by Observers that in this scenario, the Applicant should have brought forward all of the proposals for St. Michael's Wharf which incorporates residential and commercial uses in tandem with the cruise berth and to do otherwise constitutes project splitting in the context of EIA.
- 10.4.2 I have due regard to the Masterplan as submitted by the Applicant as part of their supporting documentation to the EIS. Whilst the submission of an application for a cruise berth within St. Michael's Pier is a segmented approach having regard to the Masterplan which illustrates an intention to provide 6000-7000m² of retail/food/restaurant bar floorspace and 28,000-30500m² of

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²⁵ I refer to the submission by Dublin Port at Section 6.3.6 and the Oral Hearing Report Page 33.

Page 71 of the Oral Hearing Record provided as Appendix to this Report

residential floorspace along with a hotel, commercial/leisure and enterprise use. I am of the opinion that the cruise berth can stand alone as a project with its own identifiable effects and that the Board is in a position to assess and adjudicate on the full nature and extent of existing and proposed development. I would note that the proposal as submitted with coach parking for the cruise berth has diverted from the Masterplan wherein residential and enterprise usage is illustrated at this location. I consider this to be unhelpful in the context that the Applicant has referred to the Masterplan as their template for the future of the harbour.

10.5 Quality of Finishes

The Local Authority raised the issue in their submission and at the oral hearing that the palette of materials chosen for the development was poorly defined and inconsistent. Whilst it is accepted that some of the proposed works will be temporary in nature pending the final integration of the scheme into future proposals for St. Michael's Wharf, it is argued that given the development will form an important element of the town's public realm and given that the site is located within a candidate ACA, that it is critical that a consistent and high quality approach to finishes are adopted. Therefore the Board are advised that in the event that a grant of permission is considered, to seek further detail from the applicant with respect to the final overall palette of materials and finishes including for all items of street furniture such as signage and bicycle stands.

11.0 CONCLUSION

- Arising from my assessment above. I consider the proposal as submitted by 11.1 Dún Laoghaire Harbour Company to be deficient for a number of reasons. In particular, the absence of sufficient data to inform the navigation studies carried out by Moffat and Nichol and submitted as part of the EIS, has provided a degree of uncertainty to the particular weather/current/tide conditions a cruise ship would be able to navigate the harbour mouth and traverse the harbour to the berth. This uncertainty also extends to include the impact of the thrusters of the cruise ships on the base structure of the roundheads and as to whether these structures would be destabilised arising from the force of the water being directed towards them. The Applicant's reliance on the fact that later studies would be carried out in conjunction with the cruise ship operator, Dublin Port's Pilots and Dun Laoghaire's Harbourmaster, failed to provide assurances having regard to the fact that these studies would not be in the public domain and would not be in position to inform the proper planning and sustainable development of the area.
- 11.2 In considering the proposal, it is my opinion that the sensitivity of the harbour having regard to its architectural heritage, social importance, recreational value and its proximity to designated sites of European importance were not taken

into sufficient consideration by the Applicant in their proposal to introduce cruise ships at the larger end of the scale into a confined and restricted space. The proposal before the Board has failed to achieve an adequate balance between the commercial operations of a working harbour and the recreational usage which has been functioning in tandem since its inception.

11.3 In addition, the EIS and NIS as submitted, in my opinion, failed to have adequate cognisance to the impact of the discharge of treated sewage at three nautical miles which is within the boundary of the Rockabill to Dalkey Island SAC. The discharge of the treated sewage would have potential impacts for the conservation interest of the Rockabill to Dalkey Island SAC which is the Harbour porpoise and the water quality of the sea in which this mammal resides. Arising from this negative assessment, as required under Article 6(4) of the Habitats Directive, imperative reasons of overriding public interest are not applicable in this instance and planning permission should therefore be refused for the Dún Laoghaire Harbour Cruise Berth.

DECISION

Refuse planning permission for the proposed development based on the reasons and considerations set out below:

REASONS AND CONSIDERATIONS

- 1. The proposal as submitted to the Board failed to have adequate cognisance to the MARPOL Convention wherein at 3 nautical miles from shore, i.e. within the boundary of the Rockabill to Dalkey Island SAC, the cruise ship operators may discharge their treated sewage. The EIS and NIS as submitted did not provide data on the impact of such discharge upon the Conservation Interest of this SAC, the Harbour Porpoise. In addition, avoidance measures in the form of adequate waste facilities have not been provided for in line with Marpol 73/78 in Dun Laoghaire Harbour and thus mitigation measures are inadequate. A stated mitigation measure of the EIS/NIS as submitted, is the employment of Marine Mammal Observers during the dredging/piling works in the Harbour. The Board consider this mitigation measure to be ineffective where dredging and piling are proposed to operate on a 24 hour basis i.e. during night time hours where visibility will be reduced. In light of the foregoing, the Board are not satisfied that the proposed development individually, or in combination, with other plans or projects would not affect the integrity of the Rockabill to Dalkey Island SAC, in view of the site's Conservation Objectives. In such circumstances, the Board is precluded from granting approval. As such and as currently proposed and on the basis of the information provided the Board considers that the development does not meet the requirements for approval under the provisions of Article 6(3) of the Habitats Directive and this therefore is contrary to the proper planning and sustainable development of the area.
- The Board are not satisfied with the quantum of information provided in relation to the Navigation Analyses in the EIS. The failure to incorporate all winds and tides into the Moffat and Nichol-Navigation Analyses, in tandem with an investigative survey as to the composition of the Roundheads, located at the end of the east and west piers at the harbour mouth, has provided a degree of uncertainty as to the ability of cruise ships to navigate safety through the harbour mouth to the berth and to the impact of the cruise ship's thrusters upon the stability of the roundheads, which are identified as Protected Structures in Dún Laoghaire-Rathdown's County Development Plan 2016-2022. The Board notes the Applicant's stated intention to carry out further studies in the event that the project proceeds, however, these studies would not be subject to public review. The Board consider that the proposal with its supporting documentation has failed to provide certainties that a cruise ship can safely

navigate the dredged channel and through the harbour mouth without a detrimental impact upon the roundheads and therefore consider the proposed development would be contrary to the proper planning and sustainable development of the area.

3. The proposed development of a new pier and quay berth measuring over 430m in length within Dun Laoghaire Harbour to facilitate the Freedom Range of cruise ship, which is at the higher end of the scale of cruise ships and which is capable of carrying circa 5,000 persons, conflicts with the vision as set out in the National Ports Policy plan (2013) issued by the Department of Transport, Tourism and Sport, wherein Dun Laoghaire Harbour was assigned to Tier 3 (out of 3) as it was considered a port of regional importance alongside Galway, Wicklow and Drogheda. It is therefore considered that the proposal would not be in line with national policy and would be contrary to the proper planning and sustainable development of the area.

Fiona Tynan Inspectorate 23/03/16